

# Compilation of Abstracts



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# Abstracts for Plenary Lectures

## **Opioid Use Disorders, Pain and Depression: A Complex Comorbidity**

#### Brady K

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#### Abstract:

Opioid use disorders (OUDs) and opioid overdose have increased precipitously over the last 20 years. While the initial problem in the United States was related to an increase in prescribed opioids, with education and measures to curb prescribing, the number of opioid prescriptions has decreased. However, opioid-related deaths have continued to rise as a result of illicit, high potency synthetic opioids. While medical and non-medical opioid use have been documented to be associated with a number of mental health problems, depression is particularly problematic. Some epidemiological evidence suggests that depression occurring after the initiation of prescription opioid use is common and depression may be a key factor in the initiation and maintenance of OUDs. There are common neurobiologic pathways that may be implicated. Depression has also been shown to moderate the relationship between pain, physical functioning and opiate use. In this presentation, the epidemiology of OUD and depression will be reviewed. The relationship between pain, OUD and depression will be discussed, including potential neurobiologic underpinnings and relationships. Finally, assessment and treatment of co-occurring depression and OUDs will be discussed.

## Precision psychiatry and its relevance to addiction medicine

## **Geert Dom**

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## Abstract:

Personalized or precision medicine is highly topical within many fields of medicine such as oncology. It carries the expectation that a better match between individual patient characteristics and disease stages on the one hand and specific treatments on the other hand, will lead to an increased effectivity of the treatment and subsequent better outcome. The last decade the idea of personalized medicine has found its way towards the field of substance use disorders treatment. Although still in a preliminary phase the concepts of disease staging and patient profiling are gaining in importance. Specifically, the new neuroscientific findings with respect to the mechanisms underlying the pathogenesis of addictive disorders and their clinical heterogeneity, might offer new perspectives. Specifically, for alcohol and nicotine dependence the first steps are made to translate these findings into clinical implementable strategies. This plenary will give an overview of these developments with a focus on the treatment of Alcohol Use Disorders. Also, the viewpoint will be taken from the perspective of applicability within the real clinical world. Can we already use precision medicine in the clinical decision making for our patients or are science and practice still different worlds?

## Computational Psychiatry and Addiction: Pragmatic and Explanatory Approaches

#### Paulus M

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#### Abstract:

Decision-making and its dysfunction have emerged as an important area of research in psychology, psychiatry, cognitive science, and neuroscience. This process has been implicated in both anxiety, which is characterized by excessive avoidance behavior and addiction, which has been proposed to be driven by relief of an aversive state. Computational psychiatry uses mathematical algorithmic approaches to advance a quantitative mechanistic understanding of the processes that underlie mental health and disease and aims to develop practical applications based on model-based analyses. Identification of neurocognitive predictors of substance dependence is an important step in developing approaches to prevent addiction. Thus, we examined neural processing characteristics in human occasional stimulant users (OSU), a population at risk for dependence. 158 non-dependent OSU and 47 stimulant-naïve control subjects (CS) were recruited and completed a stop signal task while undergoing functional magnetic resonance imaging (fMRI). A Bayesian ideal observer model was used to predict probabilistic expectations of inhibitory demand, P (stop), on a trial-to-trial basis based on experienced trial history. The results indicate that despite minimal overt behavioral manifestations, OSU utilize fewer brain processing resources to predict and update the need for response inhibition, processes that are critical for adjusting and optimizing behavioral performance, which may provide a biomarker for the development of substance dependence. Methamphetamine use disorder is associated with a high likelihood of relapse. Identifying robust predictors of relapse that have explanatory power is critical to develop secondary prevention based on a mechanistic understanding of relapse. We used a pragmatic framework to determine whether Bayesian modeling combined with neuroimaging can be used to predict methamphetamine dependence relapse within one year of treatment. We found that neural activity associated with two types of Bayesian prediction error, i.e. the difference between actual and expected need to stop on a given trial, in the left inferior frontal gyrus and in the left temporoparietal junction were associated with higher likelihood of self-reported relapse. These are two examples that show the utility and the improvement of explanatory models using computational approaches.

## **Plenary Symposium**



## **Cannabis: North American Experience**

Bunt G<sup>1</sup>, Khalsa JH<sup>2</sup>

<sup>1</sup>NYU and Good Samaritan Treatment Center, New York, USA <sup>2</sup>Special Volunteer at National Institute on Drug Abuse (NIDA), NIH, USA <u>buntmd@gmail.com</u>

## Learning Objectives:

The participants will learn about:

1) The incidence and prevalence of cannabis use in Canada, US and the world;

2) The clinical evidence for cannabis, cannabidiol and other cannabinoids as medicine; and3) Awareness of the research agenda generated by the legalization of cannabis and associated cost.

Dr. Khalsa will present on the medicinal value of cannabis and its products

Dr. Bunt will discuss the role of physician in cannabis.

## Abstract:

Cannabis is the most abused illicit drug in the world with an estimated 2.5% of the world's population (180 million) using it regularly (World Drug Report, 2017) 1. In Canada, ~4.2 million or 14% of Canadians aged 15 years and older reported some use of cannabis products for medical or non-medical use in the past three months. About 56% of the users indicated that they used some form of cannabis "daily"; or "weekly"; More than 25% report some use in the past 3 months (National Cannabis Survey) 2. In the US, according to the 2015 US survey (NSDUH), an estimated 22 million people used cannabis in the past month. About 30% of those who use cannabis may have some degree of cannabis use disorder. Canada and Uruguay have legalized all aspects of cannabis including recreational and medicinal use and 10 states have legalized the medicinal use of cannabis. Cannabis use is associated with serious social and health consequences involving many physiological systems thereby increasing the risk for increased morbidity and mortality.

We may discuss the current ongoing research on cannabis at the US National Institute on Drug Abuse, NIH.

## Gambling Disorder: Latest Clinical and Neurobiological Updates

#### **Bowden-Jones HM**

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#### Abstract:

The talk will focus initially on the most up to date global prevalence rates of Gambling Disorder and will give an overview of the clinical presentations clinicians may encounter. The second part of the talk will focus on the latest research evidence for treatment and the last part of the talk will look at the latest neurobiological advances in the field of gambling disorder as well as at the global public health strategies implemented by different countries to shift the onus of responsibility to reduce harm from gambling from the individual and their vulnerabilities to the cautionary principle at the core of a more societal preventative approach.

## Substance-Induced Mental Disorders: Issues for Diagnosis and Treatment

## Lubman D

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### Abstract:

Comorbid substance use is a common feature of many psychiatric presentations, and it is often challenging to determine what contribution the substance use plays in the presenting picture. A patient presents with depression, anxiety or psychosis, but also reports using alcohol, methamphetamine or cannabis. Is the presenting problem substance-induced or an independent disorder? How do I tell which is most likely? Should I start medication and for how long? What other options are there? This presentation will discuss the latest research evidence to help inform clinical decisions around assessment, diagnosis and treatment, as well as the best models to maximise treatment success.

## **Drug Policy and India**

#### Ray R

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### Abstract:

Indian national drug control policy is in keeping with the requirements of the United Nations Drug Control Conventions. The earliest voices of drug policy were raised as early as in 1893 when the British Government formed a Royal Commission on Opium to inquire whether poppy growing and the sale of opium should be prohibited in India. Recent data on use from India (National Survey, NDDTC, 2019, Ambekar et al) reflects that about 15% of population consumes alcohol (M-27.3%, F-1.6%), about 3% consumes cannabis products and about 2% consumes opioids. Also evident is the shift from the traditional drugs use to injectable pharmaceutical opioids (legal compounds). Children, who were hitherto unseen in the drug scenario, have started using inhalants in large numbers. Global drug use pattern (WDR, UNODC, 2018) showed that the global opium production has risen by 65% and cocaine by 25%. Non-medical use of prescription drugs is a major threat, though cannabis is the most commonly used drug and about 479 different new psychoactive substances (NPS) are available. Drug use and associated harm are highest among youth and many countries have failed to provide adequate treatment facility. Future: New efforts are needed in keeping with the UNDP's sustainable development goals (SDG); total 17 (2015-2030), target 3.3 and 3.5 are particularly relevant for drug control. Thus, national policy should be harmonized with the SDG targets.

## Perspective on the Role That Spirituality Can Play in Addiction Recovery

#### Galanter M

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#### Abstract:

Clinicians' understanding of spirituality in addiction recovery is generally based on their subjective response to encounters with patients, rather than on empirical research. In an effort to improve on this, this talk presents a model of spiritually grounded recovery based on empirical evidence employing the Twelve Step fellowships, Alcoholics Anonymous and Narcotics Anonymous. The programs of AA and NA draw on diverse, scientifically grounded disciplines: social psychology, cognitive psychology, neuroscience, sociobiology, and sociology. Findings from these respective disciplines will be presented to clarify how spirituality and social support influence an individual's induction into these programs, and how the social structure of the fellowships can be framed from an empirical perspective. Integration of this model along these lines can help in framing how they succeed in stabilizing long-term recovery in their adherents, and how their psychological and sociologic underpinnings have assured its continuity over time.

## Precision Addiction Management (PAM) of Reward Deficiency Syndrome (RDS), the Construct that Underpins All Addictive Behaviors

Blum K, <sup>1-7</sup> Baron D,<sup>1</sup> Siwicki D,<sup>5</sup> Hajela R,<sup>8</sup> Boyett B,<sup>7</sup> Gondré – Lewi MC,<sup>9</sup> Badgaiyan RD <sup>5,8,10</sup>

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<sup>10</sup> Department of Psychiatry, Veterans Administration Hospital, at San Antonio, San Antonio, TX. USA

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## Abstract:

Worldwide, daily there are several millions of people increasingly unable to combat their frustrating and even fatal romance with getting high; for some 'high' may be just experiencing 'normal' feelings of well-being. The National Institutes on Alcohol Abuse and Alcoholism and on Drug Abuse (among others) conduct and fund outstanding research using sophisticated neuroimaging and molecular genetic applied technology to improve understanding of the intricate functions of brain reward circuitry and resting state functional connectivity, that is purportedly playing a key role in addiction symptomatology. In the international addiction medicine community, there is controversy as to the ultimate definition of addiction involving ASAM, ISAM, on one hand and other psychological and World Health organizations on the other hand. From a neuroscience perspective, while it is widely accepted that dopamine is a major neurotransmitter implicated in behavioral and chemical addictions, there remains controversy about how to modulate dopamine clinically in order to treat and prevent various types of addictive disorders. While for the most part Medication Assisted Treatment (MAT) promotes dopamine blockade or unintentional dopamine down-regulation in the long term, adherence and relapse prevention has been poor. However, harm reduction is a major societal benefit obtained through MAT. This is especially true even for buprenorphine-naloxone combinations. It appears, though, that a prudent approach may be a biphasic short-term blockade (harm reduction) followed by long-term dopaminergic upregulation, with the goal of enhancing the functional connectivity within the brains reward circuitry, possibly targeting the reward deficiency and the stress-like anti-reward symptomatology arising in the context of addiction (relapse prevention or intervention). Such phenotypes can be characterized using the patented Genetic Addiction Risk Score (GARS<sup>®</sup>). While there are many GWAS studies with possible convergence to candidate genes, our approach involves the careful selection of ten reward genes along with eleven risk variations. Dopamine homeostasis may thus be achieved via customization of neuronutrient supplementation (putative pro-dopamine regulation) based on the GARS test result along with a behavioral intervention developed by our group, dubbed "Precision Addiction Management" (PAM<sup>®</sup>). The session will be delivered in terms of scientific development of PAM and clinical applications including genetic mining data in approximately 1000 probands and neuroimaging in humans and even animal addiction models. The scientific goal is to induce dopamine homeostasis through epigenetic manipulation without compromising harm reduction especially in Opioid Use Disorder (OUD).

## Alcohol and Society: Cultural influences and Changing Perspectives

#### Kallivayalil RA

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#### Abstract:

The recently conducted National Drug Use Survey, 2019 points to 16 crore alcohol users, 5.7 crore problem users and 2.9 crore dependent users. Cultural influences on the consumption of alcohol has been a subject of great interest and relevance. It is of importance in both individualistic and collectivist cultures. Social influences together with local cultural norms are central factors that can influence the use of alcohol. The initial approach of prohibition of alcohol in the early 20th Century changed and a revenue model from alcohol sales became the trend across the world. A large number of social changes, globalisation and liberalisation has blurred the lines set by society and religion in regard to alcohol use. Alcohol use in India, from a multistakeholder perspective, can be viewed as a public health problem, social evil as well as a social necessity. It is important to understand previous, existing and newer patterns of alcohol use in transitional cultures for formulating public health interventions. Given the recent trends, it is clear that a better understanding of the underlying social and cultural factors contributing to increasing alcohol use, is needed. This becomes even more relevant and important for public health interventions.

## Digital Addiction Medicine: New Opportunities, Better Services?

## **Baldacchino A**

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## Abstract:

Digital medicine is an emerging field in the field of medicine and social science. Advances in information technology and data storage, so called 'big data' have the potential to dramatically change the way we do research and organize and deliver services. We are presented with the possibility of linked whole population health and other administrative data, collected over multiple time points usually only available in expensive and labor intensive surveys. I will present some potential avenues that this digital revolution can be used in the field of addiction medicine while also highlighting some of the potential pitfalls.

## Harm Reduction Services for People Who Inject Drugs (PWID) in India: Opportunities and Challenges to Optimize HIV Service Utilization

#### **Kumar MS**

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#### Abstract:

**Background**: Harm reduction services are key to engaging PWID, to prevent infections such as HIV, to maintain health and promote adherence to various treatments.

**Methods:** Indian National Collaboration on AIDS (NCA) study was designed to evaluate the community-level effectiveness of PWID-targeted integrated care centers (ICCs), providing vertically integrated delivery of harm reduction services - needle syringe exchange program (NSEP), OAT (Opioid Agonists Therapy) and HIV prevention, treatment services in stand-alone venues utilizing a cluster-randomized trial design in 12 sites across north-eastern, north and central India. The six ICCs for PWID were embedded within the OAT centres. A pre-intervention cross-sectional survey was carried in 15 sites across India. The outcomes were assessed by pre-and post-intervention surveys with PWID recruited utilizing a respondent driven sampling (RDS) technique at six intervention and six control sites.

**Findings**: High HIV burden among PWID was observed with higher prevalence in north-eastern states. HIV incidence was higher in North/Central sites, suggesting a growing epidemic. Compared to older, younger PWID had higher HIV incidence, engagement in risky behaviours and low utilization of harm reduction services. HIV-infected PWID lagged behind with respect to linkage to care and other HIV care continuum outcomes. Positive association was observed between harm reduction services and HIV counselling and testing (HCT) access. Although ICCs provided HCT for greater number of PWID than in the usual care centres, among evaluation survey participants in the intervention sites, the exposure to ICC intervention was low.

**Conclusions**: The NCA study demonstrates an opportunity to recruit and engage with the hidden populations of PWID utilizing RDS technique. Moreover, it provides insights of the role various integrated services play in engagement of PWID across the care continuum as well as interactions among these services. Given suboptimal service utilization patterns among PWID, particularly, younger PWID for both harm reduction and HIV services, significant efforts are needed to address the challenges in order to cover majority of PWID with scaled-up comprehensive HIV prevention, treatment, and care package.

## **Consultation Liaison Addiction Psychiatry: Need and Challenges**

## Chadda RK

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#### Abstract:

Consultation liaison (CL) addiction psychiatry can be conceptualized as a sub specialty of addiction psychiatry, CL psychiatry or addiction medicine. Substance use disorders (SUDs) are very common in persons with physical illnesses attending outpatient services or admitted to inpatient units in different hospitals with prevalence reaching upto 40-50%. SUDs often remain unidentified due to lack of adequate screening on the part of the treating clinicians. SUDs may be the main contributing factor to the genesis of the physical illness or complicate its course by interfering in improvement. Often, physical problems may be the first point of contact of the individual with a healthcare provider. SUDs contribute to a substantial proportion of referrals to CL services. Further, SUDs in patients admitted for medical problems have adverse outcomes of their medical problems, including adherence to the medicines prescribed for their medical illnesses. Treatment of SUDs in people with medical illnesses is complicated by altered drug metabolism, confounding presentations and ethical issues. The physicians often tend to miss giving due emphasis on the substance use history and thus are likely to miss identifying and managing the co-morbid substance use disorders, which may also have an adverse impact on management of the primary medical problem for which the patient has come for treatment. In addition, if the medical problem is secondary to substance use, identification and management of substance use disorders becomes more important. Thus, there is a need for designated CL addiction psychiatry services, which can provide consultation for addiction related issues in the patients seeking treatment in various departments in a general hospital. Management of such patients need to be collaborative with the primary treatment team, which also needs to be sensitized to early identification and management of such issues. This presentation will emphasize on needs and challenges faced by the sub specialty.

# Abstracts for Invited Lectures

## Psychotherapy for addictions: an integration of the eastern and the western approaches

## Chandiramani K

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## Abstract:

Carl Gustav Jung confessed to one of his patients, who had suffered with alcoholism, his inability to help. The scientific literature also supports the notion that therapeutic approaches for addictions work only when they are multidimensional and combined with medication use. In recent years an inconvenient marriage between mindfulness and cognitive therapy, the two seemingly different approaches in psychotherapy, has worked well in spite of the fact that one is interpretive and the other one non-interpretive. One aims to alter the cognitions and the other one encourages us to leave them alone. Logically they can't be combined just as one can't play football and basketball at the same time, but one can play them at two different times of the day. Secondly, it seems that mindfulness based approaches have picked up only a few ideas from the intensive insight-oriented Eastern meditations such as Vipassana and Patanjali yogasutra, leaving room for incorporating these left out elements as well with the objective of making therapies more effective.

This paper discusses how the author has incorporated ideas from a variety of different spiritual and therapy approaches, not just Vipassana meditation but existential psychotherapy, biofeedback therapy, CBT, psychodynamic and interpersonal therapies etc, and has created a six-session stress management programme that has proved effective in treating addictions and general stress. This programme starts with explaining to clients the structure of the mind and how it works, how emotions are processed and can be neutralised, how to be less judgmental and detached, how cravings and withdrawal symptoms can be dealt with and how spiritual ideas can be combined with the use of modern electronic devices in managing one's addictions and stress. Those who are interested in this topic can download a sex-session stress management audio-programme free of charge from <u>www.undoyourstress.com</u> which provides an outline of what is going to be discussed in this presentation.

## Tobacco use and cognitive function in women with major mental disorders

### Deshpande SN, Khobragade B

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### Abstract:

**Introduction**: Tobacco is the most commonly used drug in the world and one of the most important preventable causes of mortality and morbidity. Currently 42.4% of adult Indian men, and 14.2% of adult

Indian women use tobacco (smoked and/or smokeless) (GATS 2016-1017). Among persons with mental disorders, use of smoking tobacco is 2-5 times higher. Depression is one of the major risk factors for initiation of tobacco smoking. Heavy smokers experience a decline in cognitive functions as they age. Most research in tobacco use among psychiatric patients has focused on men, while lifetime rates of mood and anxiety disorders are significantly higher among women than men. Little is known about tobacco use among women, especially Indian women with major mental disorders such as Schizophrenia (SZ), Bipolar disorder (BD) and Recurrent depressive Disorder (RDD) and its effect on their cognitive functioning.

**Methods**: As part of a study on prevalence of tobacco use among women with major mental disorders, women with schizophrenia bipolar disorder and depression were interviewed using the Fagerstrom Test for Nicotine Dependence (FTND) both for smoke and smokeless tobacco, and portions of the survey questionnaire used in Global Adult Tobacco Survey (GATS) (CDC & WHO, 2011) questionnaire. To assess cognitive functions, an information questionnaire derived from the PGI Battery of Brain Dysfunction (PGIBBD), and the Trail Making Tests A and B were used. Using the GATS numbers for tobacco use in women, with 95% level of confidence, 8% precision, and the sample size for calculating prevalence of tobacco use each group was calculated as 77.

**Results**: The final sample consisted of 321 women, 141 with schizophrenia (SZ), 80 with Bipolar Disorder (BD) and 100 with Recurrent Depressive Disorder (RDD). Prevalence of current tobacco use was 12.14% (GATS 2016-17 = 14.2%): highest in BD (16.25%) followed by SZ (14.18%) and RDD (6%). Tobacco users answered statistically significantly fewer questions on the PGIBBD information questionnaire. Users also took significantly more time to complete both TMT-A and TMT-B. Age, years of schooling and tobacco use were all significant co-variates for performance in the cognitive tests.

## Addiction Disrupts Brain Reward – So How Do We Restore It?

## **Gastfriend DR**

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## Abstract:

For a half-century, we've known that drugs disrupt brain reward. Are we addressing this challenge? Contingency Management (CM) drives healthy brain reward. It's our bestresearched and most effective – yet paradoxically least utilized – approach. After 100 successful random controlled trials, real-world challenges still abound: ethics (is paying patients money enabling?), resources (who pays?), testing (truly random, witnessed drug screens?) and management (who does intricate accounting?). Digital health apps now surmount each of these obstacles, aiding motivation, harm reduction, MAT adherence, sobriety and treatment retention. Impacts are real: decreased drinking, longer treatment retention, better program completion. Even busy, oversubscribed and scarcely-resourced providers can now easily achieve implementation to cope with the opioid epidemic – and the next one. Experts from Harvard Business School and Johns Hopkins Medical School, ASAM President Paul Earley, former U.S. Congressman Patrick Kennedy, with funding from the NIH and U.S. insurance companies, have been working to develop a rigorous, low-cost, scalable solution to all the obstacles blocking widespread adoption of this paradigm - which has >100 RCTs backing its efficacy. This is truly a breakthrough approach that is now in use across the U.S. and starting to be used internationally.

## **Adaptive Role of Addictions**

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### Abstract:

Addictions generally have a derogatory connotation. It is considered to be a manifestation of moral weakness and weakened personal control. It is damaging at many levels, be it social, economic or personal and mental health. Addictions are actually deeply entrenched maladaptive and pathological forms of attachments and consequential engagement in such behaviour. From a different perspective, attachments generally are essential for life. They facilitate affiliation to a much-needed social network, within and outside family, and also provide a purpose in life. In the absence of any attachment, every individual will become a veritable island unto himself and society will loose its cohesiveness. Attachment in the form of addictions have many adverse consequences. It consumes time, energy and resources and thereby impedes and blocks future growth and development of the individual. Despite that if we find that increasing percentage of people are resorting to one or the other kind of addiction, then it requires examination of possibly meaningful and adaptive functions of addictions. Life has its own source and share of pains and pleasures. But at times life can be very, very painful. Could it be that mankind have made their lives increasingly more painful by committed pursuit of certain wrong values of life, considered sacrosanct in modern times. Life has become more complex, more stressful and much more lonelier than before. The possibility that addictions to various substances may actually be helping some individuals to survive or making life acceptable and livable, is quite possible. For these reasons, among many theories of addiction, adaptive theory is also an important one. This presentation proposes to deliberate on possible adaptive role of addictions.

## Culture and drug use in India

#### **Murthy P**

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#### Abstract:

There is evidence of both use and proscription of alcohol and other drugs in ancient as well as in contemporary India. From early times, consumption of intoxicants was strongly influenced by social caste and class, and many religions proscribed use. The availability of alcohol increased disproportionately following the advent of the East India Company and the early excise policies of the government. The influence of prevailing socio-economic and political pulls and pushes can also be traced for the use of cannabis, opioids and other drugs. The findings of the Indian Hemp Commission can find reverberations in contemporary times. The early twentieth century witnessed a great demand for prohibition, but the excise revenues from alcohol sales soon largely reversed this trend. Liberalization has also been associated with an increase in alcohol and other drug consumption, which in turn has blurred social and religious distinctions to an extent. The use of alcohol and other drugs in India is still viewed from different lenses – as a public health problem, as a social problem as well as a social inevitability. In contemporary India, a cultural understanding of alcohol and other drug use and misuse and the health and societal implications requires an understanding both from a traditional, multi-religious, multi-cultural viewpoint, as well as in the context of a nation in rapid socio-cultural and economic transition.



## Drugs and Rural India

## Gupta R, Arya S

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## Abstract:

Although no clear definition exists for rural, it has been often defined as an area with a population less than 20,000. Apart from having smaller population, rural areas differ from urban settlements in being closely knit with stronger moral values but relatively limited health facilities. In India, majority of its 1.3 billion population lives in rural areas. Substance use disorders once subsumed to be an urban phenomenon has deeply percolated in rural areas. Recent National mental health survey reported that prevalence of substance use disorders was more in rural areas (24.1%) as compared to urban non metro (20.3%) and urban metro areas (18.3%). The study found the burden of use of tobacco and alcohol was relatively more in rural areas, while prevalence of other substance use disorders was 50% less as compared to metro cities. Per month alcohol consumption as well as percentage of average household spending on alcoholic beverages was double for the rural household as compared to urban areas. Recently conducted Global adult Tobacco Survey reported that every third adult (32.5%) from rural areas reported current use of tobacco whereas for urban areas it was every fifth adult (21.2%), thus emphasising that rural areas with limited mental health service require more focus and attention.

The survey also highlighted that significant treatment gap exists for various mental health disorders including substance use disorders, and these gaps are likely to be higher in rural areas. With a meagre availability of just 0.3 psychiatrists, 0.07 psychologists, and 0.07 social workers per 100,000 people in India, it's a challenge to address the substance use disorders. Apart from shortage of health professionals in rural areas, adequate management of substance use disorders is also limited by poor access to treatment, geographical isolation, small size of rural community and poor mental health literacy. In addition, stigmatization of mental health conditions is more prominent in rural areas as there is increased "social visibility" in small communities and substance used disorders are often seen with contempt and moralistic viewpoint. Rural mental health and substance use service providers need to tailor treatment for their patients and to integrate all the available clinical resources including general physicians, pharmacist, nurses, counsellor available in primary health care settings as well as organisational resources such as schools, temple, and local authorities like anganwadi workers, Sarpanch and the other Wise men of the villages. These adaptations using locally available resources which are culturally acceptable to rural population are much likely to have positive contribution and serve towards providing the basic substance use services to most rural parts.

## Approach to Alcoholism in Actual OPD Field in Korea: Through Personal Experience

Kim SG

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### Abstract:

One-year prevalence of alcohol use disorder (AUD) in Korea was 6.2 percent in 2016, and approximately 2 million Korean patients with AUD needed medical treatment. However, there are less than 4,000 psychiatrists in Korea, and medical and community facilities are limited. For these reasons, a medical doctor, particularly, each psychiatrist in Korea cares for considerable numbers of AUD patients in OPD as well as in psychiatric wards. So, a psychiatrist in Korea has to make decisions on a variety of aspects in a relatively short period while seeing AUD patients in his OPD Clinic.

The objective of this presentation is to share my personal experience, how to assess AUD patients and how to advice them, by introducing the BRENDA approach and several medications. I used to emphasize to AUD patients that relapse depends on the balance between degrees of their physiological responses (craving and loss of control etc.) and strength of their rational thinking (motivation and coping strategies etc.).

I will introduce Korean guidelines briefly in several aspects including pharmacotherapy, psychosocial intervention and treatment programs for AUD patients, according to Addiction Treatment Guidelines Series published by KAAP in 2011. This presentation may be helpful for the audiences from other counties to provide better approach to their AUD patients.

## **Cannabis and Driving: A Public Health Perspective**

#### **Brands B**

Health Canada, Centre for Addiction and Mental Health and Dept. of Pharmacology and Toxicology, University of Toronto, Toronto, Canada <u>Bruna.Brands@camh.ca</u>

### Abstract:

With increased access to cannabis through legalization, understanding the effects of recreational and therapeutic cannabis on health outcomes is of increasing importance. There is a popular belief that cannabis does not have any effects on driving, despite the fact that epidemiological and laboratory studies suggest that driving is altered by cannabis. A series of human laboratory studies conducted at the Centre for Addiction and Mental Health in Toronto, Canada using a high fidelity driving simulator have been conducted. In one study, we found that young drivers drove slower after smoking a cannabis cigarette with 12.5% THC; converging evidence suggests that these types of changes in driving reflect the fact that the driver is compensating for a known impairment. In a follow-up study we also found that therapeutic users of cannabis drove more slowly after smoking their usual dose of cannabis. Changes in driving in the therapeutic users were similar to those observed in recreational users, which refutes the misconception that there are no behavioural effects of therapeutic cannabis in regular users. Ongoing studies are investigating the effects of combinations of alcohol and cannabis on driving, and also the effects of different doses of cannabis on driving. Future studies will also look at changes in driving after participants consume edible cannabis. At CAMH, we hope to dispel the myth that cannabis has no effect on driving and to increase public awareness of any harms associated with driving after cannabis use.



## **Expanding the Horizon of Care for Addicts**



## Sidana R

## drroop67@gmail.com

## Abstract:

Sri Ganganagar in a district head quarter of Rajasthan located near Punjab, Haryana and Pakistan border. Economy is based mainly on agriculture and related trades and life pattern has been changing with the effect of modernization.

There have been many changes in the pattern of substance abuse over last three decades. The author has experience in psychiatric and de-addiction practice in government as well as in private sector. Traditional drugs of abuse were alcohol, opiate and tobacco, the opium husk was available with government approved outlets and was distributed to persons dependent on it certified by the health department. Gradually the supply of opium husk was smuggled to adjoining states like Punjab, Haryana. Snuff is another substance containing tobacco & opiate abused in this area by rural population.

Prescription drugs like mendrax, proxyvon, lomotil, alprax, corex, and carisoma became popular in 1990s. Later on smack or brown sugar became the drug of abuse by youth. IV drug abuse also was prevalent in this area in the form of morphine, norphine, and fortwin. Nowadays heroin (injection & inhalation), tramadol and buprenorphine are being misused.

Over the years there have been changing trends in treatment of substance abuse. Earlier the camp approach with psycho education and detoxification over a week or 10 days was in practice. Later on, de-addiction and rehabilitation centres have been established by medical as well as non-medical professionals.

In the area of prevention, medical and health department along with various NGOs have played important role in conducting awareness programs in general population. Police department has played a positive role by running a treatment facility and preventive programs in schools and colleges.

## Addiction and Recovery in the Bhagvad Gita

## Hajela R

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## Abstract:

The Bhagvad Gita is a very well known, ancient Indian Vedic text that encapsulates timeless knowledge as a dialogue between Krishna (an incarnation of Vishnu) and Arjuna. This dialogue is embedded in the epic story of Mahabharata that tells the story of conflict and war in a ruling family raising profound questions about human existence and one's duty or life purpose (Dharma). The battle of Mahabharata is estimated to have occurred around 3138 BCE in Kurukshetra, Haryana, just north of New Delhi of today. The Pandava Gita is a smaller Vedic text of comments by other eminent persons from Mahabharata, such as Duryodhana, who makes a most relevant comment about human behavior and spirituality.

This presentation will review the significance of 5 key passages (shlokas) from the dialogue between Duryodhana and Krishna; and Krishna and Arjuna that illustrate issues related to Addiction and Recovery.

Duryodhana says: Janami dharmam... (verses 57-58 of the Pandava Gita)

Krishna says about Addiction: Dhyayato vishya punsah... Krodhabhavati summoha... (Chapter2, verses 62-63 of the Bhagvad Gita)

Krishna says about Recovery: Karmandye vadhikareste... (Chapter 2, verse 47) and Ragdveshaviyuktastu... (Chapter 2, verse 64).

The application of the above verses in individual and group psychotherapy will be discussed in context of the current definition of Addiction that is bio-psycho-social-spiritual. Specific concepts related to shame will be discussed in context of power and control issues, which are interpreted as resistance sometimes in patient care. Recovery concepts such as surrender, acceptance, non-attachment to outcome will be discussed to promote recovery, together with relapse prevention.

## Achievement on Oral Substitution Therapy in Nepal - A Decade-Long Struggle and Existing Challenges

## Ojha S

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## Abstract:

**Introduction/ Issues:** Opioid use disorder is a burgeoning problem in Nepal and the country has struggled to institute appropriate policies to address this at a National level. Nationally representative studies from 2007 and 2013 have estimated an increase of substance use (excluding nicotine products and alcohol) by about 98%. About 57% of them are injecting drugs in combination of opioids, benzodiazepine and anti-histamines, commonly known as 'South Asian cocktail'. OST services are currently available in 15 facilities based in 10 districts of Nepal.

**Method/ Approaches:** OST was introduced as an emergency response program in 2007 from one tertiary hospital setting in the capital of Nepal with technical and financial support from international donors.

Since then, it has expanded to many cities and is now managed by a division of Ministry of health as a national priority program. During this span, development of guidelines, training of medical doctors and measures to improve quality and standardization of services have been attempted. Despite some achievements, major barriers to accelerate OST services are policy inconsistency between different ministries, lack of knowledge about addiction treatment and poor retention rate in OST services.

**Results and conclusions:** OST services have reached 6000 IDU with current regular beneficiaries being 1200. In Nepal, we are facing severe challenges to improve coverage (around 3%) and retention (<5%) in OST among total estimated 30,000 injecting drug users (IDU). Intersectoral collaborations and implementing measures to increase demand for OST among IDUs are the key factors for sustainability of services in Nepal.

## Multidimensional Family Therapy: Experiences from Practice and Research

#### Moss K

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#### Abstract:

This presentation focuses on a contemporary evidence-based treatment - multidimensional family therapy (MDFT) - designed to treat adolescent drug abuse and behavior problems. MDFT has demonstrated its efficacy in fourteen controlled trials conducted around the U.S. and five European countries. The quality of the MDFT research program has been singled out in independent reviews, a meta-analysis and the MDFT clinical model has been identified as one of the most effective treatments for teen drug abuse, delinquency and behavioral disorders by government agencies, independent foundations, task forces and expert groups that identify best practices. Research data supports MDFT also as a clinician- and client- and communityfriendly treatment. Clearly stated and step by step clinical protocols guide therapists through common areas of work with teen drug abuse, but also require clinician innovation, creativity, flexibility and tailoring the focal areas to each individual adolescent and family. Using some DVD-fragments of actual therapy sessions, the presentation covers the core clinical aspects of the MDFT methods in the four domains of assessment and intervention – the adolescent and parent subsystems, the family system, and the extrafamilial systems of school. Therapist issues, including clinician development, and the training and supervision context of implementing MDFT are also important aspects of the workshop.



## The Changing Landscape of Drugs of Abuse: Not the Usual Suspects

## **Elliott S**

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## Abstract:

For many years, classical drugs of abuse have been amphetamines, heroin/morphine, cocaine, cannabis and hallucinogens (e.g. LSD). Whilst prescription drugs such as benzodiazepines and barbiturates have also been abused, in recent years the range of drugs abused (both prescription and non-prescription in nature) has expanded dramatically. This lecture will describe and provide background on the often less well known but increasingly abused drugs such as loperamide, GHB/GBL, pregabalin, gabapentin, phenibut, tramadol, kratom, volatiles ('poppers', nitrous oxide), fentanyl, olanzapine, promethazine and quetiapine as well as the significant number of New Psychoactive Substances (NPS) that have emerged over the last 10 years (e.g. cathinones, synthetic cannabinoids, benzodiazepines and synthetic opioids). The challenges this changing landscape poses, especially analytically will also be discussed as well as the context of their abuse (including drug use in prisons, poly-drug use and abuse through use of high doses) and clinical considerations.

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## Drug Situation in Punjab

## Garg PD

Department of Psychiatry, Swami Vivekanand Drug-deaddiction and Treatment Centre, Government Medical College, Amritsar, India gargpdass@googlemail.com

## Abstract:

Substance use in Punjab has reached epidemic proportions, disrupting socioeconomic fabric of the state causing substantial loss to person, family and society.

Department of Social Security & Women & Child Development report shows startling facts. Punjab is second in drug consumption after Nagaland. 73% of rural youth is addicted to drugs, 40% abusers are in 35-60 yrs of age group. Amritsar, being most affected urban district and Tarn Taran, most affected rural district. In border areas extent of abuse is 75% in 15-25 yr age group.

According to Epidemiology of substance use and dependence in State of Punjab report, lifetime opioid use was 19% current dependence 0.8%.

PODS survey and Magnitude of Substance Use in India 2019 Report by AIIMS has also been conducted in this regard.

To curb this problem, Government of Punjab has opened many Model De-addiction centres, Methadone Maintenance Clinics, OST centres and 181 OOAT Clinics in various districts of Punjab and about one lakh patients are in retention. All the central jails of Punjab are also running OOAT centres.

After 2017 Comprehensive Action against Drug Abuse Programme was initiated to combat the menace of Drug Abuse. DAPO Programme was launched on 23rd march 2018. Government has also planned Buddy Project to make students aware of the problem.

Although the problem of Drug Abuse in Punjab is on rise, we hope to combat this epidemic with appropriate interventions.

## **Drugs and Creativity: Fact or Fiction**



## **Reddy IRS**

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## Abstract:

Creativity - a human ability that provides artistic, organizational, and scientific innovation, moves the world forward.

Intelligence doesn't prevent people from taking drugs any more than fame does. When those who are under stress need to relax, some turn to drugs or drink as an escape from reality. Others do it because they believe it enhances their creativity or allows them to stay awake when needed.

The common belief in alcohol or drug use and creativity is strengthened by the popular stereotypes of artists, writers, actors, and others in the creative and performing arts as heavy users or abusers of such substances. Some actors use steroids to build muscles for a more aesthetic look. Despite these anecdotal claims, the scientific evidence seems to be controvertial that supports the notion that alcohol and drug use actually increases creativity.

Drugs and alcohol are used so widely within the creative arts professions seems to have less to do with creativity than with social expectations and other extraneous factors. People use pharmacological substances for many reasons other than the stimulation of their imaginations. These reasons include relaxation, the facilitation of sleep, self-medication, social rituals, pleasure, or simply habituation or addiction.

Creative people often exploit all aspects - pathological or healthy and whether drug-induced or not—in a creative way they try to translate personal visions and insights within their own fields of expression into socially acceptable, useful, or scientifically testable truths. Without some measure of social utility, unique drug-induced experiences represent little more than idiosyncratic to quasi-psychotic productions, having value and meaning only to the substance user.

Addiction is a serious problem in the entertainment industry. Too many brilliant talents have been lost to drugs and alcohol. Unfortunately, substance abuse is not only overlooked but even celebrated in the creative world.

## Technological Advances in the Prevention and Management of Addictions

#### Basu D

Drug De-addiction Centre, PGIMER, Chandigarh, India <u>db\_sm2002@yahoo.com</u>

#### Abstract:

Addictions are common, serious and costly – to the person, the family, the healthcare system, and the society at large. Despite this, addictions are difficult to prevent, detect at an early stage, access to help, treat, and prevent relapse. Technology can help in at least partly addressing these challenges. This talk presents a bird's eye view of some of the selected recent developments where technological advances have the potential to usher in an era of optimism in preventing, detecting and managing addictions. I will briefly touch upon the following areas: abuse-deterrent formulations and long-acting formulations; neuromodulation or brain stimulation therapies; the field internet-based addiction prevention, detection and management technology; and the promise and challenges of developing vaccines or immunotherapy for addictions. After the talk, the audience should be able to appreciate the role of various technological advances in the prevention and management of addictions, and apply the knowledge for practical application as well as plan future research in these areas.



## Drug situation in Manipur

Lenin Singh RK

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## Abstract:

Manipur is a state in the north eastern part of India, which occupies an area of 22,327 square kms and has a population of about 28 lakhs (Census 2011). Manipur shares a porous border of about 398 kms along with Myanmar which is one of the highest producers of Opium. Its vicinity to the Golden Triangle may be one of the reasons of heavy transit of illicit drugs through Manipur.

As per the National Mental Health Survey of India 2015-16, the prevalence of substance use disorder in the state was 23.7%.

According to the National Survey of Extent and Pattern of Substance Use in India 4% (Quantum of Work) of the population use opioid which is the 5<sup>th</sup> highest in the country.There are 34,344 PWIDs (People Who Inject Drugs) which is among the highest in India.

There are 21 Integrated Rehabilitation Centre for Addicts (IRCA) under the Ministry of Social Justice and Empowerment, out of which 2 are for women and 1 for children, where 22939 substance users were registered in the last 5 years.

Drug treatment clinic (DTC) scheme was initiated by AIIMS, New Delhi, under Ministry of Health and Family Welfare in 2015 under which 9500 clients (up to September 2019) have benefited through four DTCs. Forty OST centres are functioning under National AIDS Control Organization, 5 Methadone Maintenance treatment clinics are functioning in the state.

Government of Manipur launched a state wide campaign to contain the drug problem in the state by June 26, 2018. Narcotics and Affairs of Border have arrested 963 drug traffickers under NDPS Act in the last five years, destroyed 3716 acres of illegal poppy, 5.51 acres of illegal cannabis plantation in the state.

## **Aerobic Exercise and Management of Addictions**

### Sharma I, Jain S

Heritage Institute of Medical Sciences, Varanasi, Uttar Pradesh, India indira 06@rediffmail.com

### Abstract:

**Background**: In management of addiction, the emphasis has been on pharmacological management and various psychological therapies. Aerobic exercise has received minimal attention.

**Aim**: The aim of the presentation is to present an overview on the role of aerobic exercise in the management of addictive disorders.

**Method:** Research papers on role of aerobic exercise (AE) in the prevention and treatment of addictive disorders published from 2009 to 2018 have been retrieved from PubMed and other search engines. The work has been reviewed with respect to the role of AE in the primary, secondary and tertiary prevention of addictive disorders.

**Results**: Epidemiological studies have revealed that individuals who engaged in regular aerobic exercise were less likely to use and abuse illicit drugs. Adjunctive moderate-intensity AE over a 12-week period was associated with increase in percent abstinent days from both alcohol and drugs, and better substance use outcomes. Three times /week vigorous AE by women was associated with quitting smoking. Ten minutes high intensity AE by smokers was associated with diminished craving for smoking for a short time. High school students who exercised regularly were less likely than sedentary teens to smoke cigarettes or abuse marijuana. When AE was combined with nicotine replacement, it was more effective at helping smokers avoiding weight gain. Adjunctive interventions targeting physical activity benefitted alcohol dependent individuals in recovery.

**Conclusion**: AE can help to prevent and even treat addiction. Further work is needed, especially in relation to smokeless tobacco, as previous studies had methodological limitations.

## Drug Use in Students: Challenges and Solutions



## Dalal PK

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## Abstract:

Over the last few decades drug consumption has become one of the biggest problems affecting millions of youth in our country and world-wide. Students have various risk factors -increasing stress in academics, coping with the ongoing competition, curiosity and novelty seeking behaviour of this age and peer pressure which can attribute to high rates of drug abuse. The substances consistently used by students are alcohol, tobacco and cannabis followed by opioids, inhalants and other psychotropics. Use of substances like Ecstasy and mephedrone has also increased in the recent past. Urbanisation and provision of more money in hand have made students vulnerable as the availability of drugs has increased.

Various challenges are thus faced in dealing drug use in students. The cognitive control for drug use remains low in young age due to the delayed maturation of pre-frontal circuits and the motivation to change is low. The resilience and coping mechanisms are also not well developed in the younger age. But the ill-effects of substance are higher in younger individuals which interfere with cognition, can contribute to debilitating mood disorders or increase accidental injury or death. Early onset of substance use predisposes to long-term implications. Other challenges which exist in societal and legal level include stigma about substance use, less treatment seeking behaviour due to stigma of parents about their child using substance, lack of implementation of prohibition of sales to minors, presence of use of drugs by parents, lack of social and family support, discord among parents, etc. Peer pressure, alienation from dominant values of society, behavioural problems in childhood can predispose to substance use in early life. To address such challenges a risk focused approach is recommended with an emphasis on protective factors. Variations like risk/protective mechanism or protective/protective mechanism can be used. Preventive strategies like incorporating about the risks of substance use in life skill education can be effective. Using measures like engaging in pro-social activities, involving the family members, enhancing motivation for change can help. Handling the social stigma, awareness and availability of treatment facilities with de-addiction services can be done. All modalities of harm, demand and supply reduction can be targeted to students and adequate steps can be taken as per the need of the individual.

## Addressing Addiction among Street Children

#### Dhawan A

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#### Abstract:

Street children are a vulnerable population and substance use is quite common among them. Tobacco, alcohol, cannabis and inhalants are the common substances of use among street children in India although use of heroin and prescription drugs also is seen among older children. Findings from a nationwide study on pattern and profile of substance use among street children in India will be shared. Also, the data from a representative sample of street children in Delhi based on Respondent Driven Sampling will be discussed.

Drug use is considered a way of coping with life on the streets and treatment seeking is quite poor. Interventions need to be accessible and to be made available on the streets. Nongovernmental organizations (NGOs) that provide other services to street children such as food, clothing, shelter, general health care can be trained to meet their treatment needs for substance use as well. Experiences in capacity building in this direction have found that it is feasible.

Evidence base for effectiveness of interventions related to substance use among street children is quite limited. Age and culturally appropriate participatory approaches for intervention need to be used. A six session group intervention based on cognitive behavior therapy was developed and tested for this target population.

To conclude, there is a huge gap in terms of limited number of services available to meet the needs of the large number of street children. Capacity building efforts to provide intervention for substance use need to multiply.

## **Research Focus for Substance Use Disorders**



#### Singh R

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#### Abstract:

Negative consequences related to excessive consumption of addictive substances are considered as important from public health angles. Literature shows that studies have been carried out on almost every aspect of substance use and the problems caused due to them. Almost all spheres of life are affected by substance abuse. Such substances are considered to alter biochemical, metabolic, psychomotor or cognitive processes. Every organ system of the body gets affected among the users. As evident, altered psychomotor component of behaviour leads to traffic accidents. At the workplace, such substances impact productivity negatively. At home, the studies show higher incidences of marital violence among partners, where one partner is found to be consuming addictive substances. These have been associated with domestic violence and weakened family structures. The partners of substance abusers pay a heavy price as they are at serious risk of violence. Among children who are exposed to addictive substances during gestation, there is a tenfold higher incidence of disorders. Parental drinking seriously harms development among children, although its modes of action are not clearly understood. Abuse, neglect, isolation and insecurity or inconsistent parental behaviours are common among the families of substance abusers as compared to other families. Efforts have been made to control the consumption of non-pharmacological use of drugs or substances. Different schedules are marked on the medicines for their prescription. But most of addictive substances are not covered under medicines and hence such policy measures are not effective. Awareness of community leaders and family members is very crucial in curbing this menace. Stricter laws are required to control the availability and consumption of substances, which harm human beings. There is need for clear strategies to reduce the social harm attributable to addictive substances.

# Abstracts for Symposia

## Symposium 1 Evidence Informed Alcohol and Drug Policy Reforms in India: Implications of the Epidemiological Data

Ambekar A, Agrawal A, Mishra A, Rao R

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#### Learning Objectives:

1) To appreciate the methodological nuances in the epidemiology of substance use.

2) To demonstrate the implications of epidemiological data, used for evidence-informed planning of intervention programs.

#### Abstracts:

# Evidence informed Alcohol and Drug Policy reforms in India: Implications of the epidemiological data Magnitude of drug use in India and the existing policy and program framework for response

Alok Agrawal

NDDTC, AIIMS, New Delhi

**Introduction:** psychoactive substance use exists in India for thousands of years. Recently, the drug use scenario had been apparently changing, however the exact dimension were not well understood.

**Methods:** We conducted the national survey on 'Magnitude of Substance Use in India', released in February 2019, comprised of a Household Survey (aimed at prevalence of alcohol and cannabis use) and a Respondent Driven Sampling (RDS) Survey (aimed at prevalence of illicit / rarer drugs).

**Results:** Prevalence of current Alcohol use in the general population (10-75 year old) is about 14.6% in India, while 5.2% people (around 57 million) are affected by alcohol use disorders. In case of cannabis the prevalence of current use is around 2.8%, while that of cannabis use disorders is 0.66 %. Around 2.1% of Indians are current users of Opioids while 0.7% are affected by opioid use disorders. Prevalence of use and use disorders for sedatives, cocaine, ATS, hallucinogens is much lower.

**Discussion:** Interesting insights emerge from the epidemiological data with implications for alcohol and drug policies. Among various alcohol beverages, use of high alcohol products (like spirits) is higher than the low-alcohol ones (like beer and wine). Prevalence of cannabis use disorders is higher for ganja / charas (smoked, illegal products) than for bhang (oral, legal product). Among opioids heroin has the highest prevalence followed by pharmaceutical opioids and opium (legally cultivated in India). The situation appears to have drastically changed in last two decades (earlier the prevalence of heroin was much lower than opium).

#### A road map for evidence-informed drug supply control response to India

Atul Ambekar

#### NDDTC, AIIMS, New Delhi

**Introduction:** Recently available data on alcohol and drug use in India provides important leads for reforms in the laws and policies aimed at controlling the availability of legal as well as illicit products.

**Methods:** We examined the epidemiological data regarding use of alcohol and drugs as well as the relevant policies and laws governing their availability.

**Results:** Though there are large variations in alcohol policies, the general trend is towards higher taxation of low-alcohol beverages (like beer and wine) as opposed to distilled spirits. India has enacted the stringent Narcotic Drugs and Psychotropic Substances Act which criminalizes drug consumption and has subjected to equal degree of control, the socio-culturally sanctioned low-potency substances (like cannabis and opium) as well as the high-potency, more addictive substances (like heroin).

**Discussion:** A graded and calibrated supply-control response according to the propensity of the drugs to cause public health harms is needed. Government-regulated Bhang market needs to be expanded (higher prevalence of high-potency, illegal cannabis, as compared to low-potency bhang, in the states with no legal bhang market). The past system of regulated supply of opium and poppy husk to registered users need to be revived to prevent escalation of the heroin market. Stringent controls over pharmaceuticals makes access difficult for the patients. The alcohol tax policies need to be reformed to discourage consumption of high-potency beverages. There is a need to move from a criminal-justice led response to health and welfare led response, including drug Decriminalization.

## Methodological Approaches for epidemiology of substance use: Advances and innovations

Ashwani Mishra

#### NDDTC, AllMS, New Delhi

**Introduction:** Research on Epidemiology of substance use brings a set of complex challenges. The behaviors under the study are difficult to observe and assess objectively and remain stigmatized.

**Methods:** We employed a number of innovations to deal with the inherent challenges in the epidemiology of substance use to generate reliable and credible results which could inform formulation of evidence based policies and programs.

**Results:** For the household survey, careful designing of the sampling frame ensured that the sample remained 'self-weighted' to a large extent and thus representative of the general population of the state. Use of Respondent Driven Sampling (RDS) approach to study the phenomenon of dependence on illicit drugs proved to be very useful since the traditional Household survey approach is often associated with under-reporting and underestimation.

**Discussion:** A number of other innovations were employed such as (a) Mapping and Listing of the households, (b) use of a team of male and female interviewers to improve the response rate (c) use of hand-held digital devices for real time data collection and digitization and (d) statistical management information system to ensure error-free and efficient data analysis.

#### Scaling-up the drug demand reduction and harm reduction response in India

Ravindra Rao NDDTC, AIIMS, New Delhi **Introduction:** High prevalence of drug use disorders in India and the huge treatment gap indicates a skewed supply-control oriented response as opposed to a health and welfare oriented response.

**Methods:** We examined the epidemiological data regarding alcohol and drug use disorders as well as the relevant programs and policies to address the same.

**Results:** Health is state (sub-national) subject and Treatment of drug and alcohol use disorders is accorded a lower priority over other public health concerns. Just 1 in 38 people with alcohol dependence and 1 in 20 with drug dependence report having received any treatment. Less than 25% of approximately 800,000 people who inject drugs (PWID) are covered with harm reduction programs. Laws governing pharmaceutical products act as barriers for scaling up opioid substation treatment (OST). Treatment in the non-government sector remain poorly regulated with consequent human-right violations. Involvement of drug user networks and civil society remains nascent.

**Discussion:** Massive investments in the health and welfare sector to scale-up the availability of evidence based treatment facilities are needed. This would require dedicated financial resources, capacity building of health providers as well as policy reforms for easier access to the pharmaceutical products. Harm reduction approach needs to be widely embraced for all drugs (beyond PWID). Recently enacted Mental Health Care Act (2017) can be a double edged sword; while it may facilitate better regulation of treatment facilities, some provisions can be misused to propagate involuntary treatment. Civil society need to play a larger role in program designing and implementation.

## *Symposium 2* International Collaborations with the United Nations ISSUP and ICUDDR

### Ghaferi HA<sup>1</sup>, Wetterau N<sup>2</sup>, Morales B<sup>3</sup>, Johnson K<sup>4</sup>, Baldachhino A<sup>5</sup>, Bunt G<sup>6</sup>

<sup>1</sup>National Addiction Centre Abu Dhabi in United Arab Emirates, Abu Dhabi, UAE

<sup>2</sup> University of Rochester, New York, USA

<sup>3</sup> US Department of State: Bureau of International Narcotic and Law Enforcement Affairs, USA

<sup>4</sup> Department of Mental Health Law and Policy, Louis de la Parte Florida Mental Health Institute, Florida, USA

<sup>5</sup>Medical School, University of Dundee, Ninewells Hospital, UK <sup>6</sup>NYU and Good Samaritan Treatment Center, New York, USA <u>buntmd@gmail.com</u>

The Political Declaration and Plan of Action (Arabic, Chinese, English, French, Russian, Spanish) on International Cooperation towards an Integrated and Balanced Strategy to Counter the World Drug Problem, adopted at the high-level segment in 2009, includes measures to enhance international cooperation, identifies problems and areas requiring further action, as well as goals and targets in countering the world drug problem. The preparatory process for the high-level segment was initiated at the fifty-first session of the Commission on Narcotic Drugs. It decided to establish open-ended, intergovernmental expert working groups to assess the achievement of the goals and targets set by the General Assembly at its twentieth special session, as well as areas requiring further action. The conclusions of the expert working groups were taken into account by the intersessional meetings of the Commission when drafting the political declaration for consideration by the Commission in 2009. The Commission at its fifty-second session in 2009 adopted the Political Declaration and Plan of Action on International Cooperation towards an Integrated and Balanced Strategy to Counter the World Drug Problem.

Member States committed themselves to reporting biennially to the Commission on Narcotic Drugs on the efforts to fully implement the Political Declaration and the Plan of Action. Two UN agencies:-

UNODC (UN Office of Drug Control) and WHO (World Health Organization based in Geneva) that address the world's addiction epidemics. Because of increasing worldwide drug problems, a special session of the general assembly was called. Special sessions of the general assembly focused progress toward the goals of international prevention, harm reduction and recovery. A large resolution was passed which addresses prevention, treatment as well as illegal drug trade and other issues. The document focused on a public health model. Reports of many of these sessions and of the 22 page resolution that passed are on the internet at http://research.un.org/en/docs/ga/quick/special.

#### CIVIL SOCIETY TASK FORCE:

There were two: the Vienna NGO Committee on Drugs and the New York NGO Committee on Drugs. ISAM is connected to the Vienna NGO committee, which is more diverse. The purpose of these committees was to provide nongovernment input to the UN. There is a 100 page report. www.cstfondrugs.org/ providing more detail.

ISSUP: International Society of Substance Use Prevention and Treatment Professionals have extensive teaching materials and work in many countries related to training of diverse and interdisciplinary addiction treatment providers.

ICUDDR: International Consortium of Universities for Drug Demand Reduction, is a newly formed international membership organization for networking of universities with addiction studies programs.

Hamad Al Ghaferi - Perspectives from UNODC Norman Wetterau - Perspectives from UNGASS Brian Morales - Perspectives from ISSUUP Kim Johnson - Perspectives from ICUDDR Moderators: Alex Baldaccino and Gregory Bunt

## *Symposium 3* Substance Use Treatment Must Move Beyond Hospital

Chavan BS, Sidana A, Das S

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#### Abstract:

Substance abuse is a major public health problem in most parts of India. According to National Mental Health Survey (NMHS 2016), the prevalence of substance use disorder (current use) was 22.4% (tobacco use 20.9%, alcohol use disorders 4.6% and other drugs 0.6%. and the treatment gap was more than 86 percent. Another recent report on magnitude of substance use in India (2019) suggests that a sizable population in India is affected by substance use disorders and is in need of urgent help. However, reach of existing facilities for treatment of substance use disorders are grossly inadequate. Considering the wide treatment gap, hospital-based addiction treatment programs are unlikely to cater to the persons who are in urgent need of help. Hence, there is urgent need to reach to this unreached population through community de-addiction programs.

In addition to lack of infrastructure, there is gross shortage of trained manpower to handle substance use disorders. There is a shortage of mental health professionals in India and the training of medical officers is grossly inadequate. The delivery of community outreach services through the various community outreach activities involving the local community resources are expected to reduce the treatment gap and will help in reaching to unreached population.

For last 23 years, Department of Psychiatry, GMCH Chandigarh has designed and implemented multiple strategies beyond hospital to reach out to persons who are not into treatment, but requiring urgent intervention. These strategies have attempted to include service users, families and community in treatment planning and delivery of intervention. Symposium will be presented under following subthemes

- 1. Magnitude of problem and reasons of huge treatment gap: Prof BS Chavan
- 2. Involvement of stakeholders in planning and implementation of service: Dr.Ajeet Sidana
- 3. Delivery of community de-addiction services: Dr.Subhash Das

## Symposium 4 Recent Advances in Tobacco Control: Regional and Indian Perspectives

Jhanjee S, Kaur J, Swasticharan L, Mattoo S K

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#### 1.Tobacco control in SEAR: Achievements and challenges

Presenter: Dr. Jagdish Kaur, Regional Advisor, Tobacco control, WHO-SEARO
2. National Tobacco Control Programme (NTCP): How far have we come?
Presenter: Dr. L. Swasticharan, CMO, Dte GHS, MoHFW
3. TB-Tobacco collaborative framework in India: The great step forward
Presenter: Dr. Sanjay Kumar Mattoo, Joint Director, Central TB division, MoHFW
4. The e-cigarette debate: The Indian perspective
Presenter: Dr. Sonali Jhanjee, Professor, National Drug Dependence Treatment Centre, AIIMS, New Delhi

#### Abstract:

In South East Asian Region (SEAR) some member states are among the top tobacco-consuming countries in the world. More recently, member countries in the Region have been fighting with the menace of tobacco and four of them are now listed among the top five countries worldwide with largest graphic warning on tobacco products. Thailand is the first country in Asia to adopt plain packaging for tobacco products. India has made rapid strides in Tobacco control with implementing 85% pictorial health warnings, introducing the toll-free national quit line in 2016 and incorporating the quit-line number on tobacco packs in 2018. In another remarkable development, under the collaboration of the National Tobacco Control Programme (NTCP), National Oral Health Programme (NOHP) and the Dental Council of India, 310 Tobacco cessation centres are to be established in all the dental colleges of the country and operational guidelines for these have been released by Government of India(GOI) in 2018. In a historical step by GOI, the Revised National Tuberculosis Programme(RNTCP) and the NTCP have come together to introduce the 'National Framework for Joint TB-Tobacco Collaborative Activities' and guidelines have been developed for the implementation of tobacco cessation services as an integral part of TB case management. As regards the use of Electronic Nicotine Delivery Systems (ENDS) in India, an advisory from the Ministry of Health and Family Welfare, GOI, in 2018 has been issued to all states and union territories to ensure that ENDS and similar devices are not sold, manufactured, distributed, traded, imported and advertised in their jurisdictions.

## *Symposium 5* Internet Gaming Disorder: A Disease of 21st Century

#### Jiloha RC, Bansal Pranjali, Aggarwal S, Desai OP

Hamdard Institute of Medical Sciences & Research, Jamia Hamdard, New Delhi, India <u>shruti.aggarwal49@gmail.com</u>

#### Learning Objectives:

1) Recent trends in Internet Gaming Disorder

2) Management of Internet Gaming Disorder

#### Abstract:

Games have always been a part & parcel of human life since ancient times. As the culture and technology progressed, types of games changed. In recent period, play of internet games has been on rise with estimates of prevalence of addiction being 2-15%. There's a wide variety/ genre of internet games available free and with easy access to add on the problem of Internet gaming addiction. DSM-5 has also considered it a problem/ diagnosis significant enough to be worthy of further investigation. Research has demonstrated significant association of gaming disorder with different psychiatric disorders like depression, panic disorder, generalized anxiety disorder, ADHD and certain personality traits, like aggression, sensation seeking and neuroticism. In India, though there are laws related to cybercrimes but no clear guidelines exist in specific relation to internet gaming. The sudden increase in cases of internet addiction warrants the need of appropriate treatment guidelines in place.

Thus, this symposium focuses on recent trends in internet gaming disorder and its future implication in terms of it being an independent diagnosis and treatment guidelines.

## *Symposium 6* Alcohol Use Disorder in Korea

Kim SG, Na E-Y, Kim D-W, Yoon D-U

Pusan National University, Korea

#### Learning Objectives:



2) To learn the trend in the rate of drinking during pregnancy among Korean women according to the type of medical institutions, and to learn the meaningful relationship of "jumping-to-conclusion" in Korean patients with alcohol use disorder.

#### Abstract:

The consumption of alcohol has an important role within the social structure and culture of Korea. Such customs resulted in high alcohol consumption rate and risky patterns of drinking in adolescents as well as adults. On the bright side, the total prevalence rate of alcohol use disorder (AUD) and the proportion of alcohol-related crime, which are directly related to the functional impairment due to alcohol use, show a declining trend in recent years. However, it is important to note that the rate of diagnosed AUD increases steadily in the certain demographic groups including women, adolescents, and elderly people. Moreover, the harmful alcohol use creates significant social costs, and the use of mental health services remains low despite its slight uptick. Regarding the treatment services use patterns for people with hazardous drinking habits and AUD in Korea, the key features are larger portion of inpatient treatment than outpatient treatment; greater re-admission rate, lesser outpatient visit rate after discharge, and lower rate of registration for community mental health services when compared to patients with severe mental illness. This presentation will provide updated information on the current situation and treatment systems for Alcoholics in Korea using data sources referenced by national databases.

Alcohol use disorder is a major public health issue in Korea. As of 2015, the alcohol consumption per capita in Korea was similar to that of OCED countries, but high-risk drinking experience was high in the 20-30 age group, and the high-risk drinking rate of women in particular was high. High-risk drinking is a major cause of many diseases, which are associated with death and disability, placing a great burden on society and the economy.

This session will address Korea's alcohol-related issues. First, Dr. Na will introduce current situation of alcohol use disorder and high-risk drinking and its treatment systems in Korea. And then, Dr. Kim and Dr. Yoon will present the results about drinking rate of Korean pregnant women according to the types of medical institutions, and the meaningful relationship of "jumping-to-conclusion" with impulsivity and working memory in Korean patients with alcohol use disorder.

#### **The current situation and treatment systems for alcoholism in Korea** Eui-Hyeon Na

Abstracts: Symposia

The consumption of alcohol has an important role within the social structure and culture of Korea. Such customs resulted in high alcohol consumption rate and risky patterns of drinking in adolescents as well as adults. On the bright side, the total prevalence rate of alcohol use disorder (AUD) and the proportion of alcohol-related crime, which are directly related to the functional impairment due to alcohol use, show a declining trend in recent years. However, it is important to note that the rate of diagnosed AUD increases steadily in the certain demographic groups including women, adolescents, and elderly people. Moreover, the harmful alcohol use creates significant social costs, and the use of mental health services remains low despite its slight uptick. Regarding the treatment services use patterns for people with hazardous drinking habits and AUD in Korea, the key features are larger portion of inpatient treatment than outpatient treatment; greater re-admission rate, lesser outpatient visit rate after discharge, and lower rate of registration for community mental health services when compared to patients with severe mental illness. This presentation will provide updated information on the current situation and treatment systems for Alcoholics in Korea using data sources referenced by national databases.

## Difference in the rate of drinking during pregnancy among Korean women visiting local OBGY clinic and university hospital

#### Dae-Wook Kim

**Background:** Although alcohol drinking during pregnancy can adversely affect the fetus, it is reported that many Korean pregnant women are drinking during pregnancy. There are many studies on the characteristics that influence alcohol drinking during pregnancy in order to reduce the drinking rate of pregnant women. According to previous reports, there are differences in the characteristics of pregnant women visiting depending on the type of medical institution. However, there have been no studies on the drinking rate of pregnant women according to the type of medical institution.

**Objective:** The aim of this study was to investigate the difference in alcohol drinking during pregnancy women visiting local OBGY clinic and university hospital.

Methods: We obtained information from self-report questionnaires from pregnant women who visit local OBGY clinic and university hospital. The drinking-related characteristics and demographic factors between two groups were compared using Student's t-test, Mann-Whitney test and Pearson's chi-squared test.

**Results:** The prevalence of drinking before pregnancy was significantly higher in women who visited university hospital than women who visited Local OBGY clinic (p=0.016). However, there was no significant difference between the two groups in the prevalence of alcohol drinking during pregnancy.

After knowing pregnancy in pregnant women aged 35 years and older, pregnant women visiting local OBGY clinic showed a higher tendency of alcohol drinking than university hospital (p=0.054)

In case of pregnant women aged 35 years and older who had been drinking before pregnancy, pregnant women visiting a local OBGY clinic were significantly more likely to drink alcohol after pregnancy compared to women visiting university hospital(p=0.048). **Conclusions:** The results from the present study show that pregnancy women aged 35 years and older who visited a local OBGY clinic had a high rate of alcohol drinking after there were

aware of being pregnancy. In this regard, among pregnant women aged 35 years and older who visited a local OBGY clinic, it is necessary to prevent drinking during pregnancy for pregnancy women who had been drinking before pregnancy.

## Investigation into jumping-to-conclusion by Korean alcohol dependent patients

Dong-Uk Yoon

**Objectives:** Patients with alcohol dependence tend to lead to an early conclusion based on insufficient data under cognitively uncertain circumstances. Such reasoning bias is called "jumping-to-conclusion." The aim of this study is to identify the presence of the reasoning bias of "jumping-to-conclusion" in patients with alcohol dependence and to investigate the meaningful relationship of "jumping-to-conclusion" with impulsivity and working memory of patients with alcohol dependence.

**Methods:** Thirty-one hospitalized patients with alcohol dependence and Thirty-eight healthy volunteers (control group) were enrolled in this study. All participants were male and they completed the following tests: the beads test, emotional card test, Barratt Impulsiveness Scale, the Wisconsin Card Sorting Test (WCST).

**Results:** Compared to the control group, the patient with alcohol dependence group displayed the tendency of making an early conclusion in both the beads test and the emotional card test. The performance on the Wisconsin Card Sorting Test of alcoholic group were significantly poorer than that of the control group. Patients with alcohol dependence scored higher than controls in the total score of the Barratt Impulsiveness Scale and the motor, non-planning impulsiveness subscale scores. However, the scores on the beads and emotional card test did not show statistically significant relationship with the score of the Barratt Impulsiveness Scale and the MCST.

**Conclusion:** Based on the results of the beads and emotional card test, this study confirmed the presence of "jumping-to-conclusion" bias in patients with alcohol dependence. In addition, it can be said that this bias is not significantly related to impulsivity, and cognitive function damage.

## *Symposium 7* Nicotine Dependence – Where do we Stand Now?

Chakraborty K, Bhattacharya R, Neogi R

College of Medicine and JNM Hospital, Kalyani, West Bengal, India

#### Learning objectives

1) To educate the audience about the magnitude of Nicotine dependence

2) To educate the audience regarding the comorbidities of Nicotine dependence and its management

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#### Abstract:

Addiction to nicotine kills one person prematurely every six seconds. One in two long-term smokers - largely in low- and middle-income countries will die from nicotine dependence. This epidemic reflects the highly addictive nature of tobacco, and specifically of nicotine, its principal addicting component. In the recently concluded National Mental Health Survey 2016, the prevalence of Nicotine dependence (moderate and high dependence) was 20.9%. The burden of nicotine dependence was more in middle aged (40-59) individuals (29%), among males (35.67%) and in rural areas (24.12%).

Nicotine dependence is associated with large number of medical and psychiatric comorbidities. Among medical comorbidities, tuberculosis, chronic obstructive pulmonary diseases, lung cancer, heart disease, stroke, erectile dysfunction to name a few. Nicotine dependence has been found to be associated with alcohol dependence, cannabis dependence, schizophrenia, major depressive disorder, panic attack, social phobia, posttraumatic stress disorder (PTSD), attention deficit hyperactivity disorder (ADHD), conduct disorder, and antisocial personality disorder (ASPD).

Pharmacotherapies for smoking cessation should reduce withdrawal symptoms and block the reinforcing effects of nicotine without causing excessive adverse effects. All forms of nicotine replacement therapy (NRT) – gum, patches, lozenges and inhaler and bupropion are safe and effective for increasing smoking cessation rates in the short and long-term use. Combination NRT (more than one therapy) may be indicated in patients who have failed monotherapy. Varenicline, is an analogue of cyticine and high potency alpha4 beta2 nicotinic acetylcholine receptor partial agonist, reported to have benefit in smoking cessation. Psychotherapies have also some role.

## *Symposium 8* Addiction: And What May Lie Within



#### Hamid R, Bairagi J

#### hamidrezaul@gmail.com

#### Learning Objectives:

This study sheds light upon what lies beneath hardcore addiction and why sometimes it is difficult to treat such cases, where even the psychopharmacology and psychological aspects fails, giving it a new arena of diagnostic criteria and treatment to get standardized.

#### Abstract:

Addiction is a complex condition, a brain disease that is manifested by compulsive substance use despite harmful consequence. The DSM-5 recognizes that people are not all automatically or equally vulnerable to developing substance-related disorders and that some people have lower levels of self-control that predispose them to develop problems if they're exposed to drugs. Now there is no such condition as 'psychopath or sociopath' in the psychiatry diagnostic manual, yet these emotive, damning terms are still common in our culture. What does this imply? Psychopaths are incapable of feeling guilt, remorse, or empathy for their actions or the objects of their actions. Psychopath or any different form of psychopathology for which they seek extreme need of satiation for rewards. Here in a study done in a private psychiatric care in Lower Assam part of North- East region named 'Mind care Neuro-Psychiatry Research Centre' we aim to look at what lies lurking behind the surface level of addiction: Psychopath. Now the modern medical term for psychopath is more appropriately titled 'Anti-Social Personality Disorder'. Thus, till now addiction or substance use disorders were looked as a single entity, but this study and its similarity with other three cases and its finding attempts to shed light upon what lies beneath hardcore addiction and why sometimes it is difficult to treat where the psychopharmacology failed giving it a new arena of diagnostic criteria and treatment to get standardized.

## *Symposium 9* Can Spiritual Healers be made a Part of the Multidisciplinary Substance Use Treatment Team in Indian Context?

#### Kathuria P, Sareen H

Prem Neuropsychiatry Centre, Ludhiana, India drpuneetkathuria@gmail.com

#### Abstract:

Substance addiction has been amongst one of the most vexing social and medical problems of our era. Medications are effective, though access, costs, stigma, side effects, and health risks may deter utilization. Likewise, professional psychotherapy helps yet is unaffordable and unavailable to many. And, even when empirically based treatments can be accessed, relapse, mortality, and morbidity are the rule with mental disorders. Therefore, there is an urgent need for affordable and accessible treatment options.

Alternative or complementary medical and spiritual approaches are promising and are associated with excellent patient acceptance. There appears to be an upward trend toward acceptance and utilization of these 'complementary' practices. Evidence suggests that meditation practice is associated with neuro-plastic changes in various regions of the brain such as the anterior cingulated cortex, insula, and temporo-parietal junction. Studies on long term meditators suggest structural changes in the form of prefrontal differences as well as insular differences in the form of increased grey matter. We address the spiritual practices viz. Yoga and meditation as alternative or complementary form of mind-body medicine

## *Symposium 10* Addiction Terminologies: ISAM, ICD and DSM Perspectives and Implications for Assessment and Treatment.

Hajela R, Tanguay R, Al Ghafari H, Ghosh M

Cumming School of Medicine, University of Calgary rajuhajela@hotmail.com

#### Learning Objectives:

Understand the definition of Addiction as developed by ASAM and adopted by ISAM
 Appreciate the differences and similarities among the definition, DSM and ICD/WHO nosologies

3) Learn how to apply the definition and nosologies in clinical practice – patient assessment and care in a chronic disease framework.

#### Abstract:

This symposium workshop will address the 3 perspectives of ASAM/ISAM definition of Addiction, DSM 5 and the WHO/ICD frameworks for understanding and addressing substance and addiction related disorders. Implications for disease vs disorder terminologies and the chronic disease framework for patient assessment and care will be discussed. Dr. Hajela will address the definition; Dr. Tanguay will present the DSM 5 views; Dr. Al Ghaferi will present the WHO/ICD perspective; and Dr. Ghosh will discuss the clinical patient management implications with participation from the audience.

## *Symposium 11* Biostatistical Aspects of Research in Addiction Medicine

Mishra AK, Dwivedi SN, Thennarasu K.

NDDTC, AIIMS, India akmaiims@gmail.com

#### Learning Objectives:

To discuss the bio-statistical aspects of research in addiction medicine with special reference to the designing, size estimation and multivariate statistical methodologies for understanding the multifactorial aspects of disease.

#### Abstract:

#### Designing a Randomized Controlled Study

#### SN Dwivedi

To cope up with the addiction problem among specific substance-dependent patients, there might be varying interventions, sometimes even no intervention. Obvious queries regarding clinical/ public health practice to deal with this problem might involve about possible superiority/ non-inferiority of a particular intervention. In the era of evidence-based health care, use of randomized controlled trials becomes unavoidable to derive quality evidence in addiction medicine. To capacitate in this regard, the concerned researchers need to be acquainted with various components under planning and conducting a randomized controlled trial. For completeness, various study designs with an emphasis on various types of randomized controlled trials in view of planned hypothesis and its phases will be discussed. Further, aiming a Phase-III trial, the focus of this talk will be on to introduce various types of trials in terms of planned hypotheses under the study; and to discuss a case study involving non-inferiority trial involving research question, hypothesis, objective, study population, dose, randomization, unequal allocation, outcome, minimum sample size at considered level of confidence and power of the study, analytical considerations including level of significance, interpretation and conclusion. To ensure optimal utility of the talk, the participants will be encouraged to preferably come with their own research questions and actively participate in the related discussion.

## Multivariate Statistical Techniques for understanding multi-factorial aspects of disease in addiction medicine.

#### K. Thennarasu.

The nature of disease in field of addiction sciences is quite complex. The etiology of disease can be understood by addressing the multifactorial dimensions of the problem. For example, we can obtain information on the phenotype as well as the genotype and there can be element of functional imaging too. Hence, the database obtained in such a scenario is multi-layered. Under such circumstances, the application of simple parametric/non-parametric statistical techniques has its limited utility. Although regression techniques can address some of these problems, they are likely unproductive in situations where the observations are repeated, clustered within a group. Moreover, situations may also warrant in delineating the association of various risk factors with more than one dependent variable at a time – like dependent on more than one substance. There can also be conditions where an individual behavior becomes time dependent and we need model that can precisely test the hypothesis in light of time dependency. The wellknown regression models like simple or multiple linear regression or binary logistics regression cannot be applied under these situations. Hence, it is desirous for researchers in addiction science to be acquainted with multivariate statistical techniques like latent class analysis, latent trait analysis, regression modelling with time dependent covariate, etc. With these views in mind the present talk focuses on multivariate statistical techniques for understanding multifactorial aspects of disease in addiction science. The focus in the present talk will be in sensitizing the professionals to various aspects of multivariate techniques with problems arising from the real world.

#### Issues in Size Estimation of Dependent Population for illegal substances

#### Ashwani Kumar Mishra

The size estimation for dependent population is an important area of concern in addiction medicine. This is attributed to the fact that the phenomena of drug use are network behavior and there is absence of adequate sampling frame which cannot be utilized for arriving at the precise estimate of the dependent population on the basis of sample survey. Although census is the best method of estimation but it is almost impossible to catch hold of the substance using population, because they are hidden. The hidden population consists of individuals practicing behavior which are considered to be a socially deviant and it is difficult to elicit information using the traditional methods of population-based surveys. Some examples of hidden population are – men having sex with men, homelessness, injecting drug use, HIV and its risky behavior and etc. Hence, it is important to understand various alternatives procedures for estimation of the dependent population of various illegal substance use. The present deliberation provides an overview of various estimation methods-population survey methods, network scale up method, enumeration method, capture recapture and multiplier methods. The focus during the talk would be on the relative advantages and disadvantages of each of these methods. An attempt will be made to illustrate the applicability of these methods with a case example from recently concluded National Survey on Extent and Pattern of Substance Use in India, a commissioned study to 'National Drug Dependence Treatment Centre', AIIMS by Ministry of Social Justice and Empowerment.

## *Symposium 12* Naltrexone Implant in Addiction Psychiatry

Lal R, Teja V, Aggarwal D, Singh S

National Drug Dependence Treatment Centre, AIIMS, New Delhi, India <u>drrakeshlall@gmail.com</u>

#### Speakers

- 1. Rakesh Lal, New Delhi
- 2. Vimal Teja, Kandla
- 3. Deeptanshu Aggarwal, Lucknow
- 4. Shalini Singh, New Delhi

#### Abstract:

Rakesh Lal: Introduction, Prevalence of Alcohol use, Anticraving drugs including Acamprosate and

Naltrexone and efficacy. Need for Naltrexone implant.

Vimal Teja: Post marketing experience including methods and tools, need for documentation compliance and Pharmacokinetics

Deeptanshu Aggarwal: Experience on using Naltrexone implant; patient selection, protocol before surgery including consent and laboratory investigations, procedure, complications and efficacy.

Shalini Singh: Summary and Conclusions

## *Symposium 13* Anabolic Androgenic Steroids: Adverse Effects, Dependence And Treatment

Havnes I, Jørstad M I, Hauger LE, Wisløff C

#### **Oslo University Hospital.**

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#### Learning Objective:

At the end of this symposium, participants will be able to:

Diagnose anabolic-androgenic steroid dependence and identify associated harms, and
 Describe barriers and facilitators to enter addiction treatment among AAS users with health problems.

#### Abstract:

AAS use is a growing public health concern and is associated with endocrine, metabolic, cardiovascular and mental health risks including AAS-dependence, but few seek treatment. Recent findings on AAS use, adverse effects including AAS dependence and treatment will be presented through four linked research presentations and discussion: "Adverse effects among AAS users in SUD treatment". Marie Jørstad will present findings from a survey among 563 patients where 28.3% reported AAS use. Half of the patients with stimulants as their most used substance reported AAS use. Participants reporting AAS use for more than a year, reported higher AAS addiction rate and more adverse effects than those who had used less than a year. "AAS dependence is associated with executive dysfunction". 30% of AAS users develop dependence and Lisa Hauger will present data on executive function in relation to long-term AAS use and dependence among 163 male weightlifters. AAS dependents scored significantly lower compared to the non-users, with strongest effects for working memory, mental flexibility and problem solving. This may be related to continued abuse despite adverse effects and social consequences. "Barriers to treatment seeking and SUD treatment experiences among AAS users with health problems". Ingrid Havnes will present findings from a qualitative study among 21 AAS users with health problems exploring barriers and facilitators to treatment seeking. For those entering SUD treatment; somatic and mental health evaluation was experienced as essential, and the withdrawal phase demanded pharmacological and psychotherapeutic treatment. "Treatment seeking prior to and during a Public health campaign informing about adverse effects of AAS and treatment options". Christine Wisløff will present the national campaign that was accessed a million times on social media during 12months, resulting in a fourfold increase in addiction treatment seeking when compared to the previous years.

## *Symposium 14* Benzodiazepine Misuse and Dependence: A Neglected 'Epidemic'

Khanra S, Khess CRJ, Munda SK, Kanabar M

Central Institute of Psychiatry, Ranchi, India souravpsy@gmail.com

#### Learning Objectives:

1) To understand magnitude, burden and complexities of benzodiazepine misuse and dependence

2) To manage and facilitate toward recovery from benzodiazepine misuse and dependence

#### Abstract:

In a rapidly changing world, many new substances and/or products have been found to be abused by individuals and got recognized by scientific and legal authorities. Benzodiazepines (BZDs), included under sedative-hypnotic class of molecules is one among them and hold few characteristics which make it a distinct psychoactive substance than others. Procuring and consuming benzodiazepines are free of any societal inhibition and/or stigma which creates a reinforcing effect among individuals who abuse benzodiazepines. Persons who use alcohol, cannabis and other psychoactive substances often choose BZD as an easy alternative or rescue drug. Though BZD and opioids both have therapeutic usage, same of the former is much wider and more diverse than latter. BZDs than opioids, have been prescribed by more physician and practitioners irrespective of their specialties. Reduced quality of life reduced social functioning, physical harm, cognitive decline and even mortality are only few long-term side effects. Unfortunately, BZD prescription and misuse is on rise and adding complexity to this. Though prescribing BZD more than weeks is nowhere recommended, continued prescription of BZD in an individual push an individual toward BZD misuse and dependence. Therefore, BZDs have a much higher abuse potential due to its pharmacological nature, easy availability, lack of monitoring and legal restriction. Its abuse potential is often facilitated by prescription errors neglecting all recommendation and guidelines for the same. As addressing this clinical situation appropriately has not been there in community both by prescribers and individuals, measures to manage this have been little. Deprescribing BZDs with offering other alternatives in an individual with problematic BZD use must be chosen and be included in treatment approaches. Similar approach to other substances in form of demand reduction, harm reduction, primary preventive measures must be initiated among all stake holders including physicians before 'epidemic' escalates to out of control.

## Benzodiazepines and similar drugs: history, patterns of use/misuse, practical methods to decrease prescription and impact of new laws regarding co-prescription with opioids.

#### Kanabar M

#### Abstract:

Sedative/hypnotics were initially introduced in the 20th century as alternative to barbiturates, they were relatively easy to use and refill. Over time patients became dependent and tolerant on the medication. Awareness about the pitfalls of use of benzodiazepines emerged in late 1990s and early 2000s. Now in the United States of America, there is increased oversight and regulation regarding prescription of benzodiazepines and other zolpidem like drugs. A significant factor for this is the incidence of opioid overdose related deaths. According to the National Institute of Drug Abuse, more than 30 percent of the opioid related deaths also involved use of benzodiazepines. The Centers for Disease Control and Prevention have recently on benzodiazepine and opioid medication co prescription, misuse and work health risks involved with the same. The prescription drug monitoring programs have been implemented through many states in which prescribers are now mandated to check frequently. Also, in 2019, naloxone co prescribing law came into action in the state of California, in addition to other regions. This has increased prescriber awareness. Patients are better informed when they are prescribed medications likely to cause overdose. As a result, there is increased interest in decreasing the benzodiazepine burden in the population. We will present information as to how to taper benzodiazepines safely, common challenges faced by prescribers, use of urine drug screens and when to get help for a possible substance use disorder. We will discuss health system wide strategies to monitor and decrease excessive use of benzodiazepines.

## *Symposium 15* The Role of the Medical System in Combatting the Opioid Crisis: Is Curing HCV Infection Part of the Answer?

Conway B, Fraser C, Yung R, Magel T

Vancouver Infectious Diseases Centre, Vancouver, Canada brian.conway@vidc.ca

#### Learning Objectives:

1) Understand the interaction of epidemics of injection drug use and chronic viral infections such as HCV infection

2) Understand the importance of multidisciplinary health care models in addressing the complex needs of vulnerable inner city populations.

#### Abstract:

In British Columbia, among people who inject drugs (PWID), there are 4 opioid related overdose deaths each day, most often related to fentanyl use. Over 65% of PWID have HCV antibodies, indicating current or past infection. We have developed community pop-up clinics (CPCs) held in the inner city of Vancouver. Using point-of-care HCV antibody testing, we identify infected individuals and engage them in a multidisciplinary program of care to address their medical, social, psychologic and addiction-related needs. To date, we have identified over 1200 patients with current or past HCV infection at CPCs, and overall VIDC has treated over 400 PWID for HCV infection. In doing so, we have developed approaches to deal with housing, financial, and food insecurity as well as promote safer drug use practices and engagement in addiction care. A similar approach has been undertaken in the city of Victoria, where the focus has also included the identification and treatment of those living with HIV infection. In Victoria as in Vancouver, the focus is on multidisciplinary engagement and identifying a population of individuals who are unstably housed or living in shelters. Given the fact that over 12 million people in India are infected with HCV, similar approaches should be considered in this country. Additional benefits of the program in Vancouver have been documented. In our patients cured of HCV infection, reinfection rates as low as 1/100 person years can be obtained if patients are actively engaged in care. As homelessness is identified as a major correlate of failure of HCV therapy, structures can be developed to address this issue and enhance the success of the program. Finally, we have demonstrated an 80% decrease in expected opioid-related mortality among individuals enrolled in our program, such that it must be considered an integral part of our response to the opioid crisis in Canada.

## Symposium 16 Psychiatric Illness with Co-Occurring Substance Use Disorders – Emerging Trends and New Directions

Mahadevan J, Kandasamy A, Shukla L

Center for Addiction Medicine, Department of Psychiatry, NIMHANS, Bangalore, India jayantmahadevan@gmail.com

#### Learning Objectives:

1) To understand the patterns and correlates of psychiatric illness and substance use disorder co-morbidity

2) To review the treatment of schizophrenia and co-morbid alcohol use disorders with a focus on the use of anti-craving agents

3) To review the treatment of bipolar disorders and co-morbid alcohol use disorders with a focus on the use of anti-craving agents

#### Abstract:

Psychiatric illnesses (both severe mental illness and common mental disorders) and substance use disorders are known to co-occur frequently in both clinical and community populations. This co-morbidity is known to lead to negative outcome in both the disorders. Individuals with this co-morbidity are known to have high healthcare utilisation and most often require intensive pharmacological and psychosocial interventions. There is a paucity of data about this co-morbidity from India with data available primarily from a few general hospital psychiatry units and prevalence rates being much lower than global data. The Centre for Addiction Medicine, NIMHANS by virtue of being a tertiary mental health centre receives a significant number of referrals for individuals with psychiatric illness and co-occurring substance use disorders. The most prevalent substance use co-morbidity in individuals with severe mental illness (excluding tobacco use) at our centre is alcohol use disorder. The clinical evaluation at the centre consists of a characterisation of the co-morbid illnesses and provision of pharmacological and psychosocial interventions by a trained multidisciplinary team. In addition to treatment of the primary psychiatric illness, there is emerging data for the effectiveness of using anti-craving agents such as Baclofen and Naltrexone particularly in individuals with cooccurring severe mental illness (schizophrenia or bipolar disorders) and alcohol use disorders, with improved outcomes in terms of symptom relapse in both psychiatric illness and alcohol use disorders.

## *Symposium 17* Co-existence of Medical/Harm Reduction and Punitive/ Criminal Justice Addiction Treatment Programs: A Worldwide Experience

Farhoudian A, Baldacchino A, Dom G, Singer SG, Jhanjee S, Joghataei MT

Iranian Research Center for Substance Abuse and Dependence, University of Social Welfare and Rehabilitation Sciences, Tehran, Iran <u>farhoudian@yahoo.com</u>

#### Abstract:

Around five percent of the global adult population consume drugs at least once in their life and 0.6 percent of them lives with substance use disorders (SUDs). There are two opposite approaches in the treatment of SUDs: The first and older is abstinence-based interventions even through a compulsory and judiciary system. The modern and progressive alternative attitude is considering addiction as a brain disease and help patients to be ameliorated through harm reduction services in health system. Concerning various levels of knowledge, counting addiction as a mental disorder or crime, civil liberty, cultural diversity, etc., each government in the world approaches differently to this problem; definitely, it was expected that authorities would deal homogenously with it through each local area.

Surprisingly, there are not only differences in each governments' approach, but also more or less confusing approach even in the societies with a large harm reduction and medication assisted treatment capability toward drug consumptions. It may reveal an ambivalence in the definition or philosophy of this disorder. This puts the trajectory of drug addiction treatment between the conflict of medical/harm reduction vs. punitive/criminal justice policies and programs. On the other hand, these various approaches may cause proactive, agile and flexible strategies. In addition, diversity in treatment options sometimes pragmatically increases adherence and efficacy with expanding the service menu.

In this symposium we will discuss advantages and disadvantages of the dichotomy of addiction as both a public health issue and a public safety/nuisance in the US, UK, Europe, Iran, China, and India as well as provide a few approach and strategies.

## Symposium 18 Sexual Addiction Disorders: Defining & Understanding Psychosocial Issues

#### Rao TSS, Rao GP, Rao SS, Pattajoshi A

Department of Psychiatry, JSS Medical College, JSS Academy of Higher Education and Research, Mysuru, India tssrao19@gmail.com

#### Abstract:

The term 'Sexual addiction' is surrounded by much controversy and even today there is no uniform agreement among social, behavioral and medical specialists that sexual addiction is a legitimate addiction. Historically it has been covered under 'paraphilia - related disorders', technically strictly speaking they are not classified under paraphilias. The issue of whether sexual addiction is a true addiction is one that has received a great deal of scientific attention recently as excessive sexual behavior has much in common with the true addictions so often associated with drug use and abuse. Although people who are apparently addicted to sex typically engage in heterosexual intercourse with consenting adults in private places, it is the persistent, compulsive and uncontrollable nature of their sexual appetites that proves most troubling. Sexual addiction can hurt and destroy marriages, relationships, friendships, job performance and job permanence. Sexual addiction is similar to paraphilias because of the objectified nature of the sexual partner as well as the subjective inner turmoil that frequently accompanies the compulsive nature of these behaviors and the ultimately unsatisfying nature of feelings following these sexual activities. The presentation looks at various evolving concepts concerning sexual addiction, bio-psycho-social implications concerning etiology and the clinical features and makes suggestions for comprehensive understanding and its management.

#### Introduction to Sexual addiction: Dr. G. Prasad Rao

**Historical development of the concept of sexual addiction disorders:** Dr. T.S. Sathyanarayana Rao, Mysore

**Bio-psycho-social issues concerning sexual addiction disorders:** Dr. Suman S Rao, Mysore **Current understanding and its management:** Dr. Amrit Pattajoshi, Bhubaneshwar

## *Symposium 19* Therapeutic Community Symposium

Taylor S, Varma S, Dhar R, Kurth D, Bunt G

World Federation of Therapeutic Communities, San Rafael, California, USA <u>buntmd@gmail.com</u>

#### Learning objectives:

 Participants will be familiar with concepts related to the integrated Therapeutic Community
 Participants will be familiar with collaboration between Therapeutic Communities and criminal justice systems

3) Participants will be familiar with the complimentary relationships between Therapeutic Communities and Addiction Medicine

#### Abstract:

The Therapeutic Community (TC) for the treatment of drug abuse and addiction has existed for over 60 years. Originating as an alternative to conventional psychiatric approaches, the Therapeutic Community has established itself as a major psychosocial treatment modality. Therapeutic Communities have historical roots in philosophy, theology, psychology, and the temperance movement. The Therapeutic Community views substance abuse as a disorder of the whole person. In addition to cognitive, behavioral and mood disturbances, values are confused or underdeveloped. Typical antecedents include socio-economic dislocation, ineffective parenting, negative role models, and anti-social peer group affiliation. Therapeutic Communities are oriented to recovery, not simply abstinence or symptom relief. The TC model is structured and systematic with defined interventions and developmental benchmarks that reflect increased levels of skills acquisition and pro-social adaptation. Peer influences, mediated through a variety of group processes, are used to help individuals learn and assimilate social norms, develop effective social skills and to assume personal and social responsibility.

TCs have evolved to serve a range of special populations with substance use disorders, including women with children, older adults, adolescents, people with HIV/AIDS, those who are homeless, and individuals who are involved with the criminal justice system.

Therapeutic Communities (TC's) for the treatment of addictions and co-occurring health and mental health disorders provide a continuum of care from outpatient to short-term residential to long-term residential treatment that is both cost-effective and clinically effective. Increasingly, the need for this affordable continuum of care model is recognized in communities afflicted with epidemics of addiction. The TC also offers uniquely an alternative to incarceration treatment opportunity for many addicted individuals encountering criminal justice sanctions related to drug abuse. Historically, some TC's have not embraced the professional influence of Addiction Medicine. However, today most TC's have integrated evidence-based treatment modalities that include Addiction Medicine. For those addicted individuals who need support in medical and/or mental health treatment, vocational and housing assistance as well as rehabilitation toward recovery, the biopsychosocial-spiritual treatment continuum of an

evidence-based integrated Therapeutic Community may be the best hope for individuals, families and communities afflicted with severe addictions.

#### Therapeutic Communities in Delhi India

Shafa Home is Urdu language word which means the "power of healing", used for addictions, rampant throughout India. A dedicated group of recovering addicts came together to provide a therapeutic environment of healing. We are a team of peer support counsellors, primary care doctors, psychiatrists, psychologists, professional counsellors and behaviour therapists. Initially we established two Therapeutic Communities simultaneously in Delhi, India, in 1999, one in Tihar Jail, Delhi and other in a Police Station Complex. We also used the TC model with street as and slum children too. Later on, Shafa Home opened three facilities in different states Delhi, Punjab and Uttarakhand. Today we are the country's oldest and largest rehabilitation centre in the country.

The existing cultural and value system prevailing in the country, as an integral part of our evidence-based integrated treatment model.

Cultural activities that are pro-social and develop character have become a regular feature of the programme. Data will be presented regarding demographics, substance use, education and employment, length of stay and outcomes will be provided as well a description of the treatment methods and coordination with medical and mental health professionals

This presentation will examine how the TC model has evolved and will provide the audience with an understanding of the essential components and methods of the TC. The presentation will also describe the structure of Therapeutic Communities that focus on special populations such as women with children, and those involved with the criminal justice system. In addition, this presentation will describe the TC model's adaptation to the culture, the social norms and the unique needs of the population served in India.

### Symposium 20

## Challenges in Addiction Treatment in Five Countries (India, Kenya, Nepal, Sri Lanka and United Kingdom): How Similar or Different Are We?

Kathiresan P, Shah B, Malalagama A, Catherine M, Garg K

Department of Psychiatry & NDDTC, AIIMS, New Delhi, India princyaiims@gmail.com

#### Learning Objectives:

1) To highlight cultural norms, legal & policy background and treatment gap related to substance use disorder in five different countries with different economic backgrounds – Nepal, India, Kenya, Sri Lanka and United Kingdom

2) To discuss future directions for improvement of treatment and management of substance use disorders in respective countries

#### Abstract:

Advances in medical and behavioural sciences have ensured that substance use disorders (SUDs) have largely moved from a moral model to a biopsychosocial model, (i.e., caused by interactions between biological, psychological, social and environmental factors). Of the various social and environmental factors, prevailing socio-cultural norms, laws and policies influence the availability and use of various psychoactive substances and the prevalence of SUD. In addition, even the availability of and access to treatment interventions is also influenced by such factors. Understanding such factors is important for (a) individualizing the treatment of a given patient and (b) reducing the burden of SUD as a whole in the community. We, young addiction psychiatrists from five different countries with different economic backgrounds (Nepal -lower income group; India, Kenya, SriLanka – lower-middle income group; United Kingdom - high income group), through this symposium seek to highlight challenges faced by patients and service providers in terms of burden due to substance use disorders, prevailing cultural norms, legal & policy background and treatment gap in our countries. We conclude that while there are substantial commonalities in our challenges, there are important differences and potential to learn from each other. We also recommend possible strategies for improving the management of SUDs, so as to reduce the burden in respective countries.

#### Subtopic 1 : SUD in Nepal: Challenges & Opportunities

#### Presenter: Dr. Bigya Shah

**Introduction:** Substance Use Disorders (SUD) are serious public health concern in Nepal. We aim to highlight the challenges in managing SUD and discuss opportunities for a psychiatrist.

**Methodology**: For the paper, we have reviewed the relevant literature using electronic databases (PubMed, google scholar).

**Results:** Unfortunately, while there is no national data on estimated prevalence of SUD in Nepal, rich information still exist. Research is largely limited to cross-sectional small studies on

prevalence, socio-demographic and clinical profiles. Data indicates a sizeable burden of SUD in Nepal including tobacco, alcohol, opioids and to some extent other substances. Among challenges, National mental health policy, adopted in 1996, is yet to be implemented. Others include health facilities concentrated to urban settings, disproportionately fewer psychiatrist and psychologist, minimal national budget allocation, inadequate quality control of treatment centers, stigma, open borders (facilitating drug availability); and cultural practices.

**Conclusion**: While there are challenges in managing SUD in Nepal, there are plenty of opportunities for psychiatrists to make a difference in their societies and have professional satisfaction. We call for enhanced collaboration between mental health professionals, government and other stakeholders.

## *Symposium 21* Expanding Access to Evidence-Based Treatment of Stimulant Use Disorder

#### Sáenz E, Lal R, Chawarsk A M, Bisaga A

Prevention, Treatment and Rehabilitation Section, Drug Prevention and Health Branch United Nations Office on Drugs and Crime (UNODC) elizabeth.saenz@un.org

#### Learning objectives:

As a result of this symposium, participants should be able to:

1) Recognize the changing global trends in the use of psychostimulants and growing need for the development of effective and attractive treatment model for individuals who developed a Psychostimulant Use Disorder (PSUD).

2) Improve knowledge of the evidence-based pharmacological and psychosocial interventions to treat PSUD and identify how these interventions can be combined to develop an integrated treatment program tailored to needs of specific communities

#### Abstract:

There is a growing concern in many parts of the world about the steady-increase of psychostimulants for non-medical purposes. An estimated 34.2 million people had used amphetamines (including methamphetamine, amphetamine and misuse of prescription stimulants), 20.6 million people had used ecstasy and 18.2 million people had use cocaine. In total, an estimated 73 million are past year users of stimulants, in comparison with around 34 million of opioid and opiate users, though polydrug use is a common feature among individuals using drugs. Many of those individuals developed psychostimulant use disorders (PSUD) as well as other psychological and medical problems and the use of illicit substances disrupts social order. These consequences impose a major cost and has negative impact on the affected individual, their families, and communities. In spite of this high prevalence, individuals with PSUD around the world are provided minimal or non-existent contact with health and social institutions and very poor treatment programs. In many countries, treatment services for substance use disorders have been designed for treatment of opioid and alcohol dependence and are not tailored for stimulants dependence. The model including medical interventions and social protection has seldom been applied for these individuals, making the services not appealing and attractive for the clients. The aim of this symposium is to present the most recent research findings in pharmacological and psycho-social treatment for people with PSUD that could inform innovative policies and practices.

## *Symposium 22* Other Approaches to the Treatment of Opiate Use Disorder

#### Surak G, Svrakic D, Gooberman L, O'Neal G

Medical Director, NaltrexZone, Belgrade, Serbia garysurak@hotmail.com

#### Learning Objectives:

Pointing out the importance and better overall results with Naltrexone as substitution opposed to Methadone or Buprenorphine

#### Abstract:

In this presentation, we are reviewing the results of two hundred patients treated by Naltrexone Sustained Release depot preparations (IMPLANTS) Findings: Patients treated with Naltrexone implant (90-300 days) were fully abstinent during those periods (67% - 90%) Complications and adverse effects were rare and limited to minor local reactions at the site of implementation. The patient receiving sustained-release Naltrexone implant and who was also involved in our rehabilitation program (i.e., counseling, psychotherapy, group therapy, and family therapy), did significantly better than those receiving only sustained-release Naltrexone treatment. According to our results, a combination of sustained release naltrexone implant and person-centered psychosocial rehabilitation is a novel and very effective way to promote abstinence and recovery in this group of patients. Compared to "classic" outpatient substitutional therapy (OST) with Methadone or Buprenorphine we find our patients opioid-free and more functional.

## *Symposium 23* Opioid Substitution Therapy: Canada vs India Experience

Siddhartha S, Siddartha A, Rao R, Bhad R

Department of Psychiatry, Dalhousie University, Canada drrvrao@gmail.com

#### Learning Objectives

1) Learning opioid situation and OST implementation in Canada and India

2) Understanding the various challenges in implementation of OST in these two countries

#### Abstract:

This symposium attempts to present and contrast the Canadian and Indian experience of implementation of opioid substitution therapy programme.

#### **Canadian Experience**

Medicare Care Act ensures "near universal care" for all the citizens. Opioid use has followed from heroin use to prescription drug use now. Increasingly, Fentanyl has been used on the street. Fentanyl is recognised as 80 to 100 times more powerful than Morphine. Canada was the first country in the Western Hemisphere to authorise Methadone in 1960s. It became regulated in 1970s after the "advocacy" from various law and health groups (Fischer2000).

Since then Methadone had been regulated. In late 2010 s Buprenorphine was introduced. It was also subjected to same regulations. Various regulations and rules were put together for the opioid replacement clinic with intense screening and only including "the right" patients.

The patients who are tested positive for street substances are being discharged from the unit. Some clinics want "Mandatory Counseling/therapy". These practices arguably forced people with Opioid use to wait for a long period of time and some would say unnecessary delay. We would discuss in detail the scientific evidence regarding the use of opioid maintenance Treatment including psychopharmacological and psychosocial interventions.

The recent changes in various treatment delivery would also be deliberated.

#### Indian Experience

The use of OST in India spans three decades, with initial use of low dose buprenorphine followed by higher strength buprenorphine and buprenorphine naloxone. Other medications such as slow release oral morphine, and recently, methadone have also been introduced. Indian research also confirms the findings from Western literature on the effectiveness as well as acceptability of this treatment modality. OST received its biggest thrust when it became a part of the National AIDS Control Programme. In recent years, the number of OST centers in India has increased manifold. Practice guidelines, standard operating procedures, and capacity building mechanisms have been put in place for effective OST implementation. Despite such widespread use, many challenges exist for OST implementation.

## *Symposium 24* Managing Drug Use in the Society: What Social Psychiatry has to Offer?

Chadda RK, Sood M, Jiloha RC, Basu D

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#### Abstract:

Drug use can be labelled as a major social malaise, which our society faces. Substance use disorders (SUDs) are an important contributor to the global burden of disease, contributed by disability, unemployment and physical comorbidities and associated shortened span of life. This is further added by a large treatment gap. Society also has a conflicting attitude to the problem with a critical attitude as well as accepting it as a part of many social rituals and functions. Social psychiatry is a sub specialty of psychiatry which deals with social factors associated with psychiatric morbidity, social effects of mental illness, psycho-social issues and social approaches to psychiatric care. Thus, the principles of social psychiatry have a great relevance in managing drug use in the society.

This symposium proposes to discuss how a social psychiatry approach may be helpful in dealing with this problem.

Magnitude of problem: RK Chadda

Can social psychiatry approach help in demand reduction? D Basu

Role of social psychiatry in long term care of substance use disorders: M Sood

Dealing with social issues related with substance use disorders:RC Jiloha

# Symposium 25

# ISAM Neuroscience Interest Group (NIG) -Neuroscience-Informed Neural Interventions (Pharmacology and Neuromodulation)

Dom G, Chand P, Yuan TF, Ekhtiari H

# Subtopics:

Pharmacological enhancement for addiction medicine (by Geert Dom) Brain stimulation for addiction medicine: India's experience (by Prabhat Chand) TMS for addiction medicine (by Ti-Fei Yuan) TES for addiction medicine (by Hamed Ekhtiari)

#### Learning Objectives:

1. Delegates will be able to define the different levels/types/targets of neural interventions in the field of addiction medicine

2. Participants will be able to determine quality of evidence to inform their own investigation/treatment strategies

#### Abstract:

There is a growing body of evidences that neural interventions in the field of addiction medicine manifest promising hopes for treatment success and relapse prevention. Application of neuroscience-informed interventions including neuromodulation and pharmacotherapy targeting certain neurocognitive processes/circuits can take us a step further through our treatment success. Neuroscientific knowledge of expected neural and cognitive changes can guide us through selecting the right target and also the right intervention in the individual level. In this symposium, we review what the neural interventional approaches are to addiction treatment and recovery, what the evidence are so far for the success of neuromodulation and cognitive enhancement pharmacotherapy, and how neuroscience-informed interventions could help having better outcomes. We also will discuss the challenges and the way forward to elaborate both our understanding and intervention strategy to increase the quality of the outcome of these interventions

# *Symposium 26* Management of Addictive Disorders in India: Current Status

# Kaloiya GS, Sony K, Mehra A, Chandra M, Hans G

National Drug Dependence Treatment Centre, AIIMS, New Delhi, India <u>gkaloiya@gmail.com</u>

#### Abstract:

In India many facilities are available for treatment and rehabilitation of addictive disorders. Facilities are available at almost all the Government and private hospitals, de-addiction centres, non- government organizations (NGOs), and rehabilitation centres. Alcoholic Anonymous (AA) and Narcotics Anonymous (NA) are also active in many parts of the country, however there is need of more trained and skilled manpower in the field of addiction to manage the problem.

# Abstracts:

# Training opportunities for Psychologists in Addictive Disorders: Current Scenario

#### G S Kaloiya,

#### National Drug Dependence Treatment Centre, AIIMS, New Delhi, India.

Hospital based training in Clinical Psychology covers wide range of exposure in different sub areas, for example Behavioural Medicine, Neuropsychology, De-addiction etc. Clinical psychologists work in various areas including addiction. The structured training of clinical psychologists in the area of de-addiction has not been taken up seriously hence, is the need of hour. There are several training & Mental Health Institutes which are providing training in deaddiction as a part of certain courses or three months certificate courses only. Considering high prevalence of addictive disorders in general population as well as in psychiatric illnesses, high relapse rate, presence of co-morbid personality disorders or depression etc. warrant a well-structured training program for psychologists. Training program should follow scientist practitioner model to develop a science-based practice of clinical psychology in the area of deaddiction. These programs need to be spread across different parts of the country to promote equal opportunity for all.

#### **Psychosocial Interventions for Addictive Disorders: Current Status**

#### Krishan Sony

# Dept. of Psychiatry, PGIMER, Chandigarh

Psychological interventions have shown proven efficacy in the treatment of drug dependence. Psychosocial interventions ranges from simple advice to structured CBT. Clinical psychologists play an important role in drug dependence treatment and provide a distinctive edge in the overall management. World Health Organization (WHO) and national/state level institutions are making various efforts to strengthen the training in psychosocial interventions considering high prevalence of addictive disorders and its significant socioeconomic costs to the society.

# Pharmacological Interventions for Addiction: Current Status

# Aseem Mehra

# Dept. of Psychiatry, PGIMER, Chandigarh, India

There are many pharmacological interventions available for treating addictive disorders including Nicotine Replacement Therapy (NRT), Opioid Substitution Therapy (OST), many other drugs for detoxification and management of addictive disorders. However, there is a need for anti-craving drugs especially for managing tobacco and cannabis dependence. There is still a need for training of medical professionals to use such drugs rationally in management of addictive disorders in their day to day practice.

#### Towards a public health approach to Addictive disorders in India.

Gagan Hans

#### AIIMS, New Delhi, India

Recently UN has recognized drug addiction as a complex multi factorial health disorder characterized by chronic and relapsing nature that is preventable and treatable and not the result of moral failure or a criminal behavior. There has been a gradual shift in the understanding the problem of substance use as being that of public health rather than that of the criminal justice system although there are multiple grey areas of interface between the two. The public health goal of reducing the world's drug problems and access to affordable, quality health care for such disorders has been declared an inherent right for all United Nations Member State citizens including India.

# Symposium 27 ASAM Symposium: Setting Standards for Addiction Treatment across the Globe

Earley PH, Stallvik M, Lee SK, Pavamani R, Ghaferi H

American Society of Addiction Medicine, USA theard@asam.org

# Abstract:

Ongoing efforts worldwide to integrate addiction treatment into traditional medical care require the use of standards to ensure uniformity and optimal patient outcomes to meet the expectations of patients, families, payers and governmental agencies. The panel members for this symposium will provide insights on the use, adoption and adaptation of standards in the U.S. and other nations.

# *Symposium 28* Alcohol and Smoking: Impact on Mood Disorders, Psychosis, and Sleep Disorders

Singh B, Veldic M, Chopra A, Kolla B

Mayo Clinic, Rochester, USA singh.balwinder@mayo.edu

# Learning Objectives:

In this session we will review data and offer clinical insights to improve treatment selection and individualize management.

# Abstract:

Worldwide, tobacco and alcohol are amongst the most commonly abused substances. Alcohol and tobacco use disorders result in staggering healthcare costs and contribute to substantial morbidity and mortality. These disorders are extremely comorbid with other psychiatric conditions and can influence the risk, presentation, treatment response and functional impairment associated with multiple psychiatric disorders. Identifying and treating these disorders in patients with major depressive disorders, bipolar disorder and psychosis can result in significant improvements in outcomes. This session will incorporate insights from experts working in the field of mood disorders, psychosis and sleep disorders. Through a discussion of current epidemiological, genomic and other patient specific vulnerability data this session will help the audience identify specific at-risk populations and enhance clinical assessment. Comorbid alcohol and tobacco use disorders can impact treatment planning and response.

Dr. Marin Veldic, the current director of the Mayo clinic mood program will discuss the impact of alcohol and tobacco use on major depression.

Dr. Balwinder Singh, assistant professor of psychiatry and psychology, Mayo Clinic and consultant at the Mayo clinic mood program will examine the influence of alcohol and tobacco use on the presentation, treatment and outcomes of bipolar disorder.

Dr. Amit Chopra, Assistant Professor of Psychiatry, Allegheny Health Network, will discuss how to approach the assessment and management of psychotic disorders in patients who have comorbid alcohol/tobacco use.

Dr. Bhanu Kolla, associate professor of psychiatry and psychology, consultant in sleep medicine and division of addiction medicine will discuss the intersection between sleep disorders and tobacco and alcohol use with an emphasis on how use of these substances can influence specific sleep disorders and present an approach to treating sleep disturbances in early alcohol /tobacco related recovery.

# *Symposium 29* ISAM NIG Symposium: Neuroscience-Informed Cognitive Interventions

Buckman J, Daughters S, Manning V, Ekhtiari H

Chairs: Victoria Manning, Antonio Verdejo-Garcia

#### Subtopics:

Brain changes to appetitive cues following resonance paced breathing (by Jennifer Buckman) Behavioral activation smartphone 'app' for substance use disorder: Results from a randomized control trial (by Stacey Daughters)

Neuroscience-informed psychoeducation for addiction medicine (by Tara Rezapour)

Neurocognitive training in addiction treatment: are we flogging a dead horse or asking the wrong questions? (by Victoria Manning)

Neurocognitive training in addiction treatment: how to cover both hot and cold cognitive functions (by Hamed Ekhtiari)

#### Learning objectives:

1) Participants will be familiarized with the different approaches in cognitive interventions in addiction medicine

2) Participants will be able to assess techniques used in cognitive interventions in addiction medicine

# Abstract:

Neuropsychological studies consistently demonstrate that many people with SUD exhibit cognitive deficits of mild to moderate severity in processing speed, selective and sustained attention, episodic memory, executive functions (updating, inhibition, shifting), decisionmaking and social cognition. The past two decades have seen significant advances in our understanding of the neuroscience of addiction and its implications for practice, however, despite such insights, there is a substantial lag in translating these findings into everyday practice, with few clinicians incorporating neuroscience-informed interventions in their routine practice. neurobiology-informed theories and expert consensus have identified additional cognitive changes not typically assessed by traditional neuropsychological measures, namely, negative affectivity and reward related processes. The past decade has seen a proliferation of cognitive training intervention trials aimed at remediating or reversing substance-related cognitive deficits. However, their implementation into clinical practice is almost non-existent, despite promising results. This symposium seeks to provide delegates with an overview of major cognitive interventions in addiction medicine, discuss how we can translate neural findings into cognitive manifestations, what challenges we have faced in cognitive interventions in addiction medicine, and where we failed to find significant outcomes. Furthermore, we also will discuss recent advances in cognitive training, identify limitations in the evidence base and highlights priorities and directions for future research to bridge the gap between science and practice.

# *Symposium 30* Selfie Indulgence

Gopalakrishnan A, Raj Z, Varghese V, Johnson D, Kallivayalil RA

# Abstract:

Internet sources suggest that the word selfie was first used in the year 2002, and by 2013, it was chosen as Oxford Dictionaries Word of the Year. Taking selfies and sharing them to social media has become a popular online activity. The increase in popularity of this phenomenon is overwhelming with studies showing that the number of selfies posted in social media increased over 900 times from 2012. In short, selfies have captured public attention to such an extent that, this global phenomenon has become an inevitable part of current pop culture. Although selfie is a problem that has just commenced, it has the potential to escalate into one of a greater magnitude. The ill effects of selfie behaviour are already here, with suicides, accidental deaths and various other behavioural problems being reported. With dubious claims, such as India having the maximum deaths following

Selfies in 2015, selfie behaviour appears to be a condition that requires further research to fully understand the psychosocial impacts it has on the individual.

This symposium intents to discuss selfie behaviour in detail including the prevalence and its relevance in current social scenario, the features and diversity of the behaviour. It also discusses the possible underlying diagnosis and differentials to consider, ending with future directions and management options.

# Topics

- 1. Prevalence and relevance in current scenario Dr. Arun Gopalakrishnan
- 2. Features of Selfie Behaviour Dr. Zoheb Raj
- 3. Diagnosis, Tools and Differentials to Consider Dr Liza Varghese
- 4. Future Directions Dr Derrik Johnson

Chair: Prof Roy Abraham Kallivayalil

# Symposium 31 Medicolegal Issues in Addiction Psychiatry: An Indian Perspective

Dayal P, Kattula D, Pakhre A, George AB, Mishra S

All India Institute of Medical Sciences, New Delhi, India drpd@rediffmail.com

#### Abstract:

Forensic aspects of psychiatry are challenging to psychiatrists as they stem from law more than medicine. Among the branches of psychiatry, addiction psychiatry is specially challenging as addiction is seen by society as moral weakness and depravity due to the voluntary element in substance consumption. It requires understanding of forensic evaluation and legal terminology. An addiction psychiatrist may be called as an expert witness to testify about capacity to stand trial, having criminal responsibility or diminished capacity. They may be also called upon to comment on civil competencies like capacity to consent, hold child custody, have testamentary capacity, disability etc. They must learn to also distance themselves from the wish to help examinee and focus on the role of a neutral examiner with due respect for the forensic contexts of addiction psychiatric practice.

Practice of medicine happens within a legal framework. In India psychiatric care including addiction psychiatry is regulated by Mental Healthcare Act, 2017, which included substance use disorder under mental illness. The act allows for coerced/involuntary treatment under special circumstances for severe mental illness. We would discuss if these provisions should ever be used in practice. We would also discuss Narcotic Drugs and Psychotropic Substances Act, 1985 and Clinical Establishment Act, 2010, which influence our practice. Different approaches to legislation & policy and the unique challenges that a diverse country like India faces would be discussed.

# *Symposium 32* ISAM Neuroscience Interest Group (NIG) ISAM Cannabis Interest Group

Baldacchino A, Roberts C, Filbey F, Lorenzetti V, Gage S

Chairs: Valentina Lorenzetti, Francesca Filbey

# Subtopics:

Neurocognitive impairments as a result of chronic cannabis use: a systematic review and metaanalysis (by Alex Baldacchino)

Brain changes associated with regular cannabis use: What is the evidence from neuroimaging studies? (by Carl Roberts)

Moderators of response to cannabis (by Francesca Filbey)

Unpacking cannabis use neurobiology using big data: sex differences and cannabis dependence (by Valentina Lorenzetti)

Triangulating the evidence: exploring causality in the link between cannabis and mental health (by Suzi Gage)

#### Learning Objectives:

1) Delegates will have the updates on the available evidence for cannabis-related adverse cognitive, mental health and brain outcomes and relevant moderators

2) Delegates will be able to plan to contribute in ISAM NIG roadmap initiative

3) Delegates will discuss potentials to focus on the next research areas of focus of cannabis research

# Abstract:

Globally, cannabis is the principal drug of abuse in the general community and amongst all firsttime drug treatment entrants. These rates are increasing along with the potency of cannabis products. Despite the rapid changes of the legal status of cannabis, the factors that confer risk and mitigate adverse outcomes in cannabis users are poorly understood and understudied. Expanding knowledge of the risk factors and moderators for adverse mental health, cognitive, and brain outcomes in cannabis use could help to identify novel targets for preventive strategies, treatment and inform public health efforts aimed at mitigating risks in cannabis users. This symposium will present findings from the latest international research on mental health, cognition and neurobiology of cannabis use. Meta-analytic findings from recent evidence on cognitive function and brain correlates of cannabis use will be presented. Neurobehavioral responses to cannabis are heterogeneous and key moderators of such response will be highlighted. The latest research from the factors driving brain abnormalities in cannabis users will be overviewed, including big-data findings on sex differences and dependence on cannabis. The causal link between cannabis use will be examined in detail based considering the latest available evidence. By bringing together an international panel of experts in cognition and mental health, neuroimaging and epidemiology, this session aims to

discuss the most-up to date neuroscientific issues in cannabis research of relevance for treatment.

# Symposium 33

# Virtual Knowledge Network NIMHANS Echo: AN innovative Tele-Mentoring Model of Empowering the Remote Health Care Providers About the Management of Substance Use Disorders

Chand P, Murthy P, Mahadevan J, Das S, Premi R

NIMHANS, Bengaluru, India prabhat@vknnimhans.in

#### Abstract:

Substance use disorders (SUDs) constitute a serious public health concern in India. Though alcohol and nicotine remain the major legal substances of abuse, there has been substantial increase in the use of pharmaceuticals as well as newer drugs of abuse (methamphetamine, LSD). The recent studies point out the treatment gap in SUD is as high as 80%. We at Centre for Addiction Medicine, NIMHANS Bangalore, believe that the best answer lies in capacity-building, in terms of professionals who are empowered to address the need for both prevention and management of drug addiction. The advent of ubiquitous digital technology like smartphone and engagement with the Project ECHO (Extension of Community Healthcare Outcome) has enabled NIMHANS to innovate and exponentially increase workforce training and simultaneously reach out to community healthcare providers to teach best-practices in addiction Management, thereby benefiting the patients from rural and underserved places. Virtual Knowledge Network (VKN) ECHO model utilizes weekly multipoint video conferencing to conduct tele-ECHO session connecting multi-disciplinary specialist of the Centre for Addiction Medicine of NIMHANS to remote community health providers i.e. spokes. The ongoing weekly teleECHO sessions consist of components of both case-based learnings (i.e. case presentations by a community health practitioner or "spokes" combined with guided practice by subject matter experts at the "hub (NIMHANS)") and didactic sessions by hub experts. The remote spokes also present patient case summary and seek clarification regarding standard management from our multidisciplinary addiction expert team as well as peers who have logged in simultaneously. This guided practice of case management strengthens the confidence and enhances the skills of the practitioner. This live (synchronous) session is integrated with elearning (asynchronous) module certification for the participating practitioner. In the last four years, this force-multiplier effect has led to a virtual community of over 5000 connected health professionals.

# Symposium 34 Classification of Disorders Due to Substance Use and Addictive Behaviours in ICD-11

#### Sharan P, Ray R, Ambekar A, Basu D, Balhara YPS

Department of Psychiatry, All India Institute of Medical Sciences (AIIMS), New Delhi, India pratapsharan@gmail.com

# Learning Objectives:

1) Learners should be able to understand the process of development of classification of addictive disorders

2) Learners should be able to evaluate validity of diagnoses of addictive disorders

# Abstract:

The development of ICD-11 Mental, Behavioural and Neurodevelopmental Disorders is based on the principles of clinical utility and global applicability. Working Groups were asked to review the available scientific evidence relevant to their areas of work as a basis for developing their proposals for ICD-11. Field studies have been conducted on vignette as well as clinical cases to validate the classification.

Given the extremely high global burden of disorders due to substance use, the grouping has been revised in ICD-11 to enable the capture of health information in multiple contexts and inform health interventions. The ICD-11 also expands the concept of harm to health due to substance use to comprise physical (e.g., due to driving while intoxicated) or psychological harm (e.g., development of PTSD following an automobile accident).

The organization of ICD-11 disorders due to substance use is consistent with ICD-10, whereby clinical syndromes are classified according to substance classes. However, the list of substances in the ICD-11 is expanded to reflect current availability and contemporary use patterns of substances. Each substance or substance class can be associated with primary clinical syndromes: single episode of harmful substance use or harmful pattern of substance use; and substance dependence. The addition of ICD-11 single episode of harmful substance use provides an opportunity for early intervention and prevention of escalation of use and harm. Substance intoxication and substance withdrawal can be diagnosed either together with primary clinical syndromes or independently as a reason for delivery of health services when the pattern of use or possibility of dependence is unknown. The ICD-11 also includes substance-induced mental disorders as syndromes characterized by clinically significant mental or behavioural symptoms that are similar to those of other mental disorders but that develop due to psychoactive substance use.

ICD-11 categorizes hazardous substance use in the chapter on "factors influencing health status or contact with health services" to cover situations where a pattern of substance use increases the risk of harmful physical or mental health consequences to the user or to others to an extent that requires health professionals' attention, but no overt harm has yet occurred.

ICD-11 disorders due to addictive behaviours include two diagnostic categories: gambling disorder (pathological gambling in ICD-10) and gaming disorder. Recent evidence points to

important phenomenological and neurobiological similarities between disorders due to addictive behaviours and substance use disorders.

Most of the changes in the ICD 11 are incremental, the contrast between DSM-5 substance use disorder and substance dependence in the ICD 11, and the inclusion of disorders due to addictive behaviours, particularly gaming disorder will generate much discussion.

# Symposium 35

# Twelve Step Addiction Treatment in a Rapidly Changing World: Twelve Step Demonstration Group

Kurth DJ, Galanter M, Huang SY, Schaub M

Chairperson, ISAM Twelve Step Interest Group, donkurth@aol.com

#### Learning Objective:

This symposium will provide a working understanding of the Twelve Step group so that physicians may add this powerful tool to their armamentarium in the world-wide struggle to conquer addiction and alcoholism.

#### Abstract:

Despite the overwhelming effectiveness and the world wide penetration of Twelve Step recovery, many ISAM members have never seen a Twelve Step Group in action and have negligible practical understanding of what actually occurs in a Twelve Step Meeting. This novel symposium will present a Twelve Step demonstration group in real time with genuine Twelve Step participants. The meeting will be stopped periodically by the symposium leaders to explain what is happening in the group and to provide an opportunity for the audience to ask questions.

Alcoholics Anonymous was founded on June 10, 1935 in Akron, Ohio by Bill Wilson, a New York stockbroker and Dr. Bob Smith, an Ohio surgeon, both seemingly hopeless alcoholics. They believed alcoholism to be a disease, a physical allergy coupled with an obsession of the mind, rather than a sin or moral failing. Furthermore, they believe that to be successful, the treatment of alcoholism must be of a spiritual nature. Small groups were formed with some dramatic early successes. In 1939 the "Big Book" of Alcoholics Anonymous was written and AA membership expanded rapidly. By 2001 AA encompassed an estimated 2,000,000 sober members in 100,800 groups in 150 countries around the world. Narcotics Anonymous (NA) and other similar groups have shown comparable success following the Twelve Step philosophy, albeit with somewhat lesser memberships.

# *Symposium 36* ISAM NIG Symposium: ISAM Neuroscience Interest Group Strategic Roadmap

# Verdejo-Garcia A, Lorenzetti V, Ekhtiari H, Manning V

Chairs: Antonio Verdejo-Garcia, Alexander Baldacchino

### Subtopics:

Cognitive assessment for addiction medicine (by Antonio Verdejo-Garcia) Imaging for addiction medicine (by Valentina Lorenzetti) Neuromodulation for addiction medicine (by Hamed Ekhtiari) Cognitive remediation for addiction medicine (by Victoria Manning)

#### Learning Objectives:

1) Delegates will have the updates on the available evidence for neuroscience-informed assessments and interventions in addiction medicine

2) Delegates will be able to plan to contribute in ISAM NIG roadmap initiative

3) Delegates will discuss potentials to reshape the future of addiction medicine through ISAM NIG roadmap initiative

#### Abstract:

Although there is general consensus that altered brain structure/function underpins addictive disorders, clinicians working in addiction treatment rarely incorporate neuroscience-informed methods into their practice. We recently launched the Neuroscience Interest Group within the International Society of Addiction Medicine (ISAM-NIG) to promote initiatives to bridge this gap. In this Symposium, we review ISAM-NIG key priorities and strategies to achieve implementation of addiction neuroscience knowledge and tools for the assessment and treatment of substance use disorders. We cover two assessment areas: cognitive assessment and neuroimaging, and two interventional areas: cognitive training/remediation and neuromodulation, and identify key challenges and proposed solutions. We reason that incorporating cognitive assessment into clinical settings requires the identification of cognitive constructs that predict meaningful clinical outcomes. Other requirements are the development of measures that are easily-administered reliable and ecologically-valid. Translation of neuroimaging techniques requires the development of diagnostic and prognostic biomarkers and testing the cost-effectiveness of these biomarkers in individualized prediction algorithms for relapse prevention and treatment selection. Integration of neuropsychological assessments with neuroimaging can provide multilevel targets including neural, cognitive, and behavioral levels for neuroscience-informed interventions. Application of neuroscience-informed interventions including cognitive training/remediation and neuromodulation requires a clear pathway to design interventions based on the multilevel targets, additional evidence from randomized trials and then clinical implementation, including evaluation of cost-effectiveness. We propose to address these challenges during this panel by promoting international collaboration between researchers and clinicians, developing harmonized protocols and data

management systems, and prioritizing multi-site research that focuses on improving clinical outcomes.

# *Symposium 37* Substance Use in Externalizing Disorders in Adolescence

Sagar R<sup>1</sup>, Patra BN<sup>1</sup>, Chatterjee B<sup>2</sup>, Rajhans P<sup>1</sup>

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# Sub topics

 Substance use in externalizing disorders in adolescence: an overview: Prof. Rajesh Sagar
 Epidemiology of substance use in adolescents with externalizing disorders: Dr Bichitra Nanda Patra

3: Neurobiological factors underlying substance use in adolescents with externalizing disorders: Dr Pallavi Rajhans

4: Management of substance use in adolescents with externalizing disorders-key issues and challenges: Dr Biswadip Chatterjee

# Learning objectives:

By the end of the symposium, the target audience will be able to learn about the following

- 1. Magnitude and burden of substance use in adolescents with externalizing disorders
- 2. Overlapping neurobiological factors involved in substance use and externalizing disorders

3. Issues and challenges faced in the management of substance use in adolescents with externalizing disorders

# Abstract:

Externalizing disorders of children and adolescents include attention deficit hyperactivity disorder (ADHD), conduct disorder (CD) and oppositional defiant disorder (ODD). These disorders are often associated with impulsive, oppositional, aggressive and disruptive behavior. The presence of these externalizing disorders poses an increased risk of novelty seeking and risk taking behavior like high speed driving and substance use in adolescent population. High impulsivity and poor behavior inhibition control is associated with externalizing disorders like ADHD. These factors contribute to the emergence of substance use in adolescents as they tend to try these substances without thinking of the negative consequences. Prevalence of comorbid psychiatric disorders range from around 60-88% with CD being most consistently linked to substance use in treatment seeking population. Underlying pathogenesis in the reward system is found to be common in both ADHD and substance use disorders. Adolescents with ADHD may even self-medicate with cannabis and nicotine. Besides these underlying behavioral factors, emotional disturbances also occur in those with substance use. Adolescents with CD and ADHD may also exhibit emotional disturbances making them vulnerable to substance use. Thus, the presence of these co-morbid externalizing disorders in adolescents with substance use has various negative consequences on the course and outcome. They also have an important bearing of the management. For achieving effective clinical outcome and maintaining it, treatment strategies need to focus on the substance use as well as co-morbidities and underlying externalizing disorders. In this presentation we will try to review the relationship between substance use and externalizing disorders.

# *Symposium 38* EUROPAD-WADD Symposium: Dual Disorder/Heroin Use Disorder: Updates on the Continuum of Care

Szerman N, Balhara YPS, Pani PP, Maremmani I

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# Abstract/ Subtopics:

Opioid System and Mental Disorder -Nestor Szerman (Madrid, Spain, EU) Opioid Use Disorder and Psychiatric Comorbidity-Yatan Pal Singh Balhara (New Delhi, India) Delineating a specific psychopathology of Opioid Addiction-Pier Paolo Pani (Sassari, Italy, EU) Is Heroin/Post-Traumatic Stress Disorder Spectrum (H/PTSD-S) part of psychopathology specific to Heroin Use Disorder? -Icro Maremmani (Pisa, Italy, EU)

# Symposium 39 The Fifty Shades of Grey: Treatment of Substance Use Disorders, the Models from Four Different Countries

Ghosh A, Delic M, Kumar T, Pant S, Arya S

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#### Learning Objectives

 Understanding the barriers to treatment for substance use disorders
 Illustration of the barriers and the treatment delivery models for substance use disorderslessons learnt from four different countries

#### Abstract:

Setting the agenda World Drug Report (2018) asserted, 31 million people across the globe suffer from drug use disorders, and merely 16% receive treatment; one-third gets minimally adequate treatment. Potential barriers are poor awareness, access, and adherence. We discuss the treatment delivery models in four countries from three continents. Treatment of Substance Use Disorders: Slovenia's Experience Slovenia's treatment ensures continuity of care and accessibility. Outpatient treatment is available through the national network of public Centres for the Prevention and Treatment of Drug Addiction (CPTDAs). Centre for Treatment of Drug Addiction offers inpatient and outpatient treatment. Opioid substitution therapy is provided by CPTDAs. Treatment of Substance Use Disorders: Australian Experience Australia has a relatively good health care system which is easy to access and affordable. The Substance use treatment is being provided in all three Public, Private, and NGO sectors but more integration is warranted. It is still a marginalized specialty with mostly medicalized focus. Managing substance use disorder in Nepal: you have your way, I have mine Cannabis and alcohol were traditionally used in Nepal but there is a shifting trend towards the use of injectable opioids, benzodiazepines, and ATS. With no trained addiction specialist in the country and no national treatment center, the role of management is taken up mostly by shoddy rehabilitation centers, overburdened psychiatrists and self-help groups. Treatment of Substance Use Disorders: Indian Experience in India, both the Ministry of Health and Social Justice are involved in the treatment of substance use disorders. The former focuses on medical care, whereas the latter's focus on rehabilitation. For a substantial proportion, services are provided by private psychiatrists. Both the recent nationwide surveys suggested a huge treatment gap. There is an urgent to ensure the minimum standard of care services at all levels.

# *Symposium 40* Intervention for Substance Use among Adolescents Across Settings

Dhawan A, Bhargawa R, Mandal P, Chatterjee B

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# Learning Objectives:

1) Understanding of substance use intervention among adolescents across settings

2) Experiences and challenges in various setting for implementing intervention

3) Need and scope for inter-sectoral coordination

# Abstract:

# Magnitude of the problem and need for intervention in multiple settings

Anju Dhawan

# NDDTC, AIIMS, Delhi, India

The Global Youth Tobacco Survey [GYTS] among children (13-15 years; grades 8-10) reported 14.6% prevalence for tobacco use (Boy = 19.0%, Girl = 8.3%). According to the National Family Health Survey-3 the prevalence of alcohol use among boys in the age group of 15-19 years was 11%. Another large scale, multi-site survey among adolescents in India reported the use of tobacco, alcohol, cannabis and inhalants from almost all regions of the country. Tobacco (83.2%) and alcohol (67.7%) were the most common substances ever used followed by cannabis (35.4%), inhalants (34.7%), pharmaceutical opioids (18.1%), sedatives (7.9%) and heroin/smack (7.9%) among substance using children. The recently completed National household survey reported the current prevalence of inhalant use as 1.17%, cannabis use as 0.9% and opioids as 1.8% among adolescents. Results from a study on a representative population of street children in Delhi using Respondent driven sampling will be shared.

Treatment seeking for substance use among adolescents is poor and there may be a time lag of a few years after onset of substance use. Active efforts for early identification need to be made in school, in community/neighborhood including streets and in general healthcare setting.

# Intervention among students in school setting

# Rachna Bhargawa

# NDDTC, AIIMS, Delhi, India

In India, there is lack of large-scale systematic studies on prevalence of substance use among school students. However, studies done at regional level report high prevalence of substance use, especially tobacco, alcohol, inhalants and cannabis use. Findings from an ongoing survey among school students in 10 cities of India will be discussed.

A large number of substance using adolescents drop-out from school as the severity of the problem increases. The school setting can play an important role in early identification for

substance use. Early intervention in form of "brief intervention" can be also imparted in this setting. Addressing family concerns and problems can be addressed through regular meetings. Experiences and results from an ongoing study on Screening and Brief Intervention in schools in Delhi will be shared. The teachers and counsellors from school setting will be trained to deliver the intervention and will be provided mentorship support for the same.

#### Intervention in community

#### Piyali Mandal

#### NDDTC, AIIMS, Delhi, India

Community involves diverse settings and so, there is scope of involving multiple stakeholders in the community. Street-dwelling and street-working children require special focus in community intervention. They engage in high-risk behaviors, are more prone and have earlier initiation of substances, and are often bereft of caregiver to protect and help in substance use problem. A six session group intervention for treatment of substance use in street children that was developed based on data collected in this population will be shared. The NGOs working with street children were trained to deliver the intervention in street settings using a participatory approach. The intervention with involvement of key stakeholders shall be discussed.

#### Intervention in general healthcare setting

#### **Biswadip Chatterjee**

#### NDDTC, AIIMS, Delhi, India

General health care setting may pay an important setting for intervention for substance use in this age group. Adolescents may not approach specialized setting for substance use treatment for multiple reasons. It may be due to the poor motivation, poor realization of the nature and extent of the problem, associated stigma, inability to reach to the service delivery due to lack of service or unaffordability or lack of information etc. However, the experiences at the Adolescent-Friendly Health Clinics started by the GoI reveal that they (esp. the females) feel free to approach these community general health care clinics for a range of problems. Some of the issues like sexual problems, emotional and behavioral problems, might be related to substance use. Therefore, this can be an appropriate setting for screening and intervention for substance use and related issues in this age group. The role and relevance of the general healthcare setting, their role in routine screening and the kind of intervention that is expected in these centers shall be discussed. Experiences from an ongoing study in this setting where the nursing staff have been trained to screen for substance use will also be shared.

#### Integration for care across various settings

#### Anju Dhawan

#### NDDTC, AIIMS, Delhi, India

A system of coordination is essential at various levels from top to bottom for smooth functioning of the service in an integrated manner. This includes coordination between key ministries, the departments under the ministries, and various agencies and institutions affiliated with them. Besides, State Commissions for Protection of Child Rights play a key role for the safeguarding the interest of children. The key organizations under these ministries such

as Directorate of Education, Directorate General Health Services also have a distinct role and need to coordinate with each other. Identification of the key nodal ministry to address and coordinate the efforts is essential. An understanding of the existing services so as to promote and strengthen them besides initiating implementation of services in areas where it is lacking is required. It is also important to ensure proper monitoring, mentoring, documentation and feedback mechanism to make the ongoing effort robust, sustainable and replicable.

Coordination at local level is equally important for provision of services. Since, all resources may not be available in a given setting, linkage can help in providing a more holistic prevention and treatment package. Though interventions should be carried out in different settings to capture as much of the child population as possible, they will have some overlap. It is important to access the child in different settings and reinforce the interventions across settings for more effectiveness. Frequent communication and coordination can also facilitate this process.

# *Symposium 41* Genetic Underpinnings of Addiction: Update and Experience

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# Learning Objectives:

To understand the wide gamut of ways in which genetics interact with addiction medicine. The clinical significance of genetics in addiction psychiatry and addictions.

#### Abstract:

The symposium will start with an introduction to the complex etiology of addiction disorders. Using substance for the first time to habitual use leading to dependence is based on multiple factors like environmental, genetic or both. Gene identification can be accomplished either by genome-wide association studies or by candidate gene studies. The genes involved in signaling pathways and metabolizing enzymes have emerged as some of the significant genes. These functional gene(s) may also have role in vulnerability, drug metabolism, elimination and pharmacological response. This presentation will focus on the clinical evidence to treatment response and NDDTC research on the subject.

The second presentation will deal with the behavioural manifestations conferred by the genes, which predispose an individual to substance use disorders. The current theoretical knowledge would be touched upon. The ways in which genetic information could be utilized in decision making paradigms in the clinical context, and current directions of research which will influence the diagnostic and prognostic systems in addiction medicine will be discussed. Data on the genetic determinants of self-harm in opioid dependent individuals, as a case example of how genetic markers could be an adjunct in phenotypic manifestation of self-harm in a select group of individuals will be presented.

Variations or Single Nucleotide Polymorphisms (SNPs) in different brain pathways such as dopamine, serotonin, GABA and glutamate have definitive roles in making individuals vulnerable to dependence. Along with genetics, epigenetic seem to underlie some of the changes that interplay between environmental factors and genes are increasingly implicated in drug abuse risk. Epigenetic mechanisms regulate learning induced gene expression and establish persistent behavioral responses. The presentation will be discussing AIIMS experience and focus on the association of SNPs of the different pathways along with epigenetic profiles of neurotransmitter genes and their transporters in individuals with alcohol and opioid dependence.

# *Symposium 42* Role of Nurse Professionals in Treatment of SUD

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# Abstracts:

#### Nurse-led clinics: A new approach to substance use treatment services

Sandhya Gupta,

# College of Nursing, AIIMS, New Delhi.

Nurse-led clinics is any outpatient clinic that is run or managed by registered nurses, usually or Clinical Nurse Specialists. Nurse-led clinics have assumed distinct roles over the years, and examples exist within hospital outpatient departments, public health clinics and independent practice environments in west.

A broad definition of a nurse-led clinic defines these clinics based on what nursing activities are performed at the site. Nurses within a nurse-led clinic assume their own patient case-loads, provide an educative role to patients to promote health, provide psychological support, monitor the patient's condition and perform nursing interventions. Nurses may have expanded roles within these clinics, depending on the scope of practice defined by their institution and the state or central government. The recent growth of nurse-led clinics is considered an emerging area of nursing practice; they developed over the 1990s into practice areas in west. But in India also they have arrived though are in infancy. There has been recent growth of nurse-led clinics both within hospitals and in the community. An impetus came from the doctors which was a response to the shortage of professionals in the community.

Nurse-led clinics typically focus on chronic disease management: conditions where regular follow-up and expertise is required, but also where a patient may not necessarily need to see a physician at every visit. Most nurse-led clinics use nursing theory and knowledge to educate patients and form care plans to manage their conditions. In their consultations, nurses undertake a range of activities. This may include a specific task such as giving patient education, assessment and management of risks, managing blood pressure, exacerbations of disorder and overall disease management. Generally, it is found that most patients experienced improved outcomes following nurse-led clinic consultation, with the best improvement rates found for wound care and continence clinics.

The best examples of Nurse led clinics are: - Pacemaker clinics, Stroke clinics, Stoma Clinics, Diabetes clinic, Well baby clinics, Antenatal clinics, Clinic for chronic Schizophrenics, wound management clinics and family planning etc. Many nurse-led clinics have also been associated with enhanced patient satisfaction with care. A nurse-led clinic for chronic disorders illustrating that parent satisfaction was significantly higher for those who attended the nurse-led clinic. This has become possible with the standard operating Procedures which provide Treatment guidelines for example, specify the role of the nurse in managing the disorder and coordinating care.

Conclusion: The evidence for the effectiveness of nurse-led intervention is growing and increasingly supported by randomised controlled trials and systematic reviews. They are really cost effective way of providing professional services in substance use area specially.

#### Success story from Kerala in relapse prevention of persons with substance use disorder-Nurse-Led Interventions

#### Renju Sussan Baby,

#### College of Nursing, AIIMS, Bhubaneswar, Odisha, India

Nurses plays a significant role in preventing relapses and helping the patients to attain recovery. To achieve the long-term goal of complete recovery and maintenance of abstinence, strict monitoring of the patients after de-addiction treatment monthly for warning signs identification of relapse triggers and manging lapses effectively is important in preventing relapses. In is equally important to resolve issues faced by the patients in maintaining physical heath, psychological wellbeing, occupational functioning and social relationship, to improve the overall quality of life. The nurses working in community health services, outpatient departments and in-patients' units of de-addiction services need to take active role in ensuring follow-up adherence. The training of nurses working in this setup is in urgent need today. The nurses are not well utilized for prevention and management of patients having substance use disorder with and without co-morbid psychiatric illness. After appropriate training in the field, the nurses can participate effectively in treatment programmes for SUD patients. Nurses can be an active member in the workforce for formulating individualized relapse prevention action plan which includes aggressive interventional strategies and strict follow-up monthly such as constantly pushing the patients as well as their family members after de-addiction treatment for follow-up adherence and medication compliance and address the problems of lapse and triggers and risk factors for relapse prevention. They can also be made equipped to track the patients who are irregular at follow-up and be trained in rendering monthly telephone-based relapse prevention counselling services to these patients, so that effective lapse and relapse management and resumption of treatment services is possible.

# Outcome based New Approaches for Drug Use Prevention and Education for School going children

#### Surbala Devi,

#### College of Nursing, AIIMS, New Delhi.

In order to determine 'what works' in drug prevention and education, an understanding is needed of what outcomes are being sought from drug education and prevention in schools. The main aim of prevention interventions delivered to children and young people in schools is not simply to increase knowledge and understanding of the issue, but also to deter or to delay the onset of substance use by providing all individuals with the information and skills necessary to prevent the problem. The primary outcomes are: Reduction of substance use (in both the short term and long term), reduction of risky behaviour and reduction of intention to use.

#### Models of drug prevention in schools

There has been considerable change in the approach taken towards drug education and prevention. The fear based and consequences approaches were discredited and generally replaced by the provision of factual information. More recently, evidence has shown the

importance and promise of programmes that combine life skills, resistance skills and normative education approaches.

1. Knowledge-focussed curricula (courses of study) give information about drugs, assuming that information alone will lead to changes in behaviour. Knowledge-focussed interventions are based on the assumption that a deficiency of knowledge regarding the risk and the danger of substance use is the cause of use and abuse, and that increasing knowledge should influence and lead to a change in attitudes toward drugs (from positive to negative) and consequently influence behaviour.

2. Social Competence curricula are based on the belief that children learn drug use by modelling, imitation and reinforcement, influenced by the child's pro-drug cognitions (perceptions), attitudes and skills. These programmes use instruction, demonstration, rehearsal, feedback and reinforcement, etc. They teach generic self-management personal and social skills, such as goal-setting, problem-solving and decision-making, as well as cognitive skills to resist media and interpersonal influences, to enhance self-esteem, to cope with stress and anxiety, to increase assertiveness and to interact with others. Social competence approaches are based on the assumption that youth with poor personal and social skills (poor self-esteem, low assertiveness, poor behavioural self-control, difficulties in coping with anxiety and stress) are more susceptible to influences that promote drugs. These interventions teach general problem-solving and decision-making skills, skills for increasing self-control and self-esteem, adaptive coping strategies for relieving stress and anxiety, and general social, communication and assertive skills.

3. Social Norms approaches use normative education methods and anti-drugs resistance skills training. These include correcting adolescents' overestimates of the drug use rates of adults and adolescents, recognising high-risk situations, increasing awareness of media, peer and family influences, and teaching and practising refusal skills. Social norms approaches are based on the assumption that substance use is a consequence of an inaccurate perception and overestimate of substance use among peers. This overestimate can lead to the perception that substance use is a normative behaviour, which could increase social acceptability among peers. This kind of intervention also teach strategies to recognise and resist peer and media pressures, for example resistance skills training and 'say no' techniques (Griffin 2010).

4. Combined methods draw on knowledge-focused, social competence and social influence approaches together.

The aim of the review was to evaluate the effectiveness of universal school-based interventions in reducing drug use compared to usual curricula activities or no intervention. The review found that programmes based on a combination of social competence (which aim to improve personal and interpersonal skills) and social influence approaches (focussed on reducing the influence of society in general on the onset and use of substances, by normative education for example) had better results than the other categories and showed, on average, small but consistent protective effects in preventing drug use.

Components of effective schools based drug education and prevention besides getting the right theoretical model of drug education and prevention delivered in schools, other components determining effectiveness also need to be considered, such as how, by whom and to whom the programme is delivered.

It is difficult to unpick the key components of effective programmes but the following are considered central. Secondly, media campaign, parent programme or those which target a young person's environment (school, family or community) are more likely to be effective than single component programmes that target just the individual.

Thirdly, the timing of interventions is important and need to be age appropriate, as the age at which the intervention is delivered can have an impact on the programme's effectiveness.

Fourthly, in terms of who delivers the intervention, there is evidence that peers should be involved in (although not necessarily lead in) programmes, and also that trained teachers and health professionals can be effective. Programme is considered to be effective by those receiving the programme, and importantly, how well the programme is implemented. Also what really matters is the programme itself. The point about how well the programme is implemented is therefore instrumental.

# Symposium 43

# The Four Bio-Psycho-Social-Spiritual Dimentsins of Addiction: A Global Perpective of Treatment and Recovery

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#### Learning Objectives

This symposium will explore the spectrum of biological, psychological, social and spiritual aspects of the disorder of addiction from a global perspective with an emphasis on treatment and recovery in India.

# Abstract:

Addiction is a primary, chronic disease of brain reward, motivation, memory and related circuitry. Dysfunction in these circuits leads to characteristic biological, psychological, social and spiritual manifestations. This is reflected in an individual pathologically pursuing reward and/or relief by substance use and other behaviors.

Addiction is characterized by inability to consistently abstain, impairment in behavioral control, and craving, diminished recognition of significant problems with one's behaviors and interpersonal relationships, and a dysfunctional emotional response. Like other chronic diseases, addiction often involves cycles of relapse and remission. Without treatment or engagement in recovery activities, addiction is progressive and can result in disability or premature death.

However, Addiction is a treatable chronic relapsing disease of the Body, Mind, Spirit provided that individuals, families and communities have access to clinically effective biopsychosocial treatment continuums. Cultural values and environment impact heavily on the access to and quality of treatment thus rendering international context a most significant variable related to successful treatment outcomes.

# *Symposium 44* New Psychoactive Substances

# Lal R, Sagar T, Soman SG

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# Abstract:

Dr. Sagar will speak on the Epidemiology of Substance Use in India with special emphasis on licit and illicit substances. He will also outline existing laws to combat such abuse in India and International conventions

Dr. Lal will give an introduction to New Psychoactive substances and elaborate various groups. Dr. Soman will talk about the challenges the country faces over emergence of these substances because of lack of awareness, lack of identification facilities and lack of laws to curb such use.

# *Symposium 45* Was 'Hypnos' lured by 'Ambrosia'? Exploring Greek Mythology with Preliminary Polysomnographic Data from an Addiction Treatment Services and Sleep Laboratory in India

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# Learning objectives:

1) To review the existing literature to explore the relationship between common substances like alcohol, cannabis, opioids, benzodiazepines and sleep.

2) To examine how far this is supported by preliminary polysomnographic data from addiction services and sleep laboratory in India.

# Abstract:

As per Greek mythology 'Hypnos' was the God of sleep and 'ambrosia' was the divine drink of God - current day equivalent of wine. From time memorial it is believed that alcohol and other drugs induce sleep. Lack of sleep is proposed to be a common cause of initiation and maintenance of substance related problems which is epitomized in the 'self-medication' hypothesis. In this symposium the existing literature will be reviewed to explore the relationship between common substances like alcohol, cannabis, opioids, benzodiazepines and sleep. Then it would be examined how far this is supported by preliminary polysomnographic data from addiction services and sleep laboratory.

# Presentation 1: Dr Aniruddha Basu

In this part brief introduction to sleep physiology, polysomnography, its subjective and objective measures would be discussed.

# Presentation 2: Dr Abhishek Ghosh and Dr Aniruddha Basu

Relationship between 'Hypnos' and 'Ambrosia': a matter of intense debate:

In this part review of existing literature would be discussed. Alcohol is known to induce sleep hence insomnia leads to increased alcohol intake. This has been also one of the supportive evidences behind self-medication hypothesis. Also chronic alcohol intake can lead to insomnia – hence the controversy which one is primary? One of the speakers would speak in favour of the motion and one against the motion.

# Presentation 3: Dr Ravi Gupta

Was 'Hypnos' lured by 'Ambrosia' or was he ambivalent? Finding the answer:

Currently with extensive polysomnographic evaluation evidence is accruing that substance use disorders particularly those related to alcohol/benzodiazepine may lead to long term sleep problems which may lead to increased rates of relapse and vice versa. That is the relationship is bidirectional.

In the Indian scenario there has been very less research exploring the interface between sleep and addiction particularly. Hence some preliminary polysomnographic data from addiction services and sleep laboratory of AIIMS Rishikesh and other centres from India would be presented to understand the current scenario.

# *Symposium 46* Tele-Medicine in Addiction Psychiatry: Current Use and Potential Applications

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#### Learning Objectives:

To understand how tele-medicine is relevant to addiction psychiatry

#### Abstract:

Tele-medicine has been playing an important role in providing care to selected population, especially those in remote areas, or those who have difficulty in mobility. Tele-medicine has found traction in addiction psychiatry as well, given the ability to reach those who encounter accessibility issues with care. Tele-medicine in addiction psychiatry can be used not only for patient care, but also for the purposes of training and case discussion among colleagues. This symposium discusses the role of tele-medicine in addiction psychiatry from a broad perspective. The first speaker will introduce the topic of role of tele-medicine in addiction psychiatry, and will introduce the activities of tele-medicine unit at National Drug Dependence Treatment Centre. The second speaker would discuss about the current evidence of the role of tele-medicine in addiction psychiatry. The third speaker would present about the technological advances in tele-medicine could be used for training and continued medical education. The fifth speaker would talk about the ethical-legal issues and potential novel application of tele-medicine in addiction psychiatry.

# Symposium 47 Behavioral Addiction: A New Medical Challenge or Pathologizing the Normal

Arya S, Jain A, Singh P, Kumar V

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# Learning Objectives:

1) To understand the concept of behavioral addiction.

2) To conceptualize and discuss the management plan.

#### Abstract:

Although there exists a controversy over current status of behavioural addiction, a vide variety of behaviours and leisure activities are increasingly being classified as behavioural addictions. Inclusion of pathological gambling under the substance disorder and internet use disorder as condition for further study in DSM-5 have widened the scope of research.

#### Mobile use and addiction

Behaviours like excessive use of mobile, taking selfies and indulgence into social media are just exaggeration of normal behaviour or pathological, is a constant controversy and debate. Indulgence with self-image is leading not only to compromise quality of life but also causing decreased socialization and risk-taking behaviours along with exposure to unexpected dangers. This is a specific focus of attention.

#### Fitness, exercise addiction and related disorder

Similarly overindulgence with fitness lead to faulty diet patterns, intense exercise schedules and consumption of health supplements again risking health and life. There have been case reports where people have exhausted themselves to death. These cases should be attended properly.

#### Management of behavioral addiction

Till date no standard therapies in guidelines exist for management of these conditions. However, a number of psychological approaches have been tried including MET, CBT, Family Therapy and life style changes. All these issues are being discussed in the symposium. These effects are variable and a constant improvement and research is mandatory.

# *Symposium 50* Substance Use Disorder in India

Singh P, Srivastava V, Arya S, Rathee S,

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# Learning Objectives:

1) The extent of problem in Indian population and its changing trends.

2) Various interventions available to tackle the issue in the Indian setting and the challenges in dealing with the problem of substance use.

# Abstract:

Substance use has assumed almost an epidemic proportion in India and a major public and social problem affecting the growth of individual, family and society at large. It has long been prevalent in social background of India. While tobacco, cannabis and alcohol use may have the color of cultural context in various parts of the country, the trend of use of opioids, benzodiazepines, and other newer drugs, along with injectable drug abuse in on rise. It has been hard to deal with this issue in Indian population because of limited resources for prevention, treatment and recovery as well as different requirements and treatment strategies associated with different populations in various parts of the country. We need to focus on the effect of substance use in India with special emphasis on to emerging patterns of use and the way to formulate an effective management program which has both pharmacological and non-pharmacological interventions tailored to the need of our population.

# Abstract of the Sub-topics:

1. Introduction and Overview of substance use in India: Changing societal values, availability of wide variety of licit as well as illicit drugs, and cultural acceptance has been the driving force behind the worrying picture in regard to substance abuse in India. The symposium aims at elucidating the extent and issues related to the proposition of the problem. Further, the trends of substance abuse have changed from time to time, with newer drugs being introduced regularly which replace the pre-existing substance use and people using them in the light of tolerance and sake of experimentation.

2. **Principals of Pharmacological Management**: Pharmacotherapy plays an important role in management of substance abuse, both in acute phase and long-term management as well as management of comorbidities and sequelae. This part describes various pharmacological agents used for detoxification and long-term management strategies.

3. **Non-Pharmacological Management**: It is suggested that treatment process is enhanced when clinical interventions are matched with the patient's motivation for change and other factors. A combination of pharmacological and psychological interventions yields the most favourable result. This part deals with various non-pharmacological factors that help in substance abuse in relevance to rural context.

4. **Challenging aspects and practical issues of substance**: Drug abuse is a major health issue with extensive legal implications as well as other challenges. The sheer magnitude of the problem is compounded by the widespread easy availability, social acceptability and associated legal concerns. The situation has worsened with excessive marketing newer synthetic drugs. The manpower, required skill, infrastructure and other resources are limited to tackle this issue. While the legal aspects include- laws regulating production & retail supply and laws for offences committed under intoxication.

## *Symposium 51* Primary Care Psychiatry Program in India: Focus on Addiction Psychiatry

Manjunatha N, Kumar CN, Gupta R, Balhara YPS

Assistant Professor, NIMHANS, Bengaluru, India manjunatha.adc@gmail.com

#### Abstract:

Ten primary care doctors from Uttarakhand undergone digitally driven, module based, one-year course on primary care psychiatry program designed by 'National Institute of Mental Health and Neurosciences' (NIMHANS) Bengaluru from their workplace. Proposed symposium focuses on presenting the designed addiction psychiatry module (mandatory and an optional) in real world scenario of primary care of these doctors. Focus on two digitally driven delivery modules: one is training module [Telepsychiatric On-Consultation Training (Tele-OCT)] and another is consultation module (Collaborative Video Consultation). This symposium also focuses on primary care doctors-based training of trainers' module, management of tobacco and opioid addiction by primary care doctors using two clinical modules.

## Symposium 52 Women in Substance Use: Through the Eyes of Women Psychiatrists

Adarkar S, Srivastava S, Mandal P, Tripathi R

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#### Women in substance use: Focusing on the gender differences

Shilpa Adarkar

#### KEM Hospital, Mumbai, India

The gender difference in substance use has been increasingly recognized during last few decades. Earlier substance use was considered to be a male phenomenon. With the recent focus on women and substance use has brought attention to important gender differences in the biology and epidemiology of substance use, etiological considerations and psychiatric comorbidity. All of these differences have important treatment implications. In the symposium, gender differences in biological responses, psychiatric co-morbidity and social issues related to substance use by women will be discussed.

#### Clinical & epidemiological findings of Substance Use Disorder (SUD) in women from India Shruti Srivastava

#### University College of Medical Sciences & Guru Teg Bahadur Hospital, New Delhi, India

Rough estimates of about 10% women from rural India suffer from SUDS. Though nationwide epidemiological data is lacking from India. The wide range of disorders from alcohol to nicotine to opioids, prescription drugs overdose exists. Often substance initiation begins in the company of family members/peers. Deliberate self-harm /suicide/dissocial personality traits/Domestic violence often go hand in hand with these substances. Delay in seeking treatment, stigma, ignorance, poverty, lack of social support, dominance on male partner, unemployment all accentuate these conditions. The peculiar case vignettes highlighting the gender sensitive issues shall be presented. The presentation will also highlight the management hurdles frequently encountered in dealing with this class of disorders.

#### Addressing the needs: More women psychiatrists to fill the gap

#### Piyali Mandal, Atul Ambekar

#### NDDTC, AIIMS, Delhi, India

The gender differences in terms of biological and psycho-social aspects, it is clear that the need of women substance users is different. The needs also vary in the context of socio-cultural and political differences. Till date there is very limited literature available on substance use among Indian women. The data mostly comes from few tertiary treatment centres and selected regions of the country. With growing understanding of the gender differences and different needs of women, few of the countries in the West have initiated the practice of "gender sensitive" interventions across all settings. In India, such initiative is at a nascent stage. Evidence from the west suggests that such interventions delivered by women are better in terms of outcome. This may be similarly applicable in India considering the socio-cultural

aspects. In the symposium, the various initiatives taken so far by National Drug Dependence Treatment Centre and other organizations and challenges faced will be discussed.

#### The way forward

Richa Tripathi KGMU, Lucknow, India

Substance abuse has traditionally been considered as a disease of men. Women were believed to have some kind of immunity in terms of "social inoculation". However, due to change in societal norms and beliefs, substance use is currently increasing among women also. In India, traditional use of various substances by women during religious festivals is not unknown. Chewing tobacco is a common practice among many women across the country. Cultural use of alcohol has been known in some tribal populations but gradually the use is increasing. There is major difference in pattern of male and female substance use including initiation, progression, recovery and relapse. Women experience greater medical, physiological and psychological impairment and experience loss of control sooner than males. So, the treatment needs of female substance users is also different and requires a gender specific comprehensive strategy which will require medical services, mental health services, services for family and child and employment opportunities. Currently, there is no Indian policy for women substance use. However, Government of India has started a convergence program which includes National AIDS Control program (NACP), National rural health mission (NRHM) and reproductive or sexually transmitted infection (RTI/STI) to combat some aspects. India is in great need of a policy or at least a standard operative protocol for management of female substance use disorder which may include screening for substance use disorder for all females accessing health sector, counseling, and referral to addiction services, formation of a treating team and after-care.

## Symposium 53 Challenges in Alcohol and Substance Use Testing in De-Addiction Programs

#### Jain R<sup>1</sup>, Ghosh S<sup>1</sup>, Bhad R<sup>1</sup>, Sharma P<sup>2</sup>

<sup>1</sup> National Drug Dependence Treatment Centre (NDDTC), All India Institute of Medical Sciences, New Delhi, India

<sup>2</sup> Deptt. of Clinical Pharmacology and Toxicology, NIMHANS, Bangalore, India rakajain2009@gmail.com

#### Learning Objectives

1. Critical issues in drug testing for substance use disorders

2. Diagnostics characteristics of alcohol biomarkers in recent alcohol use

#### Abstract:

Widespread substance abuse has led to increase demand of urine drug testing in de-addiction programs. Drug testing is an integral part of management of substance use disorders. However, there are number of issues in drug testing related to type of substance use, route of administration, time of consumption and sample collection, physiological mechanisms for drug metabolism, biological matrices and analytical techniques used for drug testing. Testing methods vary in their sensitivity, specificity, time, and cost. The present symposium would discuss an overview of detection of drugs and alcohol among substance users. The focus of the presentations would be on newer psychoactive substances (NPS), prescription drugs and inhalants along with the pitfalls of substance use testing. Moreover symposium would also cover biomarkers for monitoring recent alcohol use.

#### New Psychoactive Substances: Diagnostic issues and challenges

#### Raka Jain

In the recent years, there has been a dramatic increase in the number of new psychoactive substances (NPS) across the world. The presentation will summarize the new approaches for identification and characterization of NPS in seized and biological specimens. Also discuss challenges in detection, preparedness of the laboratories, gaps in knowledge to deal with the current situation and the need for a shift in clinical and forensic science practice for designing effective policy responses to the NPS problem.

#### Prescription drugs misuse among substance users: A Laboratory perspective

#### Shayani Ghosh, Raka Jain

The last two decades have seen a significant rise in prescription drug misuse (especially opioids and benzodiazepines), leading to dramatic increases in drug overdoses and death. Substance abuse treatment programs often use drug testing to verify abstinence. Urine drug testing provides an objective means to document a patient's drug use, and a positive result is interpreted as an evidence of drug exposure. The presentation would cover the findings of prescription drugs use and misuse based on urinalyses in NDDTC laboratory, AIIMS.

#### Inhalant Use Disorder: Clinical and Laboratory Assessment

Roshan Bhad, Arpita Verma, Raka Jain

Inhalant use disorders are one of the commonest substance use disorders among adolescents and youth globally. It is commonly encountered problem in clinical practice and yet there are hardly any biological tests for assessment of inhalant exposure. The presentation covers clinical features of inhalant use disorders and recent developments in biomarkers of assessment in clinical practice.

#### Biomarkers for monitoring recent alcohol use

Priyamvada Sharma, Raka Jain

Alcohol Use Disorder is a growing public health concern worldwide. Alcohol biomarkers are physiological indicators of alcohol exposure or ingestion and may reflect the presence of an alcohol use disorder. Biomarkers to detect alcohol consumption or harmful alcohol use offer an opportunity to objectively verify the self-reported history about alcohol consumption provided by a patient or subject. The presentation would focus on biomarkers for monitoring recent alcohol use.

## *Symposium 54* ISAM Education and Training Committee: Research on Addiction Medicine Training: Methodology and Outcomes

Quirishi R, Pinxten L, De Jong C, Tay J, Sarkar S

#### Learning Objectives:

In this symposium 5 talks by speakers from different countries and specialized in different aspects of training methods in Addiction Medicine will be presented including the evaluation of these methods.

1. Present different outcomes and methodological aspects of research in the field of addiction medicine training

2. To learn about validated evaluation tools that can be used in different contexts

## Presentation 1 - The view of international scholars on case studies in addiction medicine

Rouhollah Qurishi

Novadic-Kentron, Faculty of Medicine, Radboud University, the Netherlands.

#### Learning Objectives:

1. Providing insight in the relevance of case studies for the development of Addiction Medicine.

2. Providing insight in the competencies needed to write relevant and publishable case studies

#### Abstract:

**Objectives:** In addiction medicine little attention is spend to case studies. Only a few journals accept case reports on addiction medicine. Open access journals accept articles if a publication fee is paid for. Therefore, scholars and clinicians do not make much effort to write these kinds of articles. We believe that case studies could help to bridge the gap between practice and knowledge. We will describe the advantages and disadvantages of case studies based on the opinion of experts.

**Methods:** We explored the opinions of international experts on case studies during the annual International Society of Addiction Medicine (ISAM) conference in 2018. Interviews were audio taped and verbatim were typewritten. A qualitative analysis was performed by the first author.

**Results:** Eleven international scholars, representing 9 different countries were interviewed. Different views and *ideas* of international scholars about publishing the case report were reported. It was recommended to encourage young medical doctors to start writing case reports in favor of their clinical as well as their scientific career. Competencies medical doctors need to have to be a successful author of case studies were formulated. Well recognized journals in the field of addiction medicine should be stimulated to open space for clinical case studies.

**Conclusions:** Case studies seems to be worthwhile for the development of Addiction Medicine.

**Presentation 2** -A rational and simple approach to improving Training in Addiction Medicine: origin and use of the Addiction Medicine Training Needs Assessment Scale. Lucas Pinxten,

Faculty of Social Sciences of the Radboud University, The Netherlands

#### Learning Objectives:

Providing insight in the Training Need Assessment (TNA) as a tool for improvement of training in Addiction Medicine (AM) competencies.

Proper training increases competencies in AM.

#### Abstract:

**Objectives:** In most countries AM is not yet well integrated in undergraduate and postgraduate medical curricula. To identify training gaps between current and desired AM performance and to assist design, implementation and evaluation of training in 30 core AM competences, an assessment instrument (AM-TNA) is available. This study focuses on the changes in competencies during psychiatry training. At the psychiatry department of the Lithuanian University of Health Sciences (LUHS) in Kaunas the curriculum for residents in psychiatry includes a comprehensive program on AM training.

**Methods:** Before attending different workshops all residents in psychiatry at the psychiatry department of the LUHS filled in the AM-TNA. We hypothesized that competencies will increase during the four years of training.

**Results:** As was expected the competencies in Addiction Medicine increased over the four years of training. Out of the 30 competencies 23 of them increased significantly.

#### Presentation 3 - The Development of EPA Addiction Psychiatry in Lithuania

Cornelis A. J. De Jong Addiction and Addicton Care at the Radboud University, The Netherlands.

#### Learning Objectives:

1: Providing insight in the development of Entrustable Professional Activities at the department of psychiatry of LUHS.

2: Learn that it is satisfying to develop EPA's as staff and residents.

#### Abstract:

**Objectives:** EPA's offers a competency-based medical training the ability to translate competencies to the level at which contact with patients takes place. In Lithuania the process of EPA development has started. The staff of the psychiatry department expressed their interest in EPA development in 2018 resulting in a workshop with a delegation of fourth year residents in 2019. Questions were: Is this doable? and Is it appreciated?

**Methods:** The program of the three 4-hour meetings consisted of: A global introduction on EPAs, selecting the two EPA topics based on a Training Needs Assessment, developing the content, drafting them, seeking feedback on the drafts, refining and finalizing the two EPA's and presenting them for an audience consisting of staff members and residents that didn't attend the workshop.

**Results:** Based on the EPA it was decided plenary to develop the following EPA's:

1: Follow-up visitation focusing on preventing relapse

2: Managing emergencies in substance dependent patients.

The workshop was highly appreciated with a mean score 8.8 on a scale from 1-10. In general the staff as well as the residents enjoyed working together.

**Conclusions:** A partnership between staff and residents resulted in two relevant EPA's Addiction Medicine for psychiatrists. The workshop was highly appreciated and will lead to further initiatives.

## Presentation 4: A Critical Systems Thinking Approach to Equity-Focused Services for People Who Use Drugs

Joe Tay

MRC/ CSO Social and Public Health Sciences Unit, University of Glasgow, UK

#### Learning Objectives:

1. Providing equitable services to people who use drugs is fundamentally one of social justice and systemic change.

2. Such change is complex and embedded in unequal power structures, addressed here by a critical systems approach.

#### Abstract:

**Objectives:** People Who Use Drugs (PWUD) occupy a precarious position in society, at the intersections of discrimination, poverty, inequality, powerlessness and criminality. Nevertheless, researchers, policy-makers and frontline workers acknowledge the ethical and pragmatic importance of engaging PWUD in decision-making. Scotland has prioritised PWUD engagement as part of a treatment strategy to reduce record levels of drug related deaths, the highest in the UK and EU.

**Methods:** An Insider Action Research (IAR) approach is taken, informed by the Critical Systems Thinking (CST). IAR involves understanding the context of change, including organisational politics and maintaining academic rigour despite conflicting researcher roles. Complimenting this, CST provides a broad range of tools to explore these factors, evaluating the consequences of different boundary choices on equity and power balances.

**Results:** We present our initial understanding of the system of interest. A theoretical model for the meaningful participation of PWUD in decision-making is proposed. Key domains include critical competence, identity formation (collective and individual), internalised oppression and stigma, frontline relationships, organisational readiness to change and power imbalances. Stakeholders were classified into sources of motivation (those who wish the policy of PWUD participation to occur), sources of control (decision-makers), sources of knowledge (evidence and experience) and sources of legitimacy (those who stand to lose from power re-distribution). **Conclusions:** A wide range of issues need to be addressed or acknowledged in order for PWUD to have meaningful influence on the issues which affect them. The importance of linking participatory mechanisms to a larger framework was identified, leading to the incorporation of the deliberative system into our theoretical model.

## Presentation 5 -Super specialist training for addiction psychiatry in India

Siddharth Sarkar

National Drug Dependence Treatment Centre, All India Institute of Medical Sciences, New Delhi, India.

#### Learning Objectives:

To get an overview of the super-specialty addiction psychiatry course in India To understand the strengths, weaknesses, opportunities and threats for the supers-specialty course in addiction psychiatry.

#### Abstract:

**Objectives:** Super specialist course in addiction psychiatry has been launched in India some years back, and has seen growing interest among trainee and practicing psychiatrists. This course of Doctorate of Medicine (DM) in Addiction Psychiatry is available to those who have completed their undergraduate medical training as doctors, and have completed their residency in psychiatry subsequently. The course is of 3 years duration and involves clinical responsibility, academic involvement and requirement of dissertation or research pursuits.

**Methods:** At time point of time, there are a few centres in India which offer this course, and the selection process is largely through multiple choice based competitive examination. This super specialist course caters to the growing need of addiction specialists in India, which has seen a growing recognition of the problems related to addiction. The graduates of this course are expected to provide informed academic leadership in the field of tackling addiction in the country from clinical and health-service perspective.

**Results:** This presentation presents the design of the programme, the teaching learning methods, and the assessment structure at one of the institutions offering this course in India. A SWOT analysis would be presented about the course.

**Conclusions:** Since the course has been evolving, there has been scope for structuring and introducing innovations in this course, some of which would be presented. The pragmatic issues and concerns as well as the future outlook and directions of this course would be presented as a part of this presentation.

## *Symposium 55* The Spectre of Addiction: How the Media sees it? An Appraisal

Sidhu GS, GUL D, Gupta R

Consultant Psychiatrist at Doaba Hospital, Jalandhar gulbaharsidhu@rediffmail.com

#### Learning Objectives:

The media, including the electronic and the print media, have an important role to play in fighting the increasing menace of addiction. There is an urgent need for the media to be sensitized regarding the true nature of this mental health problem.

#### Abstract:

#### Role of media in fighting the scourge of addiction

Deepali Gul

Department of Psychiatry, Punjab Institute of Medical Sciences, Jalandhar (Punjab), India.

There is no denying the fact that the media has a vital role to play in shaping public perception regarding an issue that dominates national consciousness. There have been numerous examples in recent past wherein both the electronic and the print media have contributed constructively in raising awareness among people at large and in busting the myths that surround it. The media campaigns for raising awareness about AIDS, Racism, Gender bias, The rights of the LGBT community, and about creating a clean India ( "Swachh Bharat") are very good examples to drive home the point.

Has the media coverage of the issues surrounding the problem of substance abuse, been in the same league? This question has no clear answers. The coverage has vacillated from brilliant to downright crass. The examples of good media coverage regarding addiction will be highlighted and correlated with the relevant statistics.

#### Coverage of addiction in print media

#### Gulbahar Singh Sidhu

#### Doaba Hospital, Jalandhar (Punjab), India.

Even in the age of twitter and real time news, the print media continues to sway public opinion in a substantial way. How has the print media covered the problem of addiction? Has it made an effort to understand its fine nuances? What are the findings of the research, both internationally and in India, about the extent and nature of the coverage? Are there any specific guidelines available to the media when it comes to reporting about addiction? These are the questions which will be answered in this presentation.

#### Addiction and cinema: the best and the worst

#### Rajeev Gupta

#### Manas Hospital, Ludhiana (Punjab), India.

Cinema continues to be a hugely popular medium of mass communication. Its appeal has not diminished even after the advent of social media and, of late, the live streaming platforms.

How has Cinema portrayed the problem of substance abuse? What are examples of excellent, sensitive, well balanced and informative coverage of Substance Use/misuse in the World cinema? What are the worst examples of portrayal of substance use on the silver screen? What has been the overall trend? Is there a need of improvement? What are the ways in which it can be improved and made more in consonance with the scientific facts?

## *Symposium 56* **Regional Patterns of Substance Use in India**



Praharaj SK, Munoli R, Umesh S, Arora M

Department of Psychiatry, Kasturba Medical College, Manipal, Karnataka, India <u>samirpsyche@yahoo.co.in</u>

#### Learning objectives:

1. To understand the changing patterns of substance use across regions in India

2. To understand the factors associated with the changing patterns of substance use in India

#### Subtopics:

1. Overview of Pattern of Substance use in India – Dr. Samir Kumar Praharaj

2. Substance use pattern in Southern India, with special focus on education hub Manipal – Dr. Ravindra Munoli

3. Substance use pattern in Eastern India, with special focus on Central Institute of Psychiatry, Ranchi – Dr. Umesh S

4. Substance use pattern in North India, with special focus on Jammu - Dr. Manu Arora

#### Abstract:

India's astounding diversity of religions, languages, and cultures is unique and unparalleled. Cross-cultural contacts have nourished the growth of a great civilization over 5000 years and established environment of unity in diversity, of culture, race, caste, religion, and language. India is not simply the largest democracy in the world; majority of its population is of young people with ever-growing aspirations. In an era of globalization, digitalization and rapid economic growth, access to information or material is just a click away.

Substance use is widely prevalent worldwide, and India is no exception. Most common substances are alcohol, tobacco, cannabis, opioids, inhalants and prescription drug usage. Several other drugs such as cocaine, hallucinogens and other designer drugs are uncommon, and mainly restricted to few pockets. The drug usage pattern varies across geographical regions. The variations are because of the differences in availability, cost, policies, laws, religious/societal acceptance, etc. Being a diverse and rapidly growing population, the pattern of substance use is changing.

## *Symposium 57* Cognitive Impairment in Substance Use Disorder- A Missed Opportunity

Chandra M, Jhajharia A, Rai CB, Sandhu VK

Atal Bihari Vajpayee Institute of Medical Sciences and Dr Ram Manohar Lohia Hospital, New Delhi, India minasaxena@gmail.com

Learning objectives:

Learn to assess cognitive impairment in all patients of Substance use Disorder
 Learn to manage cognitive impairment in all patients of Substance use Disorder

#### Abstract:

Substance Use Disorders (SUD) are common in clinical psychiatric practice and often have comorbid cognitive impairment. (Toledo-Fernández et al, 2018) There is a bidirectional relationship between cognition and SUD. Cognition may be impaired secondary to SUD while cognitive impairment due to any etiology (including Intellectual Disability, Mild Cognitive Impairment and Dementia) can worsen the course of SUD. The rates of cognitive impairment and the nature of cognitive deficits varies across substances. For example, Alcohol Dependence is associated with higher rates of cognitive impairment especially in memory domain while Opioid Dependence is associated with higher rates of visuo-spatial deficits. (Bruijnen et al, 2019)

However, the focus of clinical management in SUD is usually on detoxification and relapse prevention. Lack of routine assessment for cognitive impairment often results in a missed diagnosis of comorbid cognitive impairment. Undetected cognitive impairment is a predictive factor in treatment outcomes due to its adverse impact on treatment adherence for pharmacological and non-pharmacological interventions, retention in therapeutic network, maintenance of sustained abstinence, effectiveness of psychotherapy, socio-occupational functioning and quality of life. (Hagen et al, 2018) At the same time cognitive interventions may have therapeutic potential in SUD to alleviate cognitive decline, addiction symptoms and relapse. (Sanpedro-Piquero et al, 2018)

1. Introduction – Dr Mina Chandra

2. Epidemiology and etiopathogenesis of Cognitive Impairment in SUD- Dr Avinash Jhajharia

3. Strategies for assessment of Cognitive Impairment in SUD – Dr Mina Chandra

4. Management of Cognitive Impairment in SUD – Dr Avinash Jhajharia

5. Hands on exercise on assessment of Cognitive Impairment in SUD using case studies – Dr Mina Chandra, Dr Jhajharia, Dr Chandra bhushan Rai, Dr Vipindeep.

The symposium will start with introduction of the topic by Dr Mina Chandra followed by a brief overview of "Epidemiology and Etiopathogenesis of Cognitive Impairment in Substance Use Disorders" by Dr Avinash Jhajharia. Thereafter, Dr Chandra will review the strategies for "Assessment of Cognitive Impairment in Substance Use Disorders" while Dr Jhajharia will present on "Management of Cognitive Impairment in Substance Use Disorders". The session will conclude with a "Hands on exercise on assessment of Cognitive Impairment in Substance Use Disorders using case studies" by Dr Chandra, Jhajharia, Rai and Sandhu.

## *Symposium 58* Management of Adolescent Substance Use Disorders: Recent Advances

Bhad R, Vikram V, Pakhre A, George AB, Kattula D, Mishra S

NDDTC, AIIMS, Delhi, India drroshansindia@gmail.com

#### Learning Objectives:

1) To increase understanding of issues pertinent to the management of adolescent SUDs with co-morbidities.

2) To have a comprehensive overview of evidence-based management strategies, both pharmacological and non-pharmacological in adolescent SUDs with psychiatric co-morbidities.

#### Abstract:

Prevalence of psychiatric comorbidity in adolescents with substance use disorders is higher than their prevalence in the general population within the same age group. Many of these comorbidities exist prior to the development of the SUD and their inter-relationship is complex. Their co-existence can influence bi-directionally the course and outcome of each, and presents additional challenges in the management of individuals who are navigating a crucial developmental period. Major mental illnesses belonging to the psychotic and affective spectrums and SUDs have over-lapping periods of onset, and evidence for the role of alcohol, cannabis, stimulants and hallucinogens in the onset, severity and treatment outcome is wellknown. Issues that may arise in treatment are difficulty in retaining the adolescent in treatment, mental illness compounding the generally poor motivation, severity of mental illness leaving few options for non-pharmacological management, which are crucial, and the possibility of pharmacological interactions between prescribed medication and substances of abuse. Externalising disorders such as conduct disorder and attention-deficit hyperactivity disorder are important risk factors for the development and persistence of SUDs. Often, many of the determinants of these illnesses lie outside the individual in the larger fabric of the family and society. Both categories of illness have significant heritability. These illnesses are not identified or addressed during treatment and, among other consequences, are known to increase mortality. The area of internalising disorders such as depression and post-traumatic stress disorder in the context of adolescent substance use has the maximum research volume. It is important to understand how interventions are tailored and measures to improve outcomes of treatment. Developmental disorders co-morbid with SUD poses the problem of a need for trained professionals and time investment to administer specialised interventions, which becomes a challenge in resource-poor settings. The most challenging sub-population of adolescents are those with added vulnerabilities such as run-aways, those sheltered in foster homes, those in the juvenile justice system and street children. Adolescent females in these settings face multiple issues related to sexual health and pregnancy and exposure to trauma that needs treatment providers to be vigilant and respond sensitively. The evidence-base for

adolescent treatment, though growing, currently has several important gaps that need identification and discussion, before they can be satisfactorily addressed.

## *Symposium 59* Managing Substance Use in Severe Mental Disorders:

Sood M, Deep R, Verma R, Patra BN, Krishnan V

Department of Psychiatry, All India Institute of Medical Sciences, New Delhi, India soodmamta@gmail.com

#### Learning Objectives:

1. Association between Substance Use Disorders (SUD) and Severe Mental Disorders (SMD) and effect on onset, treatment, course and outcome

- 2. Association between SUD and specific SMD like schizophrenia and bipolar disorder
- 3. Association between Substance Use Disorders and Severe Mental Disorders in Adolescence

#### **Presentation 1: Substance Use Disorders and Severe Mental Disorders: An Overview** Mamta Sood

Substance use disorders (SUD) and severe mental disorders (SMD) coexist and cause significant disability and burden. About one in four individuals with severe mental disorders also have substance use disorder. Patients with schizophrenia and bipolar disorders have higher rates of alcohol, tobacco, and drug use disorders than the general population Although SUD can happen at any time during life, drug use typically starts in adolescence, a period when the first signs of severe mental illness commonly appear The comorbidity between SUD and SMD has been attributed to three pathways: common risk factors can contribute to both or SMD may contribute to SUD or vice versa. Their coexistence affects onset, clinical presentation, treatment and outcome of both. These patients often exhibit symptoms that are more persistent, severe, and resistant to treatment compared with patients who have either disorder alone. Therefore, persons with SMD presenting for treatment should be screened for SUD and vice versa. For accurate diagnosis, it may be necessary to observe them after a period of abstinence to distinguish between the effects of substance intoxication or withdrawal and the symptoms of comorbid severe mental disorders Patients with comorbid disorders demonstrate poorer treatment adherence and higher rates of treatment dropoutIntegrated treatment for comorbid drug use disorder and mental illness has been found to be consistently superior compared with separate treatment of each diagnosis

#### Presentation 2: Substance use disorders in Bipolar Disorders

#### Raman Deep

Large-scale epidemiological studies have consistently reported a high prevalence of SUD in bipolar disorder (BD). Tobacco use is prevalent in 60-70% of individuals with BD. The lifetime prevalence of alcohol and other drug use disorders is 40-60% for BD-I and 20-40% for BD-II. Proposed explanations include shared genetic vulnerability, shared neurobiological underpinnings, self-medication hypothesis, among others. BD comorbid with SUD has an earlier age of onset, more severe and longer episodes, more suicidal attempts, rapid cycling and mixed features along with a greater psychosocial impairment and poorer quality of life. Presence of substance use delays the diagnosis of BD and poses several management challenges, including delayed recovery and treatment non-compliance. Screening must be done for substance use in all early onset cases of BD for an early intervention. Certain treatments have been reported to be effective for co-occuring BD and SUD, however more quality studies are needed to strengthen the evidence based treatment recommendations.

#### Presentation 3: Substance Use Disorders in Schizophrenia

#### Rohit Verma

The comorbidity of schizophrenia and substance abuse has provoked scientific interest for decades. They share numerous potential links, including genetic vulnerability, neurobiological aspects, medication interaction & compliance, and psychosocial factors. The link is demonstrated by the high prevalence of substance abuse in this population. Substances commonly abused include alcohol, nicotine, cannabis and cocaine. In general, substance use in psychosis is associated with increased risk of illness and injury, poorer outcomes, increased psychotic symptoms and poorer treatment compliance. Current management strategies designed for this population cohort appears inadequate to completely address the issues at hand and require more research into various aspects of this co-occurring condition.

#### Presentation 4: Substance Use Disorders and Severe Mental Disorders in Adolescence

#### Bichitra Nanda Patra

Adolescence is a time period of emergence of novelty seeking, inquisitive and risk-taking attitudes. This may lead to initiation of drug and alcohol use in this period. And about half of all life time mental disorders begin before the age of 14 years. The period of adolescence also marks the first signs of a psychosis. The association between substance use and psychosis is bidirectional and the psychotic illness is associated with amphetamine and cannabis abuse in adolescence. Increasing psychotic like symptoms in adolescence was found to be associated with engaging in cocaine, cannabis and other drug use. Cannabis use, in individuals who did not have psychotic symptoms before they began using cannabis, predicted future psychotic symptoms and psychotic symptoms in those who had never used cannabis before the onset of psychotic symptoms also predicted future cannabis use. Persistent substance use is associated with non-compliance, treatment drop-out and poor remission rates of psychotic illness. In India the adolescent population constitutes a quarter of the country's population, posing this to be a great burden. There should be comprehensive and holistic management of the adolescents with substance use and co-morbid severe mental illness.

## *Symposium 60* The Needs, Scopes, and Challenges of Training Professionals in Addiction Medicine: Sharing the Indian Experience

Ghosh A, Basu A, Kumar S

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#### Learning Objectives

1) To discuss the potential causes and implication of the treatment gap in substance use disorders

2) To elaborate the Indian model of addiction training at the specialty and super-specialty level

3) To discuss the current effort to train the primary care physicians in addiction medicine

#### Abstract:

Setting the agenda, the report on "Magnitude of Substance Use in India" suggested, an enormous "quantum of work" is required to address the country's current substance use problems. 1 in 38 people with alcohol use disorders and 1 in 4 with drug use disorders would receive any treatment. National Mental Health Survey reported even a higher treatment gap for drug use disorders. These findings are consistent with the Global Observatory Survey and the World Mental Health Survey. Although treatments of substance use disorders are costeffective and have comparable efficacy (with chronic medical disorders), a scarcity of the trained human resources is a matter of concern. Top-down training: Creating professionals to start and continue the training cycle Training in addiction psychiatry is incorporated in the psychiatry post-graduation curriculum. However, the quality and intensity of training remain highly variable. Fellowships and Doctorate of Medicine in addiction psychiatry are expected to generate experts in the field, proficient in clinical acumen and skills of patient care; in active teaching, productive research, and advocacy. Nevertheless, the islands of excellence cannot address the huge treatment gap. Incorporating relevant sections on substance use disorders in the medical graduation program is currently underway. Training the primary care doctors One effective solution to reduce such huge treatment gap would be to empower the Primary Care Doctors (PCDs) in identifying and managing the most prevalent substance use disorders such as alcohol and tobacco use disorders, which in turn should reduce the harm due to substance use as well. Training of PCDs with bottom-up adult based learning with continuous handholding and evaluation would ensure effective skill transfer. Virtual training has increased outreach and expanded the scope.

## *Symposium 61* **Problem, Explication and Policy- Kashmir Scenario**



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Government Medical College ,Srinagar, India arshadtina@gmail.com

*Learning Objectives:* Drug abuse policy in Kashmir

#### Abstract:

Kashmir has been traditionally a low substance-prevalent zone; only instances of socially approved substance use were Charas takia (Cannabis pubs) which were frequented by people having severe mental illnesses like schizophrenia and Bipolar affective disorder (BPAD).During 1980s, when whole of the subcontinent was witnessing opioid boom, Kashmir still did not face any major public health issue in spite of being a transit zone for most of the opium coming from Afghanistan. However, recent years have seen a major change in pattern of substance use with intravenous opioids being a major concern. In this context, Institute of Mental Health & Neurosciences ,Srinagar Kashmir framed the first ever drug de addiction policy which is based on the core principle of Prevention ,Integration and Community participation to combat the epidemic of substance use in low-economy conflict zone. The policy keeps Demand reduction as its soul and promotes INTEGRATED MODEL where in de addiction would be integrated with the main hospitals. It ensure evidence based management of substance related emergencies, treatment of medical comorbidities as well as long term follow up and involving community members in the treatment process.

## *Symposium 62* Role of Non Invasive Brain Stimulation in Substance Use Disorders

#### Kumar N, Kumar S, Goyal N, Verma R

Department of Psychiatry and National Drug Dependence Treatment Centre, All India Institute of Medical Sciences, New Delhi, India

#### Abstract:

Substance use disorders account for 5.4% of the total global burden of disease. Impaired inhibitory control, increased salience and craving for the abused substance are related to the development, continuation, and relapse in addictive disorders. Overall a significant proportion of the patients fail to respond to currently available treatment options and new treatment modalities are clearly needed.

Noninvasive neurostimulation such as repetitive transcranial magnetic stimulation (rTMS) and transcranial direct current stimulation (tDCS) are new intervention methods that may target the reduction of craving levels in substance dependence. The mechanisms through which tDCS exert its effects on the brain are only partly understood, but may involve increased cognitive control, decreased craving, or both. Most studies have used the dorsolateral prefrontal cortex (DLPFC) as stimulation may decrease craving levels could be through increasing dopamine levels in reward circuits. Though with equivocal findings, rTMS targeted at DLPFC has shown some promising effects in reduction of craving in substance dependence and food addiction. In our presentation we will be providing overview of various noninvasive brain stimulation techniques which are being used in substance use disorders. The major focus would be on repetitive transcranial magnetic stimulation as it has strongest evidence base amongst available modalities.

## *Symposium 63* Super-Speciality Course in Addiction Psychiatry in India

Tripathi R, Dhagudu NK, Varshney M, Singh S

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#### Learning Objectives:

Psychiatry residents to get exposure about DM super-specialty course at AIIMS, New Delhi
 End user (experiential) account of the program

#### Abstract:

Drug addiction is a bio-psycho-social disorder. India is currently facing an exponential rise in addiction problems. So, there is a special need of people having extensive training in the field. The National Drug Dependence Treatment Center has been established as the apex center for treatment of drugs and substance abuse disorders in India and it started D.M. Addiction Psychiatry training program in 2015. The super-specialty course (D.M. program) is a three year academic program with 30 months of posting in Addiction Psychiatry & 6 months of posting covering Neurology, Gastroenterology and Emergency Medicine. During the program the trainee has exposure to various outpatient & inpatient clinical services, community addiction services, academic and research activities. Having exposure in such a wide variety of addictive disorders, it gives us immense experience and makes us more confident in dealing with complex cases. The postings in various other departments give us an opportunity to understand and manage the medical complications associated with substance use disorders. It also helps to prime other departments about addiction as a disease and the need of referral to us for appropriate intervention. The community clinics are an appropriate set up to interact with the community and raise awareness. The ongoing thesis and research activities in the department keeps us updated with new concepts emerging in the field. In this symposium we will discuss the model of academic program followed at NDDTC, how it is gradually evolving and how it is helpful in managing addiction problem in India.

## *Symposium 64* Current Scenario of Behavior Addiction

Srivastava S, Bhatia M.S, Kataria D, Saha R, Priyadarshini NC

Department of Psychiatry at University College of Medical Sciences & Guru Tegh Bahadur Hospital, Delhi, India srivastava shruti@hotmail.com

#### Abstracts:

#### **Overview of Behavior addiction globally**

#### M.S Bhatia

Globally, Gambling disorder, a controversial entity perpetuates crimes and legal problems. Recent studies from Hong Kong have reported high prevalence of this disorder in youth, figures quite similar to globally reported prevalence from 0.2% to 12% in the age group of 12-24 years. The prevalence of internet addiction in general population is 0.3% to 0.7%. This often leads to adverse consequences like social isolation, depression, anxiety in social situations, substance use, a, impulsive behaviour and suicidal attempts in extreme cases. Problematic online behaviours in the form of cell phone addiction, video-gaming, social networking, online gambling, online romantic and sexual relations etc. are been reported from school-going, college students and young professionals.

#### Behavior addiction in Indian context

#### Shruti Srivastava

There are few studies reported from India which have highlighted the prevalence of severe problems on Internet addiction using Young's Internet Addiction Scale in different population groups ranging from 0.5% to 2.02% in small sample size. There are currently no nationally representative sample size studies published from India. Another problem is the use of uniform diagnostic criteria for this new entity of behaviour addiction. A recent Indian study carried out under guidance of Srivastava et al. on college students of Delhi University found the prevalence of IA to be 25.3%. The independent predictors of IA in this study were greater duration of internet use per week and always online status, depression, anxiety, and stress. Longitudinal follow up studies (for longer duration) with emphasis on neurobiology needs to be carried out in Indian setting. Currently, Indian society is changing with less focus on cultural and traditional values .More youth are engaged on social networking sites and free access and easy availability of internet, social isolation with the preferences for indulgence in these activities is a major contributor. Life style intervention and integration of family ties, social supports need to be enhanced to curb this menace from Indian setting.

#### Internet Gaming (IG) disorder ICD XI

#### Dinesh Kataria

Controversy exists for this new entity though not included in the list of main clinical diagnosis in DSM-5 but incorporated in ICD XI. Condition requiring further study for IG has been mentioned

in DSM-5. The main features include preoccupation with internet games, withdrawal symptoms, unable to control, loss of interest in activities, continued use despite knowing the harm, impairment in social and occupational functioning. Clinical measures and management will be discussed.

#### Social networking/ surfing/ Facebook/ Instagram/ WhatsApp to what extent?

Rashmita Saha/ Priyadarshini NC

Recent reports of online video-game (Blue whale), PUBJI game has reported deaths from India. Majority of parents are not aware of the fact that excessive usage of these devices is detrimental to physical and mental health. The excessive usage of social networking sites instead of real world network has affected the social and personal lives of millions. Timely intervention, media and educational institutions need to play vital role in creating awareness of this menace. Early detection, assessment and early intervention, legislations to handle are the need of the hour.

Two learning objectives per symposium (up to 50 words)

The knowledge of different forms of Behavior Addictions (BA) will be provided including the epidemiology, neurobiology, clinical features, reaching the clinical diagnosis in line with ICD-XI, DSM-5 and their management.

The impact of BA on Indian population shall be understood including simple means to handle this alarming public health issue that is yet to gain focus of attention.

## *Symposium 65* Travel award Fellows Symposium

Jones J, Teck JTW, Fafei, P, Camilleri M, Narasimha VL

#### **Presentations:**

1. More in-Depth Overdose Education Increases Naloxone Utilization by Opioid Use Disorder Patients - Jermaine Jones

2. A Critical Systems Thinking Approach to Equity-Focused Services for People Who Use Drugs - Joseph Tay Wee Teck

3. Different Brain Activation Patterns Underlying Episodic Future Thinking in Cannabis Use Disorder - Parnian Rafei

4. Elimination of Hepatitis C – The Malta Experience - Moses Camilleri

5. Attitude and practice of doctors towards patients with substance use related problems - Venkata Lakshmi Narasimha

## Symposium 66 Profile and Pattern of Substance Use from a Tertiary Care De-Addiction Centre in Kashmir

Rather YH, Ismail H, Kour S, Younis S

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#### Learning Objectives:

Changing pattern and profile of substance use

#### Abstract:

A total of 92 patients were included in our study. Two third of our study group were in the age group 10-19 years. Fevicol SR was the most predominant inhalant used. Bagging was the most common mode of inhalation seen in 83.7% of study population. Majority of our subjects were males (98.7%), unmarried (89.13%), from urban background (70.7%) and belonging to the nuclear families (83.7%). 76 % of our study population belonged to the middle socio economic status. "First Oral substitution therapy centre in Kashmir" The data from registers maintained since the inception of the centre (November 2012) was obtained and analysed till date (September 2018). The total number of IDUs registered for OST has increased more than three times from 2012 to 2018. Nearly 91% of the total enrolled regularly attend OST clinic. The centre has a dropout rate of 4-8%. Majority of the IDUs were males falling within 16-47yrs age (mostly below 35yrs). Most common comorbid substance use was tobacco, followed by cannabis. The dose of buprenorphine used ranged between 2-10 mg per day. Seroprevalence of HIV, Hepatitis B and Hepatitis C in Opioid Use Disorder Patients Admitted to a tertiary care De-Addiction Centre in Kashmir study was conducted over a period of 10 months from June 2018 to March 2019. 522 participants were included in the study. 522 participants were included in the study. Overall 58 patients were found positive for one or more viral markers among whom 224 were intravenous drug users. Among the 58 patients, 42 (72.4%) had HCV,15 (25.8%) had Hepatitis B and HIV in 1 (2.1%).

#### Symposium 67

## Effectiveness of The Tincture of Opium on Pains, Sleep Quality and Emotion Regulation of Female with Opioid Use Disorder based on DST Method

#### Sadeghi M, Farhoudian A

Substance Abuse and Dependence Research Center, University of Social Welfare and Rehabilitation Sciences, Tehran, Iran <u>Msadeghi md@yahoo.com</u>

#### Abstract:

**Objective**: Tincture of Opium (ToP) has been provided as a controlled medication in some outpatient substance use treatment centers in Iran. Despite to classic medications for maintenance treatment like methadone and buprenorphine, there is very few studies on the effectiveness of ToP. The aim of this study was to investigate how tincture of opium effects on emotion regulation, previous pain, and quality of sleep of female under maintenance treatment.

**Method**: It was an uncontrolled clinical trial on 85 females with opioid use disorder in Tehran. The patients were recruited from Congress 60, a recovery-based NGO for treatment of addiction to drugs. The clients were prescribed ToP in a period of 11 months (DST method) in addition to psychosocial supports. They were assessed for pains, emotion regulations and sleep quality in weeks 0, 5, 10, 15, 20, and 30.

**Result**: The medication was well tolerated and no serious adverse events were observed. The result showed that the patients under the treatment with ToP experienced decrease in pains (p< .0001), but non-significant reductions in the quality of sleep disorders and emotion regulations.

**Conclusion**: This preliminary study indicated that taking ToP in addition to psychosocial interventions was adequately efficacious and well tolerated. ToP might be a good medication for the patients with painful problems. Additional controlled studies with follow-up are warranted to evaluate efficacy.

## *Symposium 68* Addiction, Trauma and Sociocultural Influences



#### Megan Howard

Addiction and Trauma Recovery Services, USA mhoward@addictionrecoveryidaho.com

#### Learning Objectives:

1) To increase awareness and understanding of how sociocultural expectations and/or gender roles can negatively impact and create a further disconnect from society among an already isolated population and increase the prevalence of addictive tendencies.

2) Explore how individuals suffering from extreme gender roles, cultural expectations and past trauma are more likely to abuse substances and how these social norms have become a barrier for change for individuals, specifically men, who suffer from addiction and/or trauma.

3) Educate on how to break the social, gender and cultural stereotypes and provide useful interventions that will assist in reaching beyond the symptoms of addiction to increase individual resiliency, reduce toxic shame and increase long term outcomes related to addiction.

#### Abstract:

As the Opioid Crisis continues to crash forward, there seems to be an open-ended struggle to recover clients adrift in the wave of its toxicity. Overdose deaths continue to rise in all age groups despite interventions being implemented to tourniquet a bleeding nation. As the application of a tourniquet to temper an internal bleed remains ineffective, so is treatment aimed at anywhere but the core of the opioid crisis.

Our session will pivot around an essential element of this core. We will traverse how not meeting self-defined sociocultural expectations generates a further disconnect from society among an already isolated addict population. We will explore how perceptions of gender are socially constructed and shaped by sociocultural structures and processes over time and include family and peer influences, demographics, advertising, media, economics, cultural customs and practices. We will tour how individuals are influenced by extreme gender expectations are at greater risk to abuse substances, finding an escape through a synthetic connection and acceptance. We will not only consider how these norms drive use, but how they barricade change for individuals, specifically men, who suffer from addiction and/or trauma. We will further investigate how trauma is often a co-occurring theme intricately woven within sociocultural expectations.

We will focus on how to deconstruct a client's sociocultural expectations, reach beyond symptoms and reconstruct the entrenched core of the client's culturally specific feelings, emotions, and beliefs. We will further detail interventions to increase resiliency and reduce toxic shame thus improving long-term outcomes related to addiction. We will also challenge providers to consider alternative solutions that create more connection, foster true belonging, and develop support to all affected by this disease.

## *Symposium 69* Behavioural Addictions - Concepts, Contents and Controversies

#### Das S, Chaudhuri I, Khanra S

Medica Superspeciality Hospital & Iris Multispeciality Hospital, Kolkata, West Bengal, India <u>ic.bosco@yahoo.co.in</u>

#### Learning Objectives

1. Understanding where behavioural addictions fit in the current landscape of psychiatric classification and the relevant neurobiological correlates.

2. To use this understanding to aid and guide in effective management of this currently burgeoning mental health issue.

#### Abstract:

The practice of Psychiatry today is certainly undergoing a paradigm shift. Gone are the days when "addictions" implied only tangible substance use. In the 21st century, even various human behaviours are proving to be addictive. The realm of behavioural addictions is however, comparatively, still in its infancy. It's very standing in the current classification system, is somewhat unclear. Hence it is important to understand where we stand today with regard to this problem. A further understanding of the neurobiology of behavioural addictions will go a long way in aiding and guiding management interventions in this sphere.

## Symposium 70 Nomophobia: Fear of Being without Own's Smartphone in Medical Students

Prasad S, Ranjan R, Singh J

Department of Psychiatry, All India Institute of Medical Sciences, Patna, India rajeevranjan0087@gmail.com

#### Learning Objectives:

1) To describe the term "Nomophobia" and assess the level of smart phone use and extent of "Nomophobia" among undergraduate medical students

2) To assess the relationship of smart phone use with quality of life

#### Abstract:

Dr Sambhu Prasad will talk about the emerging public health problem associated with smart phone use in youths. It will contain the increasing trends of its use, the negative consequences of inappropriate smart phone use, the need to create awareness and appropriate interventions. In the background of above context, Dr. Rajeev Ranjan will talk about study finding (conducted at tertiary care medical hospital) on excessive use of smart phone and its association with quality of life amongst medical students. Dr. Jai Singh will discuss the finding of the study and he will compare with the exiting evidence available.

## *Symposium 71* Genomic Pathways in Alcohol Metabolizing Enzyme in Chronic Pancreatitis

Kharbanda K, Vaswani M, Seth D, Saraya A

University Nebraska Medical Center kkharbanda@unmc.edu

#### Learning objectives:

1) Understand the importance of genetics and nutrition in alcohol-induced organ dysfunction from a mechanistic perspective

2) Insights into newer therapeutic strategies to prevent and manage alcohol-induced disease progression

#### Abstracts:

#### Genomic pathways in alcohol metabolizing enzyme in chronic pancreatitis

Meera Vaswani, University of Minnesota, USA and All India Institute of Medical Sciences, India

Chronic pancreatitis (CP) is a progressive inflammatory disease, relatively rare in the Western World. Epidemiologic studies have shown evidence of a genetic basis of alcohol metabolizing pathways (oxidative and non-oxidative pathways) in chronic pancreatitis.

Due to inconsistent findings in alcoholic pancreatitis (ACP), idiopathic pancreatitis (ICP) and chronic pancreatitis (CP), we examined the associations of three groups of pancreatitis with chronic alcoholics (ALC), and healthy controls (C) in Indian subjects

In alcohol metabolizing pathways, ADH1B, ADH1C and ALDH2 genes (oxidative pathway genes) were strongly associated with all groups of pancreatitis. However, Null genotype of GST-T1, Val allele of GST-P1 and UGT1A7\*3/\*3 (Arg/Arg genotype) of UGT1A7 (non-oxidative pathway genes) may influence the risk for pancreatitis development in Indian subjects.

Thus, genes polymorphism in alcohol metabolizing pathways may help in identifying the risk for developing chronic pancreatitis and such individuals with these polymorphisms may be warned against alcohol consumption.

#### Relevance of genetics in alcoholic liver disease

Devanshi Seth, RPA Hospital and Centenary Institute, The University of Sydney, Australia.

Alcoholic liver disease is a multi-step and multi-factorial process. More than 90% of chronic drinkers develop alcoholic steatosis but why only up to 20% ever progress to cirrhosis is unknown. In addition to the amount of alcohol intake, female gender and ethnicity increase risk for ALD. A battery of genetic, epigenetic, and environmental factors are suspected to operate during ALC pathogenesis impacting cellular injury, inflammation and impaired hepatic

regeneration. Investigations for genes known to operate during ALC pathogenesis remain largely unconfirmed. Recent genome-wide searches have identified several polymorphisms in genes PNPLA3 (rs739409), HSD17B13 (rs72613567), TM6SF2 (rs58542926) and MBOAT7 (rs641738) associated with the risk of developing alcoholic liver cirrhosis. Interestingly, these SNPs are also associated with non-alcoholic fatty liver disease (NAFLD)/non-alcoholic steatohepatitis (NASH) and are involved in lipid metabolism/processing. This indicates that these shared risks are non-specific to alcohol-induced liver disease and that lipids play an important role in chronicity underpinning inflammation and fibrogenesis. Given the clinical and histopathological commonalities between the two diseases, greater understanding of their mechanisms will provide opportunities for targeting these SNPs for therapeutic interventions in ALD, NAFLD/NASH and other chronic liver diseases.

#### Alcoholic liver injury: From pathogenesis to therapy

Kusum K. Kharbanda,

#### University of Nebraska Medical Center, Omaha VA Medical Center, USA

Alcoholic liver disease (ALD) is a major health care problem worldwide. Our laboratory has made seminal contributions in elucidating that chronic ethanol exposure alters several of the multiple steps in methionine metabolism in the liver to ultimately lower the hepatocellular S-adenosylmethionine (SAM) to S-adenosylhomocysteine (SAH) ratio. This decrease in the ratio impairs the activity of several critically important SAM-dependent methyltransferases resulting in the generation of many hallmark features of early alcoholic liver injury such as steatosis, apoptosis, accumulation of damaged proteins and altered signalling events. We further showed that betaine administration can preserve the hepatic SAM:SAH ratio and thereby attenuate alcoholic steatosis and other features of hepatic liver injury.

In expanding our findings to other organs and tissues of relevance to ALD, we found similar reduction in SAM:SAH ratio in the white adipose tissue (WAT) and intestine as seen in the liver. This reduction in the ratio impairs specific methylation-dependent pathway(s) to produces detrimental effects in these two organs which ultimately results in progressive liver injury. Betaine administration averts the development of ethanol-induced liver damage by preserving intestinal and WAT SAM:SAH ratio and preventing WAT hyperlipolysis and intestinal barrier dysfunction. To conclude, betaine is a promising therapeutic in the treatment of alcoholic liver injury.

#### Oxidative stress in alcoholic liver disease and chronic pancreatitis

#### Anoop Saraya

#### All India Institute of Medical Sciences, India

Altered redox status has been implicated in pathogenesis of alcoholic liver disease (ALD) as well as in non-alcoholic fatty liver disease (NAFLD). We planned to find the relative role of redox status in these two diseases. A total of 44 patients with ALD and 32 patients with NAFLD and 25 apparently healthy controls were included. ALD patients have a higher degree of redox imbalance as compared with NAFLD patients.

Oxidative stress has been implicated in the pathophysiology of chronic pancreatitis (CP). Micronutrient deficiency may increase the oxidative stress as they assist in free radical clearance. We assessed the intake of micronutrients in patients with CP. They had significantly

decreased micronutrient intake owing to diet modification due to pain. Micronutrient deficiency might contribute to increased oxidative stress in these patients. We evaluated the effects of antioxidant supplementation on pain relief, oxidative stress, and antioxidant status in patients with CP. Antioxidants were effective in relieving pain and reducing levels of oxidative stress in patients with CP. But, supplementation with antioxidants to patients with CP had no additional benefit over placebo on endocrine and exocrine functions, markers of fibrosis, inflammation, nutritional status and Quality of Life.

# Abstracts for Workshops

### Workshop 1

## Understanding and Using the ASAM Criteria – Treatment Criteria for Addictive, Substance-Related, and Co-Occurring Conditions

Mee-Lee D

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#### Abstract:

The ASAM Criteria – Treatment Criteria for Addictive, Substance-Related, and Co-Occurring Conditions (2013) are the most widely used guidelines for assessment, service planning, placement, continued stay and discharge of patients with addictive disorders. This workshop is designed to review the underlying principles and content of The ASAM Criteria and improve skills in individualized treatment and care management. Specific hands-on exercises will help participants implement The ASAM Criteria and organize assessment data to improve person-centered, outcomes-driven services.

## *Workshop 2* Cannabidiol as Medicine



Khalsa J, Bunt G

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#### Learning Objectives:

The participants will learn about: (a) the current research available on medicinal cannabis/cannabinoids/cannabidiol and (b) the role of addiction physician/psychiatrist in dealing with medicinal cannabis/cannabidiol and their patients.

#### Abstract:

Cannabis is the most abused illicit drug in the world with an estimated 2.5% of the world's population (180 million) using it regularly (World Drug Report 2017)<sup>1</sup>. Despite its associated health consequences<sup>)</sup> (WHO, 2016)<sup>2)</sup>, marijuana as medicine *remains* the subject of extensive reviews and fierce debates around the globe. Of the 104 cannabinoids present in cannabis, only two-THC and cannabidiol (CBD), have been approved as medicine. Neither smoked marijuana or its extract has been approved as medicine. Most recently, cannabidiol (Epidiolex) was approved for the treatment of epilepsy in children. Though research from clinical studies and trials suggests that cannabidiol has a great potential to treat a wide range of clinical conditions including pain, anxiety, depression, Parkinson's disease, multiple sclerosis, treatment of substance use disorders, and others (Khalsa et al. in press, 2018),<sup>3</sup> much work is still needed to use it as a medicine at this time. In the meantime, it is of paramount importance that addiction physician is made aware of the adverse medical consequences of marijuana and the current limited research available on medicinal value of cannabis or its cannabinoids that are being promoted as medicine. In this workshop with active audience participation, Dr. Khalsa will present on clinical research on CBD as medicine, and Dr. Bunt will discuss the role of addiction physician/psychiatrist in dealing with issues of CBD as medicine.

## *Workshop 3* Expanding Access to Pharmacological Treatment of Alcohol and Opioid Use Disorder

Bisaga A, Ghosh A, Brewer C, Menzies P

Columbia University, New York, USA amb107@cumc.columbia.edu

#### Learning objectives

As a result of this symposium, participants should be able to:

(1) Recognize the challenges to expand access to effective medical treatments for individuals with opioid and alcohol use disorder.

(2) Improve knowledge of the evidence-based pharmacological and psychosocial interventions to treat AUD and OUD and identify how these interventions can be combined to develop an integrated treatment program tailored to needs of specific communities

#### Abstract:

Opioid and alcohol use disorders (OUD and AUD) remain highly prevalent in many parts of the world, including in countries of the South-East Asia. These disorders impose a major cost and have negative impact on the affected individuals, their families, and communities.

Both OUD and AUD are best understood as chronic disorders that can be effectively managed in the healthcare system, similar to management of other chronic psychiatric and medical disorders. Several evidence-based pharmacological and psychosocial interventions have been developed, and most patients with mild or moderate severity disorder can be effectively managed in the general medical setting.

Despite evidence of efficacy and consensus that these medications should be available and considered for all patients, rates of medication utilization are low and a large number of affected individuals, particularly in low-to-middle-income countries (LMICs) are not able to access effective treatment.

Many barriers exist to disseminating and implementing evidence-based pharmacological interventions for OUD and AUD including regulatory and cultural barriers, poor integration with the mainstream healthcare system, treatment philosophies incompatible with medical interventions, cost and treatment funding barriers, lack of trained medication prescribers, and logistical issues with treatment implementation.

Several treatment models have been developed and could be adapted to needs of individual communities in LMICs. Treatment outcome can also be improved when medications are used in combination with a behavioral approach that is matched with medication's mechanism of action. To maximize effectiveness, treatment must be attractive not only to patients but also their families and communities.

This workshop will briefly review the current prevalence of opioid and alcohol use disorder in LMICs with a focus on India and summarize the evidence for pharmacological models of OUD and AUD management. Barriers to implementing evidence-based treatment will be discussed

and several examples of implementation will be presented using the example of opioid agonist treatment. Behavioral interventions to maximize effectiveness of OUD and AUD medication will be reviewed. Interventions targeting families and communities will also be presented.

The main part of workshop will include addiction experts from India, UK and US who will lead workshop participants in an interactive discussion that focus on challenges in expanding OUD and AUD treatment in LMICs. Participants will be asked to design treatment programs individualized for community they practice in with specific strategies to overcome barriers.

# Presentation 1: Opioid and alcohol use disorders in India: current treatment delivery models, challenges and opportunities

Presenter: Abhishek Ghosh

#### Abstract:

A recent nation-wide survey conducted in India documented nearly 2.7% dependent users of alcohol and 0.3% dependent users of opioids with some states having significantly higher prevalence rates than the national average. India, once a dominant consumer of natural opioids, has turned to synthetic and semi-synthetic opioids, mainly heroin.

In India, both the Ministry of Health and Social Justice are involved in the treatment of substance use disorders. The former focuses on medical care, whereas the latter's focus is on rehabilitation. For a substantial proportion, services are provided by private psychiatrists. Out of a total of twenty-nine states, only Punjab has a government-sponsored out-patient opioid agonist treatment (OOAT) program. Other publicly funded buprenorphine-based substitution programs are run by the National AIDS Control Organization (NACO), and by the Ministry of Health under the Drug Treatment Clinics (DTC) scheme. The latter one is yet to have a broad coverage. All these schemes and programs are inadequate to meet the enormous need of patients with substance use disorders.

The treatment gap for alcohol use disorders and the opioid/drug use disorders, as estimated in the National Mental Health Survey, are 86% and 73%, respectively. The median duration of being 'in treatment' (12 months) was also the lowest (compared to other psychiatric disorders) for alcohol use disorder. Therefore, India suffers from both poor treatment seeking and treatment retention. In addition to these problems, wide variations exist in availability, accessibility, affordability, and quality of treatment services. There is an urgent to ensure a minimum standard of care services at all levels.

Lack of trained human resources to cater to these people in need is a significant limitation. The opportunity of training is also restricted. Of late the National Institute of Mental Health and Neurosciences has started an initiative in several states of the country, to train the primary care physicians in substance use disorders, using the virtual knowledge network.

## Presentation 2: Current pharmacological strategies in opioid use disorder: models of treatment delivery and relevance for developing countries

Presenter: Adam Bisaga

#### Abstract:

Individuals with opioid use disorder (OUD) will have better treatment retention and outcomes when they receive long-term outpatient treatment which includes a medication support, and their use is a standard of care for most patients with OUD. Opioid receptor (2) agonists

methadone, partial agonist buprenorphine, and antagonist naltrexone are the primary medications available to treat OUD (MOUD) with each of the medications having unique characteristics, requirements, and relative advantages. Both daily and extended-release preparations exist for buprenorphine and naltrexone while methadone is only available as daily preparation. There is limited evidence on the comparative effectiveness of these medications however no studies have identified which patients will respond to which medication.

Traditionally MOUD has been done in the specialty treatment programs however these medications can also be used in other settings, which can greatly expand access to treatment, and a variety of models of OUD care have been proposed including prescribing of OUD medication in family medicine, infectious disorders and OB-GYN clinics, multispecialty health care centres, and criminal justice settings. Patients can be identified, and medications initiated in the general hospital and emergency care departments. Needs and resources of each community can be matched with the program to deliver treatment as long as various stakeholders are involved in program development, including governmental agencies, religious and community leaders as well as family and peer representatives. Several models of care will be presented and barriers to their implementation and strategies to overcome them will be discussed with workshop participants.

# Presentation 3: Antagonist-based treatment of alcohol and opioid use disorder – behavioral mechanisms and maximizing treatment effectiveness

### Brewer C

#### Abstract:

Particularly in the last two decades, it has become increasingly clear from comparative reviews and meta-analyses that when compliance is maximized, disulfiram (DSF) is considerably more effective than naltrexone (NTX), acamprosate (ACP) or other drugs recommended for alcohol abuse. That remains true even when NTX compliance is maximized by depot injection. The under-use of DSF stems largely from a failure to understand that DSF treatment is not a form of 'aversion therapy' but works by effectively deterring alcohol use for long enough for patients to have a good chance of learning and consolidating new, alcohol-free patterns of behavior. This can take a year or two in severe cases but after that, DSF can usually be withdrawn with a low risk of relapse, even after seven years. DSF has only an average side-effect profile and the dangers of the DSF-alcohol reaction have been greatly exaggerated, especially when compared with the risks of unchecked alcohol abuse.

Using NTX (especially depot or implanted NTX) for opiate abuse involves very similar principles, in particular the need for at least a year or two of consistent abstinence for opiate-free patterns of behavior to be leaned (or re-learned) and consolidated. In both conditions, intensive and individually planned management may be needed during the first crucial 2 - 3 months (including good pharmacological symptom relief in the case of prolonged opiate withdrawal symptoms) but thereafter, treatment can usually become steadily less intensive. The under-use of safe, well-documented, humane and relatively rapid opiate withdrawal techniques with 100% completion rates is the main barrier to the expansion of NTX treatment in this context.

## Presentation 4: Pharmacotherapy of opioid and alcohol use disorders: engaging patients and communities

#### Presenter: Percy Menzies

#### Abstract:

The primary goal of treatment for patients with substance use disorders (SUDs) is the remission of the symptoms of the disorder. But to sustain the remission of symptoms long-term, it is necessary to also focus on improvement in physical and psychological health, improvement in functioning and to support patients in developing and maintaining personal and social assets that are necessary to cope with external stressors and in maintaining healthy lifestyle. It involves helping patients to move from a "survival" mode to a "thriving" mode.

However, many patients with SUDs in developing countries do no seek or access treatment as they are not aware that their problems may be addressed in the healthcare setting, they are not aware how to access programs, or they do not find existing programs helpful. Other reasons include embarrassment or stigma, believe that the treatment is not necessary, and privacy concerns. In case of alcohol use disorder, there is also perception that medicationbased treatments are not highly effective. Addressing those concerns while developing treatment that is accessible, attractive, and patient centered can attract and retain patients for extended periods of time and can offer effective treatment to broad range of individuals needing it.

One of the effective strategies to engaging and retaining patients with SUDs in treatment is the involvement of families and community representatives, involvement of healthcare workers, and the involvement of peers to help individuals with the disorder access and navigate treatment and therefore increase treatment adherence. Especially useful intervention is the use of broad range of incentives as a reinforcement for a desired behavior. The examples of such strategies implemented in treatment programs in the US will be presented and compared with strategies used in opioid treatment program in India and the UK. Workshop participants will be encouraged to share their experiences and group exercises will be used to plan a model program for developing countries that will incorporate novel treatment-engagement strategies with the hope that participants can implement them in their home treatment programs.

## *Workshop 4* Workshop on Behavioural Addictions

#### Potenza M, Bowden-Jones H, Bhargava R

#### h.bowdenjones02@imperial.ac.uk

#### **Topics:**

Marc Potenza - Pornographic pornography use Henrietta Bowden-Jones - Gambling Disorder as a Public Health Issue: the UK experience. Rachna Bhargava- Gaming disorder

## Can Sex Be Addictive? Hypersexuality, Compulsive Sexual Behaviors and Problematic Pornography Use in the DSM-5 and ICD-11

Marc N. Potenza

Departments of Psychiatry and Neuroscience and the Child Study Center, Yale University School of Medicine, New Haven, USA

#### Abstract:

Although the term "sexual addiction" has been used widely and criteria proposed several decades ago, debate persists regarding the extent to which sexual behaviors may best be considered within an addiction framework. Furthermore, the internet has changed how people engage in sexual behaviors, including with respect to pornography consumption, a prevalent behavior that many people, particularly men, may have difficulty controlling their use. Data will be presented with a focus on DSM-5 and ICD- 11 considerations on how sexual behaviors were considered in each case. Hypersexual disorder was considered but omitted from the DSM-5. On the other hand, the ICD-11 has defined and included criteria for compulsive sexual behavior disorder and classified the condition as an impulse control disorder. While many research gaps exist, data suggest that compulsive sexual behavior disorder and related phenomena like problematic pornography use share features with addictions and are linked to negative health measures like psychopathology and poor attachment. Additional research is needed to clarify the extent to which compulsive sexual behavior disorder and problematic pornography use constitute addictive disorders/behaviors and how information about these phenomena may be translated into improved prevention, treatment and policy interventions.

#### Gaming: Public health Implications & Challenges in Intervention

Rachna Bhargava

Department of Psychiatry & National Drug Dependence Treatment Centre AIIMS, New Delhi

#### Abstract:

Gaming disorder has become a significant issue in mental healthcare. While gaming is an important form of entertainment, however enough evidence has accumulated for gaming whether digital or video to be recognized as a cause that may result in serious consequences. It

has now been included in international diagnostic manuals and classifications of diseases. However, there is still lack of clarity in terms of aetiology, diagnosis and its current conceptualization. Not much data is available regarding the exact prevalence and risk factors to identify the individuals vulnerable to develop this disorder, especially in the developing countries such as India. The severity and prevalence of IGD are found to be higher in the Asian countries than that of the West. The prevalence rate varies in different researches. It could be due to the use of different types of measurement instruments, different cutoffs, etc. There are several challenges for an effective intervention plan nature of games and soforth.

### *Workshop 5* Introducing Depot Buprenorphine into an OPIOID treatment System: The Australian Experience and Reflections for Other Settings

Lintzeris N, Arunogiri S, Dunlop A, Lubman D

University of Sydney, SESLHD, Sydney, Australia nicholas.lintzeris@health.nsw.gov.au

#### Abstract:

Two new depot buprenorphine formulations, Buvidal<sup>®</sup> (Camurus) and Sublocade<sup>®</sup> (Indivior) have been recently introduced into Australia for the treatment of opioid use disorder. These enable weekly or monthly subcutaneous injections, instead of daily sublingual dosing, and have a range of potential benefits for clients and service providers, such as greater convenience, increased access to treatment, better medication adherence, reduced costs for clients and service providers, and less diversion or non-medical use. They also have the potential to 'disrupt' routine approaches to treatment, forcing us to reconsider how opioid agonist treatment is provided.

The workshop will examine the introduction of depot buprenorphine products into the Australian treatment landscape, providing an overview of

(a) the new depot buprenorphine formulations (pharmacology and evidence);

(b) clinical research studies (completed and in progress) in Australia in both community and prison settings;

(c) the development and implementation of clinical guidelines, training programs and regulatory frameworks

(d) panel discussion regarding the implications of these new formulations for clients and services, including future research directions

The workshop will be of particular relevance to clinicians, researchers, service planners and program administrators looking to introduce these new treatments.

**Presentation 1.** An overview of the depot products: clinical pharmacology and evidence of safety and efficacy of the two depot buprenorphine formulations (Buvidal and Sublocade). Presenter: Dr Shalini Arunogiri (Turning Point Alcohol and Drug Centre,, Monash University)

**Presentation 2.** Clinical trials in Australia: the story so far – studies in community and prison settings. Clinical trials conducted in Australia with depot buprenorphine products will be presented – including the '499 Patient Safety Study' with Buvidal; the DEBUT open label RCT comparing Buvidal to standard care with SL buprenorphine; the UNLOC-T safety and implementation of Buvidal in prison settings; and the CoLAB open label outcome and safety study of Sublocade. Presenters: Prof Nicholas Lintzeris (University Sydney, SESLHD) Paul Haber (University Sydney, SLHD), Dr Jill Roberts (Justice Health & Forensic Medicine Network)

**Presentation 3**. What do clinicians need to know? An overview of the clinical guidelines regarding the use of Buvidal and Sublocade. Presenter: Professor Adrian Dunlop (HNELHD, University Newcastle)

**Presentation 4**. From clinical trials to routine care - an overview of key implementation requirements for introducing and up-scaling these new medications into the Australian treatment system: including an overview of the development of clinical guidelines, regulatory frameworks, training programs and consumer information. Presenters: Prof Dan Lubman (Turning Point, Monash University) & Nicholas Lintzeris (University Sydney, SESLHD)

**Presentation 5.** Generalizing from the Australian experience: implications for 'roll-out' in other countries and treatment settings. Questions and panel discussion.

## *Workshop 6* Implementation of Medication Assisted Treatment (MAT) for both Opioid Use Disorder (OUD) and Alcohol Use Disorder (AUD) in a New York City Inpatient Medically Supervised Withdrawal, Stabilization and Rehabilitation Program

Seewald R,

Elev8 Centers: Addiction Recovery and Wellness Services, New York, USA <a href="mailto:rseewald@elev8centers.com">rseewald@elev8centers.com</a>

#### Abstract:

Medication Assisted Treatment (MAT) for persons diagnosed with a substance-use disorder (SUD) is the use of medications, in combination with counselling and behavioral therapies, to provide a whole-person approach to the treatment of substance use disorders (SUDS). Research shows that when treating substance use disorders, a combination of medication and behavioral therapies is most successful. The duration of treatment should be based on the needs of the individuals served.

Several Food and Drug Administration (FDA) medications have been found to be effective in treating addiction to opioids, alcohol, and/or nicotine in adults. There are currently no FDA-approved medications to treat addiction to cannabis, cocaine, or methamphetamine in any age group.

The Elev8 licensed programs which include Medically Supervised Inpatient Withdrawal and Stabilization, Inpatient Rehabilitation and Outpatient Services, provide a unique opportunity and a supportive recovery environment for the provision of MAT within our continuum of care.

## *Workshop 7* Writing Addiction Medicine: Developing as a Writer and as an Addiction Clinician

#### Ramin B

Faculty of Medicine, University of Ottawa, Canada bramin@uohs.uottawa.ca

#### Abstract:

Prominent writers shape the public's views of addiction. Well known clinician writers on addiction include Gabor Mate and Abraham Verghese, while journalists often shape the narratives around addiction issues. This interactive workshop will explore the twin roles of the clinician-writer. Participants will explore the landscape of writing on addiction medicine topics including illness narratives, clinician memoirs, self-help books and blogs. Together we will seek to understand the ethics, risks and rewards of writing for addiction medicine clinicians. We will identify skills and tips to write clearly and keep a reader engaged in your writing as well as best practices for promoting your work using traditional media and social media. Finally we will review strategies to get published and impact national and international audiences.

#### Learning objectives

1) Explore the landscape of writing on addiction medicine topics including illness narratives, clinician memoirs, self-help books and blogs

- 2.) Understand the ethics, risks and rewards of writing for addiction medicine clinicians
- 3.) Skills and tips to write clearly and keep a reader engaged in your writing
- 4.) Best practices for promoting your work using traditional media and social media
- 5.) Strategies to get published and impact national and international audiences

## *Workshop 8* Family Intervention in Substance Use Disorder

Adarkar S, Kamble K, Surti G, Adarkar S

King Edward Medical Hospital and Seth G S Medical College, Mumbai, India <u>dtc.kemh@gmail.com</u>

#### Abstract:

Substance use disorder is a 'family disease'. The family as a unit not only suffers the consequences of the addiction, but also impacts the recovery and relapse of the patient. The family can be both a risk factor as well as a protective factor, thereby making it a point of therapeutic interest and intervention. This workshop aims to discuss and understand various problems faced by caregivers of Substance use disorder patients including important aspects like denial, enabling/ co – dependence, burden of dealing with the patient and burnout. By use of a presentation and a role play, a family intervention module used at our centre will be explained and demonstrated, including the Do's and Don'ts for the caregiver while dealing with the patient's illness. This workshop will enable skill development among mental health professionals in dealing with patients of substance use disorder and their caregivers, making participants better equipped to deal with these cases in their practice.

### *Workshop 9* Community Deaddiction Work -An Indian Experience



#### Singh SD, Menon M, Gupta D, Yadav D

Kinder Hospital, Sudheendra Medical Mission Cochin, Kochi, Kerala, India cochinsingh@gmail.com

#### Abstract:

**Presentation 1** - A brief introduction of the project which we did during 2005 to 2010 .A geographic area was demarcated for the purpose the project. The whole population of the area was classified into three categories , after field survey , namely 1) Occasional alcohol users (OAU) 2) No alcohol use (NAU) 3) alcohol dependence cases (ADC) .The community volunteer were trained for a six step working style during the project period .The six step works were 1) identify and classify the population into OAU ,NAU,ADC 2) positive motivational work for all three groups 3) Strategies to care ,manage and help all the three groups OAU,NAU ,ADC 4) The strategies to prevent relapses / counselling for NAU to remain as NAU and discourage OAU in consuming alcoholic beverages 5) all possible family members all three groups were regularly taken up for counselling 6) All the three categories were followed up for a period 5 yrs.

The observation at the closing of project was,

- 1. The percentage of NAU increased,
- 2. The percentage of OAU decreased
- 3. The percentage ADC decreased.

#### Presentation 2 Involving Stakeholders in Community-based Drug Abuse Programmes

#### Dhanesh Kumar Gupta

Community-based drug abused programmes are considered as one of the best approaches in prevention and control of drug abuse. However, effectiveness of these programmes is often marred due to inadequate involvement of the relevant stakeholders in the community. This presentation will discuss process of involving stakeholders in community- based drug abuse programmes.

First step is Stakeholders analysis which begins with identification of stakeholders. These stakeholders can be individuals, families, organizations and community systems/networks. They may be located exclusively in the index community or may be part of larger set-up. Then the key stakeholders with respect to the objectives of drug abuse programme need to be shortlisted based on their strengths, weaknesses, potential influence on the programme and their attitude towards the programme. Special focus should be on the stakeholders which are likely to be enablers and resistors in the programme.

Next step is to plan the strategy to ensure comprehensive, productive and sustainable participation of the majority of the identified key stakeholders. It is important to understand their diverse perspectives and agendas to align the same with the drug abuse programme. The stakeholders should be involved at all the stages of the programme including planning, implementation, monitoring and evaluation.

Implementation starts with meeting with stakeholders to arrive at a shared vision, goal and targets for the programme. A Shared decision-making process should be agreed upon in the beginning of the programme. Successful implementation would depend on the ability of lead organization to form 'Team of Teams' to work together in a coordinated and synergistic manner. Mental health professionals can lead such a programme, but they should follow a non-prescriptive consultative approach with a non-hierarchical collaborative functioning to maximize the success of the programme.

### *Workshop 10* Advances in Analytical Methods for Detection of Alcohol and Substance Use in Biological Matrices

Jain R<sup>1</sup>, Quraishi R<sup>1</sup>, Luthra PM<sup>2</sup>, Jaiswal AK<sup>3</sup>, Ahi S<sup>4</sup>, Wilson J<sup>5</sup>

<sup>1</sup> National Drug Dependence Treatment Centre (NDDTC), All India Institute of Medical Sciences, New Delhi, India

<sup>2</sup>Neuropharmacology Laboratory, Dr.BR Ambedkar Center for Biomedical Research, University of Delhi, Delhi, India

<sup>3</sup>Department of Forensic Medicine & Toxicology, All India Institute of Medical Sciences, New Delhi, India

<sup>4</sup>National Dope Testing Laboratory (NDTL), New Delhi, India

<sup>5</sup>Abbott Rapid Diagnostic Toxicology Global Business Unit, Asia-Pacific at Abbott, Seaford Rise, South Australia, Australia, Hospital & Health Care

rakajain2009@gmail.com

#### Learning objective:

1) Update on the recent developments in detection techniques

2) Advantages and limitations of different biological matrices in drug testing

#### Abstract:

Drug testing has undergone major advances, particularly over the last decade. The use of alternative specimens to blood or urine for establishing exposure to drugs has become an integral part of clinical and forensic toxicology.1 These alternative specimens include hair, sweat and oral fluid. Various analytical techniques and number of biological matrices has been used for the detection of drug of abuse in cases such as drug addiction, driving under influence of drugs, etc. The focus of the workshop would mainly involve various analytical approaches for detection of drugs and alcohol in biological matrices, strengths and limitations, advances in analytical techniques for drug detection. Lastly, Quality Assurance and Quality Control in Substance Use Testing Laboratories will also be discussed. This would provide and insight on how to handle non-conformances and performing root cause analysis for same, thereby ensuring the credibility of laboratory results.

## Presentation 1: Analytical approaches for testing drugs in substance use disorder: An overview

#### Raka Jain

#### rakajain2009@gmail.com

The ability to detect drug and its metabolites from biological matrices has always been a challenging task. This presentation addresses the conventional and alternative biological matrices used for detection of drugs. Moreover, sample preparation methods, analytical techniques, factors affecting the interpretation of the results will also be discussed.

# Presentation 2: Utility of dried urine and blood spots for testing drugs in substance use disorder

# Rizwana Quraishi, Atul Ambekar, Raka Jain rizwanaquraishi@gmail.com

With advances in detection techniques dried spots has emerged as a potential method for drug testing. Dried spot sampling is less invasive, simple to store, infection safe, easy to transport and cost effective. This talk would cover detection of drugs from dried urine spots with an emphasis on our own experience among substance users.

# Presentation 3: Application of Chromatography and mass-spectroscopy techniques in biological specimens

Pratibha Mehta Luthra

#### pmlsci@yahoo.com

Testing of drugs in biological samples involves screening and confirmation. Screening is mainly done by immunoassays. Confirmation and quantitation is done by highly sensitive techniques: gas chromatography (GC) or liquid chromatography (LC) coupled to single-stage or tandem mass spectrometry. This presentation addresses the application of GC/LC coupled to Mass spectroscopy for drug testing in substance use disorder.

#### Presentation 4: Examination of Alcohol in Drunken Driving

#### Ashok Kumar Jaiswal

#### ashokjaiswal72@gmail.com

Detection and quantification of alcohol in drunken driving is of immense importance in forensic toxicology. This presentation elaborates on the suitability of Headspace-Chromatography using capillary column and Flame Ionisation Detector for determination of alcohol content in whole blood for analysis.

#### **Presentation 5: Quality Assurance and Quality Control in Substance Use Testing Laboratories** Shobha Ahi

#### shobha@ndtlindia.in

Testing of drugs is a critical task as it requires highest level of certainty. Quality assurance and quality control forms basis of reporting correct results. This presentation would cover all the aspects of quality assurance and quality control in substance use testing, thereby ensuring the credibility of laboratory results.

# Presentation 6: Detection window for screening of drugs of abuse in saliva and other biological specimens

John Wilson

#### John.Wilson@abbott.com

Oral fluid is rapid and non-invasive specimen for drug testing. The window of detection varies for different specimen, each depicting frequency of drug use. This presentation outlines an understanding of detection windows helps in selecting the specimens as per the requirements for analysis.

# Abstracts for Oral Communications

## ORAL COMMUNICATIONS 1: Day 2 – 14 Nov 2019 – 8:30 am to 10:00 am – Hall 8

The prevalence of Problematic Internet Use in Malta among Young Persons Aged 13–16 Years: A Quantitative Research Study

Vella AM, Clark M, Mifsud J, Mifsud M, Brown M

Department of Medicine, University of Malta, Malta anna-maria.a.vella@gov.mt

#### Abstract:

**Aim**: This research study investigated the prevalence of problematic Internet use among 13-16 year-olds in Malta and Gozo, with special attention to this age cohort's engagement with Internet for entertainment.

**Method**: A total of 869 students of Years 9, 10 and 11 (Forms 3, 4 and 5) from a total of eighteen schools that comprised of fifteen State schools from the ten different State colleges, two Church schools and one Independent school, participated in this study between November 2016 and January 2017, by submitting their response to the quantitative Problematic Internet Entertainment Use Scale for Adolescents (PIEUSA). The PIEUSA was previously used in similar studies in Spain and Britain.

**Results**: The results enabled the identification of a four-tiered Internet for entertainment user categorization: occasional users (13.9%), habitual users (65.5%), at risk users (15.4%) and problematic users (5.2%). Overall similarities in size of the user categories between Malta, Spain and Britain show that ubiquity of Internet for entertainment transcends cultural contexts, at least in Western European countries. Problematic users reported experiences of withdrawal, preoccupation and loss of control.

**Conclusion**: The identification of these experiences provides a more comprehensive understanding of their experience of problematic use of Internet for entertainment. It also informs the debate concerning recognition of problematic Internet use and broader behavioral addiction as official disorders. Findings from this study support policy development of targeted adult education and lifelong learning, as well as enhanced media literacy.

**Recommendations**: Investment in community-based non-formal educational interventions that combine online and offline interactions. When including sports, these interventions would capitalize on empirical evidence supporting physical exercise as a replacement for online activity that maintains dopamine levels. Future research should account for a more sophisticated pilot study design to allow the testing and retesting of quantitative data, as well as consider the use of mixed-methods research to include qualitative investigation, particularly of home dynamics.

## Case Report: Rare Presentation of Acute Pancreatitis with Normal Se. Lipase in an Alcohol Dependent Patient

Kale Y, Gupta AB

vosephkale@gmail.com

#### Abstract:

Acute pancreatitis can have a variable presentation and diagnosis is based on clinical presentation, serum amylase and lipase levels and radiological investigations like (CT/USG). Negative predictive value of serum lipase in diagnosing acute pancreatitis is approximately to 100 percent and a normal blood lipase level in acute pancreatitis is an extremely rare condition. Here I present a case with normal serum amylase and lipase levels.

## Platelets Monoamine Oxidase-B Activity Levels and Cognitive Functions in Patients with Alcohol Dependence: An Exploratory Study.

Singh J, Jain R, Bhargava R, Balhara YPS

Department of Psychiatry and NDDTC, AIIMS, New Delhi, India <u>drjawaharaiims@gmail.com</u>

#### Abstract:

**Background:** The purpose of the present study was to assess and compare the platelet Monoamine Oxidase-B activity levels and cognitive functions in both alcohol-dependent patients and healthy controls. A possible relationship between platelets MAO-B activity level and cognitive functions was also explored.

**Methods:** Twenty-two male outpatient alcohol-dependent patients and twenty-two healthy male volunteers were included in the study. Platelet MAO-B activity levels were assessed by using ELISA and cognitive functions were assessed by using WAIS-IV<sup>INDIA</sup> (Working Memory Index and Processing Speed Index), Category Fluency, Stroop Test, Trail Making Test, and P.G.I. Memory scale.

**Results:** Platelets MAO-B activity was significantly lower in alcohol dependents than healthy controls. Similarly, the alcohol-dependent group showed significant impairment in the cognitive functions compared to the healthy controls. Platelets MAO-B activity showed a significant association with visual retention and recognition.

**Conclusion:** Our study indicates that platelets MAO-B activity is a useful biomarker of alcohol dependence in the early abstinence period. Alcohol has deteriorating effects on cognitive functions. Findings support the notion of association of low levels of platelet MAO-B activity and cognitive impairment which necessitates a prospective study with a larger sample size in the future.

## Does Ethyl Glucuronide in Hair Correlate with Alcohol Consumption? A Cross-Sectional Study from India

Ghosh S, Jain R, Rao R, Jhanjee S, Mishra AK

Department of Psychiatry and NDDTC, AIIMS, New Delhi, India <u>Shayanni.g@gmail.com</u>

#### Abstract:

**Background:** Ethyl Glucuronide (EtG) is a direct metabolite of alcohol. EtG in hair is proposed as a biomarker for assessment of long-term alcohol consumption.

**Objective:** To assess the association between Ethyl Glucuronide in hair with alcohol use.

**Method:** Using cross-sectional study design, ninety-one alcohol dependent patients (diagnosed as per International Classification of Diseases, Version-10) with last alcohol consumption within 24 hours were recruited after their consent. The subjective information included: sociodemographic details, alcohol use details and alcohol amount consumed in past three months (by beverage-specific quantity-frequency method). Three centimetre of hair from the posterior vertex region of the head was collected and analysed using gas chromatography–mass spectrometry. The obtained EtG values were compared and correlated with the amount of alcohol consumed.

**Result:** The mean age of the participants was 37.7 (SD: 7.7) years. All participants used alcohol daily; country made liquor (CML) being the preferred beverage (51.6%). Mean quantity of alcohol consumed in past three months was 261.7 grams per person per day. The mean age of onset of daily alcohol consumption was 27.7 (SD: 6.3) years and the mean age of onset of early morning drinking was 32.8 (SD: 7.3) years. All hair samples showed hair EtG value higher than the cut-off (i.e. 30pg/mg). EtG values showed a positive correlation with the amount of alcohol consumed (p=0.05). Kruskal-Wallis test showed statistically significant differences between the EtG in hair and the quantity of alcohol consumed (Chi-square= 10.32, p<0.05, df=3).

**Conclusion:** Hair EtG can be positively used to indicate chronic alcohol consumption.

## Systematic Study of Adverse Effects associated with Baclofen in Treatment of Alcohol Use Disorders

#### Shukla L, Murthy P, Andrade C

NIMHANS, Bengaluru, India drlekhansh@gmail.com

#### Abstract:

**Background:** Baclofen is increasingly used as an anti-craving agent in Alcohol Use Diosrder (AUD). Most of the studies have reported 'good tolerability' even at high doses. This is in contrast with multiple case-reports of adverse effects and data from the French Pharmacovigilance database.

**Objective:** To document adverse effects and their correlates in a prospective cohort of patients who received increasing doses of Baclofen initially in an inpatient setting followed by continuation in an outpatient setting.

**Methodology:** 239 patients were recruited during the detoxification phase and monitored for at least 3 months prospectively (or till treatment discontinuation). French Pharmacovigilance project monitoring baclofen used for ADS, 'Consultations Multidisciplinaires de Prescriptions de Recours en Addictologie' (CAMTEA) instrument, which measures 30 adverse effects was used to monitor adverse effects. Naranjo score was done for all serious adverse effects and dose-limiting non-serious adverse effects.

**Results:** Fourteen patients experienced a severe adverse effect, all during the titration phase and treatment were discontinued for these cases. Ten common adverse effects were identified, which were seen in more than 5 % of cases. Different adverse effects show a varying relationship with the dose and time, indicating the development of tolerance.

**Conclusions:** A number of adverse effects are common when baclofen is used as an anti-craving agent. Dose titration strategies that minimize these adverse effects should be used.

# Risk Factors Associated with Development of Complicated Alcohol Withdrawal Syndromes

#### Kukreti P, Saurabh, Saloni, Kataria D

Lady Harding Medical College, Delhi, India dearfrien@gmail.com

#### Abstract:

**Background:** Complicated alcohol withdrawal syndrome includes Alcohol withdrawal delirium (AWD) and Alcohol withdrawal Seizures (AWS). Both these conditions are associated with increased mortality and morbidity. Prospectively identifying risk factors for developing such complicated syndromes can have significant implications on management.

**Objective:** To identify the risk factors associated with alcohol withdrawal seizure or alcohol withdrawal delirium tremens as compared to patients presenting with uncomplicated alcohol withdrawal.

**Methodology:** A hospital based cross sectional study was carried out in patients admitted for acute management of alcohol withdrawal in Department of Psychiatry and Drug De-addiction Centre, Lady Hardinge Medical College, Delhi. Sixty participants were recruited, divided equally into two groups, patients who developed alcohol withdrawal related conditions (AWC) & patients with uncomplicated alcohol withdrawal (AWU). Complicated alcohol withdrawal group (AWC) comprised of patients who developed Alcohol withdrawal delirium tremens or Alcohol withdrawal Seizures. Participants were assessed for severity of alcohol use disorder and their baseline hemodynamic, biochemical, haematological parameters were recorded. Addiction Severity Index (ASI) was used to ascertain drug/alcohol use, psychiatry/medical comorbidity and effect of alcohol use on their medical status, employment status, legal status and family relationship.

**Result:** In the multivariable regression, significant predictors of complicated withdrawal were a delayed climax of withdrawal severity since admission, lower age at dependence, past history of complicated withdrawal, higher systolic blood pressure at presentation, lower platelet count and elevated transaminase.

**Conclusion:** Easily determinable parameters may be useful tools for clinicians to identify the patients likely to develop complicated alcohol withdrawal and manage them more intensively.

# Alcohol Ban during the Election in India and its Effects on Alcohol-Dependent Individuals

Mukherjee D, Narasimha VL, Mahadevan J, Shukla L, Murthy P

NIMHANS Bengaluru, India diptadhimukherjee@gmail.com

#### Abstract:

**Background:** Throughout the history of civilization, alcohol has been used as a bribe. All over the world, distribution of free drink as well as providing cash has been reported during the election campaign. In India, this increase in the availability of alcohol is always followed by a phase of alcohol ban during polling days.

**Objective:** To evaluate whether alcohol-dependent individuals perceive a sudden change in the availability of alcohol during the election; and to observe the effect of this sudden change in the alcohol-dependent population.

**Methodology:** Our center provides tertiary care for addictive disorders at Bangalore, Karnataka. The general election in the state was conducted in 18<sup>th</sup> and 23<sup>rd</sup> April 2019. It was followed by a 72-hour prohibition of alcohol sale around the days of polling. We systematically listed all the patients who are residents of Karnataka, presented in the emergency services and some patients from the routine outpatient services with alcohol-related problems from 17<sup>th</sup> to 26<sup>th</sup> April.

**Results:** Among 31 patients, almost half perceived increase availability of alcohol during canvassing. Majority of the emergency visits were related to the direct or indirect effect of the election ban. A quarter of patient relapsed or increased drinking because of increased availability before polling. On another hand, 25% presented with complicated withdrawal because of the election-related ban. Though almost 90% knew about the election ban, only 50% of them took precaution to ensure availability.

**Conclusions:** Elections might have a significant effect both on alcohol intake as well as unintended abrupt abstinence.

## Role of Temperament and Family History in Alcohol Dependence Syndrome

Ali F<sup>1</sup>, Nadella RK, Holla B, Mahadevan J, Sreeraj VS, Balachander S, Vishwanath B, Jain S, ADBS consortium.

<sup>1</sup> The Accelerator program for Discovery in Brain disorders using Stem cells (ADBS), Department of Psychiatry, National Institute for Mental Health and Neurosciences (NIMHANS), Bangalore. <u>alifurkhan@ymail.com</u>

#### Abstract:

**Background**: The role family history of psychiatric disorders has been of significant interest for genetic research and public health screening. There have been few studies that explore the role of temperament in subjects with positive family history.

**Objective**: To analyse the role of temperament and family history of psychiatric disorders in Alcohol Dependence Syndrome (ADS).

**Methodology**: A total of 111 consenting subjects from The Accelerator program for Discovery in Brain disorders using Stem cells (ADBS) project, with a family history of any of Alcohol Dependence Syndrome (ADS), Schizophrenia, Bipolar-Affective disorder, Obsessive-Compulsive Disorder were analysed. Temperament was measured using the Adult Temperament Questionnaire (ATQ) and scores for each of the four factors i.e. Negative affect, Effortful control, Extraversion, Sensitivity were calculated. Family history of alcohol use and mental illnesses was assessed by Family Interview for Genetic Studies, and three generation pedigree chart. The Family History Density (FHD) scores were calculated by proportion of disordered family members, weighted by relatedness. Relevant socio-demographic, clinical data were collected using a structured interview. Statistical analysis for Pearson's correlation was done using SPSS v23.0

**Results**: There were significant negative correlation between the FHD of ADS, with ATQ of Effortful control, and age of regular use. Also, age of first use of alcohol correlated positively with age of regular use of alcohol.

**Conclusions**: The study shows that the subjects with strong family history of ADS have difficulty in attention, inhibitory, and activation control, thereby putting them at risk of problem behaviour like dependence on alcohol.

## Impulsiveness and High Risk Behavior among Alcohol Dependent Patients

#### Anupama K, Reddy CMPK

#### anu ug@yahoo.co.in

#### Abstract:

**Background:** A cross sectional study on alcohol dependent patients with High Risk Behaviour. **Objectives:** To study the relationship between impulsiveness and with High Risk Behaviour among alcohol dependent patients

**Methods and Materials:** The study was conducted on the patients admitted with Alcohol dependence syndrome to Psychiatric ward of Mamata Medical College and Hospital (Khammam, Telengana State) during one year period (2011). The tools used prior to sample selection include; ICD-10, CIWA-AD, MMSE, SOADQ, and the HRBQ and BIS were used to assess high risk behaviour and impulsivity respectively.

**Results and Discussion:** There was significant association found between all the three variables i.e., high impulsivity (p-value<0.001), low impulsivity (p-vale<0.001), severity of alcohol dependence (p-value<0.001) and high risk behavior (road traffic accidents, crime and violence, self-injurious behavior, risky sexual behavior) in the sample. There was significant difference between the groups of Severity of Alcohol Dependence Questionnaire (SADQ) scores and high impulsivity (p-value=0.049).

**Conclusion:** The presence of both alcohol dependence and personality as important indicators of high risk behaviour lends support to the hypothesis that alcohol dependents with both these variables may be prone for risk taking, probably with a common genetic variability. Patients scoring high on personality constructs such as impulsivity were particularly vulnerable to indulge in high risk behaviour.

## ORAL COMMUNICATIONS 2: Day 2 – 14 Nov 2019 – 10:00 to 11:30 am – Hall 7

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## Individual Specific Stress and Substance Abuse: Interrelationship: A Case Series

Gupta S

Benaras Hindu University, Varanasi, India guptavaranasi@hotmail.com

#### Abstract:

**Introduction**: Psychoactive Substance Abuse is a chronic relapsing remitting disorder. Various life stressors like poverty, unemployment, low education and deprivation contribute to higher prevalence of substance abuse in developing countries. Stress is a well-known risk factor in the development of addiction and in addiction relapse vulnerability. Not only acute stressor but chronic cumulative stressor are responsible for long-term maintenance and relapse in substance abuse. Early-life stress and prolonged and repeated stress adversely affect development of the prefrontal cortex, a region that is highly dependent on environmental experiences for maturation and significantly affect the mesolimbic dopamine pathways and play a role in drug self-administration. Assessment and management of Individual Specific Stress (ISS) is often neglected in management of substance use disorders and it is this stress loading which leads to the person relapsing.

Through a case series, we assessed the stress loads and its association with relapse and recovery

**Methodology**: substance abuse cases were taken and stress was assessed with a modified version of the Student Stress Dimension Questionnaire (SSDQ), which is a multidimensional, holistic tool that effectively identifies individual specific stress across ten life domains. Domain specific Interventions were given along with standard management protocol for substance abuse. Cases were followed for period of one year with periodic assessment and interventions.

**Result**: Assessment and management of stress in substance abuse cases was associated with reduced relapse and better treatment outcome.

**Conclusion**: We hypothesize that individual specific stress is an important factor responsible for relapse in substance abuse and needs to be effectively measured and treated for better treatment outcomes.

## Co-morbid Psychiatric & Substance Use Disorders with Chronic Medical Conditions at Medical Outpatient Department: A General Hospital Based Descriptive Study

#### Matoria R

Department of Psychiatry, Central Hospital, Jaipur, India drmatoria@gmail.com

#### Abstract:

**Background:** Substance use disorders and psychiatric illness commonly co-occur in what is known as dual diagnosis. Notwithstanding, co-existence of a medical illness in persons with dual diagnoses, the triple diagnosis has emerged as a clinically challenging condition for primary care physicians, addiction medicine specialists and psychiatrists. Existing data support the high prevalence of triple-diagnosis patients in psychiatric, substance abuse, and medical settings.

**Objectives**: Present hospital based observational descriptive study was carried out with specific aims to assess proportion and patterns of co-occurrence of psychiatric & substance use disorders in a medical outpatient department of a general hospital and also to evaluate clinico-social and occupational determinants of the co-morbidities.

**Methodology:** Total 450 randomly selected employees of Railways were screened at medical outdoor patient department of Central Hospital, Jaipur, a referral unit of North Western Railway from 1st June 2014 to 30th May 2015 for psychiatric & substance use disorders by using Mini-International Neuropsychiatric Interview- Plus and "Alcohol, Smoking and Substance Involvement Screening Test" (ASSIST). A self-designed, pre-tested & semi-structured detailed performa was used to elicit demographical and occupational attributes. Psychiatric diagnosis was confirmed by using the ICD, 10th revision (diagnostic and research criteria); while author was reliant upon the treating physician for diagnosis of chronic medical disorders. The data was analyzed in terms of descriptive statistics, Chi-square test and logistic regression by using SPSS, Primer Version '6'.

**Results:** In male predominated study 365 (81.11%), mean age of subjects were  $36.4 \pm 6.37$  years. More than half (n = 242, 53.78%) had some psychiatric diagnosis, out of which 156 (64.46%) were also having psychiatric illness in addition to a chronic medical condition. Among the various physical disorders the major proportion of symptoms of depression, anxiety, dysthymia and somatization were found i.e. 39.74% (n = 62), 26.92% (n = 42), 19.87% (n =31) and 19.23% (n = 30) respectively; while, overall major depressive episode 69 (15.33%) was diagnosed as the most common psychiatric disorder among study individuals followed by Oral somatization 30 (6.77%). Furthermore, total 29 (11.98%) among the co-morbid study group (n = 242) were also afflicted with at least one psychiatric & substance use disorder in in conjunction with a chronic medical condition. Univariate analysis shows that perceived stress, job satisfaction, environment at working place, relationship and stressful life events were the significant determinants of psychiatric morbidity; while shift duty was observed as the major occupational attribute associated with dysthymia, sleep disorders, substance use and chronic medical conditions.

**Conclusion:** A significant proportion of employees attending medical OPD met criteria for triple diagnosis and many psychosocial and occupational factors were associated with caseness; which underlines the need for an integrated and interdisciplinary approach addressing substance abuse. Mental health issues should be a primary element of comprehensive care of the patients; while service delivery and intervention models based on "One-stop Shopping" should be developed and put into practice in order to optimize clinical outcomes. Evaluating the safety and efficacy of psychopharmacologic and psychotherapeutic interventions and understanding the complex interactions among the components of the triple diagnosis are areas for future research.

## Unusual Presentation of Cannabis Use Related Catatonic Schizophrenia and Role of ECT in its Management: A Case Report

Sharma M, Sharma M

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#### Abstract:

**Introduction**: An acute and usually transient psychosis has been associated with prolonged cannabis use. Catatonic schizophrenia is a subtype of schizophrenia characterized by a psychomotor disturbance.

**Objectives**: To discuss about the atypical presentation and difficulty in management of cannabis use related catatonic schizophrenia, and to highlight on the use of ECT in the treatment outcome.

**Background:** Cannabis is known to be associated with psychosis as a predisposing, precipitating and perpetuating factor. It also has a varied polymorphic presentation. One of the difficult case presentations for management is catatonia.

**Methodology**: A 25 years single male belonging to Hindu family of rural background having a history of cannabis use since adolescence for past 8 years in a dependent pattern, presented with abrupt onset continuous deteriorating course of 2month precipitated by increased use of cannabis, with symptoms comprising of hallucinations, bizarre delusion and catatonia requiring hospitalization. He was given adequate trials with both typical and atypical antipsychotic but responded after MECT augmentation: 28 therapeutic followed by maintenance MECTs for past 1 year (48 total).

**Results**: This case is reflection of varied presentation of the cannabis related schizophrenia and management difficulty; role of MECT in therapeutic and maintenance phase of treatment.

**Conclusion**: Cannabis use is associated with poor prognostic presentation and difficulty in management; although ECT is a promising therapeutic measure in patients with cannabis use related catatonic schizophrenia.

# A Study of Anxiety Disorders in Patients of Alcohol Use Disorder

#### Rathod BD, Kedare J

B.Y.L Nair Ch. Hospital, Mumbai, India rathod.brahmadutt498@gmail.com

#### Abstract:

**Background**: Many clinical and epidemiological studies have documented significant crosssectional relationships between Anxiety Disorders (AD) and Alcohol Use Disorders (AUD), however Indian data in this aspect is lacking. Early diagnosis and appropriate treatment of both disorders improves prognosis and quality of patient's life.

**Objectives**: (1) To find the prevalence of AD in patients diagnosed with AUD in psychiatry OPD. (2) To study and compare socio-demographic factors, illness variables, coping strategies, personality traits in AUD patients with and without AD.

**Methodology**: 187 AUD patients, abstinent of alcohol and off benzodiazepine medication for ≥2 weeks were taken. "Big five inventory", "Coping Inventory for Stressful Situations", "Alcohol Use Disorder Identification Test" and "Hamilton Anxiety Rating Scale" were used.

**Results**: 40.10% had AD, of them 19.8% generalized anxiety disorder (GAD), 15% panic disorder (PD), 3.7% social anxiety disorder and 1.6% specific phobia. Mean age of onset, mean number of relapses and severity of alcohol consumption were more in AUD patients with AD. These patients used significantly more emotion oriented coping whereas those without AD used more task-oriented coping (p<0.05). In personality questionnaire, these patients scored high on neuroticism factor and significantly low on extraversion, agreeableness, conscientiousness, openness than patients without AD (p < 0.05).

**Conclusion**: AUD patients have high prevalence of AD. These patients were found to use significantly more of emotion-oriented coping and less of task-oriented coping and they scored significantly higher on neuroticism and low on other 4 personality traits as compared to those without AD

## **Exploratory Study on Pathways to Care among Alcohol Dependent Patients Attending a Tertiary Care Hospital**

Kethawath SM, Pingali S, Umashankar M

Department of Psychiatry, Gandhi Medical College, Secunderabad, Telangana, India <u>shantimohankethawath.143@gmail.com</u>

#### Abstract:

**Aim**: To assess the pathways to care among alcohol-dependent individuals seeking help at a tertiary care center.

**Methodology**: A cross-sectional, descriptive study with a total of 85 subjects diagnosed with alcohol- dependence syndrome as per ICD-10. Pathways to care were assessed using the World Health Organization - Encounter Form.

**Results**: Psychiatrists were first point of contact for only 9.4% of subjects. 72.9% sought help from non-psychiatric medical professionals. Ayurvedic/Homeopathy and religious healers were first point of contact for 7.1 and 3.5% respectively. Mean duration of alcohol dependence was 7.32  $\pm$ 5.78 years; mean duration of treatment seeking for alcohol related problems was 1.46  $\pm$ 2.82 years.

## Socio-Demographic Correlates in Treatment Seeking Injection Drug Users Attending De-Addiction Services at a Tertiary Care Centre in North India.

#### Prasad SK, Karahda A, Singh P, Gupta R

Department of Psychiatry, Institute of Mental Health, Pt B.D. Sharma PGIMS Rohtak, India <u>drshobhitkprasad@gmail.com</u>

#### Abstract:

**Background**: Injection drug usage (IDU) represents severe form of drug use, associated with many socio-occupational consequences. Few studies have characterized the socio-demographic trends for IDUs in India.

**Objective**: To determine the prevalence and trends of IDU and its socio-demographic correlates in those attending the deaddiction services in a tertiary level care centre in North India.

**Methodology**: Retrospective review of IDUs seeking treatment at SDDTC, PGIMS Rohtak between January 2015 and December 2018, using the DAMS format. Descriptive statistics were applied.

**Results**: Total 131 IDU subjects visited for treatment. Mean age of subjects 32.21 (±10.35) years with range 17-65 years. Majority belonged to young adult age range (17-30) 49.6%. Overall treatment seeking in young adults (17-30) has increased while in among old adults (>45) has decreased in last 4 years. Majority were males (91.6%), married (58.8%), educated up to matric and high school (40.5%), self-employed (35.1%), currently residing in joint family (54.2%). Trend of increased treatment seeking among graduates and post-graduates, and among the unemployed was seen. Most common co-existing substance of abuse was tobacco, followed by alcohol. Pentazocine (58.8%) was mostly injected, followed by morphine and heroin (11.45% each) and buprenorphine (both 9.92%), and least of tramadol, diazepam and phenergan. Inj chlorpheniramine use co-existed with pentazocine (0.76%) and heroin (6.87%). Sharing of needle (19.1%) and paraphernalia (18.32%) was present. Seven were found to be HIV positive.

**Conclusions**: Despite the growing number of prevention campaigns, IDUs in India exhibits an increasing trend. Long term studies should be planned for better understandability of changing trends in IDUs.

## The Management of Methamphetamine Dependence, Detox Treatment and Rehabilitation from an Australian Context

#### O'Neil G, Mellon A

#### alistair.mellon@freshstart.org.au

#### Abstract:

Despite a recent decline in Australia of people reporting use of amphetamine(s) from 2.1 to 1.4% in 2016, the preferred form has changed from powder/speed to crystal/ice. The state of Western Australia has continued to be at the top for estimates of average consumption of methamphetamine in Australia.

Currently there is no approved pharmacotherapy treatment for the management of meth/amphetamine. Positive results have been reported with the use of oral naltrexone and longer acting naltrexone implants.

At the Fresh Start Recovery Programme (FSRP), promising results have been seen in the treatment and management of meth/amphetamine dependent patients presenting for treatment. A combination of long acting naltrexone implants, low dose flumazenil delivered either subcutaneously or via long acting implants, delivered alongside a supportive programme of counselling, psychiatric and mental health care, residential rehabilitation, and work, educational and spiritual support.

Safety and efficacy data is routinely collected from all patients treated at FSRP. This data will be presented alongside an outline of treatment techniques from detox to recovery in patents presenting with meth/amphetamine dependence.

## Naltrexone for Cannabis Use Disorder – A South- Indian Study

#### Raghavan S<sup>1</sup>, Chandrika PP<sup>2</sup>, Kumar MS<sup>3</sup>

<sup>1</sup> Drug Treatment Clinic, Institute of Mental Health, Madras Medical College, Chennai, India
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 <sup>3</sup> PSYMED, Chennai, India
 <u>drraghaswe@yahoo.co.in</u>

#### Abstract:

**Background:** Cannabis (Cannabis Indica, the Indian hemp) has been used in India for centuries. In a recent Nation-wide survey (Ambekar et al 2019), it has been estimated that the prevalence of Cannabis use is 2.8% while 0.25% are dependent on Cannabis. Several studies have proven that opioid antagonist especially Naltrexone reduces both the discriminative stimulus and reinforcing effects of Cannabis on CB-1 receptors which is responsible for craving and subsequent dependence.

**Objective:** To study the anti-craving effects of naltrexone in cannabis dependent subjects, considering the non-availability of US-FDA approved treatment for this disorder.

**Methodology:** Consecutive sample of 50 individuals both male and female who are diagnosed with current Cannabis dependence according to ICD-10 criteria will be included after obtaining informed consent. Subjects with comorbid current Alcohol dependence will be excluded. The sample will be assessed using Cannabis Use Disorder Identification Test- Revised version (CUDIT-R). Thereafter Naltrexone 50mg once daily dose shall be administered for the next 4 weeks and craving will be assessed at weekly intervals using 12-item Marijuana Craving Questionnaire (MCQ). Any co-occurring psychiatric disorders will be managed symptomatically during the assessment period.

**Instruments**: Cannabis Use Disorder Identification Test-Revised (CUDIT-R); 12- Item Marijuana Craving Questionnaire (MCQ)

**Results & Conclusion:** The recruitment is ongoing and the results shall be discussed at the time of presentation.

## Parenthood and Delay to Treatment for Alcohol Dependence

Okruhlica, K., Kamendy, Z.

Centre for Treatment of Drug Dependencies, Bratislava, Slovakia <u>okruhlica@cpldz.sk</u>

#### Abstract:

**Background:** Several studies found decline of alcohol consumption among heavy drinkers during parenthood.

**Objective:** We expect that parents will enter treatment for alcohol dependence in their older age, than childless drinkers.

**Methods:** The study tested the association of number of children and the age at which parents sought treatment for alcohol dependence for the first time in their life. From a sample of 1,316 patients, 1,109 were included for analysis. The mean age was 44 (SD+12.6) years; 73% were males. Their histories were retrospectively reviewed in the descriptive study that focused on the age and number of children at the first time of treatment entry for alcohol dependence. The data were subjected to one-way analysis of variance (ANOVA). GMT and MCV were monitored to assess the stage of impairment. Correlation with number of children was analysed using Pearson Correlation.

**Results:** showed that male and female patients without children had average age 36 (SD+11.8) and 35 (SD+10.0) years, respectively; male and female patients with one child, 44 (SD+11.7) and 43 (SD+10.8); with two children, 50 (SD+10.1) and 50 (SD+9.5), respectively. The association between number of children and age at the first treatment entry was statistically significant. Correlation between number of children and GMT was r=-0.72 and MCV r=0.072 (p<0.05).

**Conclusions:** Parents with more children were seeking treatment for alcohol dependence later, than those with one child or those who were childless. This was in the association with only slight increase of biomarker MCV, and no GMT.

## ORAL COMMUNICATIONS 3: Day 2 – 14 Nov 2019 – 10:00 to 11:30 am – Hall 8

## Art in Addiction: The Merger of Group Process and Creativity to Support Recovery

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Hansen H, Friedman L

#### Helena.Hansen@nyulangone.org

#### Abstract:

This paper presents a thematic analysis of process notes and patient-produced artwork from creative arts therapy groups in a large New York City public hospital's outpatient addiction program over a ten year period. It identifies the ways creative arts in a group psychotherapy setting are employed to support addiction recovery, with attention to the interplay of group process, artistic expression, and the meanings of substances and pharmaceuticals in the daily lives of group members.

The group is a safe place in which group process fosters hope, a sense that one is not alone in one's struggles, the sharing of information and altruistic acts, and corrective emotional experiences in family-like relationships (Irvin D. Yalom). Art is a non-verbal communicator that serves as a metaphor for one's mental state and this helps to begin the process of examining one's inner reality. The sharing of artwork with other group members allows one to see the "other" in the room. This analysis found that creative arts therapy group members use group process to collectively reinterpret the meaning of relapse, the distinction between substances of abuse and opioids used in maintenance treatment for opioid dependence (buprenorphine and methadone), as well as the role of psychotropic medications for co-occurring psychiatric diagnoses in recovery. Relapse and medications were recurring themes in group discussion and in the artwork produced, which identified coming to terms with relapses, and managing the effects and contradictions of medications, as core tasks for recovery requiring techniques that could be shared among group members and refined through collective self-examination and coaching.

## Impact of Fasting Ramadan on Substance Misuse Patients

#### Al-Ali H, Eickelberg S

#### hala.alali@naufar.com

#### Abstract:

**Objective:** National Institute on Drug Abuse (2007) indicated the increased incidence of cooccurring diagnosis of substance use disorders and symptoms of anxiety and depression. Accordingly, people with mood or anxiety disorders are twice as likely to be diagnosed with substance use disorder compared to the general population. The 12 months' prevalence of people diagnosed with both a substance use disorder and a mood or anxiety disorder is approximately 20% and 18%, respectively. The present study was aimed to observe the effect of fasting during Ramadan month on patients treated for addiction.

**Materials and Methods:** 50 male patients, experience was monitored pre, during and post Ramadan, Patients were selected for the present study by the convenience sampling method. Validated Depression scale (PHQ-9), anxiety scale (GAD-7) and quality of life utilizing the World Heal Organization Quality Of Life Bref scale (WOQOL-Bref) were used to assess depression, anxiety, and impact of fasting on reported quality of life. The research study was conducted on three phases, pre, post, and during Ramadan with an interval of 1 month each.

**Result:** Depression, anxiety scores significantly decreased on the 28th day of Ramadan when compared with baseline values. Stated Quality of life scores levels improved significantly following fasting by 28th day.

**Conclusion:** In the present study, we have observed the positive impact of fasting on depression and anxiety. We recommend further detailed studies, including male and female participants and biochemical parameters to investigate other aspects of Ramadan fasting on human anxiety and depression.

## Socio Demographic Profile and Types of Drug Use in Admitted Patient of Tertiary Care Psychiatric Center: a Retrospective Study

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#### Abstract:

**Background:** It is believed that the problem of drug dependence in India differs in different parts of the country, and Rajasthan is known for its traditional use of raw opium in the form of *amal* or *doda*. With the closure of licensed outlets for traditional forms of opium, there is a likelihood of change in the pattern of substance use. Hence, it is pertinent to study and document socio-demographic characteristics and types of drug used by admitted patients.

**Objective:** To study the socio-demographic and types of drug used by admitted patients in tertiary care psychiatric center.

**Materials and Methods:** This was retrospective study conducted in Department of Psychiatry, Sardar Patel Medical College, Bikaner from 1<sup>st</sup> June 2017 to 31<sup>st</sup> May 2019. Socio- demographic & clinical profile were retrieved from indoor case file.

**Results & Conclusion:** Total 751 patients admitted in de-addiction ward for substance use disorder treatment. The age of patients ranging from 13 to 75 years, mean age was  $37.5 \pm 10.3$  years, majority from rural background (56.9%), educated up to 8<sup>th</sup> class (40.5%), self-employed (36.2%), income in between 50 thousand to 1 lakhs per year (38.7%). The majority of the patients were dependent on alcohol dependence (61.8%), polysubstance (19%), opioids including traditional opioids and pharmaceutical opiates (15.7%), benzodiazepines (2%) & cannabis (1.3%). 5.1 % patient also had comorbid dependence on other substances including benzodiazepines, opioid and alcohol. The results highlight that patients abusing pharmaceutical drugs are increasing due to easy availability of these drugs in market.

## Substance Use Addiction among Moroccan Women

El Omari F

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#### Abstract:

Drug use among female in Morocco is not rare, and few studies estimated the characteristics of psychoactive substance addicted women. Objectives of our study are to evaluate sociodemographic and psychopathological profiles of inpatients Moroccan women who have a substance use disorder. This study has been conducted in the addictology service of Ar-Razi psychiatric Hospital of Rabat-Salé Ibn Sina University Hospital over a period of 99 months, and 119 residents are included. The average age is  $31 \pm 10$  years, and 83.20% are unemployed. Among our population, substance use disorders are represented by cannabis use in 68% of cases, tobacco use in 52.1%, alcohol addiction among 40.33%, benzodiazepines and cocaine respectively among 15.96%, and 33.61%, opioids use disorder in 7.5%, and inhalant use disorder represent 1.6%. 73.8% of the residents have psychiatric comorbidities that can be as follows: personality disorder among 58.8%, 42.9% have depression, 13.4% have bipolar disorder. Around 17% have anxiety disorders, and one case has bulimia. 36.1% of addicted females attempted suicide, 16% experienced violence, and 20.2 % of residents were raped. Women hospitalized in Salé addiction treatment service are more likely to have more psychiatric comorbidities, to be victims of violence.

## A Comparative Study of Pattern and Severity of Substance Use and Co-morbidity among Out-patient Youth and Older Adult Opioid Users

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#### Abstract:

**Background:** The clinical burden of treatment-seeking youth opioid users has increased over time in India. However, there are inadequate studies from India related to pattern and severity of substance use and co-morbidity among young opioid users. Understanding the pattern severity of substance use and its impact across different age groups has potential clinical implications.

**Aims and Objectives:** To compare the pattern and severity of substance use among outpatient youth and older adult opioid users.

**Materials and methods:** 30 older adults (25-45 years) and 60 youth (15-24 years) patients of opioid dependence, diagnosed on ICD 10 DCR were assessed and compared for pattern and severity of substance use, based on various scales namely WHO ASSIST, OTI, ADAD, GAF and semi structured questionnaire.

**Results:** Cannabis use and its dependence was higher in youth as compared to older adults. Age of onset and dependence for all the substances except for alcohol was earlier for youth. Progression from onset of substance use to opioid use was faster in youth (2 years) than the older adults (5 years; p=0.001). Severity of substance use scores, poly-drug use score and injection drug use scores were found to be high among youth. Youth had greater heroin use while older adults have more tramadol, pentazocine and poppy husk use.

**Conclusion:** As compared to older adults, youth have faster progression to harder substances, greater severity of substance use. It provides insights about this vulnerable population and demands more speedy and strenuous measures to save youth of the country.

## **Pregnant Maltese Women on Opioids**

Vella AM, Savona Ventura C, Camilleri L, Wolff K

#### anna-maria.a.vella@gov.mt

#### Abstract:

**Background:** In Malta, 0.4% of circa 4000 live births are babies born to opioid dependent mothers. A comparison between opioid using mothers and the general Maltese pregnant population was undertaken.

**Method:** Retrospective data (Jan 2012-Dec 2016) from the National Obstetric Information System (NOIS) was compared to that obtained from Sedqa the National Substance Misuse Agency. Consent was obtained to investigate mothers from the Malta Medical School Ethical Board and King's College London Ethical Committee. Socio-biological characteristics and obstetric outcomes were studied.

**Results:** All mothers (N = 71) who were known or who at the antenatal booking clinic admitted using opioids were included along with their neonates. Methadone maintained mothers were significantly more likely to be younger (p<0.001), unmarried (p<0.001), multiparous (p=0.08), of lower educational achievement (p=0.007), smokers (p<0.001) and unemployed compared to the general Maltese pregnant population. Forty-one percent worked in the sex industry; 72% were never regularly employed (p<0.001), 44% were Hepatitis C positive while none were HIV positive. Heroin use decreased with advanced pregnancy while methadone dose/day increased (p<0.015).

Mothers on opioids gained the same weight during pregnancy as the general pregnant population (p=0.929) while their new-borns weighed significantly less and had significantly lower occipital frontal circumference (p<0.001) regardless of maternal smoking habits (p=0.081). Only 11% of opioid-using mothers compared to 64% of the general Maltese population breast fed their new-borns in the first 30 days. The hospital stays for new-borns exposed to opioids was on average 23 days when compared to 3.6 days for the Maltese population (p<0.001). The prediction of the removal of neonates to alternative guardianship was dependent on whether opioid-using mothers were living with a drug using partner (p=0.019) or were involved in prostitution (p=0.072).

**Conclusions:** Although Malta is serviced by a single National Hospital and a specialised drugtreatment centre, methadone-maintained mothers had significantly different socio-biological characteristics from the general pregnant population. This is unsurprising but still merits attention as these characteristics influence the wellbeing of the new-born. Health and social policies need to be educational in nature in order to enable improved wellbeing in this population.

## Substance Use in Women: Challenges of the Hidden Population

#### Bhola S

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#### Abstract:

National Institute of Drug Abuse (NIDA) June 2019 report on drug use shows that all over the world 19.5 million females (or 15.4 percent) ages 18 or older have used illicit drugs in the past year. The term "illicit" refers to the use of illegal drugs, including marijuana according to federal law, and misuse of prescription medications. In India, most of the studies have projected the incidence of women population who use drugs, is around 2%. The 2014-15 Punjab Opioid Dependence Survey (PODS) has shown that out of the total sample taken, 1% are women who have been using opioids which is approximately 8000-10000. Interestingly, this sample was taken from the indoor facilities which were predominantly for males, so one can expect a much higher figure. That's why it is called "The Hidden Population" (some people call it Punjab's new addicts, which is actually not true). Besides to bring this population out, there are many more challenges related to their drug use, its complications, treatment, stigmatization, restriction to treatment, lack of support, shame & guilt, child care, dependence on male partner etc. to name a few. Even in the services which are exclusive for women, the clients and the health professionals have to face many treatment related challenges. Since the challenges related to this hidden population are quite different from their counterparts, so addressing these challenges and managing these, obviously, has to be different.

This presentation will share these challenges, the procedures adopted to address these and the way ahead.

# Use of Storytelling Method for Teaching School Going Children on Tobacco Use Prevention

### Arora S<sup>1</sup>, Baby RS<sup>2</sup> Gupta S<sup>3</sup>

<sup>1</sup>College of Nursing UCMS & GTB Hospital, Delhi, India <sup>2</sup>College of Nursing, AIIMS, Bhubaneshwar, India <sup>3</sup>College of Nursing, AIIMS, New Delhi, India <u>sumityarora@gmail.com</u>

#### Abstract:

**Introduction:** Addiction, as a social disorder, is often referred to as a world-destroying disaster among students. Consumption of tobacco is increasing in India, which emphasizes the need for prevention of tobacco at the grass root level. This study examined the effects of storytelling method as one of the preventive strategies to control tobacco use among school going children. Using story and storytelling as a therapeutic tool has been explored by storytellers, psychologists and social workers. The effectiveness of story and storytelling in substance abuse prevention programs has been well documented and researched. The effectiveness of story and storytelling is not well studied in treatment programs. This study proposes an approach to prevention based on storytelling.

**Method:** This pre-experimental study was conducted on 50 school students (grade five to ten), selected by purposive sampling in Delhi. The instrument for gathering data was a readiness to addiction questionnaire. This questionnaire included 12 items for which the scoring of each item followed the Likert format. The data gathered was analyzed using SPSS version 21 with descriptive statistics and inferential statistics.

**Results:** The results revealed that the mean scores of the readiness to use substances index in the experimental group fell from pretest to post test (p<0.001). This suggests that storytelling method was effective in reducing the readiness to use substances.

**Conclusion:** This suggests that the storytelling as narrative method is effective in reducing readiness to use substances. Storytelling is an effective way to raise awareness among school going children about tobacco use and its detrimental impacts on health.

## A Comparative Study on the Safety and Efficacy of Naltrexone vs Baclofen vs Acamprosate in the Management of Alcohol Dependence

#### Kumar R

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#### Abstract:

**Background:** The efficacy of naltrexone, baclofen and acamprosate in the treatment of alcohol dependence has been successfully established over past several years. The knowledge about their relative efficacies can facilitate in developing relapse prevention strategies that would give rise to a greater personal and socio-economic benefits.

**Aims and Objective:** To assess and compare the safety and efficacy profile of naltrexone, baclofen and acamprosate in the treatment of alcohol dependence. In addition to this, the pattern of relapse and attitude of subjects towards the treatment was also assessed.

**Materials and Methods:** This was a prospective study carried out at Guru Gobind Singh Medical College and hospital, Faridkot. It comprised of 30 alcohol dependent subjects each assigned to naltrexone, baclofen and acamprosate group after detoxification. The subjects were assessed for craving, relapse risk, and medication adherence using the respective scales and questionnaires.

**Results:** In terms of OCDS score decline, the decline seen in naltrexone group (26.72±13.05) was maximum, followed by baclofen and acamprosate, respectively. In terms of decreasing AWARE questionnaire score, again naltrexone was most effective with the maximum decline in AWARE score (64.72±45.65), followed by baclofen and acamprosate. The attitude towards treatment with all the three medications was positive, as per the Hogan Drug Attitude Inventory score.

**Conclusion:** Naltrexone was most effective in decreasing craving and drinking behavior. Baclofen showed best tolerability in terms of liver function tests and least number of side-effects reported. Naltrexone group reported the least number of relapses but maximum number of side-effects. Acamprosate group had the maximum dropout rate.

## ORAL COMMUNICATIONS 4: Day 2 – 14 Nov 2019 – 14:15 pm to 15:45 pm – Hall 7

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## Effect of Yoga on the Individuals with Alcohol Use Disorder

#### Tambare S, Varade T

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#### Abstract:

Alcohol abuse is now major universal problem. As per WHO, alcoholism is third leading preventable cause of death. The term alcoholism means when a person shows signs of physical addiction to alcohol and continues to drink, despite problems with physical, mental health and social, family or job responsibilities. Yoga is an ancient art based on harmonizing system of development for the mind, body and spirit. The continued practice of yoga will lead you to sense of peace and wellbeing. The aim of the study was to assess the effect of yoga on chronic alcoholism. The study was undertaken on 30 patients in the age group of 20 to 50 years presenting with history of chronic alcoholism. These all 30 patients practiced yogasanas, pranayama, shavasana and meditation therapy i.e. dharna & dhyan daily in the morning for 50 - 60 minutes for the period of 30 days in the supervision of yoga teacher and then allowed to practice at home for 2 months.

This paper throws light on chronic alcoholism, a combination of yogasanas, pranayamas and meditation practiced by chronic alcoholics for 3 months were found to cause significant changes in clinical, psychological and biochemical parameters which are found to be abnormal in chronic alcoholism.

## Executive Function Assessment among Adolescent Offspring of Alcohol-Dependent Fathers and Correlation with Emotional/ Behavioral Disturbances

Nattala P, Thomas K M, Murthy P, Jacob P, Christopher R, Jessy S V, Sumegha S

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#### Abstract:

**Introduction:** Growing up in a home with parental alcohol use is known to adversely impair executive function development during childhood/adolescence. However, related research is sparse in India.

**Objectives:** To assess executive functions among adolescent offspring of alcohol-dependent fathers and examine their association with emotional/behavioral disturbances in the adolescents.

**Methods:** Data from the first 39 adolescent offspring of fathers with alcohol dependence (AOFAD) in an ongoing study were analysed to assess their executive functions, and compared with 45 adolescent offspring of fathers with no alcohol dependence (AOFNAD). The BRIEF-2 was used to assess executive functions which compose three indexes: Behavior Regulation Index (BRI), Emotion Regulation Index (ERI), Cognitive Regulation Index (CRI), and an overall summary score, the Global Executive Composite (GEC). The Strengths and Difficulties Questionnaire (SDQ) was used to assess for emotional/behavioral disturbances, represented by the Total Difficulties Score. Higher scores represented higher dysfunction/disturbances.

**Findings:** Adolescents in AOFAD group (versus non-AOFAD) had significantly higher GEC scores (p<0.0001), suggesting overall executive dysfunction. Further, significant dysfunction was noted in the AOFAD group (versus non-AOFAD), in all three indexes: BRI, ERI, CRI (p<0.0001). GEC score was positively correlated with Total Difficulties Score (p=0.001), and two sub-domains, viz. Emotional Problems and Hyperactivity (p=0.001). This indicated that more the disturbances among the AOFAD group, greater the overall executive dysfunction.

**Conclusions:** The findings provide a basis for developing family-based interventions to reduce the deleterious impact of a stressful home environment due to father's drinking on executive function development and mental wellbeing during this critical life stage.

## Relationship of Metacognition, Cognitive Flexibility and Personality with Cognitive Dissonance and its Resolution among Males with Alcohol Dependence

Vijayapriya CV, Rai S

#### vijayapriyacv@gmail.com

#### Abstract:

**Background:** Studies have shown that the concept of cognitive dissonance plays a major role among patients with alcohol dependence. Based on this, the clinical parameters contributing to the state of dissonance, resolution of dissonance and its effect on behaviour are also highly essential to obtain a thorough understanding of the process. Due to the dearth of literature in this area, the present study was designed to examine the relationship of cognitive dissonance with metacognition, personality and cognitive flexibility and attempted to understand the process of resolution of cognitive dissonance.

**Method:** Two scales and a questionnaire measuring cognitive dissonance, metacognition and personality as well as a cognitive task measuring cognitive flexibility were administered on 30 males with alcohol dependence in the age range of 18 to 50 years. Five subjects were further recruited for a telephonic in-depth interview to understand the process of resolution of cognitive dissonance.

**Results:** The study identified that cognitive dissonance was associated with the overall score of metacognition and four of its constituents, i.e. monitoring, information management strategies, evaluation and declarative knowledge. Monitoring was found to be contributing to 28.3% of the scores on cognitive dissonance. The study also found that lower lie scores of Eysenck's Personality Questionnaire (Short-form Revised) predicted higher levels of cognitive dissonance. Cognitive dissonance was resolved by means of changing attitudes and replacing cognitions, engaging in alcohol incompatible behaviours and reducing the importance of dissonant cognitions.

**Conclusion:** The present study provided sufficient evidence for the relationship of cognitive dissonance with metacognition and social desirability but not for cognitive dissonance with personality and cognitive flexibility. It also provided sufficient evidence for understanding the process of resolution of cognitive dissonance among patients with alcohol dependence.

## **Health Issues Related to Alcoholism**

#### Singh R, Sharma S

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#### Abstract:

Alcohol consumption is not only a causal factor in various diseases, but also a precursor to injury and violence. It affects physical, mental and social health of individuals. Furthermore, alcohol consumption has negative impacts that can spread throughout a community or a country. WHO Report (2002) states that alcohol, illicit drug and tobacco use are three major risk factors out of leading 20 selected risk factors. WHO Global status report (2011) on alcohol and health stated, "The harmful use of alcohol results in approximately 2.5 million deaths each year. Almost 4 per cent of all deaths worldwide are attributed to alcohol." In India, the National Crime Records Bureau (NCRB) data revealed that there has been a continual rise in the total number of alcohol-related deaths. The National Household Survey of Drug and Alcohol Abuse 2003 (NHSDAA) in a nation-wide prevalence of drug use, recorded alcohol use in only 21% of adult males. The prevalence of current use of alcohol ranged from a low of 7% in the western state of Gujarat (officially under Prohibition) to 75% in the North-eastern state of Arunachal Pradesh. Prevalence among women has been estimated to be <5 per cent but is much higher in the North-eastern states. Significantly higher use has been recorded among tribal, rural and lower socioeconomic urban sections. Alcohol affects endocrine, sensorineural, and vaso-vagal systems. It affects virtually every organ system in the body and may lead to coma and death. The consumption of Alcohol is a causal factor in 60 types of diseases and injuries. Worldwide alcohol is responsible for physical health problems caused due to damage of internal organs or through injuries due to road traffic accidents. Management of alcoholism/addiction needs multi-disciplinary approach and requires identification of problem, its treatment, rehabilitation and prevention of recurrence. The AUDIT (alcohol use disorders identification test) is the best test for screening because it detects hazardous drinking and alcohol abuse. AUDIT is sensitive in the areas with lower prevalence of alcoholism. Treatment of alcohol is achieved with medical and psycho-social intervention, while withdrawal is best accomplished with benzodiazepines. Other agents that have been used with some success in the treatment of withdrawal include beta-blockers, clonidine, phenothiazines, and anticonvulsants. Newer strategies should be developed for identification of alcohol related disorders in community. Intervention packages and diagnostic test batteries for screening and diagnosing the alcohol related disorders in India also should be identified and developed.



## A Novel Biomarker for Inhalant Addiction: Preliminary Investigation of Stress Biomarker Response in Adolescent Inhalant Users from India

Bhad R<sup>1</sup>, Jain R<sup>2</sup>, Rao R<sup>3</sup>, Dhawan A<sup>4</sup>

Department of Psychiatry & National Drug Dependence Treatment Centre (NDDTC), AIIMS, New Delhi, India

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#### Abstract:

**Background:** Inhalant use disorders is global problem and it is more prevalent drug problem in adolescent population compared to adults in India. However, little is known about pathophysiology and neurobiology of the inhalant use. Insights into neurobiology of inhalant use can open avenues for development of new drugs, assessment of harms and monitoring progression of inhalant use disorders.

**Objective:** To study whether serum Cortisol, DHEA-S levels in adolescent patients with inhalant abuse differ from that of healthy controls and correlates with stress/coping

**Methods:** A cross sectional, case-controlled design was used to investigate serum Cortisol, DHEA-S levels in adolescent male patients aged 13-18 yrs., urban background, with recent inhalant use (n=40) vs of healthy controls (n=20) recruited at community outreach centre for drug treatment. Serum biomarkers assessed using sandwich ELISA technique. IEC clearance was obtained.

**Results:** Mean age of the participants was 17 (S.D. = 1.859, I.Q. 15-18). There was no significant difference in socio-demographic profile of both the groups. There was a significant difference between serum levels of stress biomarkers Sr Cortisol (t-test 3.97(E-07)) & Sr DHEA-s (t-test 8.13(E-05)) in both the groups.

**Conclusions:** The findings are suggestive of inhalant abuse in adolescent is associated with higher Sr. Cortisol level & lower Sr. DHEA-S levels. Stress biomarkers (Sr Cortisol & Sr DHEA-s) can be potentially utilized for diagnosis as well as a prognostic marker for adolescent inhalant abuse.

## Cannabis Use as a Predictor of Earlier Onset of Bipolar Affective Disorder

#### Sharma M, Hegde S

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#### Abstract:

**Background:** Age at onset (AAO) in affective disorders is of significant prognostic value. Substances like alcohol, cannabis may affect the onset, course and outcome of BPAD. Cannabis already has an established role as a risk factor for schizophrenia. It remains one of the most illicit drugs used among patients with BPAD. However, there is scarcity of research among Indian population to assess its association prior to the onset of BPAD, which calls for the need of study in this regard

**Aims:** To compare the AAO of BPAD among subjects with prior history of cannabis use and those without cannabis use and to assess course and outcome of affective episodes in both the groups.

**Methodology:** 60 patients presenting to the psychiatry in- and outpatient department with BPAD were administered a proforma with details pertaining to socio-demographic data, family and past history of psychiatric disorders, AAO of cannabis use and first episode of mood disorder, frequency of cannabis use and other clinical variables were recorded. Written informed consents were taken.

**Results:** Patients with cannabis use prior to the onset of affective episode (Group 1) had an earlier onset as compared to patients without prior cannabis use (Group 2). Mean AAO of first affective episode among Group 1 was found to be  $20.3\pm3.74$  while it was  $23.5\pm5.84$  among Group 2 with a p-value of 0.0142 (statistically significant).

**Conclusion:** The main finding of our study was that cannabis use prior to onset of affective disorder was associated with an earlier age of onset of BPAD and a poorer outcome.

## The Association between Intensity of Cannabis Use and the Probability of Transitioning to Cannabis Use Disorder

#### Lev-Ran S

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#### Abstract:

**Background:** Intensity of substance use has been shown to be associated with increased risk of developing substance use disorders. Nevertheless, whereas intensity of nicotine use is commonly measured as cigarettes per day and intensity of alcohol use is commonly measured as grams per day, intensity of cannabis is commonly based solely on to frequency of use.

**Objective:** The goal of the study was to explore the utility and predictive properties of "cannabis load" – a novel measure integrating frequency and dose of cannabis used and defined as number of cannabis joints consumed per week.

**Methodology:** Participants ≥18 years were interviewed in the National Epidemiologic Survey on Alcohol and Related Conditions-III (NESARC-III; 2012-2013 (N=36,309)). Univariate and multivariate discrete-time survival analyses were performed, and survival plots were used, to examine the association between "cannabis load" and probability of transitioning to Cannabis Use Disorders (CUD) across several sociodemographic and clinical categories.

**Results:** The cumulative probability of transitioning from cannabis use to CUD among cannabis users consuming 7, 14 and 42 joints/week was 7%, 14% and 50%, respectively. A 50% probability of transitioning to a CUD was found among women using approximately 35 joints/week and among men using approximately 40 joints/week (p<0.0001). Using the same number of joints/week, individuals with depressive and anxiety disorders were at significantly (p<0.0001) higher risk of transitioning to a CUD.

**Conclusions:** "Cannabis load", defined as number of joints/week, provides important information as to the probability of transitioning to a CUD in the general population and across several sub-populations.

## Theta Burst Stimulation to Bilateral Dorsolateral Prefrontal Cortex in Patients with Alcohol Dependence - A Randomized Double Blind Sham Controlled Trial

Mahadevan J, Holla B, Sagi MR, Mehta UM, Keshavan M, Venkatsubramanian G, Benegal V

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jayantmahadevan@gmail.com

#### Abstract:

**Background:** There is a paucity of effective treatments for relapse prevention in alcohol dependence. Repetitive Transcranial Magnetic Stimulation (rTMS) to the dorsolateral prefrontal cortex (DLPFC) has been seen to be effective in reduction of craving in alcohol, nicotine and cocaine dependence.

**Objectives:** To compare the effects of bilateral DLPFC theta burst stimulation (TBS) and sham TBS on craving and time to relapse in alcohol dependent subjects

**Methodology:** A total of 60 male alcohol dependent inpatients were randomized to one of 4 groups [Bilateral True TBS (A), Right Sided True TBS (B), Left True TBS (C) and Bilateral Sham TBS (D)]. They received 12 sessions over a period of 6 days. Craving was assessed at baseline and after completion of the sessions and patients were followed up for a period of 3 months or till relapse whichever was earlier. RMANOVA was used to analyse the change in craving between groups. Survival Analysis was used to analyse time to relapse between groups.

**Results:** There was a significant reduction of craving in all 4 groups after treatment, however no differences was noted between groups. There was no difference between Groups A, B and D in terms of time to relapse during follow-up. There were significant differences in time to first drink between Group C and D at 2 weeks after the sessions. However, this difference did not persist during the rest of follow-up.

**Conclusions:** TBS may delay time to relapse in individuals with alcohol dependence, however the effects appear to be short lasting.

## A Study of Serum Brain Derived Neurotrophic Factor Levels in Patients with Alcohol Dependence during Withdrawal.

Kethawath SM, Jain R, Dhawan A, Sarkar S

Department of Psychiatry and National Drug Dependence Treatment Centre (NDDTC), All India Institute of Medical Sciences (AIIMS), New Delhi, India <u>shantimohankethawath.143@gmail.com</u>

#### Abstract:

**Background:** Brain-Derived Neurotrophic Factor (BDNF) is a neuropeptide which plays an important role in central nervous system development, plasticity, learning and memory. Its role has been explored in alcohol dependent patients, though the results have been inconclusive.

**Aim**: To compare serum BDNF levels in alcohol dependent patients during withdrawal with age and gender matched healthy controls, and assess the change in BDNF levels in initial abstinence period.

**Methodology**: Twenty-five cases with a diagnosis of alcohol dependence were compared with twenty-five healthy controls. BDNF levels for all participants were measured at baseline. Additionally, BDNF levels were measured in patients with alcohol dependence on 5th and 10th day of inpatient detoxification.

**Results**: BDNF levels of controls did not differ with cases on day 1, day 5 or day 10 (t = 1.437, p = 0.157; t = 0.483, p = 0.631 and t = 1.152, p = 0.255 respectively). But BDNF levels increased significantly during alcohol abstinence from base line to day 10 (Pillai's Trace F = 3.753, p = 0.039, partial  $\eta$  2 = 0.246). BDNF levels also significantly correlated with total duration of alcohol use as well as total duration of regular alcohol use.

**Conclusion**: Serum BDNF levels significantly increased during alcohol withdrawal which may suggest its protective role in alcohol dependence during abstinence.

## ORAL COMMUNICATIONS 5: Day 2 – 14 Nov 2019 – 14:15 pm to 15:45 pm – Hall 8

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### Design of Brief Intervention for Alcohol Use Disorders, Harm Reduction and Suicide: An International Perspective

Hill R, Benson P, Hill A

#### hill999@aol.com

#### Abstract:

This presentation reviews the design of Brief Interventions as it relates to hazardous drinking, and the impulsive and violent behaviours that often accompany it. Brief Intervention can be effective against binge drinking and suicidal behaviors. The design of Brief Interventions for specific populations should be contextually relevant. The authors discuss the implementation and delivery of BI in acute and ambulatory care settings in a native Canadian population with an emphasis on outcomes data relevant to hazardous drinking and suicidal behaviors. Newer approaches to the delivery of brief interventions by information technology are outlined. The integration of brief interventions with other approaches to harm reduction is discussed.

## ADHD and the Risk of Substance Use amongst Youth

#### Hussain K.

Child Psychiatry Fellow Physician, Rush University Medical Center, Chicago, USA <u>dr.kumail@gmail.com</u>

#### Abstract:

India has one of the largest proportions of children and adolescents in the world. While there has been much studied on substance use amongst adults, there has not been much research done on substance use in youth. It is during early adolescence that many are in the phase of experimentation and are the victims of societal pressures and can have their first encounter with drugs. Throughout the world there is a growing trend of substance use amongst the youth and substance use in India has not been any different. In a prevalence study done in India, it was found that 13.1 % of people involved in substance use in India are below the age of 20. In another survey conducted in India it was found that 63.6 % of the substance uses currently in treatment were exposed to drugs at the age of 15 or younger. While substance use can put the youth at risk for a range of medical and psychiatric complications in the future, the question arises in what can put the youth at risk for a substance use disorder. One particular disorder that can place youth at risk for substance use in youth with childhood onset ADHD. We will examine the relative risk of substance use in youth with childhood onset ADHD versus youth without ADHD in this workshop. We will also examine the various substances that early clinical studies have shown to be linked to childhood onset ADHD.

## Management of Substance Use Disorders in Pregnancy: An Update

#### Roub FE

Department of Addiction Medicine, Post Graduate Institute of Medical Education and Research (PGIMER), Chandigarh, India peshionaakriti@gmail.com

#### Abstract:

**Substance Use Disorders in Pregnancy: Introduction and Epidemiology**: Substance use disorder in pregnancy is a significant public health problem which has multiple adverse consequences both for the mother and the child. The incidence of substance use in pregnancy differs among populations and regions.

Assessment of Substance Use Disorders in Pregnancy: Substance use is identified through antenatal screening. Education, empathy and ongoing support involving a multidisciplinary team should be offered. Substance use is identified through antenatal screening. Education, empathy and ongoing support involving a multidisciplinary team should be offered.

**Management of Substance Use Disorders in Pregnancy: Alcohol, Tobacco and Opioids:** Specialized care involving a team of psychiatrists, specially trained in addiction medicine, obstetricians, and paediatricians are needed for the management of withdrawal, adverse effects and rehabilitation of the mother and the child in a safe and secure environment.

Management of Substance Use Disorders in Pregnancy: Sedative- Hypnotics, Cannabinoids and Others with Future Directions: Substance use disorders have implications for pregnancy care, neonatal care, education, employment, social justice, relationships, physical and mental health, legislation and policing. It is an up-coming area of research and much can be done to improve women's health, mental health and pregnancy outcomes and to address the root cause of their substance use.

# Plasma BDNF and Cognitive Dysfunctions in an Egyptian Sample of Chronic Heroin Users

ElGhonemy SH, Soliman A, Zaki N, Farag M

#### selghonamy@hotmail.com

#### Abstract:

**Background**: Few studies reported cognitive deficits in patients with chronic substance abuse with no consistent pattern of cognitive deficits especially among the patients with heroin abusers.

**Objective**: To determine the pattern of the cognitive dysfunction in Egyptian patients with chronic heroin users by applying a battery of neuropsychological tests and its relation to BDNF plasma level

**Method**: Fifty patients with chronic heroin abusers selected from the inpatient and outpatient departments evaluated for cognitive dysfunction and compared with 38 healthy controls matched for age, sex and education. Each subject was diagnosed by SCID-I, The severity of addiction was assessed, battery of neuropsychological tests was introduced for assessing the cognitive functions and laboratory evaluation to BDNF plasma level was done.

**Results**: Compared to controls, patients with heroin abuse had worse cognitive domains of total intellectual functions, visual, verbal, immediate memory and executive function (p<0.005). Meanwhile, a statistically significant higher plasma level of BDNF was found among cases. Furthermore, there was no statistically significant correlation between BDNF plasma level and different neuro-cognitive functions (p > 0.05).

**Conclusion**: Patients with chronic heroin abuse suffered from dysfunction of multiple cognitive domains that could be detected by neuropsychological tests. Moreover, BDNF is one of the patho-physiological factors that has role in development of addictive behaviors and continued drug use and relapse.

# Association between Smoking and Suicide Risk in Schizophrenia: Smoking Gun or Just Smoke and Mirrors?

Sankaranarayanan A<sup>1</sup>, Castle D<sup>2</sup>, Baker A<sup>3</sup>, Richmond R<sup>4</sup>

<sup>1</sup> School of Medicine, Western Sydney University, University of Sydney, Australia

<sup>2</sup> University of Melbourne, Australia

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#### Abstract:

**Background**: Risks of suicide and suicidal behaviours are higher among people with schizophrenia. Smoking has been identified as a risk factor for suicide among the general population; people with schizophrenia are more likely to smoke than the general population. We undertook multiple levels of analysis to explore the association between smoking and suicidal behaviours in schizophrenia.

**Objective**: The objective of this presentation is to summarize results of our research into the association between smoking and suicidal behaviours among people with schizophrenia.

**Methodology**: We used data from two studies (a large Australian epidemiological study in psychosis, the Survey of High Impact Psychosis (SHIP), and an intervention trial, the Healthy Lifestyles Intervention study) to conduct a systematic meta-analysis. We explored associations between smoking and suicidal risk and suicidal behaviour among people with schizophrenia. We also explored the burden associated with smoking as a suicidal factor and the effect of reducing or stopping smoking on suicidality.

**Results**: Among 1812 participants in the Australian SHIP study, current smoking and lifetime smoking were associated with lifetime suicide attempt on univariate analysis. Smoking contributed to 21% of the suicidal behaviours in the sample. Meta-analysis of 13 studies involving 6813 patients showed smoking to be significantly associated with suicidality (OR 2.12; 95% CI 1.67-2.7). Smoking reduction was found to be significantly associated with reduced suicidality (even after adjusting) at 12 months among 235 people that participated in a randomized trial of healthy lifestyle intervention trial.

**Conclusions**: Smoking appears to influence suicidality independently; we will discuss the potential explanations for the interaction.

<sup>&</sup>lt;sup>4</sup>UNSW, Australia

## Pattern of Substance Use in Elderly Patients Attending Tertiary Care Drug Dependence Treatment Centre of North India

Aarti, Singh P, Gupta R

Department of Psychiatry, Institute of Mental Health, Pt B.D. Sharma PGIMS Rohtak <u>karahdaaarti@gmail.com</u>

#### Abstract:

**Background**: Elderly population is particularly vulnerable to misuse of psychoactive substances and can lead to a number of harmful consequences. Research is scarce regarding pattern of substance use in elderly in India.

**Objective**: To study the pattern of use in elderly patients with substance dependence.

**Methodology**: A cross-sectional study was done on fifty patients, selected using purposive sampling, aged ≥60 years, who belonged to either gender and diagnosed with ICD-10 criteria for Mental & Behavioral disorder due to substance use. Sample was collected from patients attending services at SDDTC, PGIMS Rohtak. Consent form was used and ethical clearance was obtained for the study. DAMS proforma and a semi-structed questionnaire was used to assess patient's correlates for substance usage pattern. Descriptive statistics were applied for statistical analysis.

**Results**: Most of cases were males, belonged to rural background, with currently residing in joint family type pattern, educated up to middle school & currently retired. Majority came with current usage of tobacco followed by alcohol and benzodiazepine usage, and least for opioid followed by cannabinoids. Among the ever-used substance of abuse, tobacco was in majority, followed by alcohol, benzodiazepines, cannabinoids and least for opioids. Majority had onset of substance intake in their second decade. Concurrent evaluation revealed most frequent presence of anxiety symptoms followed by depressive illness.

**Conclusions**: Older people who continue to use substance and require the support of services for treatment and care are an important emerging population and their specific needs should be recognized.

## The Spectre of Varied Third Wave CBT Protocols in Hampering Mindfulness Intensification in Addictive Disorders

#### Selvapandiyan J

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#### Abstract:

The third wave CBTs (Dialectical behavior therapy, Acceptance and Commitment therapy and Metacognitive therapy) are characterized by the induction of mindfulness paradigm as a major strategy in their treatment protocol. The current usage of third wave cognitive behavioral therapies designed for addictive disorders offers specific conceptualizations that would guide the therapist in implementing the intended therapy for this group of disorders. The negative side of these protocols could have a diluting effect on the intended purpose of training in core mindfulness techniques. Therefore, it requires reframing from a mindfulness focal point for better therapeutic application. Even though the case conceptualizations suggested in these therapies have good internal validity and consistency, there is increased possibility that the patient may get lost in the tangents and fail to master the core strategy. This presentation aims to clarify these issues and offers suggestions to overcome these difficulties. The presentation starts with description of facts regarding mindfulness approach for addictive disorders. This is followed by discussion on the extant models dealing with mindfulness practice. Then the roadblocks to the unitary models of mindfulness application which is followed by redefining mindfulness practice to suit current world practice in addictive disorders.

## Avoiding Opiate Dependency by Prescribing Low Dose Ketamine for Intense Chronic Pain with Depression and Anxiety?

Hart M, Cernovsky Z

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#### Abstract:

**Background:** Ketamine, in large doses, is abused frequently. In contrast, scientific publications in the last decade have reported cases of its successful use in low dose as antidepressant in high risk suicidal patients. It is a non-addictive analgesic agent, when used in therapeutic range. Patients with severe unrelenting chronic pain usually develop depression and anxiety as associated symptoms, are at high risk for suicide, and unfortunately, are almost always prescribed opiates.

**Objective and Methodology:** We present two case studies of ketamine use on patients with intense chronic pain, depression, and anxiety.

**Results:** Case Study 1: A 55 year old lady with history of severe depression poorly controlled by antidepressants, anxiety, and also with chronic pain from osteoarthritis, fibromyalgia, and lower back pain (injury to L3-L5 from a car accident) reports about 60% relief from depression, 80% from anxiety, and also a pain relief after placed on 75 mg every 3 rd day.

Case Study 2: 72 year old gentleman with chronic back pain and pain from multiple bone fractures in his lower legs several years ago; several surgeries were needed, but walking remains painful. A stroke a few years ago left his left limbs partly paralysed, with excessive muscle tonus preventing the use of fingers on left hand. Ketamine administered every 3<sup>rd</sup> day allows him far more extensive use of his left limbs and reduces depression, anxiety, and pain.

**Conclusions**: Therapy with low dose ketamine allowed these patients to avoid opiates and controls depression, anxiety, and pain.

# New Digital Adolescence – Gaming Disorders and Social Networks

#### Alexinschi O.

Institute of Psychiatry Socola, Iasi, Romania alexinschi@yahoo.com

#### Abstract:

Immersion in digital universe offers interesting data for considering new psychodynamics, although the risk for false identities abound in social media such as Facebook, where there are more than 2 billion monthly active users. Continuous feeds of information from Snapchat, Facebook or Instagram determine a social adaptation that was unthinkable by in the past except perhaps science fiction authors. Nowadays, it is crucial for clinicians, to become aware of new behavior addictions, such as gaming disorders and to understand the current risks that increased use of social media offers.

**Objectives:** Identity and the Internet are emerging as a separate field of study due to the impact of Internet-based applications and social networking sites. Continuous feeds of information from Snapchat, Facebook or Instagram determine a social adaptation that was unthinkable by in the past except perhaps science fiction authors. Immersion in digital realities offers interesting data for considering new psychodynamics, although the risk for false identities abound in social media such as Facebook, where there are more than 2 billion monthly active users.

**Method**: I reviewed literature in order to find specific anchors that enable retaining of subjects into the digital world.

**Results:** Gaming disorders and social network intensive use might cause important social and behavior disruption, especially to teenagers and psychologically vulnerable population. In the review we found applications such as Second Life (an online virtual reality application where one could construct an entire interactive identity capable of interpersonal and financial transactions, with more than 50 million users), where people had reported having more success than in their real lives. Also there were subjects that have entered therapy because of social media–based relationships interference.

**Conclusion:** In the present days, it is crucial for specialists to become aware of new behavior addictions and to understand the current risks that increased use of social media offers. One can easily become a victim when participating in chat groups wherein others are using false identities, often for a specific purpose like sexual predation. Brand new high-tech revolution has changed radically the legal system's possibility to provide traditional protection

## ORAL COMMUNICATIONS 6: Day 2 – 14 Nov 2019 – 16:00 pm to 17:30 pm – Hall 7

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How Opioid and GABA Receptor Antagonists can return the HPA axis to Normal and Correct Stress Related Disorders such as Addiction, Neuroinflammatory Diseases such as Anxiety, Depression and Migraines

O'Neil G, Mellon A

#### alistair.mellon@freshstart.org.au

#### Abstract:

Addiction is usually managed by one of the following:

1) Psychosocial interventions, usually in a protected setting.

2) Use of agonist based pharmacotherapies typically to the opioid and GABA systems supplemented by antidepressants and antipsychotics.

3) Use of antagonist based pharmacotherapies to the opioid and GABA systems.

Each of these groups competes for attention and funding often at the expense of each other. The outcomes for each of these three approaches differ:

1) While psychosocial interventions delivered in a rehab environment can help patients in addressing their addiction, many patients struggle reintegrating successfully back into their previous community without suitable support. This can lead to relapse and a return to the rehab environment.

2) Whilst the use of agonists based therapies has been shown to help reduce illicit drug use and improve wider health outcomes, they are not suitable for everyone, invariable increases the length of time of dependence and struggle with providing a route out of addiction.

3) By being non-addictive, antagonist pharmacotherapies have struggled with compliance issues once a patient has been detoxed. The use of long acting antagonist delivered with safe detoxing methods has been shown to improve the long term outcomes and reduce the risk of overdose deaths. However, the provision of this treatment has been limited around the world.

We will discuss the treatment of opioid, amphetamine, cannabis and benzodiazepine addictions with opioid and GABA antagonists, and the wider implication of this treatment in stress related disorders.

## Detoxification of GHB Dependence by Diazepam and Baclofen-Case Series

#### Raay MEJ

#### maryejvr@gmail.com

#### Abstract:

Gamma-hydroxybutyrate (GHB) is a potent anxiolytic drug that is cheap and easy to selffabricate. Its effect is similar to a combination of ethanol and benzodiazepines. For people who have issues with uncertainty or anxiety, it is easy to regularly start using GHB. From regular use to dependence can be a matter of months. It is very dangerous to stop using GHB once it is necessary to take it every 2 hours. This can cause a delirium that can persist for over a week. In the past years research has shown that detoxification with pharmaceutical GHB is a safe and efficient treatment. Our experiences with a diazepam and baclofen protocol show that this is a safe and cheaper alternative. A case series will be presented with result form 2018.

## Prevalence and Risk Factors of Non-Fatal Opioid Overdose among People Who Inject Drugs (PWID) in India: A Community-Based Study

Saini R, Rao R, Parmar A, Mishra AK, Ambekar A, Agrawal A, Dhingra N

Department of Psychiatry and NDDTC, AIIMS, New Delhi, India saini.romil@gmail.com

#### Abstract:

**Background:** PWID experience non-fatal opioid overdose (NFOO) at high rates, which is predictive of future fatal overdose, an important cause of mortality among PWID. There is a dearth of literature on NFOO and associated risk factors from developing countries, including India.

Aims: To assess the rates of NFOO and NFOO-related risk factors among PWID in India.

**Methods:** Cross-sectional, observational study design. A total of 104 male PWID aged 18 years and above, receiving HIV prevention services were selected by simple random technique after their consent. The participants were then interviewed in a single session using a semi-structured questionnaire, WHO-ASSIST (for substance use pattern), Leeds Dependence Questionnaire, LDQ (for opioid dependence severity) and MINI 7.0 (for co-morbid psychiatric illnesses).

**Results:** Participants' mean age was 27.9 (SD 8.4) years. About 53.8% were unmarried and 51.9% were unemployed. The rates of NFOO were: 45.2% (n=47) ever, 25% (n=26) in past one year and 21.2% (n=22) in past three months. PWID with NFOO in last one year had significantly higher suicidality rates (p=0.03). The number of opioid overdoses experienced ever in lifetime (AOR: 3.72), abruptly switching from one opioid to another (AOR: 8.84), and concomitant use of benzodiazepines while injecting opioids (AOR: 11.98) predicted the risk of having an opioid overdose within the past year. While, increasing duration of opioid use associated with less likelihood of opioid overdose (AOR: 0.81).

**Conclusion:** PWID from India have high rates of NFOO, with several risk factors. There is a need for interventions like targeted educational campaigns, life-saving peer-led interventions, administration of naloxone by a non-expert to overcome the burden of morbidity and mortality of opioid overdose among PWID.

## Profile of Substance Users Seeking Treatment at Community Clinics in Northern India

Roub F

PGIMER Chandigarh, India fazleroub@gmail.com

#### Abstract:

**Background:** Treatment gap among substance users has been reported to be higher than patients suffering from other psychiatric ailments, substance users also suffer from greater stigma which leads to poor treatment seeking. To address this issue, community clinics have been initiated by many service providers in India.

**Objective:** To study the socio demographic and clinical profile of patients presenting to community de addiction clinics

**Methodology**: Retrospective charting of patients attending the community de addiction clinics **Results:** 386 patient sought treatment in four community clinics run by this centre in year 2017. Patients were predominantly males (99.5%), majority belonged to the age group of 25-39 years (46%) and were usually educated up to class 10<sup>th</sup> (28.37%). Opioids were the major substance group (45.08%) followed by alcohol (43.07%). Among opioids, natural opioids were the predominant opioids in 63.95% followed by heroin (13.7%).

**Conclusions:** Community clinics may be one of the options in addressing the large treatment gap among substance users. Opioids are the predominant substance and are being used by the productive age group.

## Relapse Prevention with Depot Antagonist Preparations after Tapering of Substitution Therapy in OUD

Singh J

#### jaswinder1968@hotmail.com

#### Abstract:

**Background:** Medication Assisted Treatment with Substitution Therapy in form of Buprenorphine or Methadone is proven to be safe and effective in reducing the mortality and morbidity associated with Opioid Use Disorders. Since OUD is a chronic relapsing disorder this treatment once started is generally advised to be continued for indefinite period. However, some patients stable with Buprenorphine want to stop buprenorphine after a period of time due to different reasons. Reasons most commonly quoted are cost factor, difficulty in travelling to get buprenorphine, travelling abroad, challenging jobs, patient belief that they are cured of addiction, side effects with medicine etc.

**Methods:** We report a series of 46 patients in which we tapered buprenorphine. After stopping buprenorphine in first group of 22 patients, only comfort medicines were given, and second group of 24 patients were given monthly I/M depot naltrexone injections along with comfort medicines. All the patients in both the groups were psycho-socially stable at-least six months before stopping buprenorphine. In all the patients a gradual detox from buprenorphine was done in 7-10 days. In all these patients, weekly telephonic calls were made and urine was tested regularly either on office visit or by significant others at home for six months.

**Results:** In first group of 22 patients only comfort medicines were given after seven days. After three months 12 patients tested negative for illicit opioid in urine, 2 patients went out of country permanently, 2 patients were untraceable and 6 had relapsed back to opioid use. After six months 7 patients tested negative to urine opioids (33 %), 4 were untraceable and 9 had relapsed back to opioid use.

In second (naltrexone injection) group of 24 patients, first depot IM injection of naltrexone was given after 7-10 day of detox and after that, monthly injections were given. After 3 months 17 patients tested negative for opioid, 2 were untraceable and 5 had relapsed. After 6 months 15 IM depot naltrexone injected patients tested negative for opioid (65%), 3 were untraceable and 6 had relapsed.

**Conclusions:** We find that long acting preparation of opioid antagonists are safe and effective method to reduce the incidence of relapse after stopping substitution therapy in patients of opioid use disorders

## A Systematic Review of Mindfulness Interventions as a Stress Management Technique among Working Professionals

#### Gupta R, Saha S

Department of Psychology, Christ (Deemed to be) University, Delhi NCR, India rashika.gupta@psy.christuniversity.in

#### Abstract:

**Introduction**: Stress constitutes a significant portion of a working professional's life these days. Organizations are now adopting psychological interventions to help the professionals to deal with daily stress. Psychological interventions like mindfulness are required to improve the emotional wellbeing of working professionals as they help in improving concentration and organization of day-to-day tasks. Mindfulness is the state of being consciously aware of the present surroundings such as the workplace, home settings, etc. Mindfulness techniques have perceived to have improved workplace benefits such as improved memory, task commitment and enjoyment. A systematic review of empirical studies among working professionals was conducted to understand the effectiveness of mindfulness intervention trials.

**Method**: Research databases, like that of PubMed, ProQuest etc, were searched extensively for including the studies into this review. Empirical analyses of mindfulness-based interventions were the primary eligibility criteria for this study. Forty-five papers met the eligibility criteria where anxiety, depression, and restlessness were induced because of work stress; and interventional modifications were carried out to minimize them.

**Results**: Mindfulness-based interventions (MBIs) had positive outcomes in most researches. Reduced stress, positive thinking, and positive organizational environment were induced and working employees reported an increased sense of organizational citizenship. It can be recommended that control trials and interventions become a mandate for organizational functioning so that the working professionals find a stress reduced environment to work.

## Trends of Sedative-Hypnotics Use in Substance Users Attending De-Addiction Centre of Tertiary Care Setting in North India

#### Gupta A

Pt B.D. Sharma PGIMS Rohtak, India dravnigupta1993@gmail.com

#### Abstract:

**Introduction**: A good portion of substance using population belongs to the class of sedatives/hypnotics category of drug use. Benzodiazepines are the most commonly abused category of drugs in this class. Some deliberately use prescription medications for recreational purposes in order to achieve intoxicating or euphoric psychoactive effects, irrespective of prescription status.

**Objective**: To determine the prevalence and trends of sedative/hypnotic abuse and its sociodemographic correlates among those attending services at a drug deaddiction center in a tertiary care setting in North India.

**Methodology**: A retrospective study was conducted at State drug deaddiction treatment center, Post Graduate Institute of Medical Sciences Rohtak. A sample of sedatives/hypnotics substance of abusers was collected using the Drug Abuse Monitoring System (DAMS) proforma from the duration of January 2015- December 2018. Following socio-demographic characteristics was correlated: age, sex, marital status, education, employment status, current living arrangement, co-existing substance use, history of IDU, concurrent psychiatric illnesses and history of treatment seeking for drug abuse, if any.

**Results**: The total sample of those seeking treatment for sedative-hypnotic drug abuse at State Drug Deaddiction center was 241 in the duration year 2015-18, which was included in the analysis. The mean age of total sample was 33.08 years (±11.04 years), with range from 15-68 years. 14 (5.8%) were aged <20 years and 11 (4.6%) were >60 years of age. There was overwhelming majority of males (96.7%). Majority were married (61.8%) at the time of treatment seeking. Previous history of treatment seeking was found in only 38 cases (15.8%).

**Conclusion**: Findings suggest that alprazolam is most abused among the sedative/hypnotic class, followed by diazepam and nitrazepam. There is need for further studies to document the extent, patterns and trends of sedatives/hypnotics drug abuse to appreciate the magnitude and severity of the problem

## **Assessing Substance Misusing Mothers**



Vella AM

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#### Abstract:

Background: 'A substance misusing mother is definitely a bad mother!'

Many times in my work as a medical doctor working with substance-misusing women I come across this perception both from the mothers themselves as well as from other professionals. This presentation will discuss whether substance misuse in itself is indeed a barrier to adequate parenthood and whether women testing positive for illicit drugs should be automatically considered bad mothers and their children to be considered at risk.

**Method**: A literature review of some case laws in the UK, US and Malta was examined to see what medico-legal approach was adopted in each country and the following questions were sought to be answered: If the substance-misusing mother continued her drug misuse during her pregnancy did that qualify her as very dangerous to her children? Which drugs were the most dangerous: prescribed or illicit? Does the substance-misusing mother have autonomy over decisions taken during her pregnancy or does substance-misuse render her incapable to give her opinion? Where do we draw the line? After delivery of the neonate, if the mother stopped her substance misuse should another chance be given her? How many chances should be given?

**Conclusion**: The presentation will conclude with examples of assessment tools that may help professionals to assess whether a substance-misusing mother is putting her child at risk or not and how parenting could be properly assessed both during and after pregnancy.

## Feasibility and Acceptability of Group-based Neuroscienceinformed Psychoeducation (NIPE) Intervention in Substance Use Disorders

Rezapour T, Barzegari M, Sharifi E, Malmir N, Noroozi A, Ekhtiari H

#### rezapour t@iricss.org

#### Abstract:

**Background:** Substance use disorders are commonly associated with lack of insight and knowledge about the addiction related problems as well as treatment related facts. This poor awareness may lead to decreased compliance with treatments and poor outcomes.

**Objective:** The present study aimed to evaluate the feasibility and acceptability of a brief, 4-session open group psycho education intervention for subjects with SUD.

**Methodology:** 100 subjects with SUD were randomized to attend four 2-hr sessions delivered weekly and to waitlist control. Both groups received similar treatment as usual (TAU) during the study. KAB (Knowledge, attitudes, and behaviors) and BSW (benefit, satisfaction, and willingness to continue) were assessed at pre-intervention and post-intervention and 1-month follow-up.

**Results:** Our results indicate that the PE intervention was feasible and acceptable for substance users who were receiving TAU. Changes in knowledge, attitudes, and behavior were significant in the group that received PE plus TAU. Moreover, the group with PE were willing to continue the NIPE sessions and evaluated it as a beneficial and satisfiable treatment.

**Conclusion:** Our study demonstrates the added value of providing substance users with a neuroscience informed psychoeducation to change their knowledge, attitude and behavior. Engaging this group of subjects in this treatment may raise the awareness about their symptoms, negative consequences of behaviors, and need for treatment.

## ORAL COMMUNICATIONS 7: Day 2 – 14 Nov 2019 – 16:00 pm to 17:30 pm – Hall 8

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## A Study of Objective Sleep Parameters in Opioid Dependent Patients Maintained on Buprenorphine

#### Tripathi R, Dhawan A, Rao R, Jain R

#### drricha12@gmail.com

#### Abstract:

**Background:** Opioid dependent individuals frequently complain of sleep problems in withdrawal and abstinence. While there are multiple subjective and objective sleep studies on effect of methadone on sleep, very few researches exist on association of buprenorphine with sleep problems. The aim of present study was to assess objective sleep parameters in buprenorphine-maintained opioid-dependent patients.

**Methodology:** The study was a cross-sectional observational study and was conducted in two phases-subjective and objective sleep study respectively. Twenty-eight participants who have Pittsburgh sleep quality index (PSQI) scores >5 in subjective assessment underwent overnight polysomnography.

**Results:** All participants were males. The mean age and mean BMI of sample were 40.1 years (SD-13.3) and 20 (SD-6.2) respectively. These participants were on OST for a median duration of 84 months IQR (12, 144). The mean dose of buprenorphine was 9.1 milligrams (SD 3.6) and participants had excellent compliance with mean duration of buprenorphine use for 29.5 days (SD 1.1) in the previous month of the study. Urine screen was positive for cannabis in 75% (n=21) of participants. The mean total sleep time and median sleep latency were 349 minutes (SD 74.3) and 18.7 minutes (IQR 12.6, 42.1) respectively. The mean total recording time, total time in bed and total sleep period of the sample were 460.1 minutes (SD 74.7), 463 minutes (SD 50.3) and 421.5 minutes (SD 35.5) respectively.

**Conclusion:** The present study showed that patients on buprenorphine have substantial sleep problems and alteration in sleep pattern with observed changes in both NREM sleep and REM sleep.

### Why do People Who Inject Drugs Dissolve Opioids in Pheniramine Maleate? A Randomized, Double-blind Experimental Study

Dhagudu NK, Ambekar A, Agrawal A, Rao R, Jain R, Singh S

National Drug Dependence Treatment Centre (NDDTC), AIIMS, New Delhi, India <u>naveendhagudu@gmail.com</u>

#### Abstract:

**Background:** Mixing opioids in sedative/ hypnotic drugs like pheniramine maleate is a prevalent phenomenon among injecting drug users (PWID) in India. It is useful to study psychoactive effects of pheniramine among opioid dependent PWIDs. Hence this study intended to explore and assess the abuse liability of pheniramine maleate among buprenorphine maintained opioid dependent subjects.

**Objective:** To assess psychoactive effects of injection pheniramine maleate compared to injection buprenorphine in opioid dependent patients.

**Methodology:** This was a double blind, within subject, randomized, experimental, crossover study. The study subjects were opioid dependent, buprenorphine maintained volunteers, having a history of injecting drug use (n =14). Following informed consent and baseline assessment, we assessed the reinforcing and subjective effects of Intravenous (IV) pheniramine maleate (45.5mg), combination of buprenorphine-naloxone in 4:1, (i.e. Buprenorphine 2mg + naloxone 0.5mg), plain buprenorphine (2 mg), and normal saline.

**Results:** In Euphoria, assessed using Visual Analogue Scale (VAS), with pheniramine maleate had no difference with 4:1 combination of buprenorphine – naloxone but was significantly lower compared to plain buprenorphine (p=0.025) and significant higher than normal saline. In sedation, assessed using VAS and Pentobarbital Chlorpromazine Alcohol Group Scale (PCAG)), pheniramine maleate was not significantly different from other test conditions except with normal saline (VAS, p=0.004 and PCAG, p= <0.001). Four subjects falsely recognized pheniramine maleate as buprenorphine. In the opiate sensation scores, pheniramine maleate differed significantly from all test conditions (p= <0.001). The drug liking scores for pheniramine maleate significantly lower than agonist and active control, but persistently higher than neutral control (p=0.007).

**Conclusions:** Sedation and euphoria along with subjective experiences with pheniramine maleate indicates significant abuse liability, though lower than buprenorphine.

### A Study of Social and Cultural Aspects of Heroin Use in Jammu Region, India

### Chowhan A, Sakral A

### abhi3212007@gmail.com

### Abstract:

**Background:** Drug dependence can be a result of or can cause a number of socio-cultural issues. Our study aims to find socio-cultural issues of heroin addiction in a city in northern India. **Objective:** 1) To discuss socio-cultural issues associated with heroin dependence. 2) To study the socio-demographic variables associated with heroin dependence.

**Methods:** 244 patients visiting an outpatient psychiatric clinic for heroin detoxification were assessed for their socio-cultural and socio-demographic profile using a semi-structured questionnaire. Percentages were calculated and results analysed.

**Results:** More males visited the treatment facility. A majority of patients were of the age group 18-30 years (158 patients, 64.75%). About half of the patients were those who are either doing or dropped out from graduation (127 patients, 52.05%). A very high number of patients were from nuclear family (203 patients, 83.2%). Peer pressure and experimentation were major reasons for initiating heroin dependence. A large majority of patients had family disharmony and financial troubles due to heroin dependence.

**Conclusions:** This study has hence bought forward important socio-cultural anomalies associated with drug abuse in a small city and its periphery.

### Impact of a Rural Drug De-addiction Centre

Singh R, Singh O, Pakhare M

#### psy33d@gmail.com

#### Abstract:

**Background**: Drug abuse has become a worldwide problem. It has a devastating effect on the well-being of individual, family and society.

**Objective**: The study is carried out to evaluate the effect of treatment on socio-economic status and behaviour of patients who were managed with holistic treatment in a rural Drug Deaddiction Centre.

**Methodology**: For the present longitudinal follow-up study, random sampling was used for the selection of study subjects. A multi-parameter questionnaire (both open and close ended) was administered to the key member of the patients' family. It was designed to measure various aspects like current status of abstinence/drug use, social and family behavior, education, occupation and income of patients admitted in the Centre from 2010 to 2013 i.e. after a period of 5 to 8 years of admission.

**Results**: At the time of admission, more than half of the patients were in the age group of 15-30 years. A high prevalence of multiple drug abuse was noted amongst the patients. More than one third of the patients were observed to be abstinent or abstinent with maintenance therapy. Another, one fourth of the patients was abstinent with lapses i.e. occasional indulgence which did not interfere with their functional capabilities and family relationship. A substantial improvement was visible in their educational status, employment level, monthly income, domestic behavior and marital relationship post-treatment.

**Conclusions**: Present findings reveal high drug abuse amongst adolescents and youth. The nature of the disorder is so intractable that emphasis should be laid on preventive strategies.

### Yoga as an Adjuvant for Management of Opioid Dependence Syndrome: A Case Report

Varshney P, Sagar V, Sumana V, Bhargav H, Rashmi A, Narasimha GV, Murthy P, Vedamurthachar, Varambally S, Gangadhar BN

#### iampprraatteeeekk@gmail.com

#### Abstract:

**Background:** Opioid dependence syndrome (ODS) is a worldwide health problem that has enormous economic, personal and public health consequences. Yoga is a cost-effective mind-body intervention found useful in management of substance use disorders.

**Methodology:** We present a 32 year old married male suffering from ODS (ICD-10 criteria). Patient came from Manipur (India) and was addicted to injectable heroin (1gm/day) for the last 6 years. He had relapsed 6 times in the past with maximum abstinence for 1.5 months. Patient was admitted to NIMHANS with predominant withdrawal symptoms. He was started on buprenorphine (BPN) 2 mg/day which was gradually increased over a week to 10 mg per day. When he became stable (after a week of admission), he was referred to the NIMHANS Integrated Centre for Yoga. Patient performed a validated yoga program for 1 month (1 hour/day) under supervision followed by practice at home, with the assistance of supplied video and booklet. Assessments were done using standardized rating scales at baseline, at 3 months and 9 months of follow-up.

**Results:** Urine screening for opioids was negative at 9 months follow-up. Buprenorphine dosage was reduced to 6 mg after 3 months and 2 mg after 5 months respectively. Patient was without buprenorphine for last 4 months. There was a significant reduction in craving, withdrawal symptoms, anxiety, depression, pain and constipation at 3 months which continued to improve till 9 months. There was also an improvement in his sexual functioning, sleep quality and CGI scores.

**Conclusion:** Yoga may be potentially useful as an adjuvant in management of ODS.

### Sublingual Buprenorphine for the Management of Chronic Non-Cancer Pain in a Tertiary Care Setting in India: A Case Report Highlighting Practical Considerations.

George AB, Balhara YPS

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### Abstract:

**Background:** Chronic pain of any severity is a condition that adversely affects the quality of life and functioning of individuals and thus imposes significant costs and burden on the society. The prevalence of chronic pain varies from 6% to 80%. More than 40% are treated inadequately. The use of opioids for treating such conditions presents several challenges. Here, we discuss the management of chronic pain due to peripheral spondylo-arthritis of hip-joint with short-term sublingual buprenorphine.

**Objectives:** To highlight the difficulties in the assessment of an opioid use disorder in the context of chronic pain and to discuss the clinical issues in the use of opioids for the management of chronic non-cancer pain (CNCP).

**Case Description:** A 36 year old, married male, employed as a physician, from a semi-urban area presented to us with pain developing in bilateral hip joints since 21 months, which was moderate to severe in intensity, causing severe dysfunction, to the extent of limiting activities of daily living. At the time of presentation, the patient had started self-medicating with injectable opioids nalbuphine and butorphanol, in progressively increasing amounts and combined with injectable midazolam, due to inadequate pain relief despite multiple treatment-seeking attempts. The three foci of management were: assessment of pain and disability, assessment of drug use pattern and any psychiatric comorbidity and appropriate management of hip-joint disease.

**Results:** After completion of assessment, the patient's pain was comprehensively and satisfactorily managed with a short duration of sub-lingual buprenorphine up to 8mg per day, cognitive behavior measures and management of the underlying spondylo-arthritis. Diagnosis of a possible drug-use disorder could be clarified after continued observation during a 6 month follow-up period that revealed that the patient had developed a benzodiazepine dependence syndrome and no dependence to opioids, despite a history of harmful use.

**Conclusion:** The use of sub-lingual buprenorphine for managing CNCP may be considered based on individual case assessment and addiction psychiatrists can play an important role in a multi-disciplinary approach to the safe and effective use of opioids for managing pain.

### **Evidences to Inform Risk Reduction Interventions for People Who Use / Inject Drugs (PWUD/PWID) in Sri Lanka**

Herath S<sup>1</sup>, Ambekar A<sup>2</sup>

<sup>1</sup> Public Health Specialist, National STD/AIDS Control Program, Sri Lanka

<sup>2</sup> Professor, National Drug Dependence Treatment Centre, AIIMS, New Delhi, India

### sathya herath@yahoo.com

### Abstract:

**Background**: Information on drug use patterns helps countries to initiate specific interventions. Such a study of understanding pattern of drug use among non-institutionalized PWUD and PWID was carried out in Sri Lanka.

**Methods**: Quantitative data were obtained from 283 PWUD and 174 PWID, from six districts. Total of 36 Key Informant interviews (KII) were conducted with different stakeholders; (PWUD / PWID, Treatment provider, Family member / Spouse / partners, Law enforcement personnel. Ethics clearance was obtained from University of Colombo. Data analysed using SPSS V 21.0.

**Results**: More than 95% were males in their late 30s. Majority (>90%) were educated and employed. Addiction is largely on Opioids. While heroin smoking starts around 19-20 years, injecting starts around 28 years. About 83% injected 'daily' with 64% injecting '2-3 times per day'. Nearly 85% reported sharing needles, 64% shared in the last month, and 68% in the first instance of injecting. 52% of PWID and 38% of PWUD reported unprotected sex with commercial sex workers. More than 90% had been apprehended by police and large majority (84% PWID and 78% PWUD) had been to jail. The key informant interviews revealed widely prevalent misconceptions regarding harm reduction approaches.

**Conclusions**: While PWUD are at risk of transition to injecting, major concern is high prevalence of risky injecting and sexual practices. Specific interventions such as educating and monitoring the use of clean needles have been included under the routine prevention, care and treatment packages. Initiatives have been in place to address ineffective criminal justice system and poor access to evidence-based treatment.

# Examining Existing Standards of Care for Treatment of Substance Use Disorder in India

### Rao R, Sharma C, Kishore K, Kathiresan P

Department of Psychiatry and NDDTC, All India Institute of Medical Sciences, New Delhi, India princyaiims@gmail.com

#### Abstract:

**Background:** The recently conducted national survey of drug use in India shows that a substantial proportion of people suffer from substance use disorders in India and there is a huge treatment gap. Different ministries support different type of addiction treatment facilities with differing objectives and standards advocated to be followed.

**Objective:** To examine the existing standards of care (SOC) for treatment of substance use disorders in India.

**Methodology**: The study critically examined SOC documents and evaluation studies of the various drug use disorder treatment services available in India. As there were no available studies or SOC documents on private centres in India, a cross sectional, qualitative study was also conducted in 15 private centres in five states of India to understand the quality of services available there.

**Results**: Different ministries have different standards of care (SOC) documents for centres funded by them. However, mechanisms to ensure compliance are not robustly built. The health ministry supports 'De-Addiction Centres' (DACs) in Government hospitals and has recommended SOC that emphasizes on outpatient and inpatient care. There are well-laid down standards for processes to be followed for patient care and respecting patient's rights while providing treatment. However, evaluations conducted show few centres to adhere to these standards. The Ministry of Social Justice and Empowerment supports Integrated Rehabilitation Centres for Addicts (IRCAs). The SOC document lays emphasis on inpatient management and aftercare in outpatient basis with focus on psychological interventions predominantly. The IRCAs are expected to monitor regularly, but no reports are available in public domain. The Opioid Substitution Therapy (OST) centre supported by National AIDS Control Organization for People Who Inject Drugs are guided by well-developed SOC documents. Evaluation of these centres has found good client satisfaction. In the private centres, quality of services was poor in most centres with gross human rights violations. Most had inpatient settings only, were run by "recovering drug users" based on their experience and had poor client satisfaction.

**Conclusions:** There is an urgent need to establish uniform evidence-based and human rightsbased SOC for all addiction treatment facilities. There is also need to establish mechanisms for to ensure that these standards are followed to improve the quality of care for people suffering from SUD.

### Effect of Internet Addiction on Knowledge Seeking Behavior and Learning: A Comparative Study among College Students

### Singh S

Teerthanker Mahaveer Medical College, Moradabad, Uttar Pradesh, India <u>ss9953285101@gmail.com</u>

### Abstract:

**Introduction**: Internet addiction is a typical abuse of the internet that causes problems in the psychological, social, educational, or occupational functions of the users. Students need to use the internet more than other people due to their educational or research needs. Time spent on the internet use and quality of internet search may affect their learning patterns and academic performance.

**Objectives**: This study aims to investigate the effect of the internet addiction on the information-seeking behaviour of the postgraduate students. An effort is made to correlate the quality of internet use and its effect on learning and academic performance of the users as compared to their previous grades prior to the usage of internet.

**Method**: This is a comparative study composed of around 200 college students from different streams. Young's internet addiction scale (IAT) and researcher-developed questionnaire of the information-seeking behaviour was used as the data collection instruments. Research data were analysed using the descriptive statistics (mean and standard deviation) and independent t-tests.

**Results:** Will be discussed at the time of presentation.

**Conclusion**: Will be discussed at the time of presentation.

# ORAL COMMUNICATIONS 8: Day 3 – 15 Nov 2019 – 8:30 am to 10:00 am – Hall 8

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# Role of Mixed $\mu/K$ agonist in suppressing the Rewarding Effects Induced by $\mu$ -Opioid Agonist in Rats

### Raghav R<sup>1</sup>, Jain R<sup>1</sup>, Roy TS<sup>2</sup>, Dhawan A<sup>1</sup>

<sup>1</sup>National Drug Dependence Treatment Centre, Department of Psychiatry, All India Institute of Medical Sciences, Ansari Nagar, New Delhi, India

<sup>2</sup>Department of Anatomy, All India Institute of Medical Sciences, Ansari Nagar, New Delhi, India raghavrahul74@gmail.com

#### Abstract:

**Background:** The most actions of exogenous opioids, such as morphine, are mediated through  $\mu$ -opioid receptors. By contrast, the activation of the  $\kappa$ -receptor antagonizes various  $\mu$ -receptor mediated actions in the brain, including analgesia, tolerance, reward and memory processes. Therefore, the aim of present study was to provide more information about the possible action of acute and chronic co-administration of  $\kappa$ -agonist, nalbuphine on opioid dependence also it is not properly known whether the effects of acute and chronic doses of nalbuphine are similar in attenuating the opioid dependence.

**Method:** Male adult Wistar albino rats (n=160) were made physically dependent by administrating increasing dose of morphine and withdrawals were precipitated with naloxone. Nalbuphine was co-administered acutely and chronically in variable doses (0.1, 0.3, 1.0, 3.0 mg/kg, i.p.) with morphine. Somatic signs of withdrawals were scored by using Gellert-Holtzman (GH) rating scale. Thereafter, brain was carefully dissected out for tyrosine hydroxylase,  $\mu$  and  $\kappa$  expressions.

**Results:** Withdrawals from chronic morphine administration produces profound increase in GHscore whereas, TH levels were significantly decreased. Chronic co-administration of nalbuphine significantly suppressed the GH Score and  $\mu$ -opioid receptor levels, while increased the TH and  $\kappa$ -opioid receptors levels. No change was observed with acute co-administration.

**Conclusion:** These findings suggest that withdrawal-induced reduction in TH levels could be responsible for somatic and as well as subjective symptoms of opiate withdrawal and antimorphine action of the  $\kappa$ -receptor systems may lead to new drug design and therapeutic strategies for opioid addiction (Supported by ICMR, Govt. of India and nalbuphine gifted by RUSAN Pharma Ltd.).

### Long-Acting Buprenorphine in Clinical Practice – Experience so Far

### Capusan AJ, Heilig M

Center for Social and Affective neuroscience (CSAN), Linköping University, Linköping Sweden andrea.johansson.capusan@liu.se

#### Abstract:

**Background:** Opioid maintenance treatment is highly effective and potentially life-saving. However, patients may be unable to receive care if they cannot adhere to required daily visits for medication access or there is a lack of resources. The purpose of this study is to assess patients' self-reported withdrawal symptoms in those switched from sublingual buprenorphine to buprenorphine prolonged release (PR) injection (Buvidal).

**Method:** Patients currently on sublingual buprenorphine, irrespective of treatment phase, are offered the option of switching to weekly buprenorphine-PR initially, and monthly buprenorphine-PR after 6–8 weeks. Subjective Opioid Withdrawal Scale (SOWS), treatment satisfaction, Visual Analog Scale for craving, buprenorphine plasma level and drug urine tests are assessed at baseline and after switching. Focus groups are used to identify patient self-defined needs.

**Results:** Preliminary results from 15 patients (70% male, mean age 31 years) receiving an average dose of buprenorphine-PR 16.5 mg/day demonstrated a decrease of average SOWS scores from baseline 21 to 15 after reaching steady state plasma levels. In the first 2–3 weeks, patients (86%) experienced side effects. However, these symptoms remitted in all but two patients after 4–5 treatment injections. Patients expressed treatment satisfaction and increased stability with fewer patient visits.

**Conclusion:** Buprenorphine-PR decreased subjective experience of withdrawal, and increased subjective feeling of stability and treatment satisfaction in patients switching from sublingual buprenorphine.

Long-acting buprenorphine formulations can potentially lead to fewer patient visits, with less focus on control and increased patient self-efficacy but clinical experience is currently limited.

### Psychometric Properties of a Hindi Instrument for Self-Assessment of 'Recovery' in Opioid Dependence (OD)

Basu A<sup>1</sup>, Mattoo SK<sup>2</sup>, Basu D<sup>2</sup>, Subodh BN<sup>2</sup>, Sharma SK<sup>3</sup>

<sup>1</sup>Department of Psychiatry, All India Institute of Medical Sciences, Rishikesh, Uttarakhand, India. <sup>2</sup>Department of Psychiatry, Post-Graduate Institute of Medical Education and Research, Chandigarh, India

<sup>3</sup>Department of Statistics and Co-ordinator, Centre for Systems Biology and Bioinformatics, Panjab University, Chandigarh, India

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### Abstract:

**Background:** 15-20 % patients with OD are known to attain recovery which is the long-term treatment goal.

**Objective:** To develop and validate an instrument for self-assessment of recovery in OD – Hindi Assessment of Recovery Instrument (HARI).

**Methodology:** Mixed methodology study – in the qualitative arm through purposive sampling, focused group discussions and in-depth interviews among consenting males with OD using illicit or prescription opioids, care-givers or treatment providers a 5- point Likert-type self-rated HARI was developed. This instrument along with Hindi Addiction Recovery Capital Scale, Addiction severity Index (ASI) and WHO – Quality of Life-BREF questionnaire (Hindi ) was applied on 100 active OD, 56 abstinent on opioid substitution and 56 abstinent 'drug free'. The initial 70 items were subjected to exploratory factor analysis and further confirmatory factor analysis was also done (CFA).

**Results:** EFA (varimax) yielded a 45-item 5 point instrument with four constructs namely 'Holistic individual change' (F1), 'Future orientation' (F2), 'Behavioral aspects of drug use' (F3) and 'Psychological aspects of drug use' (F4). Similarity with a qualitatively derived understanding and expert opinion established the construct validity. Internal consistency checked with Cronbach's alpha was high with all > 0.7 except F4 which had an alpha of 0.64. Rest-retest reliability, concurrent, prospective, convergent and divergent validity were established by comparing HARI with standardized instruments and also by means of CFA. HARI also differentiated between OST and those abstinent (drug free).

**Conclusion:** The psychometric properties of HARI have been established. The instrument will be useful for monitoring 'recovery' among patients with opioid dependence.

### To Evaluate Neurocognitive Functioning among Intravenous Opioid Dependent Patients

### Sharma N<sup>1</sup>, Subodh BN<sup>1</sup>, Dhiman RK<sup>2</sup>, Nehra R<sup>3</sup>, Mattoo SK<sup>1</sup>

<sup>1</sup> Drug De-Addiction and Treatment Centre, Department of Psychiatry, PGIMER, Chandigarh, India

<sup>2</sup> Department of Hepatology, PGIMER, Chandigarh, India

<sup>3</sup> Department of Psychiatry, PGIMER, Chandigarh, India <u>vsvikas67@gmail.com</u>

### Abstract:

**Background:** Impairments in cognitive functions have been found among chronic opioid users. However, most studies are on a heterogenous population taking multiple substances. The contribution of opioid use in this impairment can be ascertained accurately only by studying exclusive opioid dependent patients.

**Objectives:** To evaluate the neurocognitive functioning among intravenous opioid dependent patients.

**Methodology:** 34 male patients (age 18-60 years) with opioid dependence (OG) and 33 healthy controls (CG) were taken. Patients with other substance dependence or comorbid psychiatric illness were excluded. Performance on neurocognitive tests for verbal learning & memory, sustained visual attention, auditory attention, visuospatial attention & memory, speed of visual information processing, executive functions measured and compared between these two groups.

**Results:** *Verbal Learning and Memory:* OG showed significantly poor performance in verbal learning compared to CG group. *Auditory Attention:* Significantly poor performance in OG compared to CG group. *Sustained Visual Attention:* OG group showed significantly more errors compared to CG group. *Speed of Visual Information Processing:* OG had significantly poor performance compared to CG on one component of the test. *Visuospatial Attention:* No group difference in performance was found. *Executive functions:* OG performed significantly poor as compared to CG.

**Conclusion**: Intravenous opioid dependent patients might have significantly poor neurocognitive functioning which can have treatment and prognostic implications.

### Hundreds of Needle in Human Body, an Eye-Opener to Unravel Substance Use: An Amazing Case from India Focusing on a Good History Taking Practice

Pattnaik JI<sup>1</sup>, Nath S<sup>1</sup>, Ravan JPR<sup>2</sup>, Padhy SK<sup>1</sup>

<sup>1</sup>Department of Psychiatry, AIIMS, Bhubaneswar, India <sup>2</sup>Department of Psychiatry, KIMS, Bhubaneswar, India <u>drjigyansaipsita@gmail.com</u>

### Abstract:

**Background:** Foreign bodies inside the human body (ear, nose, lungs, skin and GI, genitourinary systems) are reported which could be due to traumatic, self-ingested/inserted and iatrogenic. Needles are rare foreign bodies to be found in situ.

**Objective:** We are reporting a rare case that presented with hundreds of needles in human body alongside substance use disorder with a learning objective of a holistic interventional management that is individual based.

**Methodology:** The report is of a middle aged male who presented to the emergency department with severe body pain along with signs and symptoms of opioid withdrawal. The association with substance use was revealed when the psychiatrist had developed a good therapeutic alliance and a strong suspicion of SUD.

**Results:** Radiological investigation of this man revealed hundreds of needles in many body parts which were staying there for quite some time unknown to the patient. They are the broken needle portions which were because of repeated self-injection of opioids. To our knowledge, this is probably the first case reported worldwide of hundreds of indwelling needles in human body giving him diffuse and nonspecific pain. A detailed management was planned from medicinal and surgical point of view in liaison with appropriate departments followed by appropriate management of opioid withdrawal and opioid maintenance treatment. We will be presenting photographs and video of the case (that has written informed consent of the patient) in details in the conference.

**Conclusion:** The report signifies the need for a holistic and individualized management when dealing with any patient with substance use and chronic pain in pectoral and pelvic areas.

### Downtown Eastside Connections: A Novel Approach to Tackling Opioid Use Disorder in Vancouver's Downtown Eastside.

Andrusiak TL, Pare D

#### tara.andrusiak@gmail.com

### Abstract:

British Columbia, Canada has been in the midst of a provincial public health emergency since April 2016 secondary to drug overdose deaths. This is thought to be a result of the increased proportion of fentanyl and stronger opioid analogs in the illicit opioid supply. Vancouver's Downtown Eastside is an area that has been hardest hit by the opioid crisis due to its high proportion of drug users. In response to this, the Downtown Eastside Connections clinic was opened in March 2017 to address the need for resources and evidence-based treatment options, such as suboxone, methadone, and kadian, for people with opioid use disorder. This unique clinic provides patients with low barrier access to a multidisciplinary care team which includes physicians, nurses, pharmacists at an onsite pharmacy, social workers and peer support workers. Physicians are able to address patient needs relating to opioid agonist treatment (OAT), as well as primary care concerns which have often been neglected in the chaos surrounding substance use. Once a patient is stabilized on OAT, they are transitioned to a long-term care provider in the community for ongoing maintenance of treatment and follow-up care. To date, the clinic has successfully transitioned over 700 patients to community providers. Future directions of this clinic include possible expansion to treatment of other substance use disorders as well as expanding OAT options to include injectable formulations

### Prevalence of Gambling Disorder among Homeless People Recruited at Selected Facilities in Osaka city, Japan

Takano T, Hwang C, So R, Kawakami S, Kihara MO, Kihara M, Furuawa T

### hwang.chiyoung.44e@st.kyoto-u.ac.jp

### Abstract:

**Background:** Internationally, prevalence of gambling disorder (GD) among homeless people has been reported to be higher than the general population. In Japan, however, such a survey has never been conducted, leaving the actual situation of GD among homeless people poorly understood.

**Objective**: To describe the prevalence of GD among homeless people who are services users at selected facilities (one shelter and one care center) in Osaka city and the characteristics of homeless people having GD.

**Methodology:** This is a cross-sectional survey, conducted during 30 December 2018 - 4 January 2019. We used the questionnaire of the 2017 Japanese National Survey of Gambling (JNSG) supplemented with questions on homelessness experience, drinking, and smoking among others. GD was defined as having a score of  $\geq$ 5 out of 20 using the South Oaks Gambling Screening.

**Results:** A total of 121 male homeless people participated. Mean age was 58.8 (SD=9.1). The prevalence of GD in lifetime and in the past year was 42.1% (n=51) and 4.1% (n=5), respectively, compared to 6.7% and 1.5% of the 2017 JNSG. Among the participants with GD, gambling type for which they spent most money was Pachinco (electronic game machines), followed by horse racing and boat racing. Among participants who experienced GD in lifetime, only 13.7% (n=7) ever sought supports.

**Conclusions:** Though among limited subgroups, this study first identified the prevalence of GD among homeless people in Japan being much higher than the general population. The results suggest that GD could be one of the risk factors of homelessness.

### **Gambling- A Neurobiological Perspective**

### Jakhar K

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### Abstract:

**Objective:** A gamble, or bet, can be partitioned into three distinct phases: decision phase, anticipation phase and outcome phase. DSM V incorporates gambling disorders under the category of substance related and addictive disorder.

The aim is to determine the neurobiological changes associated with gambling which qualifies it as a disorder.

**Data source:** The literature search included PubMed, GoogleScholar, and Medline.

**Study selection:** Search terms used included "gambling", "gambling disorder", "neurobiology", "DSM V", "substance related and addictive disorder", "behavioural addiction", "non substance addiction" in different combinations.

**Data Extraction:** We included neurobiological changes in gambling disorder. No limit to the publication year of the searched articles was applied but was restricted to all the articles in English only. The abstracts of the retrieved articles for the search were scanned manually.

**Data Synthesis:** Dysfunction in various neurotransmitters like increased dopamine release, lower level of serotonin metabolite 5-hydroxyindoleacetic acid (5-HIAA) and decreased density of platelet serotonin transporter (SERT), elevated blood levels of endogenous opioid  $\beta$ -endorphin, dysfunctional glutamate system which engenders changes in neuroplasticity, imbalance between neural systems like amygdala-striatum, prefrontal cortex dependent neural system and insula that integrates interoception states into conscious feelings have also been found out.

**Conclusion:** There is a promising evidence to support neurobiological basis of gambling disorder in concordance with substance related and addictive disorder.

### Gambling-Related Problems and Homelessness: A Exploratory Qualitative Study in Osaka city, Japan

Hwang C, So R, Kusaka K, Ohbayashi Y, Suzuki S, Ishisaki M, Nishimura M, Matsukawa M, Techasrivichien T, Takiguchi N, Kihara MO, Kihara M, Furukawa T

#### hwang.chiyoung.44e@st.kyoto-u.ac.jp

#### Abstract:

**Background** Globally, previous research has shown that homeless people are particularly vulnerable to Gambling Disorder (GD). However, in Japan, regarding this issue is understudied, and relationship between GD and homelessness is not sufficiently recognized as public health concern.

**Objective** To explore experiences of gambling among homeless people and how gambling contributes to becoming and being homelessness.

**Methods** This is a qualitative study, conducted during October 2017 - July 2019. We carried out in-depth interviews and measured the South Oaks Gambling Screening (SOGS). With the cooperation of 3 NPOs in Osaka city, 72 homeless men were recruited by purposive and snowball sampling. Participants were categorized as having GD if they scored  $\geq$ 5 out of 20 on the SOGS. Thematic analysis was used with investigator triangulation.

**Results** Fifty two (72%) of the participants were currently gambling, and 41(57%) and 5(7%) were categorized as having GD in lifetime and in the past year, respectively. The narratives from participants with GD in lifetime suggested that gambling had a direct and indirect negative impact on leading to homelessness. Although, most of them were not categorized GD in the past year, gambling and homelessness seemed to influence and perpetuated each other. Gambling served as a safe space for them, occupied their time, and appeared to be a psychological coping pattern for some participants.

**Conclusion** Our results provide a better understanding of the relationship between gambling and homelessness in Japan. Developing comprehensive GD support programs for homeless people and early preventive measures for GD are urgently required.

## ORAL COMMUNICATIONS 9: Day 3 – 15 Nov 2019 – 10:00 am to 11:30 am – Hall 7

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### Effect of Anti-Tobacco Health Messages Create Favorable versus Unfavorable Response among the Users and Non-Users, Review from Indian Studies: A Kaleidoscope

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#### Abstract:

Introduction: Tobacco related deaths are on rise although; it is a preventable man made epidemic. Globally tobacco accounts for death of 6 million people each year. Tobacco kills about 2500 Indians every day and almost 10 lakh per annum. To fight tobacco India made significant attempt by endorsing WHO Framework Convention on Tobacco Control (FCTC) in February 2004. For achieving the set goals by FCTC, India launched The Cigarettes and Other Tobacco Products Act (COTPA), 2003, on May 2004. Highlights of the Act are ban of smoking in public places, proscription of pro-tobacco Advertisement and Promotion and sponsorship of Tobacco Products, embargo of Tobacco Products sales to and by minors, no person shall sell tobacco products within the area of 100 yards of any educational institute. Anti-tobacco health messages (ATHM) play a crucial role in effecting tobacco related health behaviour. Studies done in the past indicate the importance of ATHM's and their significant role in tobacco initiation, cessation and changing attitude. The effect of particular type of ATHM's is unique for every individual. General public not only includes non-smokers but smokers. Needs for both groups are different and hence, ATHM's must contain proper content and information which can help both groups. This paper here presents the effect of ATHM's on Indian population; the influence of different type of ATHM's in Indian scenario. Previous studies done in India were quantitative in nature and used the data from Global Youth Tobacco Survey (GYTS). The results indicate that youths who are exposed to anti-tobacco health messages are less likely to be current smokers. The data does not allow us to determine which type of advertisements had the highest impact on specific populations. There is a need for mixed method approach to identify the needs of smokers as well as non-smokers related to anti-tobacco health messages. Studies mostly include the effect of televised anti-tobacco health message on knowledge and attitude towards tobacco use. Anti-tobacco health messages are available in various other forms like audio (on Radio), visual (posters and sign boards) and audio-visual (cinemas, T.V.). Negative health affects messages found to be most effective at generating quitting intention. Most of the studies are cross-sectional in nature and hence, casual relationships cannot be defined. The advertisements their intensity, frequency of delivery, recall and effect on knowledge and attitude, quit intentions is not assessed in many of the studies.

**Conclusions:** Impact of ATHM's on smoking behaviour differs according to the group studied. ATHM's can play important role in educating public about the harms of tobacco use, can change their attitudes and beliefs, increase intentions to quit as well as quit attempts and reduce tobacco use dominance. Government must focus on high reach and logical ATHM's with consistent exposure and inclination towards NHM's with graphical and live testimonial advertisements.

### **Challenge and Outcomes N-Acetylcysteine (NAC) Managing Smoking Cessation in Indonesia**

### Harlivasari AD, Ginting TT, Susanto AD, Taufik FF

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### Abstract:

**Background**: Health concern related to person with tobacco addiction are a particular problems and requires approach to policies and treatment resources. N-acetylcistein (NAC) as glutamate modulator from previously trial holds potential in dealing with addiction especially nicotine.

**Objective**: This study aims to compare withdrawal, craving status and smoking abstinence with NAC intervention vs placebo.

**Methods**: This randomised clinical trial study divided had 1200mg NAC twice a day group and a placebo group. Smoking cessation program was held in 4 weeks observation at Persahabatan Hospitals, Jakarta in 2019. Abstinence was confirmed by carbon monoxide (CO) exhaled measurement.

**Result**: Sixty smokers were enrolled in smoking cessation program with abstinence rate 37.5% (p = 0.024). There was a significant change in craving score in NAC group at the end of program. **Conclusion**: There is potential for smoking abstinence with pharmacological approach by using NAC and further observation for prolong abstinence is needed.

### A Functional MRI Study to Understand the Brain Regions Associated with Cue Induced Craving among Indian Tobacco Smokers

Kathiresan P, Dhawan A, Kumaran S, Jain R, Jhanjhee S, Goswami A.K., Mathur V.P.

Department of Psychiatry & NDDTC, AIIMS, New Delhi, India princyaiims@gmail.com

#### Abstract:

**Background:** Cue induced craving is a very important reason for relapse and can persist even after long periods of abstinence. It is necessary to understand the brain regions associated with cue induced craving.

**Objective:** (1) To find the changes in activity in different brain regions during cue-induced craving among adult male tobacco smokers (2) To find the association of various clinical variables with these changes in activity

**Methodology**: The study was a cross sectional, case control study and consisted of 2 groups – 20 smokers and 11 controls. The selection criteria for the study were right handed adult males, not taking any substance in past 1 month (except tobacco in smokers), no lifetime dependence to any substance (except tobacco in smokers). Additional criteria for smokers were taking more than 10 cigarettes or beedis daily for at least past one year and willing to abstain from smoking for 2 hours before fMRI. fMRI involved assessing brain areas associated with craving by showing smoking cues block, neutral cues block and baseline screens.

**Results**: The areas that were activated among smokers during smoking cues compared to neutral cues were areas related to the visual perception, visuo-spatial attention, memory, planning and control, somatosensory area, co-ordination, and dorsal striatum. There were many brain areas that were correlated with the different clinical variables used in the study, namely, age, number of smoking years, number of beedis or cigarettes per day, CO level before fMRI.

**Conclusions:** Cue induced craving involves multiple brain regions and pharmacotherapy which targets these brain regions need to be developed to reduce the cue induced craving. Age of the patient, number of smoking years, amount of beedis or cigarettes smoked per day and CO level before fMRI has an effect on cue induced craving.

### A Correlational Study of Demographic Characteristics and E-Cigarette Use Characteristics in Jakarta

Lusikooy CH<sup>1,2</sup>, Ginting TT<sup>2,3</sup>

<sup>1</sup>Drug Dependence Hospital, Cibubur, East Jakarta, Indonesia <sup>2</sup>Departement of Psychiatry, Medical Faculty, Universitas Indonesia Jakarta, Indonesia <sup>3</sup>Persahabatan Hospital, Rawamangun, East Jakarta, Indonesia <u>carla.lusikooy@gmail.com</u>

### Abstract:

**Background**: There exists limited research on e-cigarette (EC) use and use patterns in Indonesia, despite increasing prevalence of awareness and use in the region. To fill the research gap, data on EC-related disease morbidity and mortality is needed; by learning which groups of the EC population is at greater risk for such diseases. This will justify EC's potential as a nicotine replacement therapy and an aid to quit tobacco use.

**Objective:** The present study attempts to examine relationships between demographic characteristics and EC use patterns in a sample of adult users in Jakarta.

**Methods**: Through a cross-sectional design, 422 adult EC users completed an online survey through convenience and snowball sampling between March and May 2019 in Jakarta. Demographics (sex, age, education, living conditions) were examined in relation to e-cigarette use characteristics (EC use status, reason for use, frequency, volume of liquid used, and nicotine preference).

**Results:** Sex, age, and employment status showed signification associations (p<0.01) with use patterns, in which working males between the ages 25-64 showed greater likelihood of EC use, reason of use as an NRT, and greater frequency of use, whereas unemployed males aged 18-24 showed lower likelihood of liquid volume consumption and nicotine preference.

**Conclusions:** These preliminary findings of relative risks among different groups are important in developing further research questions for more robust research designs, to which its findings will further contribute to policy development in Indonesia.

### Teaching School Going Children on Tobacco Use Prevention by Storytelling Method: A Systematic Review

### Arora S<sup>1</sup>, Baby RS<sup>2</sup>

<sup>1</sup>College of Nursing UCMS & GTB Hospital <sup>2</sup>College of Nursing, AIIMS, Bhubhneshwer <u>sumityarora@gmail.com</u>

### Abstract:

Addiction, as a social disorder, is often referred to as a world-destroying disaster among students. Consumption of tobacco is increasing in India, which emphasizes the need for prevention of tobacco at the grass root level. This study systematically reviewed relevant literature to examine the effects of storytelling method as one of the preventive strategy to control tobacco use among school going children, there are three strategies to restrict the consumption of drugs in most countries of the world: legal strategies, educational-training strategies and treatment strategies. Chief among educational-training activities is the raising of awareness among young people about the reasons for the tendency to use drugs and the physical, mental and social dangers of drug use. At present, the best place for carrying out these strategies is educational centers, such as schools. Using story and storytelling as a therapeutic tool has been explored by storytellers, psychologists and social workers. The effectiveness of story and storytelling in substance abuse prevention programs has been well documented and researched. The effectiveness of story and storytelling is not well studied in treatment programs. The studies propose an approach to prevention based on storytelling.

**Method:** Online bibliographic databases and a hand search were used. We included the studies that examined the impact of school-based programs on preventing tobacco use in Africa from year 2016 to year 2019.

**Results:** Five articles were selected. Four were conducted in South Africa and two were performed in Nigeria. Four programs were systematically incorporated into annual curriculums, targeting 8<sup>th</sup> to 9<sup>th</sup> grade school going children, while the other two were temporary programs. All programs were based on the hypothesis that providing knowledge and/or social skills against smoking would be helpful. All studies utilized smoking or polydrug use rates to compare outcomes before/after intervention. There were no significant differences between intervention and control groups in three studies, with the other three demonstrating only partial effectiveness. Additionally, three studies also examined change of knowledge/attitudes towards smoking as an outcome. Two of these showed significant differences between groups.

### Smokeless Tobacco use among Women in Northeastern States, India: A Geo-Spatial Analysis

### Devi Y S, Gupta S, Singh KJ

### joy.shaikhom@gmail.com

### Abstract:

**Background:** Chewing tobacco is accepted socially and culturally in many northeastern states of India which shows alarming scenario of high prevalence of smokeless tobacco (SLT).

**Objectives:** To identify the hotspot clusters and determinants of SLT use among women. **Methodology:** Subjects were married women in Northeastern states. Getis-Ord Gi\* statistic and multilevel logistic regression analysis was done.

**Results:** Prevalence of SLT is highest (35%) between 40-49 year of age and lowest at the initial age of 15 years but goes higher with age. Level of consumption of SLT is low as the education status is high. Older women were using more SLT than young women [OR=3.76] and urban women [OR=1.61]. Women from Mizoram and Manipur were having 6 and 5 times more use of SLT than from Arunachal Pradesh.

**Conclusion:** There is an urgent need for appropriate prevention and cessation strategies for SLT products by intense educational programs in district level planning and convergence for achieving the goal of tobacco free districts.

### An update on the Development and Use of the O'Neil Long Acting Naltrexone Implant (OLANI)

O'Neil G, Mellon A

### alistair.mellon@freshstart.org.au

### Abstract:

For 20 years, the Fresh Start Recovery Programme (FSRP), a not-for-profit drug and alcohol clinic in Perth, Australia, has used the O'Neil Long Acting Naltrexone Implant (OLANI) alongside flumazenil formulations, for the treatment of opioid, alcohol, amphetamine, benzodiazepine and polydrug addiction under compassionate use programs. FSRP offers an integrated range of treatments, alongside residential rehabilitation, psychiatric and mental health care, counselling, and work, educational and spiritual support.

A number of treatment techniques and procedures have been developed to treat the wide range of patients presenting at the FSRP clinic. Most patients remain within FSRP for many years, receiving repeat treatments and follow-up care as they transition through recovery.

Safety and efficacy data is routinely collected from all patients treated at FSRP. This data will be presented alongside an outline of treatment techniques from detox to recovery in patents presenting with alcohol and other drug dependence.

Go Medical, the manufacture of the OLANI used clinically at FSRP, in collaboration with the National Institute on Drug Abuse (NIDA) and Columbia University have recently started trials in the US as part of the development program to fulfil regulatory requirements for a New Drug Application (NDA) to the FDA. These and other trials currently underway will also be discussed.

Nabiximols for the Treatment of Cannabis Dependence: Findings from a Randomized Controlled Trial.

### Lintzeris N

#### nicholas.lintzeris@health.nsw.gov.au

#### Abstract:

**Background**: Cannabis is the most common illicit drug of dependence in the world, however there are no proven medications for this indication.

**Objective**: To examine the safety and efficacy of nabiximols (THC: CBD) for the treatment of cannabis dependence.

**Methodology**: A double-blind, placebo-controlled RCT enrolled 128 participants into a 12-week treatment program, involving flexible doses of nabiximols or placebo, weekly medical/nursing reviews and CBT-based counselling. Primary outcome was self-reported number of days of illicit cannabis use over the 12-week period; measures of general and mental health (SF-36, DASS-21, sleep, pain), and safety parameters (adverse events, abuse liability, cognitive function). Participants were followed up for research interview 12 weeks after end of treatment (week 24).

**Results**: Treatment retention over 12 weeks was comparable (45% placebo, 49% nabiximols). The nabiximols group reported significantly fewer days of illicit cannabis use over the 12-week period ( $35\pm32 \times 53\pm33$ ; estimated diff=19, 95%CI=4-34, p=0.02). There was general improvement in health measures over time, with no significant group differences. Medication was well tolerated, and no significant cognitive impairment following routine doses. The nabiximols group continued to report significantly less cannabis use at 24 weeks.

**Conclusions**: Nabiximols appears to be a safe and efficacious approach to treatment of cannabis dependence. Importantly, many participants did not resume cannabis use following the 12-week treatment episode, suggesting that limited duration treatment may be effective in assisting patients to discontinue their cannabis use – suggesting a nicotine replacement rather than a methadone maintenance model of care may be feasible.

### Addressing Substance Disorder in Primary Care in the USA

#### Dixie D

University Medical Center, Chicago, Illinois, USA dixiedora3@gmail.com

#### Abstract:

Deaths from drug overdose is rising steadily and are now the leading cause of injury death in the United States according to the Centers for Disease Control and Prevention. More than half of new drug users begin with marijuana. Substance use disorder is a growing problem in primary care and the need for inpatient exceeds inpatient treatment slots. Primary care providers can be a part of the prevention challenge and treatment of the disease. Providers must educate themselves on how to make the diagnosis, identify the barriers to making a SUD diagnosis, present the diagnosis and initiate treatment. Currently, multiple medications are available to the provider to be used in an outpatient setting. Alcohol use disorder can be treated with naltrexone, disulfiram, and acamprosate. Benzodiazepine use disorder treatment is a slow process taking months to years to withdraw a patient from them, but medication assisted treatment strategies are available in an outpatient setting. Opioid SUD can be either referred to a methadone maintenance clinic or treated in the office. Medications available in the outpatient setting include Lucemyra for treatment of acute withdrawal symptoms. Three buprenorphine products: sublingual, subcutaneous, and implants are available for waivered providers.

# ORAL COMMUNICATIONS 10: Day 3: 15 Nov 2019 -10:00 am to 11:30 am - Hall 8

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### Borderline Personality or Complex Trauma: Understanding the Characteristics of Women Attending Addiction Treatment in Melbourne, Australia

#### S. Arunogiri

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#### Abstract:

**Background:** Women are a minority of individuals in alcohol and other drug (AOD) treatment settings, representing less than a third of Australian treatment-seekers. AOD clinical research is therefore based on majority male samples, leading to a gap in understanding the needs of women who seek help. Within our service in Melbourne, Australia women frequently attend a psychological therapy clinic for co-occurring borderline personality disorder and substance use, offering a unique opportunity to characterize the specific needs of this under-researched group, with implications for service delivery for women in substance use settings.

**Objective:** To understand the characteristics and needs of women seeking treatment for cooccurring mental health and substance use problems in Melbourne, Australia

**Methodology:** Retrospective audit of medical records (n=160). Data was extracted using a standardized electronic spreadsheet, including (i) demographics, (ii) primary drug, (iii) caregiver status, (iv) history of trauma, (v) mental health diagnoses and symptom profiles. Statistical analysis involved descriptive summary statistics for each of these domains, as well as investigation of associations (using chi squared and Fisher exact tests) between treatment engagement, history of trauma, and mental health symptoms.

**Results:** Preliminary results suggest a very high prevalence of trauma in this cohort. Treatment engagement was influenced by level of psychological distress, as well as other measures of complexity (unemployment, homelessness).

**Conclusions:** Almost universal experiences of trauma amongst women attending this service suggest the need for specific interventions to address this, with further implications for reframing of personality disorder diagnoses within the context of complex post-traumatic stress.

### Socio – Demographic, Clinical and Psychological Profiles of Women with Substance Use Disorders in India

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### Abstract:

**Background:** There is growing recognition of the increasing rates of substance use disorders (SUDs) among women in developing countries. However, there is limited information about the characteristics of treatment – seeking women with substance use disorders (wSUDs). Indian literature is limited by retrospective designs and under – representations of drug – use disorders and comorbid psychiatric disorders.

**Objective**: The study explored the socio – demographic, clinical and psychological profiles of wSUDs.

**Methodology:** 50 wSUDs were recruited from inpatient and outpatient departments of a tertiary care hospital in South India. The mean age of the sample was 31. 88 years (S.D. = 9.13). The MINI 7.0.2 and SCID II were used to identify comorbid disorders. The Addiction Severity Index (ASI – Lite), Fagerstrom Test of Nicotine Dependence (FTND), Penn Alcohol Craving Scale (PACS), Rosenberg's Self – Esteem Scale (RSES), Drug – Taking Confidence Questionnaire – 8 (DTCQ), Short Self – Regulation Questionnaire (SSRQ), Difficulties in Emotion Regulation Scale (DERS), Distress Tolerance Scale (DTS), Positive and Negative Affect Scale (PANAS), WHOQOL – Bref and Clinical Global Impression (CGI) were employed. Regression analysis was carried out to identify predictors of onset of use and addiction severity.

**Results:** The results revealed two distinct profiles of wSUDs that sought treatment. The first comprised younger women from affluent backgrounds with histories of trauma, personality disorders and mood dysregulation. These women had fewer substance - related problems. The second comprised older women from lower socio – economic backgrounds. These patients had higher addiction severity. However, they had fewer mood vulnerabilities.

**Conclusions:** The study elucidates the psychological risk and protective factors, as well as important foci of gender - sensitive treatment among wSUDs in India.

### Barriers to Addictions Care for Persons with Disabilities: An International Perspective

### West SL

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### Abstract:

A substantial literature exists demonstrating that persons with disabilities (PWDs) have significant rates of substance misuse and addiction. Although variable by disability type, substance misuse and addiction among PWDs is notable for its frequency, severity, and substantial negative consequences. Despite this fact, existing research indicates that few PWDs may be found in the treatment population. A major factor in this low participation rate centers on the physical and programmatic accessibility of addictions treatment centers. These barriers not only inhibit the ability of PWDs to access treatment, but also result in the direct denial of services. Implications of these shortfalls are significant and include both immediate and longterm negative consequences in multiple life domains of PWDs. In this presentation, I review an ongoing collective of research that highlights these issues from Australia, Canada, the Netherlands, the U.K., and the U.S. Findings from studies of specific populations of PWDs including individuals with developmental and physical limitations will be discussed. Further, I detail common barriers in three broad domains - environmental barriers (i.e., barriers to physical access), structural barriers (i.e., the ability to pay for services and the medical provider's ability to pay for barrier removal, and process barriers (i.e., a lack of provider knowledge about the unique needs and culture of PWDs). Implications for public policy and practice will be reviewed.

### Short Video-Based Teaching about Pharmacovigilance: A Pilot Implementation in Addiction Treatment Centre

Sharma GB, Thota A, Dhagudu N, Sarkar S, Chadda RK

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### Abstract:

**Background and aims:** Pharmacovigilance helps to know about common and uncommon adverse drug reactions (ADRs) encountered in the clinical setting. Training about pharmacovigilance enables health-care providers to systematically report about the ADRs, and also emphasizes the need for continued reporting. We developed a YouTube based short video for training healthcare professionals about ADRs and used it in an addiction treatment facility in India.

**Methods:** The short video (about 5 minutes in length) was developed after scripting a refined power point presentation used for in-person training of health-care professionals. After uploading the video, the links were sent to the health-care professionals, and they were asked to fill in a questionnaire to check their knowledge and opinion through GoogleForms.

**Results:** The video helped to provide an introduction to pharmacovigilance, which was accessible to the health-care providers through their devices. They could access it at their convenience, and the video has received a total of 456 views over a year. Out of the 85 health-care professionals who were sent the link, responses to the questions was available from 38 of them (response rate of 44.7%). The answers to the scored questions (5 in number) were largely correct (range 3 to 5, mean score 4.63 out of 5). Out of the 38 respondents, 37 had come across an ADR and 35 had reported it as well. Opinion was divided about whether reporting of ADRs was a professional obligation.

**Conclusion:** Short educational video coupled with a brief questionnaire could be a potential method for sensitizing the healthcare professionals about pharmacovigilance. However, many of the viewers might look at it out of curiosity, and may not partake in the assessment coupled with such a training method.

### **Emergence of Chemsex in India: a Case Series from National Capital Region**

### Singh VV, Rao R, Dayal P

Department of Psychiatry and NDDTC, All India Institute of Medical Sciences, New Delhi, India virvik@gmail.com

### Abstract:

Chemsex was an emerging phenomenon and a cause of concern in last decade, mainly in Europe. It relates to use of some substances primarily for sexual purposes. The drugs frequently included in chemsex are crystal methamphetamine, mephedrone and gamma hydroxy butyrate (GHB). Other drugs that may be included in the list are MDMA, cocaine & ketamine. It is a cause of concern due to associated high risk sexual activities, risk of HIV, HCV and STIs. Chemsex is reported from across the globe among men who have sex with men (MSM) yet there is hardly any report from India. Several media reports and few studies suggest use of mephedrone and methamphetamine in India. However, scientific literature with regard to chemsex in India is lacking. We present a case series of two cases from national capital region who used mephedrone and methamphetamine in context of sexual activity. Both persons from MSM community highlighted the emergence of this phenomenon in MSM circles of the region. We discuss about phenomenon of chemsex, substance used and hypothesis around it. Reporting of this case series is to document emergence of this peculiar phenomenon among Indian MSM community and highlight the need for further research.

### Short term and Long-Term Outcomes of Residential Deaddiction Treatment in Patients with Substance Use Disorders

Soni PA, Patkar AA, Rajkumar IR, Ryntathiang N

#### parthasoni009@gmail.com

#### Abstract:

**Introduction:** Residential treatment for substance use disorders includes combination of pharmacotherapy, behavioral therapy and self-help therapies like Alcoholics Anonymous (AA) and Narcotics Anonymous (NA). It has been seen that residential treatment for substance use disorders plays a significant role in the treatment outcome. With this background in mind the study is being conducted.

**Methodology:** Evidence based pharmacotherapy, behavior therapy and self-help therapies like AA and NA were performed on the patients suffering from substance use disorder in a residential treatment center in India. Patients were screened at the baseline using standard assessment tools for anxiety, depression and sleep difficulties which were repeated at the recommended intervals and at the intervals of 30, 60, 90 days. Primary outcome of the treatment was measured using CGI (clinical global improvement) which was done at baseline and then every week. Follow up outcome after 1 month, 2 months and 3 months after the discharge was measured using email and telephone. Appropriate statistical tests were used to compare the outcome measures before, during and after the treatment.

**Results and Conclusion:** As this is ongoing study, the exact results will be discussed at the time of presentation. Preliminary data shows that evidence-based residential addiction treatment is effective for patients with more severe substance use disorder. However, the treatment needs to of 60-90 days to be more effective. Initial follow up data also shows that even 30 days of residential treatment may also help.

### Impairment of Executive Function and Increased Impulsivity can Predict Treatment: Secondary Analysis in Court-based Methadone Maintenance Program

Rezapour T, Hatami J, Farhoudian A, Noroozi A, Daneshmand R, Ekhtiari H

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#### Abstract:

**Background:** From a cognitive neuroscience perspective, lower chance of treatment success in subjects with substance use disorder could potentially be explained by inability of prefrontal cortex to regulate impulsivity and Executive Function (EF).

**Objective:** The present analysis was conducted to investigate to what extent impulsivity and EF could predict treatment outcomes.

**Methodology:** Data from 117 opioid users recruited from a court-based Methadone Maintenance Treatment were analysed. As independent variables impulsivity was measured by Barratt and three components of executive function including working memory, inhibitory control and shifting were measured by the tests of Auditory Verbal Learning/backward digit span, Stroop and trial making-B, respectively. Treatment outcomes were considered in terms of treatment completion (completer versus non-completers) and the number of positive urine tests during a 3-month MMT program. Multivariate logistic and linear regression were utilized to identify predictive factors.

**Results:** The findings indicate that those subjects with higher score on the backward digit span (odd ratio=1.61, p<0.05) and lower interference score on the Stroop test (odd ratio=0.95, p<0.05) were more likely to complete the 3-month MMT program. Moreover, from those who completed the treatment (n=51) after 3 months, the subjects who had higher word span on the AVL test (beta= -0.35, p<0.05) and lower impulsivity (beta=0.43, p<0.05) were more likely to remain abstinence.

**Conclusion:** On the basis of these findings, working memory and inhibitory control components of EF as well as impulsivity could be potentially considered for the first line of assessments of the newly admitted users in MMT program. Followed by early detection of high risk users, better monitoring and more personalized treatment could be provided to increase the likelihood of treatment success.

# ORAL COMMUNICATIONS 11: Day 3 – 15 Nov 2019 – 14:15 pm to 15:45 pm – Hall 7

Internet Addiction Disorder in Medical College Students: Prevalence, Determinants and its Association with Five Factor Personality Model

Gupta M, Bansal K, Kumar K, Verma P, Sethi S

#### manushree@gmail.com

#### Abstract:

**Background**: The advent of the technological revolution has brought about computing to the common man but it has also resulted in behavioral addiction like Internet Addiction Disorder (IAD). IAD diagnosis is a matter of great debate but researchers converge to agree that it manifests similar to substance use disorders and high confluence with personality traits and psychiatric disorders

**Objective:** The study estimated the prevalence of internet addiction disorder in medical college students and assessed the correlates of sociodemographic and five-factor personality traits with the internet usage pattern

**Method:** 200 undergraduate medical students with active internet use were recruited and were assessed using a self-administered questionnaire. The Young's Internet Addiction Scale and Ten-Item Personality Inventory (TIPI) were used to determine internet addiction and personality traits using five-factor model, respectively. Students with any other psychiatric disorder were excluded. Data was entered in MS Excel and analysed using SPSS v 20. Univariate analysis was done by calculating means, frequencies and proportions. Chi-square test was used to check for association, and a p<0.05 was considered significant.

**Results:** The mean age of the sample was 20.8 years. 144 (72%) students had problematic internet usage with 52(26%) students diagnosed with moderate IAD and 2(1%) students had severe IAD. Male gender (p<0.01), laptop ownership (p=0.006), neuroticism (p=0.014), openness (0.006), conscientiousness (p<0.01) and agreeableness (p=0.01) were significantly associated with internet addiction pattern. Extraversion was negatively associated with IAD pattern.

**Conclusion:** Internet Addiction is highly prevalent in medical college students and personality traits such as neuroticism and openness contribute to problematic internet usage.

### Exploring Current Evidence and Clinical Scenarios for Teenage Internet Use Adverse Effects to Increase Physician Awareness about Problematic Internet Use

### Kanabar M

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#### Abstract:

**Background**: Modernization and social isolation have increased vulnerability of teens to increasing problematic internet use (PIU). Although internet and microprocessor use disorder are recognized by the Diagnostic and Statistical Manual 5<sup>th</sup> edition, actual availability of treatment modalities is limited. In the addiction medicine community, it fails to be recognized as a true problem, as teams are busy combating the opioid epidemic.

**Objective:** To understand current adolescent and young adult internet use data from research and make clinical recommendations for education and harm reduction. Discuss Young's internet addiction test and data on its validity.

**Methodology:** For this review we looked at studies across the world regarding patterns of use, factors associated with use and adverse events with increasing vulnerability of teenagers and young adults. Clinical vignettes regarding phone social media use and "catfishing", physical symptoms and consequences on family dynamic will be discussed.

**Conclusions:** Problematic internet use may be seen in teenagers with low social support or social skills, cooccurring use psychiatric issues and other substance use disorders. There is increased social media use in this population which leaves them vulnerable to depression, anxiety, increased suicidality and falling prey to sexual predators. Awareness in addiction medicine, psychiatry and primary care providers is needed to assess problem and decrease harm early. More data is needed to find appropriate treatment modalities.

## The Relationship between Problematic Internet Use and Psychological Distress among University Students in Eight Countries: A Cross-Sectional Study

Singh S, Balhara YPS, Doric A, Stevanovic D, Knez R, Kafali HY, Vally Z, Vu TV, on behalf of ICMH-SG

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#### Abstract:

**Background:** Internet use has increased exponentially over the past two decades, with no upto-date cross-country comparison of Problematic Internet Use (PIU) and its correlates available. **Objective:** The present study was aimed to explore the pattern and correlates of PIU across different countries in the European and the Asian continent. Further, the stability and extent to which PIU could be predicted by psychological distress related variables were assessed.

**Methodology:** An international, cross-sectional study with a total of 2749 participants recruited from universities of eight different countries: Bangladesh, Croatia, India, Nepal, Turkey, Serbia, Vietnam, and United Arab Emirates (UAE). Participants completed the self-reported Generalized Problematic Internet Use Scale -2 (GPIUS2) assessing PIU, and the Patient Health Questionnaire Anxiety-Depression Scale (PHQ-ADS) assessing the psychological distress.

**Results:** A total of 2643 participants (mean age 21.3  $\pm$  2.6; 63% females) were included in the final analysis. The overall prevalence of PIU for the entire sample was 8.4% (range 1.6% to 12.6%). The mean GPIUS2 standardized scores were significantly higher among participants from the five Asian countries when compared with the three European countries. The psychological distress (depressive and anxiety symptoms severity) was the most stable and strongest factor associated with PIU across different countries and cultures.

**Conclusion:** The PIU is an important emerging mental health condition among university going young adults, with psychological distress being the strongest and most stable correlate of PIU across different countries and cultures in this study. The present study underscores the importance of screening university students for PIU.

## Study of Internet Addiction and its Correlation with Depression and Insomnia in University Students

Jain A, Sharma R, Gaur KL, Yadav N, Jain G, Sharma P, Kumawat P, Khan N

#### akhilesic@gmail.com

#### Abstract:

**Background:** Use of internet has increased exponentially worldwide with prevalence of internet addiction ranging from 1.6% to 18 % or even higher. Depression and insomnia has been linked with internet addiction and overuse in several studies.

**Objectives**: Present study has looked in to pattern and prevalence of internet addiction in university students. This study has also explored the association of internet addiction with depression and insomnia.

**Methodology:** In this cross sectional questionnaire based survey 954 subjects were enrolled who had been using internet for past 6 months. Information regarding pattern of use and sociodemographic characteristics were recorded. Internet Addiction Test (IAT), PHQ-9, and insomnia Severity Index (ISI) were applied to measure internet addiction, depression and Insomnia respectively.

**Results:** Among 954 subjects, 518 (60.59%) were male and 376 (39.41%) were female with mean age of 23.81 ( $\pm$ 3.72).15.51% study subjects were internet addicts and 49.19% were over users. Several parameters including graduation level, time spent per day on line, place of internet use, smoking and alcohol had significant association with internet addiction. Internet addiction was predominantly associated with depression and insomnia.

**Conclusion:** Internet addiction is a rising concern among youth. Several parameters including gender, time spent online, alcohol, and smoking predicts higher risk of internet addiction. Depression and insomnia are more common in internet addicts.

## Sexual Risk-Taking Behavior and its Correlates in Late Adolescent Substance Users Seeking Treatment at State Drug Dependence Treatment Centre

Taneja K, Gupta R, Singh P

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#### Abstract:

**Introduction:** Sexual risk behaviors are sexual activities that may expose an individual to the risk of sexually transmitted infections and unplanned pregnancies. Substance use by adolescents is associated with increased rates of indulgence in sexual risk behaviors.

**Objectives:** To study the prevalence of sexual risk taking behaviors and its correlation with sociodemographic variables in late adolescents with substance use.

**Methodology:** Sixty adolescent males who attended State Drug Dependence Treatment centre, PGIMS, Rohtak for seeking treatment during September 2017 to October 2018 were interviewed two weeks after recruitment and successful detoxification after taking written consent (in case of assent, consent of parent). Each adolescent was interviewed along the Drug abuse monitoring system proforma and sexual risk taking was assessed.

**Results:** 53.3% adolescents had ever had sexual intercourse, and half of them had it before 17 years. 56.25% had intercourse with more than one partner. 37.5% had been sexually active in the last 3 months. Half of them had taken one or other substance before intercourse. Out of sexually active males, half of them or their partners had not used any contraceptive during last intercourse. Sexual risk behaviours had positive correlation with age and negative correlation with employment. Adolescents living alone had higher sexual risk taking behaviours. These did not vary significantly with the employment status and the study grade.

**Conclusions:** Adolescents with substance use are likely to engage in high risk sexual behaviors. Increasing age, lower educational attainment and living alone confer higher chances of such behaviors.

## How can Today's Youth be helped to Quit Substance Use? Perspectives of College Students from Bangalore, India

#### Padmavathy D, Nattala P, Murthy P

#### paddunimhans@gmail.com

#### Abstract:

**Background:** Research among college students regarding their viewpoint on how they can be helped to quit psychoactive substances is sparse in India.

**Objectives:** To explore in depth the perspectives of college students as to how today's college youth can be helped to overcome the use of psychoactive substances.

**Methods:** Data from focus group interviews with 38 adolescent college students were analysed qualitatively to identify their subjective viewpoints on how today's college youth can be helped to quit substance use. Interviews were transcribed verbatim, themes and sub-themes were identified.

**Findings:** Three major themes (with sub-themes) were identified as follows: (1) Patterns of substance use among college youth (2) Reasons for use (negative emotions; stress of academic pressure; peer influence; rebellious attitudes; media influence; poor life skills; lack of knowledge, myths) (3) Interventions needed to help college youth to quit substances (need for interventions, basic principles to follow when developing interventions, content to be included in the intervention, methods to be employed for delivering the intervention).

**Conclusions:** The information from this study can guide the development of an intervention that is likely to be relevant and tailormade to the specific needs of the college student population.

## Changing Pattern of Substance Abuse in Kashmir Valley: A Follow up Study of Three Decades

Majid A, Khan AW, Din NU, Rather YH, Margoob MA

Department of Psychiatry, SKIMS Medical College, Srinagar, India maajid72@gmail.com

#### Abstract:

Substance abuse is becoming a major public health problem across globe. Although levels of illicit substance use in many developed countries had remained stable or even declined for a number of years, the patterns of use now appears to be changing. Increase in use of opioids, cocaine and other psychotropic substances has been observed in developing countries. This trend is also worsening in Kashmir valley over the last few years. The present study compared the substance abuse in 1980-88, 2002 & 2013 in patients presenting to the psychiatric disease hospital/ Community Centre, SMHS / Department of Psychiatry SKIMS Medical College, Srinagar. There has been an alarming increase m the use of opioid- based preparations (9.5% to 73.61%) along with multiple substance use (15.8% to 41.6%) from 80's to the year 2002 respectively. There has been upsurge in Inhalant use (11.1%) in year 2013. Since 2016 onwards there was also significant shift among adult drug using population towards heroin use and many of them using intravenously. Pattern of abuse has also changed in female patients. Among the various reasons for substance abuse significant number attributed it to the prevailing condition in the valley (11%).

### Treatment and Rehabilitation of Children Suffering From Substance Use Disorder

#### Bhushan B, Kapoor K

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#### Abstract:

**Substance**: Indian scenario, treatment facility available and role of Muskan Foundation in treatment and rehabilitation of SUD children.

**Indian scenario:** SUD is a common problem in growing children, mostly in the metropolitan cities. Small towns and villages are now also facing the solvent use disorder problem. The prevalence among children and adolescent as per latest survey conducted by MSJE-GOI and AIIMS-New Delhi – 2019: alcohol-1.3, cannabis-0.9, opioid-1.8, solvent-1.17.

**Role of Muskan Foundation**: Muskan Foundation is running a separate ward as a treatment facility for SUD children in Dwarka, National Capital Territory New Delhi since its inception in 2003 and exclusive rehab since June 2017. Till date we have treated and rehabilitated about 575 SUD children.

**Method(S) / Project(S):** SUD children from the age group of 7 to 18 years are being admitted for their different types of addiction under a structured program of Therapeutic Community Treatment Model. It includes individual counselling, group sessions and various other activities. Firstly they are detoxified with homoeopathic and allopathic medicines and then put in the Behavior Modification Treatment for 4 to 6 months. Then, they undergo aftercare and follow-up.

**Conclusion(s) / lesson(s) learned:** SUD is a disease which destroys every aspect of the human being: Bio–Psycho–Social–Financial and Spiritual. This is treatable but difficult to treat. Treatment of SUD children is more difficult than that of adults. Family education is important factor to control this sociological problem.

## ORAL COMMUNICATIONS 12: Day 3 – 15 Nov 2019 – 14:15 pm to 15:45 pm – Hall 8

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## A Clinical Study of Opioid Substitution Therapy in a Tertiary Care Center of Eastern India

Mohapatra S, Nayak MR

#### satyakgmu@gmail.com

#### Abstract:

**Background:** Opioid substitution therapy (OST) is an evidence-based intervention for opiate-dependent persons that replaces illicit drug use with medically prescribed orally administered opiates.

**Objective**: In view of the dearth of studies from Eastern India on the usefulness of OST, we planned to study the sociodemographic variables, HIV ELISA status, HIV risk behavior, comorbid substance use pattern, and required dose of buprenorphine used for the treatment of injection drug users (IDUs) attending OST centre.

**Methodology**: This cross-sectional study was conducted among all the new IDUs of age >18 years and <60 years of age attending OST centre at Department of Psychiatry, SCB Medical College, Cuttack, Odisha, for 1-year. Each IDU is interviewed in detail by separate questionnaires regarding sociodemographic parameters, pattern, type, and frequency of drug used in injection, HIV risk behaviors, and comorbid substance use types.

**Results**: Total number of cases registered within the study period for opioid dependence syndrome was 120. 54% of the participants are using injection drug for the last 4–6 years with mean duration use of  $3.2 \pm 2.8$  years. Mean dose of buprenorphine used for the substitution was 4.6 mg/day at the start of therapy. Most common substance abuse among IDU users were tobacco (74.17%) followed by heroin (57.5%).

**Conclusion:** Our findings have relevance to other parts of India and Asia, where injecting drug use is common and is a first step toward filling the gap in knowledge regarding the effectiveness of community-based OST programs delivered in resource-constrained settings.

# Substance Abuse among Adolescents and Young Adults in General Population

#### Akula V, Kondaparthi P

#### drvishalakula@gmail.com

#### Abstract:

**Background**: Use of Alcohol, Tobacco, cannabis and other illegal drugs among young people has become a major public health concern.

**Objective**: The aim of the study is screening for Alcohol, Tobacco and Cannabis abuse among adolescents and young adults in general population.

**Methods**: The screening was conducted in India among 1500 scholars aged 14–22, in secondary schools, high schools, and university. Substance use was assessed by self-completed mail survey regular tobacco smoking, alcohol abuse (AUDIT), cannabis use, problematic cannabis use (CAST). Socioeconomic position was defined by educational attainment, occupational grade, employment stability and unemployment. Covariates included demographics (age, sex, relationship status, parenthood), family background (parental income, parental tobacco smoking, parental alcohol use), and juvenile characteristics (psychological problems, academic difficulties) measured longitudinally.

**Results**: 35.8% of study participants regularly abused alcohol, 14.3% were regular smokers, 10.5% used cannabis (4.2% had problematic cannabis use). Except for alcohol abuse, substance use rates were systematically higher in individuals with low, rather than intermediate/high, socioeconomic position.

**Conclusions**: Tobacco smoking, alcohol, cannabis and polysubstance use are common behaviors among young adults, particularly those experiencing socioeconomic disadvantage.

## Prevalence of Oral Sub-Mucosal Fibrosis in South-India among Tobacco Users in Various Forms

Raghavan S<sup>1</sup>, Kumar MS<sup>2</sup>, Chandrika PP<sup>3</sup>

<sup>1</sup>Drug Treatment Clinic, Institute of Mental Health, Madras Medical College, Chennai, India <sup>2</sup> PSYMED, Chennai, India <sup>3</sup> Institute of Mental Health, Madras Medical College, Chennai, India drraghaswe@yahoo.co.in

#### Abstract:

**Background**: Tobacco use/abuse is rampant in South India and it is not perceived as an addictive/ harmful substance among the users and their family. OMSF is a pre-malignant condition with insidious onset and leads to Squamous Cell Carcinoma (SCC) in about one third of the users. This condition is reversible in the early stages if the causative substance use is stopped. However, most of the individuals are diagnosed during the moderate or late phase when the condition is irreversible and only symptomatic treatment with steroids is possible.

**Objective**: To study the prevalence of OSMF among smokable/non-smokable tobacco users and organise referral linkages for them.

**Methodology**: Consecutive sample of 100 individuals both male and female above age 18 years who are diagnosed with current tobacco dependence according to ICD-10 criteria will be included after obtaining consent. They need to have completely erupted maxillary and mandibular incisors and no dental prosthesis on upper and lower anterior teeth up to first molar. Those with co-morbid other dental conditions affecting mouth opening, recent history of Temporo-Mandibular Disorders (TMDs), jaw or face pain at rest, previous history of any malignancy, dependence on other substances such as cannabis, past h/o OMSF and having disorders interfering with the ability to provide consent will be excluded. The sample will be evaluated with 3 finger test for Maximal Mouth Opening (MMO) and Inter-Incisional distance measured using Vernier caliper.

**Results and Conclusion**: The recruitment is ongoing and the results shall be presented at the time of presentation.

## Socio-Demographic and Clinical Profile of Female Opioid Treatment Seekers Attending Drug Treatment Clinic (DTC), RIMS Hospital, Imphal

Majumder U<sup>1</sup>, Singh RL<sup>2</sup>, Singh SG<sup>2</sup>

<sup>1</sup> Modern Psychiatric Hospital & De-Addiction Centre, Agartala, India <sup>2</sup> Department of Psychiatry, RIMS, Imphal, Manipur, India <u>udayan586@gmail.com</u>

#### Abstract:

**Background:** Opioids in forms of heroin, dextropropoxyphene, codeine is being readily available & abused in Manipur, being the drug hub of eastern India. However there has been a limited focus on pattern of opioid abuse among females.

**Aims & Objectives:** The present study aims to document the socio-demographic and clinical profile of female opioid treatment seekers attending the Drug Treatment Centre (DTC), Department of Psychiatry, RIMS.

**Materials and methods:** It was a cross sectional hospital based study. Thirty consecutive consenting females with opioid dependence fulfilling ICD-10 criteria from December 2017 to September 2018 were included. Data analysis was done by SPSS 21.0.

**Results:** Commonest age group abusing opioids was 21-30 years (43.3%). Majority were Hindus (60.0%), married (53.3%), from urban areas (66.7%) & unemployed (33.3%). Commonest used opioid was heroin (70.0%). Recreational purpose (30.0%) was the commonest reason for initiating drugs. 53.3% of them were indulged in unprotected sexual intercourse with multiple partners. Majority (63.3%) was under detoxification with buprenorphine while 30.0% were undergoing opioid substitution with methadone. Majority (23.3%) of them had psychological problems in the form of depression and anxiety.

**Conclusion**: Our study revealed the pattern of opioid use among women and associated complications with them. Parallel to men, women are also at an increased risk of substance abuse especially opioids. Female patients who complain of chronic pain should be thoroughly evaluated for psychological issues.

## 'Self-stigma' among Opioid Dependent Men and Women: A Cross Sectional Comparative Study among Treatment Seekers

Verma K, Mandal P, Mongia M, Ambekar A

All India Institute of Medical Sciences, New Delhi, India kamini.aiims@gmail.com

#### Abstract:

**Background**: Substance use disorders are commonly accompanied by a sense of shame or selfstigmatization which results in a barrier for treatment seeking, diminished self-efficacy, and lower quality of life. We aimed to compare self-stigma among men and women seeking treatment for opioid use disorders.

**Methodology**: Cross sectional observational study, with sample size of 40 (20 males, 20 female) patients of opioid dependence (ICD-10) first time treatment seekers in a tertiary care addiction-treatment center. Following informed consent, participants were interviewed using a semi-structured questionnaire (socio-demographic and substance use details) and Substance Abuse Self Stigma Scale (SASSS). Clearance from institutional ethics board obtained.

**Results**: The primary opioid of use was Heroin (55%) in males while Inj Pentazocine (45%) in females. Mean duration of use was higher in males (8.53 vs 5.75 years). Self-stigma was found to be significantly higher (p<0.001) in females in all three subscales: self-devaluation (2.52 vs 3.29), fear and enacted stigma (3.28 vs 3.95), Stigma avoidance (2.79 vs 3.63).

**Conclusion**: This finding contribute to better understanding of increased self-stigmatization in female substance using population and underscores the need for gender sensitive public health policies to address the issue.

## A Retrospective Study of Factors Influencing Compliance and Re Admission Rates in Patients Admitted with Substance Use Disorder

Singal P, Kumar K, Yadav A, Mina S

Department of Psychiatry, VMMC and Safdarjung Hospital, New Delhi, India <u>kamya0793@gmail.com</u>

#### Abstract:

**Background:** Patients with substance use disorder are known to have high rates of relapse and account for a substantial number of admissions to inpatient facilities.

**Objective:** To study the sociodemographic profile and clinical factors determining the recent trends in admission rates of patients with substance use disorder in an inpatient facility in a tertiary care general hospital.

**Methodology:** Details of 115 patients admitted in psychiatry ward at a tertiary care general hospital over a period of 14 months from 1<sup>st</sup> May 2017 to 30<sup>th</sup> June 2018 were obtained from the admission register and electronic registration system in the OPD. Further details were obtained through medical record files. SPSS version 21 was used for performing analysis.

**Results:** Of the 115 patients admitted, 93% were males while the rest were females. The mean age of patients admitted was 32±11. 57% of the patients were admitted with a primary diagnosis of substance use disorder while the rest 43% were found to have comorbid use of substance. Past history of poor compliance had a significant impact on non-adherence to current treatment and follow up.

**Conclusion**: Engagement in successful treatments at first healthcare contact can predict successful outcomes for patients with substance use disorder.

## **Opioid Substitution Treatment in Indonesia: The Challenges and Outcomes in a Buprenorphine Maintenance Program**

Indriyani I

Jakarta, Indonesia

## To Study the Effect of Parental Alcohol Use on Their Children.

#### Dhiman R, Kumar K, Yadav A, Mina S

Department of Psychiatry, VMMC and Safdarjung Hospital, New Delhi , India rupamdhiman64@gmail.com

#### Abstract:

**Background:** Having alcohol use disorder in one or both parents is shown to have negative impact on their children.

**Objectives:** 1) To assess the behavior of children (aged 6-18 years) of parents with alcohol use disorder. 2) To study the relationship of parenting and various variables of alcohol use disorder and their impact on children.

**Methodology:** A total of 65 children (aged 6-18 years) of parents with alcohol use disorder presenting to Psychiatry OPD were assessed using semi structured questionnaire, paediatric symptom checklist and Alabalma parenting questionnaire.

**Results:** The children has shown symptoms in form of dropping school grades(63.2%), trouble with teacher (44.1%) , fidgety (58%) and blaming others for mistakes (49.9%). About half parents has shown poor involvement.

**Conclusions:** The hazardous effects of alcohol poses threat not only to patient but also his family including children so it should be made into practice to screen their children for psychological problems.

## ORAL COMMUNICATIONS 13: Day 3 – 15 Nov 2019 – 16:00 pm to 17:30 pm – Hall 7

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### Dual Disorders in Psychiatry: Challenges in the Context of Changing World

Adhikari SR, Dawadi A

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#### Abstract:

"Dual disorders" in psychiatry are misleading called "dual" as hypothetically all of the psychiatric disorders are due to complex interactions of abnormalities of the different parts of the brain. Practically almost all addiction disorders have co-morbid psychiatric disorders. Creating differentiation of addiction disorders and other mental disorders will lead to mismanagement and misdiagnosis. Globalization, migration and electronic media exposure have made co-morbid disorders assessment and treatment more complex. This presentation will highlight the clinical importance of managing co-morbid disorders in clinical setting. Integrating rather than differentiating co-occurring disorders in the mainstream psychiatry will help patients. It will also help psychiatrists the importance of recognizing co-occurring disorders in clinical setting.

## Does Co-morbid Psychiatric Illness Influence the Help-Seeking in Individuals with Substance Use Disorder (SUD)?

Mishra S, Padhy SK, Nath S, Pattnaik JI, Kumari T

#### shreemishra09@gmail.com

#### Abstract:

**Background:** Substance use poses an ever-escalating problem in countries like India. Comorbid substance use influences the course and outcome of major psychiatric illnesses and vice versa. Studies looking into the pathways to care of such clients and their caregivers are of paramount importance, particularly from a cultural diverse country like India.

**Objectives:** The current study endeavours to look into help-seeking behaviour and the pathways to care regarding substance use per se across various psychiatric diagnoses in an apex tertiary care medical institution in Eastern India and whether comorbid psychiatric illness influence the pathways to care.

**Methodology:** This is a retrospective review of all inpatients admitted during a 2 year period. Socio-demographic and clinical profile, substance use related parameters and the pathways to care specifically for substance use disorders were collected and statistically analysed. General Help-seeking questionnaire was used to tap help seeking behaviour.

**Results:** A total of 965 in-patient case records were reviewed with regards to ICD-10 psychiatric diagnoses. Types and patterns of substance use, associated comorbidity varied across age, gender, socio-demographic characteristics with tobacco use being the most common followed by cannabis, alcohol and opioids. The pathways to care varied from faith healer, quacks, multi-purpose health workers, primary physicians and others. Delay in help-seeking for substance use disorders was apparent in comparison to the dual-diagnosis group. This could be because of multiple bio-psycho-socio-cultural factors. We will be presenting and discussing in details in the presentation.

**Conclusion:** Pathways to care possibly vary in the comorbid SUD group in comparison to SUD group.

## Frequency of Adult ADHD and Associated Common Psychiatric Illness in Medical College Undergraduates

#### Monga P, Hegde S

Department of Psychiatry, Father Muller Medical College, Mangalore, Karnataka, India pankhuri.monga16@gmail.com

#### Abstract:

**Background:** Attention deficit and hyperkinetic disorder (ADHD) is a chronic disorder of childhood onset, with a significant proportion of the affected children continuing to display symptoms throughout adulthood. In students, ADHD in adulthood is associated with weaker academic performance leading to unsuccessful attempts in examination and those who get into college showcase poor cognitive skills and coping strategies. It is often an overlooked diagnosis among adults, thereby calling for a need for this study among a less studied, yet highly demanding profession as far as academics are concerned.

**Aim**: (1) To assess frequency of adult ADHD among medical undergraduates, (2) To evaluate common psychiatric comorbidities associated with it.

**Methodology:** Total of 150 medical students studying in father Muller Medical College were recruited, were administered a proforma with details pertaining to socio-demographic data, family and past history of psychiatric disorders and if treatment sought for the same, currently seeking treatment for a psychiatric illness and regular basis use of substances. Each student was given adult ADHD self-rating scale and general health questionnaire - 28.

Results and conclusion: Will be discussed.

## Pain Management in the Setting of Addiction and Mental Health Disorders

#### Mead A, Rieb L

#### annabel.mead@vch.ca

#### Abstract:

Treating pain in people with concurrent mental health and addiction issues can be challenging, and a biopsychosocial approach to treatment is necessary for treating pain in this setting. Pain is particularly difficult to treat in patients with opioid use disorders due to dysregulation of the pathways involved with mood, pain and behavioural reinforcement.

The management of acute and chronic pain in those with concurrent substance use disorders and mental health symptoms will be discussed. A focus on pain management in opioid use disorder will highlight treatment options in various settings (inpatient, outpatient and perioperative), including opioid rotations and micro-dosing induction techniques for buprenorphine-naloxone. The role of non-opioid pharmacotherapies for pain and trauma symptoms will be explored, with recommendations for useful medications from various drug classes.

## A Clinical Study on Substance Use Disorder among Adolescents and its Association with Other Psychiatric Conditions in Assam, Northeast India

Rahman N, Bora U, Das S, Chakravarty S

#### nilofarr19@gmail.com

#### Abstract:

**Introduction:** Substance use disorder nowadays is a highly prevalent problem among adolescents. It is often associated with other psychopathologies, like depression, anxiety, conduct disorder, ADHD etc. Every third individual in Northeast region is estimated to indulge in substance use, which is attributed to easy availability and close proximity of this region to the 'Golden Triangle'. In Assam, few studies on adolescent substance use have been done at community level, but a comprehensive study at tertiary set up is still lacking. Our goal through this study is to provide a groundwork relating to substance abuse in adolescents.

**Objectives:** To study the clinical profile of substance use disorders among adolescents; Association of substance use with other psychopathology among adolescents.

**Methodology**: Sample consisted of adolescents between 10 to 19 years attending Department of Psychiatry, GMCH, Assam. Study period was from January 2018 to June 2019. Diagnoses were made according to the ICD 10.

**Results**: Total sample size was 53. Mean age was 17.43 years. In 21 (40%) adolescents the onset of substance use was before 15 years of age. 4 participants were girls. The most common substance use for which patients attended tertiary center was opioid followed by cannabis. We found 47 (88.6%) adolescents with associated psychiatric conditions, of which most common was ADHD (14).

**Conclusion:** We found a significant association between adolescent substance use and other psychiatric conditions. Hence, further research and good empirical data is needed to gain knowledge about the emerging trend of substance use during adolescence.

## Comparative Study on Resilience and Marital Quality in Wives of Persons with Alcohol Dependence & in Wives of Persons with Alcohol Dependence and Comorbid Psychiatric Illness

Johnson D, Varughese S, Kallivayalil RA

Department of Psychiatry, Pushpagiri Institute of Medical Sciences, Thiruvalla, India drderrickjohnson90@gmail.com

#### Abstract:

**Introduction:** Alcohol dependence is a major health problem causing a significant amount of distress both physically and emotionally. Family members especially spouses take the major brunt affecting their ability to cope, adjust with the life situations and their marital quality. These distress increases when they have a comorbid psychiatric illness. Resilience helps them to adapt to this difficult situation positively.

**Objectives:** To compare the resilience and marital quality in wives of persons with alcohol dependence and in wives of persons with alcohol dependence and comorbid psychiatric illness. **Methods:** Consecutive patients with a diagnosis of alcohol dependence and their wives and patients with a diagnosis of alcohol dependence and comorbid psychiatric illness with their wives attending the Alcohol and Drug Dependence Clinic (ADDC) attached to our department were inducted in the study based on inclusion and exclusion criteria. Wives of the two groups were compared for their resilience and marital quality using Resilience Scale for Adults and Marital Quality Scale respectively.

Results: Data will be analyzed and presented.

## Trends in Patient Profile at a Community Based Substance Treatment Centre in India

#### Gupta S, Chatterjee B, Sarkar S, Dhawan A

Department of Psychiatry and NDDTC, All India Institute of Medical Sciences, New Delhi, India <u>snehil2161@gmail.com</u>

#### Abstract:

**Introduction:** Community based addiction treatment facilities are vital, yet limited, in India. Current study aimed to assess the change in profile of treatment seekers at a community drug treatment clinic.

**Methods:** The study was carried out at community drug treatment centre situated in Delhi, India. The profile of all clients registered at the centre for the year 2003 (n=330), 2010 (n=110) and 2017 (n=302) were compared.

**Results:** Most of the treatment seekers were male (98%) and belonged to lower socio-economic status at all three time-points. A trend towards progressive decline in age of substance use initiation (F[2, 427]=68.52, p < .0001), and age at seeking treatment (F[2, 732] =35.64, p < .0001) was noted. Time to seek treatment also decreased progressively (F[2,650]=110.1, p < 0.0001). The proportion of clients who were unmarried/separated/ divorced showed significant decrease over time ( $\chi$ (2) =46.70, p < 0.001). Similarly, proportion of those involved in illegal activities also decreased ( $\chi$ (2)=12.99, p=0.002) while proportions of school-completers increased over time ( $\chi$ (2) =27.44, p < 0.001). Trend also shows a progressive decline in clients with opioid dependence ( $\chi$ (2) = 81.5, p<0.0001) and increase in those with alcohol dependence ( $\chi$ (1) =53.6, p<0.0001).

**Conclusion**: There has been a change in the client-characteristics over the years. Progressively decreasing age of onset indicates easy availability of substance. On the other hand, early treatment-seeking might indicate increasing treatment awareness. Increasing proportion of licit substance users and those with less complication might also indicate inability to bring those with severe complications and using illicit substance into treatment.

## Profile of Opioid Users Presenting to a De-Addiction Centre in Tertiary Care Hospital of Northern India

#### Roub F

PGIMER Chandigarh. India fazleroub@gmail.com

#### Abstract:

**Background:** Opioids dependence has been found to lead to increased rates of morbidity and mortality secondary to medical issues, suicide, and overdose along with higher criminal involvement. There has been an increase in opioid overdose deaths globally as well as in Northern India.

**Objective:** To study the socio demographic and clinical profile of heroin users attending our de addiction center

**Methodology**: Retrospective charting of patients attending the Outpatient clinic was assessed and those who had a diagnosis of opioid dependence were included.

**Results:** 377 patients were included in the final study. Patients were predominantly males (98%), and were mostly shop keepers/farmers (30.5%). Predominant opioids were natural opioids (63%). About 32.09% patients were put on Naltrexone. There was dropout rate of about 39% at one month.

**Conclusions:** Opioid users seeking treatment are males and belong to young age group. In northern India, natural opioids form the predominant type of opioids even though the use of injection drug use is also increasing.

## ORAL COMMUNICATIONS 14: Day 3 – 15 Nov 2019 – 16:00 pm to 17:30 pm – Hall 8

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### Clinical Profile and Outcome of Patient with Seizure in the Course of Alcohol Withdrawal: Case Control Study

Prakash O, Murthy P<sup>1</sup>, Benegal V<sup>1</sup>, Taly AB<sup>1</sup>, Jha S<sup>2</sup>, Gangadhar BN<sup>1</sup>

<sup>1</sup>NIMHANS, Bangalore, India <sup>2</sup>Apollo Hospital Delhi, India

#### Abstract:

**Background & Objective:** To study clinical profile and outcome of patients with withdrawal seizures (WS) during alcohol withdrawal syndrome (AWS) & also evaluates serum homocysteine levels.

**Methodology**: Analysis of a cohort study patient population seeking symptom triggered therapy for AWS treated between January, 2007 and June, 2009 in out-patient and in-patient services under the Departments of Psychiatry and Neurology, National Institute of Mental Health & Neurosciences, Bangalore, India.

**Measurements**: Multivariable binary logistic regression models with stepwise variable selection procedures were conducted providing odds ratio (OR) estimates.

**Findings**: 100 cases with seizures (WS group) and 54 controls without seizure with alcohol dependence formed study population. The mean age qualified for alcohol dependence was 29.5  $\pm$ 6.4 years and duration of dependence was 118  $\pm$ 81.6 months at the index visit. No significant differences were noticed in drinking profile of alcohol, past history of medical illness/epilepsy and family history of alcoholism/epilepsy between two groups. The serum homocysteine levels were significantly elevated in WS case group. The cases with WS were hospitalized more (p= 0.05) and had more social and health complications (P < 0.05). During a heavy drinking period, the case group with WS had significantly more feeling of sweating (p<0.05). On the follow up of at least one year, 4 patients with seizure died as compared to one in control group. Four patients in seizure group had relapse of fits as compared to none in control group.

**Conclusions**: The present study highlighted adequate clinician attention during course of alcohol withdrawal. It is important to document that patient with seizure had more deaths and relapse of fits as compared to controls.

## Prevalence of Nomophobia and Internet Addiction in Population Presenting to Tertiary Care Hospital

Jindal M, Mahajan R, Mahajan N

DMCH Ludhiana, India malika.jind@gmail.com

#### Abstract:

**Background**: Smartphones and internet have become an integral part of human life. But technology addiction that connects us, makes us lonely at the same time. Smartphone addiction (known as nomophobia, which is fear of not using mobile phone) and internet addiction, which are substance free addiction have become problematic these days.

**Objective**: Over the past decade, the use of smartphones and internet has increased at an alarming rate. This study was done to study the prevalence of smartphone and internet addiction and their association with demographic variables.

**Methodology**: A cross-sectional survey was conducted using smartphone over-dependence scale (SODS), nomophobia questionnaire (NMP-Q) and internet addiction test (IAT). A self-reported questionnaire regarding demographic data, was used. The sample consisted of 128 subjects, aged between 18-60 years.

**Results**: Most of the subjects were in the age group 18-30 years. Males used smartphone and internet more than the females, in terms of number of hours per day. More than 60% of the participants were found to be addicted to their smartphones, 70-80% of which spent their maximum time over the internet.

**Conclusion**: The use of the smartphone and internet is associated with advantages, but at the same time, smartphone and internet have addictive potential as well.

## Patterns and Sociodemographic Characteristics of Substance Abuse in Punjab: A Retrospective Study at Tertiary Care Centre

#### Kaur K, Mahajan R, Mahajan NS

DMCH Ludhiana, India karan17jot@gmail.com

#### Abstract:

**Background**: Substance abuse has become one of the major public health problems of present society. Illicit drug use in Punjab State has assumed alarming dimensions, with estimated millions of victims of different kinds of drug abuse and substance related disorders.

**Objective:** Record the pattern of substance abuse and the sociodemographic characteristics of abusers attending OPD at a tertiary care centre

**Methods**: the sample included all patients from age group 15 years to >60 years, presented to DMC&H during the period of October 2018 till March 2019. Data was collected retrospectively from medical records. 300 treatment seeking patients, fulfilling the ICD-10 criteria for substance abuse were included in the study.

**Result**: The majority of patients were males of the age group (31-45) years, consuming opioid (155) as the most common substance of abuse followed by alcohol (134) and 141 subjects found using more than one substance. Majority of the patients studied less than 10th standard, were married, most commonly belonging to rural Sikh community. Comorbid psychiatric illnesses, most commonly found were mood disorders.

**Conclusion**: Our study showed that the use of substance including that of opioids is highly prevalent. The findings of the study can have implications in policy making.

## A Study of Coping Strategies and Perceived Burden in Spouses of Synthetic and Semi-Synthetic Opioid Addicts

Bagri G, Mahajan R, Chaudhary R

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#### Abstract:

**Background**: Opioid dependence syndrome has deleterious consequences not only on the addict but also on the members of family/caregivers especially the spouse who is most vulnerable. Family conflicts, depressive illness, exhaustion, anger, difficulties in social and interpersonal relationships, along with feelings of isolation, neglect and stigmatization are amongst the common problems reported by family members. Coping strategies refer to specific efforts that people employ to master, tolerate, reduce or minimize the stressful situations or events.

**Objectives:** (1)To study the perceived among the spouses of patients with synthetic and semisynthetic opioid dependence presenting to DMC&H, and (2) To evaluate various coping strategies employed by spouses of patients with synthetic and semi-synthetic opioid dependence presenting to DMC&H.

**Methodology**: The study will be conducted on 50 spouses of patients of opioid (synthetic and semi-synthetic) dependence syndrome presenting to Department of Psychiatry, DMC&H Ludhiana. Socio-demographic proforma will be filled containing the basic information about the spouse and the subjects will be evaluated for the perceived burden assessed using Zarit Burden Interview and coping strategies employed by them by administering Brief Cope Inventory.

**Results**: Our study showed that burden was more in spouses of heroin dependent individuals and they tend to employ more coping strategies. Most of the substance abusers and their wives were in the age group of 21-30 years.

**Conclusion**: In conclusion, our study showed that substance dependence was associated with substantial burden for the family members. Narcotics abusers who experience relapse will increase their family burden.

## Association of Internet Addiction with General Health Profile among Students Pursuing Medical Education

Mishra S, Kar SK

King George's Medical University, Lucknow, India sudha13pandey@gmail.com

#### Abstract:

**Background**: India is a leading country for the explosive growth in the use of the internet. The number of internet users increased up to 8% from 2000 to 2008. The prevalence rate of internet users are increasing day by day and it mainly belongs to college based population i.e. 14%. Internet addiction can have adverse health consequences.

**Objective**: The objective of the study was to assess internet addiction among medical students and its association with their heath profile.

**Methodology**: This was a cross-sectional study on the medical (MBBS/BDS) and paramedical students of King George's Medical University, Lucknow. Stratified random sampling was done for recruitment of the participants in the study. A total of 385 participants were evaluated on the survey questionnaire. The survey questionnaire included the socio-demographic details, 20 item Internet Addiction Test, Duke Health profile-(17 items generic questionnaire to measure adult self-reported functional health status).

**Result**: Of the 385 evaluated participants, complete information on internet addiction and health profile were available for 371 participants and 374 participants respectively. Male participants had significantly higher (p<0.001) scores on Internet Addiction Test than females; however, the difference in general health profiles among males and females did not differ significantly. Among the MBBS students (both males and females) and female nursing students, significant negative correlations were observed for most of the domains of health profile with internet addiction severity.

**Conclusion**: Internet use is closely associated with the general health profile of an individual. As the severity of internet addiction increases the general health profile deteriorates.

## Alcohol Use in Children and Adolescent in Attention Deficit Hyperactive Disorder: An Exploratory Study

Mathur R, Jhanjee S, Sagar R, Patra BN, Sarkar S

All India Institute of Medical Science, New Delhi, India jammyrahul17@gmail.com

#### Abstract:

**Background**: Substance use disorders are now conceptualized as having their developmental roots in childhood. Compared with the normal population, the risk of substance use disorder is twice as high among individuals with ADHD. We aimed to examine the rate of alcohol use in children and adolescents with ADHD and compare it with healthy age matched controls.

**Methodology**: Cross sectional observational study, with sample size of 50 cases of ADHD seeking treatment at Child Guidance Clinic of AIIMS psychiatry OPD and 50 healthy aged matched controls. Following informed consent from parents and assent from children, participants and parents were interviewed using a semi-structured questionnaire (socio-demographic and substance use details) and MINI Kid, and severity of ADHD was assessed using Conner's parent rating scale-short form (CPRS-S). Clearance from institutional ethics board was obtained.

**Results**: Alcohol use was present in 14% of the cases of ADHD as compared to nil in control group. Family history of alcohol dependence significantly predicted alcohol use in ADHD cases (p value= 0.031). CPRS hyperactivity domain was found to be significantly associated with alcohol use in the cases (p value= 0.041).

**Conclusion**: There is increased risk of alcohol use in children and adolescent with ADHD. This underscores the importance for screening of substance use while working up a case of ADHD.

# Analysis of the Role of COMT Gene Expression in Alcohol Dependence

Singh R<sup>1</sup>, Gupta R<sup>1</sup>, Ambekar A<sup>2</sup>, Grover T<sup>2</sup>, Jain R<sup>2</sup>, Sharma A<sup>1</sup>

<sup>1</sup> Laboratory of Cyto-molecular genetics, Department of Anatomy, AIIMS, New Delhi, India <sup>2</sup> Department of National Drug Dependence and Treatment Center, AIIMS, Ghaziabad, India <u>renu.singh2611@gmail.com</u>

#### Abstract:

**Introduction:** Alcohol dependence (AD), a complex disorder involves gene-environment interactions. Variations in the genes of the reward pathway play an important role with *COMT* gene of this pathway being involved in dopamine degradation. Single Nucleotide Polymorphisms (SNPs) - Val158Met (rs4680) and 287A>G (rs2075507) are widely investigated in AD and the present study reports on their effect on the relative expression of *COMT*.

**Materials and methods:** A total of 100 clinically diagnosed AD males recruited from Department of NDDTC and 100 age-matched controls who were residents and staff members of the hospital formed the study group. Clinical and pedigree details were noted from all participants and five ml blood collected after taking informed consent. Two *COMT* gene SNPs – Val158Met and 287A>G were genotyped, real-time RNA levels along with epigenetic studies undertaken to assess their effect on *COMT* gene expression. Genotypes were scored, fold change in expression, methylation changes noted and results analyzed using SPSS v20.0.

**Results:** Mean age of the patients ( $35.7\pm0.76$ ), age at first use ( $21.8\pm0.58$ ) and duration of use was ( $13.8\pm0.73$ ) years. The SNP Val158Met showed significant increase in heterozygosity among cases (63%) compared to controls (42%; p-0.03). Presence of Val158 allele is known to augment *COMT* activity thereby increasing dopamine levels. *COMT*287A>G did not differ between cases and controls (p-0.34). *COMT* RNA levels showed increase among the patient group. The results of methylation changes will be discussed in relation to *COMT* expression and SNP changes.

**Conclusion:** The present study suggests the role of SNP Val158Met in altering dopamine levels thus increasing vulnerability to AD.

## ORAL COMMUNICATIONS 15: Day 4: 16 Nov 2019 -8:30 am to 10:00 am - Hall 8

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## Substance use Disorders in Forensic Psychiatry Settings in Australia and India

#### Balakrishnan A

Department of Psychiatry, Victorian Institute of Forensic Mental Health, Melbourne, Australia; Department of Psychiatry at NIMHANS, Bangalore, India <u>abhi.gilli@gmail.com</u>

#### Abstract:

**Background:** History of substance use disorders (SUDs) among patients in forensic psychiatry settings complicates the diagnosis and management of mental illnesses in different settings. Further, ongoing surreptitious substance use in prisons interferes with trust, alliance and medication compliance.

**Objective:** To examine SUDs among male incarcerated patients in a hospital in Melbourne, Australia and Bangalore, India.

**Methodology:** Retrospective chart reviews were used to obtain information about substance use history, comorbid diagnoses, pharmacological management and drug screening while in custody.

**Results:** In both the settings, cannabis and alcohol use disorders were very common but use of methamphetamine while almost non-existent in the Indian setting, was present in almost all patients at the Melbourne centre. There was also a much higher rate of acquired brain injury (ABI) in this population, possibly secondary to the use of methamphetamine. Urine drug screens revealed benzodiazepine as the most common drug detected in the Indian setting, whereas amphetamines and buprenorphine were the commonest drugs detected in the other setting. The use of benzodiazepines as prn medication and the use of anti-craving agents was much higher in the Indian setting. Both settings involved demands from patients to be started on sedative-hypnotics/other medication as a means to 'control' their treatment provider, whose focus was that compliance on psychotropics could be ensured

**Conclusion:** Both settings had similar difficulties in regulating the access of patients to illicit drugs while in prison, and while the choice of illicit drugs was different, addressing systemic gaps would be useful in preventing such access. ABI numbers tended to be much higher in the Victorian setting, most of them secondary to amphetamine use, suggesting that policy level interventions would be beneficial. The use of benzodiazepines as prn medication was higher in the Indian settings, which could possibly lead to increased diversion and lack of efficacy of administered psychotropics, indicating that a change in prescription patterns could make a potential difference.

## Belief and Perception of Medical Students towards Treatment of Substance Use Disorder: Preliminary Findings from a Medical College in Nepal

Shah B<sup>1</sup>, Sharma P<sup>1</sup>, Thapaliya S<sup>2</sup>, Shakya R<sup>1</sup>, Shrestha E<sup>3</sup>, Vaidya K<sup>3</sup>

<sup>1</sup>Department of Psychiatry, Patan Academy of Health Sciences, School of Medicine, Patan, Nepal <sup>2</sup>Department of Psychiatry, National Medical College, Birgunj, Nepal <sup>3</sup>Nidan Hospital, Patan, Nepal <u>shahbigya@gmail.com</u>

#### Abstract:

**Background:** Substance Use Disorders (SUDs) have been shown to contribute substantially to global burden of disease. However, there is huge treatment gap. Further, there exists wrong beliefs and attitude towards SUD among health professionals which hamper treatment. But these haven't been explored in Nepalese setting. The current study is aimed to assess belief model of addiction and perception of medical students towards treatment of SUD.

**Objective:** (1) To assess belief models of addiction of medical students, (2) To understand perception of medical students towards treatment of substance use disorder

**Methodology:** It is a cross sectional study being conducted in a medical college in Nepal and is a part of multi-centric study. Till now with 96 medical undergraduates and postgraduates have participated. Study tools included a semi-structured questionnaire to record exposure to SUD training, drugs and drug users' problem questionnaire and addiction belief scale.

**Results**: All medical students had attended clinical postings in psychiatry for minimum period of 2 weeks during their under-graduation. But eleven had never interacted with patients with SUD during training period. 57.3% of students believed on free-will model of addiction whereas 42.7% believed on disease model. Majority (71.9%) believed that willpower helps best to overcome addiction and 31.2% believed that addiction is a coping strategy for patients. 69.8% were happy with clinical encounter with patients of SUD. 5.8% felt that their role wasn't adequate while treating SUD, 4.8% perceived that their role wasn't legitimate, 12.4 % felt poor support for treating, 27.4% had poor motivation to work, 25.5% had low professional self-esteem and 15.1% had low work satisfaction. Only 7 wanted to pursue psychiatry in future.

**Conclusion:** Training in addiction psychiatry improves knowledge. However, it is essential to focus training on bio-psychosocial model of illness, improving professional self-esteem and job satisfaction so that confident and competent professionals are willing to manage SUD in Nepal.

# Attitude and Practice of Doctors towards Patients with Substance Use Related Problems

Narasimha VL, Arvind BA, Tadepalli R, Kandasamy A, Murthy P

Department of Psychiatry, NIMHANS, Bengaluru, India diptadhimukherjee@gmail.com

#### Abstract:

**Background**: According to national mental health survey 2016, treatment gap (TG) for substance use disorders (SUD) (86% for alcohol use disorders) is high. Doctors working in general practice can detect and offer early intervention in SUD and such interventions can reduce the existing TG.

**Objective**: To understand the attitude and practice of Doctors Practicing in South-zone of Bengaluru (DPSB) towards patients with substance use related problems.

**Methods**: DPSB were selected using a stratified proportionate random sampling and interviewed face-to-face using a specially developed questionnaire.

**Results**: 135 doctors, mostly (67.4%) private practitioners, from different specialties were interviewed. In attitude towards substance users, 62% felt users were 'very responsible' for their drug use; 4% felt that adverse life circumstances may be responsible; two-thirds felt angry, 80% felt disappointed, 70% felt sympathetic, 90% felt concerned, 95% felt they deserved/entitled to same level of medical care as non-users. In practice, 30.0% of their patients used Alcohol, Tobacco or Other Drugs of abuse (ATOD). 73.3% and 80.0% either always/often asked or advised their patients to stop use of ATOD respectively. Follow-up (43.7%), referral (45.2%) was relatively low. 64.4% provided brief counselling, 7.7% prescribed anti-craving agents for alcohol use. 83.7% felt having knowledge about substance use is very/extremely important.

**Conclusion**: Doctors reported commonly encountering ATOD use among their patients and had a favourable attitude towards such patients. Study highlights the need to strengthen active follow-up, referral and prescription of anticraving medications by the doctors in the study area which would facilitate reduction of TG for SUD.

## Study of Prevalence and Pattern of Substance Abuse among the Patient Attending Psychiatry Outpatient Department in Psychiatric Hospital

Razdan RG<sup>1</sup>, Razdan M<sup>2</sup>, Razdan RA<sup>3</sup>, Chouhan B<sup>4</sup>

<sup>1</sup> Department of Psychiatry, M.G.M.Medical College Indore, India

<sup>2</sup> SAIIMS, Indore, India

<sup>3</sup> Index College of Dentistry, Indore

<sup>4</sup> Department of Medicine, M.G. M. Medical College Indore, India

ram ghulam@gmail.co.in

#### Abstract:

**Introduction:** National survey of substance use 2019 by NDDTC (National drug Dependence Treatment Center, AIIIMS, New Delhi) reported that 14.6% using alcohol, 2.8% cannabis, 2.1% opoids, 0.7% inhalants .Substance abuse is a complex problem having medical and social ramifications. Data on substance use is required from different regions in the country as the likelihood of regional disparity in substance use. Substance use plays a major role in course and prognosis in mental disorders. There is a scarcity of research work of co-morbid substance use in psychiatric illness in our region .this study aimed at bridging this gap.

**Aims and objectives:** To study the prevalence pattern of substance use among the patient attending psychiatric outpatient department.

**Objectives**: 1) To study the psychosocial variable related to substance use in studied sample. 2) To study the prevalence of substance use in studied sample. 3) To study pattern of substance use studied sample.

**Methodology:** Study Design: Cross-sectional study, Sample size: 500, Study duration: Jan 1018 – Dec 2018.Studied Population: Patient above 18years attending Mental hospital, Indore outpatient department, who gives informed consent for the study. Procedure: After taking consent from patient data was entered in semi- structured data entry Performa which has questioners of the socio-demographic and substance use profile data. Appropriate statistical analysis was done using SPSS v16.

**Results:** Sample size comprises of 500 patients who were analysed. Mean age of the studied sample was 36 years, and most of them were males (70%). Prevalence of substance use in the psychiatric population was found to be 54%. Tobacco was most prevalent (51.1%) followed by alcohol (26.3%), cannabis (10.7%) opioids (2.6%), and sedatives & hypnotics (3%). Users were mainly diagnosed suffering from schizophrenia 48.5%, followed by BPAD (18.2%), and depression (15.2%). Among specific substances, tobacco use was most prevalent in schizophrenia (63%), BPAD (43%), and depression (52%). Alcohol was most prevalent substance in anxiety disorder patients. Peer pressure was the most common reason for starting the substance use. Age of onset of substance use was mostly in 18-25 yrs. group patients (57%).

**Conclusion:** This study shows that a considerable number of psychiatric patients are having comorbid substance use. As already established substance use has direct effect on course and prognosis of psychiatric illnesses, more integrated treatment protocol has to be made to deal with this issue.

## Assessing Impact of Drug Abuse in Gastrointestinal Obstruction and Perforation: A Retrospective Review

Bishnoi D, Rathi AK, Verma KK, Sharma S

#### bishnoi94divya@gmail.com

#### Abstract:

**Background:** There has been rise of reference consultation from Department of Surgery for patients of intestinal obstruction or perforation as many were substance dependent particularly pain killers. These drugs are easily available in various combinations, common are tramadol, NSAIDs, antispasmodics, muscle relaxant etc. NSAIDs cause gastric erosion and ulcers, dicyclomine reduces gut motility and tramadol is associated with pyloric sphincter thickening and constipation.

**Objectives:** (1) To find the drugs frequently associated with gastrointestinal obstruction/ perforation and factors related. (2) To find out site of obstruction and perforation in drug abusers.

**Methodology:** A retrospective chart review was done in gastrointestinal obstruction or perforation cases operated in last 3 months. Case files were retrieved and sociodemographic profile and site were noted. Cases with history of substance use were then assessed in detail. Data collected was analysed by SPSSver21.

**Results:** Of total 94 cases operated for gastrointestinal obstruction/perforation from April to June 2019, 78 files had proper record, of them 48 had history of current drug abuse. Out of 48, 89.5% were male with mean age 42.4 (±12.5). Most common drug abused was combination of tramadol and NSAIDs (45%). Most common site stomach (60%). Majority (37%) initiated drugs for non-specific pain.

**Conclusions:** This study shows combination of synthetic opioids and NSAIDs are implicated in gastrointestinal obstruction and perforation. This calls for the urgent need for the scrutinization of the drug dispensing agencies and proper scheduling and issue of warnings. We also need to regularize the indications and duration of the drug intake because patients often exceed the recommended doses.

## The Implementation of Short-Term Rehabilitation System on Patient Related Legal Problems in Drug Dependence Hospital (RSKO)

#### Noveria PS

Drug Dependence Hospital (RSKO), Cibubur, East Jakarta,13720, Indonesia. <u>psandynov@yahoo.com.sg</u>

#### Abstract:

The Indonesian Government under Law no 35/2009 ensure social and medical rehabilitation for substance use disorder. Thus, RSKO as the only government hospital directly under Ministry of Health has the main task of drug rehabilitation, need to create a comprehensive service involves handling multidisciplinary and fulfil intersectoral needed. The Government through Ministry of Health Regulation no 50/2015 expand access rehabilitation, both inpatient and outpatient setting. Rehabilitation for patient related legal problems paid by the government over a period of three months, for voluntary cases can reach six months inpatient period and be able to continue as outpatient for a year.

In the last two years there is a significant increase patients with legal problems was sent to RSKO around 70 % - 80 %. Supporting the idea of short-term rehabilitation system: hospitalization for three months and outpatient program for the next three months. This system consists of:

1. Intersectoral coordination especially police cooperation, attorney, court, social rehabilitation centers.

2. Different health care services.

3. The three months in rehabilitation program which include medical psychiatric and psychosocial intervention.

4. The next three months advance rehabilitation program focusing on psychosocial intervention.

5. Outpatient rehabilitation program.

Short term rehabilitation help patient to adapt faster to their community and being productive.

# The Brain Morphometric Correlates of Clinical Parameters in Alcohol Use Disorder

Khadse PA , Holla B, Karthik S, Biswal J, Mehta UM , Viswanath B, Bharath RD, Venkatasubramanian G , Chand PK , Murthy P, Benegal V

Departments of Psychiatry and Neuroimaging and Interventional Radiology, National Institute of Mental Health and Neurosciences (NIMHANS), India. <u>pawankhadse@gmail.com</u>

#### Abstract:

**Background:** Chronic use of alcohol is known to cause various structural, functional and neurometabolic disturbances in the brain. These disturbances could have potential influence on the clinical outcomes resulting in the chronic relapsing course of alcohol use disorder (AUD). **Objective:** To compare structural brain measures between treatment seeking subjects with AUD and healthy controls (HC) and to study their correlation with various clinical parameters. **Methodology:** Free Surfer-based cortical-reconstruction of T1-weighted MRI from 36 male AUD patients was compared with 36 age-matched HC. Brain volumes differentiating the groups at p<0.001 were then correlated with clinical parameters in a larger dataset of 79 subjects with AUD.

**Results:** Compared to HC, patients showed significantly smaller volumes at various cortical and subcortical regions, including bilateral cerebellar white-matter (CerebWM), bilateral hippocampus (Hip), right para hippocampal cortex, bilateral medial-orbito-frontal cortex (mOFC), mid-anterior corpus-callosum, right amygdala, right inferior-parietal-cortex (IPC), right precentral-cortex (PreCC) and right superior-frontal-cortex (SFC). In the larger dataset, longer dependence was associated with smaller volumes of right SFC, IPC, mOFC and PreCC. Greater average daily-use of alcohol had negative correlation with bilateral CerebWM, Hip, and right SFC and IPC. Smaller right mOFC was related to higher scores on Penn Alcohol Craving Scale and earlier time to first alcohol lapse.

**Conclusions:** Smaller volumes in regions critical for executive-functions (fronto-parietal) are seen in patients with more chronic-exposure to alcohol. Heavy alcohol consumption is related to lower volumes in bilateral cerebellum and hippocampus. Smaller volumes of regions involved in reward-motivational sensitivity (mOFC) are related to craving severity and earlier lapse.

## Public Health Problem of Opioid Use in NCR Delhi: A View from Periphery

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### Abstract:

This brief oral presentation is based largely on clinical data collated at the clinic run by the presenter. The objective is to highlight the magnitude of opioid problem in second tier cities like Rohtak which is just 70 KM from Delhi. Descriptive statistics are presented about patients who attended the psychiatric OPD in the clinic for the first time during a period of 1 year from 1st September 2018 to 31st August, 2019. The challenge of treating such patients on OPD basis with buprenorphine or its combination with naloxone is discussed. The issue of intention to treat versus intention to make money is highlighted. Outcomes, based on clinical judgement, in such case are discussed. Frustration about what a clinician can't do is mentioned. The talk would end with a conclusive message.

# Abstracts for Posters

### *Poster 1* Oral Methadone versus Sublingual Buprenorphine for Acute Opioid Withdrawals: A Triple-Blind RCT

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#### Abstract:

**Background:** Oral methadone and sublingual buprenorphine have the best evidence of effectiveness, globally for managing acute opioid withdrawals ('detoxification'). In India, buprenorphine is used commonly owing to easier availability and local evidence of effectiveness, while methadone use is limited as long-term maintenance in a few centres. Hence, we conducted this randomized controlled trial (RCT) to compare the effectiveness of methadone and buprenorphine in the in-patient management of acute opioid withdrawals.

Methods: Study setting: a tertiary-care drug dependence treatment centre. Study design: triple-blind, double-dummy, RCT. A total of 80 male patients aged 18-60 years were included and were randomized immediately after hospitalization, written informed consent and baseline assessment into two groups: oral methadone (with sublingual placebo) and sublingual buprenorphine (with oral placebo). Those with comorbid other substance dependence (except nicotine) were excluded. Assessment modalities: a semi-structured questionnaire, WHO-ASSIST, MINI-SCREEN, Visual Analogue Scale (VAS) for craving, subjective opioid withdrawal scale (SOWS) and clinical opiate withdrawal scale (COWS). Assessments: twice-daily application of SOWS, COWS, VAS, side-effect checklist and treatment monitoring (till treatment completion or for 20 days). For additional confirmation of abstinence: urine Thin Layer Chromatography for opioids at baseline, 7th and 14th day. Treatment: a flexible and tapering dosing regimen, whereby patients were eligible for additional dosage, over-and-above the fixed, once-a-day dose, in case of withdrawals. Primary outcome measure: proportion of patients completing the in-patient treatment. Secondary outcome measures: relief from opioid withdrawals and craving. The protocol was approved by the institute ethics committee and registered in the national clinical trial registry. SPSS V24.0 was used for the statistical analysis, based upon the principle of Intention-to-treat (using last observation carried forward).

**Results:** A total of 40 patients each were randomized into either buprenorphine or methadone arm. There were no significant differences between both the arms in terms of their sociodemographic profile and substance use profile (both opioids and non-opioids). Primary opioid used was heroin in both the groups (n=38 in buprenorphine group and n=39 in methadone group; p=0.56). There were no significant differences between both the arms in the term of past history of detoxification and agonist treatment. The cumulative mean dose (of the entire detoxification period) required in buprenorphine group was 20.16 mg (SD=5.81; range:1.60-29.60) while that of methadone was 127.75 mg (SD=25.56; range: 40.00–175.00). The mean duration of opioid agonist treatment (for detoxification) was almost alike in both the groups (buprenorphine: 8.93 days, S.D= 3.38 and methadone: 8.70 days, S.D. = 2.23; p=0.71). The treatment completion rates were also similar i.e. 32 (80.0%) in buprenorphine and 33 (82.5%) in methadone group (chi-square=0.08; p=0.77). However, at the end of treatment regimen, a significantly higher proportion of patients in buprenorphine group had withdrawals (as measured by COWS) (p=0.02) and higher scores on VAS (p=0.01).

**Conclusion:** Sublingual buprenorphine and oral methadone were equi-efficacious in terms of treatment completion rates for the management of acute opioid withdrawals among hospitalized Indian men. However, for clinical parameters like craving and clinical objective withdrawals scores the methadone group performed better. More studies on these lines are needed to replicate the finding. Along with buprenorphine, now methadone can also be an effective option for the acute opioid withdrawal management in India.

### Relationship of Self-Harming Behaviour with the Symptoms of Internet Addiction, Internet Gaming Disorder, Neuroticism, Extraversion and ADHD

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#### Abstract:

**Background:** Self-harming behaviour (SHB) might be defined as "deliberate self-injury to body tissue without the intent to die". It has long been speculated that SMB serves a coping function that is activated by an increase in emotional arousal. Similarly, Internet use or gaming has a propensity to alleviate dysphoric moods and may therefore be used to cope with real life problems.

**Objective:** The aim of the present study was to evaluate relationship of SHB with the symptoms of Internet addiction (IA), Internet gaming disorder (IGD), neuroticism, extraversion and attention deficit/hyperactivity disorder (ADHD) among young adults.

**Methodology:** The study was conducted with online survey among 457 volunteered university students in Ankara and people who play games on the Internet and who are in the e-mail database of a company located in Istanbul that organizes e-sports tournaments. Participants were evaluated by applying the Adult ADHD Self-Report Scale (ASRS-v1.1), the 27-item Internet Gaming Disorder Scale (IGDS), the Young's Internet Addiction Test-Short Form (YIAT-SF) and the Eysenck Personality Questionnaire Revised-Abbreviated Form (EPQR-A).

**Results:** Mean of age was did not differ between those with SHB (24.34±4.94) and those without (24.23±5.16). All the scale scores were higher among those with SHB, other than extraversion, which did not differ between the groups. In logistic regression model severity of Internet addiction and high neuroticism predicted the SHB.

**Conclusions:** These findings suggest that the presence of SHB is related with symptoms of IA, IGD, neuroticism and ADHD among young adults, although only severity of IA and high neuroticism are predictors for the SHB.

### **Poster 3** Player 2 Has Entered the Game: A Case Report of Video Game Addiction Leading to a Suicide Attempt

### Lodhi SAK

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#### Abstract:

**Background**: Video game addiction remains a controversial diagnosis. It is included as a formal diagnosis in ICD-11 but not DSM-V. We present a case of a 20-year-old Asian American male who presented with all the symptoms of a bona fide addiction. This video game addiction had driven him to attempt suicide.

**Case History**: A 20-year-old Asian American male with no psychiatric history presented to a Psychiatric Emergency Room after attempting to hang himself. It was discovered that the context of his attempt was video game addiction. On the day of presentation, the patient had received an eviction notice due to failure to pay rent. The rent money in question had been spent on a new gaming computer. On further interview, the patient revealed that his video gaming had caused him to drop out of college, lose his job due to sleep deprivation, and become malnourished. The patient had no insight into his addiction. He stated that gaming was not a problem for him and that he simply needed a new job.

**Discussion:** Addiction experts should recognize the unique neurobiology of video games which leads to their propensity for addiction. They should also be aware of current evidence-based treatment options so that they can help their patients who present with this addiction.

**Conclusion**: There are more than 2.5 billion video gamers worldwide. Studies have estimated that up to 9% of video gamers show signs of addiction. This case is an example of how serious and debilitating such an addiction may become.

### Impact of Adverse Childhood Experiences (ACE) Scores on Clonazepam Use in Medication Assisted Treatment Programs

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#### Abstract:

**Background:** Adverse Childhood Experiences (ACE) score, a questionnaire evaluating past abuse, neglect, and household dysfunction, has been linked to permanent neurological abnormalities. Clonazepam is often prescribed for patients in medication assisted treatment (MAT) programs. The purpose of this study is to evaluate whether ACE score impacts clonazepam prescribing.

**Methodology:** This retrospective cohort enrolled all patients in an East Tennessee MAT program from 2017-2019. Subjects were placed into two cohorts: low ACE score ( $\leq$ 6) or high ACE score ( $\geq$ 7). Primary endpoint was the frequency of clonazepam prescribing. As a secondary endpoint in the subgroup of patients receiving clonazepam, the mean doses were also compared. Categorical variables were compared with Fisher's Exact test and ordinal or continuous variables were compared with Mann-Whitney U test.

**Results:** Sixty-one patients were enrolled. There were 38 patients in the low ACE cohort; median age was 38, 55% (21/38) were female, and all but one were white. There were 23 patients in the high ACE cohort; median age was 38, 70% (16/23) were female, and all were white. For the primary outcome, 91.3% (21/23) were prescribed clonazepam in the high ACE cohort compared to 39.5% (15/38) in the low ACE cohort (p = 0.0001). Average clonazepam dose was 3 mg vs 2.31 mg in the high and low cohort, respectively (p = 0.024).

**Conclusion:** Patients with high ACE scores are significantly more likely to require clonazepam therapy and may also require higher doses. Further research is needed to evaluate the association of dose and treatment outcomes.

### **Poster 5** Substance Abuse and Stress Levels in Canadian University Students

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### Abstract:

**Background:** University students often report intense stress, high anxiety, depressive feelings, low self-esteem, and suicidal ideation. Our study examined correlations of these symptoms to misuse of alcohol and of non-prescription drugs.

**Methodology:** A total of 100 Canadian university students (mean age 20.2 years, SD=2.5, 33 males, 67 females) completed the Student Stress Questionnaire dealing with the use of alcohol or non-prescribed drugs "to cope" with the stress of studying and exams, and symptoms such as nightmares, depression, feelings of "being better off dead," low self-esteem, as well as with the extent of positive attitude to professors and with their pride in or contentment with the prestigious social status as a university student.

**Results:** High proportions of students reported use of alcohol (76%) or of non-prescribed drugs (83%) to cope with the stress of university life. Only 6% of the students indicated that they used neither alcohol nor non-prescribed drugs. Higher level of stress were reported by students using alcohol (r=.51) or non-prescribed drugs (r=.50). The substance abusing students more often reported feeling depressed, being better off dead, worthless, and useless, and had more often nightmares about exams or about uncompleted assignments (Pearson rs from .26 to .40).

**Conclusions:** University students who abuse alcohol and/or non-prescription drugs report higher levels of academic stress in their lives. The high prevalence of use of alcohol and non-prescribed drugs among university students is worrisome and is consistent with recent surveys by other authors in other countries.

### Adverse Effects of Disulfiram: A File Review of Patients with Alcohol Dependence Syndrome

#### Munoli R, Acharya M, Praharaj SK

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#### Abstract:

**Background:** Disulfiram is one of the oldest drugs commonly used for alcohol deaddiction. It acts by inhibiting enzyme acetaldehyde dehydrogenase, resulting in accumulation of acetaldehyde in alcohol users, leading to unpleasant effects. In recent decades, it is being studied as a possible treatment for cancer, latent HIV infection, Lyme disease and babesiosis. Commonly seen adverse effects, in absence of alcohol use, are: metallic taste in mouth, headache, neuropathy, hepatic impairment, skin rashes, etc. Despite being a commonly used drug, there are fewer well designed studies about it.

**Objective:** To study adverse effects of Disulfiram in patients with ADS.

**Methodology:** After ethics committee approval, files of 1191 substance use disorders patients, of 5 years, were screened and 405 were included. Clinical details and documented adverse effects were collected using proforma designed for the study.

**Results:** Mean age of sample was 40.5 (SD 9.52) years, mean duration of dependence was 13.48 (SD 7.41) years, mean duration of disulfiram usage was 3.11 (5.18) months. Dose of disulfiram was 250mg/d in 81.5% of patients and 125mg/d in remaining. Adverse effects of disulfiram were seen in 18% of patients. Disulfiram Ethanol Reaction (DER) was most common (48 patients), followed by peripheral neuropathy (11 patients), sleep disturbance (5 patients) and psychosis (3 patients).

**Conclusions:** Concept of aversive treatment seems to be inadequately understood as DER was most common adverse effect. Peripheral neuropathy appeared almost 4 times faster when compared to other studies, indicating need of routine evaluation and nutritional supplementation in Indian population.

### Assist-Linked Brief Intervention to Reduce Substance Use in Class C Male Hospital Employees in India: A Randomized Controlled Trial

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### Abstract:

**Background:** Substance use in workplace is associated with negative consequences and has limited research. No randomised controlled studies of brief interventions are available in Indian hospital settings.

**Aim:** To evaluate the efficacy of World Health Organization (WHO) Alcohol, Smoking and Substance Involvement Screening Test (ASSIST)-Linked Brief Intervention (ALBI) for reducing risky substance use in Class C hospital employees in North India.

**Material and methods:** In Phase-I, risk categorization was done for risky substance use using ASSIST scores from a random list of 400 Class C male hospital employees. In Phase-II, moderate or high risk subjects ('ASSIST screen-positive') were randomised into Intervention and Control groups with 35 screen-positive subjects in each group. The Intervention group was given a 15-30 minute structured session as per ALBI protocol while the control group was given general health talk for similar duration and were compared on ASSIST score, WHO Quality of Life Bref version (WHOQOL-BREF) and Readiness to Change Questionnaire (RCQ) at baseline and at 3-month follow up.

**Results:** The prevalence of screen positive use of tobacco, alcohol and cannabis in the total sample was 28.6%, 27.5% and 6.9% respectively. At 3-months post-intervention follow-up, recipients of ALBI had significant reduction of ASSIST scores compared to the control group (p<0.001), were ready to change to RCQ action stage (p values for tobacco, alcohol and cannabis <0.001, <0.001 and 0.007 respectively) and had significantly improved in WHOQOL-BREF scores.

**Conclusion:** ALBI was effective in reducing substance use, increasing readiness to change and improving the QOL of the subjects at workplace setting.

### **Poster 8** Role of Addiction Specialists in Prevention of Opioid Overdose Deaths

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### Abstract:

Recently there has been epidemic of Opioid Use Disorders in certain parts of world and hence the mortality associated with opioid overdose. Different studies show that opioid overdose is generally witnessed, death takes a while and is generally due to respiratory failure

Addiction is a chronic relapsing disorder where even a recovering patient can relapse anytime and die of opioid overdose. Considering the fact that a large number of OUD patients come to addiction specialist for treatment, these physicians can play a major role in reducing the mortality of OUD by educating the patients and their significant others against opioid overdose and prescribing naloxone to them in addition to other addiction medicines. They can keep naloxone at a safe place and use it in case they witness an opioid overdose and save a life.

Naloxone a pure opioid antagonist is very safe, reliable, cheap, easily available and fast acting drug. Naloxone causes reversal of sedation and respiratory depression associated with opioid overdose within minutes and it has no side effect of its own even in higher doses. Recently newer preparation of naloxone in form of nasal spray (Narcan) has been approved by FDA to prevent overdose deaths

In some developed countries naloxone dispensing program is being practiced widely and they have been able to minimize the mortality associated with opioid overdose. Also there is Good Samaritan law being implemented in these countries where even a layman can give naloxone in case of witnessed opioid overdose. Unfortunately in certain parts of world including India there is yet no hold of OEND even in tertiary health care centres

As an addiction specialist certified by ISAM, in last four years I have been able to spread awareness and save many patients in emergency with naloxone who were brought to me with opioid overdose respiratory depression

### **Poster 11** Genetic and Epigenetic Effects of Early Adversity at the BDNF and NR3C1 Genes in Children of Alcoholics

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### Abstract:

**Background**: BDNF r6265 SNP has been noted to interact with stress with met allele associated with lower BDNF levels when exposed to stress. BDNF exon 4 methylation is associated with higher methylation in a number of psychiatric disorders. NR3C1 BCL1 RFLP (rs41423247) is associated with increased GR sensitivity. NR3C1 exon 1 has been noted to be differentially methylated in adults with childhood abuse and children with maternal depression.

**Objective**: The current study was designed to determine the association of early adversity with differential methylation and genotypes of BDNF and NR3C1 genes and cortisol reactivity in children of alcoholics (COA) compared to matched healthy controls.

**Methodology**: 50 healthy male children of patients with alcohol dependence syndrome and 50 age, gender and ethnicity matched controls (with no family history of alcohol dependence syndrome) were assessed for early adversity (pre and post-natal), cortisol reactivity, externalizing behavior and salivary DNA methylation in the BDNF and NR3C1 promoter regions and specific genotypes.

**Results**: Early adversity was noted to be associated with higher cortisol reactivity, externalizing behavior and higher methylation in BDNF gene. NR3C1 genotype was associated with lower change in cortisol to stress in COA.

**Conclusions**: Our study provides further evidence that early adversity is associated with differential DNA methylation in the BDNF promoter gene. Also the NR3C1 genotype interacted with early adversity leading to blunting of cortisol reactivity to stress. This may have implications for early intervention in children of patients with mental illnesses.

### *Poster 10* Is Nalbuphine Use Beneficial or Harmful: A Narrative Review

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### Abstract:

**Background:** Nalbuphine, a kappa opioid agonist and mu partial agonist, has been widely used in post-operative and obstetric analgesia. It has been studied to have a low side effect profile as well as less abuse potential. But low potency opioid like nalbuphine continues to be abused in South East Asian countries.

**Objective**: To review the available literature on the abuse liability of nalbuphine and its clinical implications.

**Methodology:** A systematic PubMed search for articles published in English with the terms 'Nalbuphine', 'Abuse', 'Dependence' was conducted. After screening of the articles from title and abstract and further manual search of articles from cross references listed, the full articles were reviewed.

**Results:** Individual case reports and narratives suggest an initiation of use of nalbuphine as analgesic, with the subjective effect of euphoria leading to development of dependence. Literature is available in abuse of nalbuphine by bodybuilders along with anabolic steroid use. Easy availability of prescription opioids also contribute to this. Some reports suggest the chance of progression to higher opioid use. Nalbuphine being available in injectable form, its use brings along with it the risks and complications of parenteral drug abuse. However recent animal studies suggest the utility of chronic administration of nalbuphine to counter opioid dependence.

**Conclusion:** Thus, nalbuphine may be a promising solution to opioid dependence treatment, but its potential to be abused should not be neglected.

### **Poster 11 Bowel Dysfunction in Opiate Substitution Patients**



### Sidhu G<sup>1</sup>, Warren D<sup>1</sup>, Sidhu A<sup>1</sup>, Warren K<sup>2</sup>, McDowall M<sup>1</sup>, Cernovsky Z<sup>3</sup>

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### Abstract:

**Background**: Chronic use of opioids is clinically known to be often associated with bowel dysfunction, most often with constipation.

**Objective**: We examined the correlates of bowel dysfunction in methadone and suboxone patients.

**Methodology**: 68 patients (mean age 40.3, SD=9.5; 40 men, 28 women) participated. The average number of years using opiates prior to treatment was 6.9 (SD=7.2) and the average number of years in the substitution treatment was 7.2 (SD=3.1). Seventeen were on suboxone (mean dose 14.7 mg, SD=8.6) and 51 on methadone (mean dose 70.4 mg, SD=29.6). All responded to a survey questionnaire about frequencies of 8 types of bowel dysfunction: constipation, nausea, emesis, abdominal pain, loss of appetite, heartburn, acid reflux, and intestinal bloating. For each of these 8 symptoms, the response categories were: never=0, only rarely=1, sometimes=2, often=3, very often=4, and always=5.

**Results**: When categories "very often" and "always" were pooled, the frequencies of bowel dysfunction were as follows: constipation (42.6%), nausea (7.4%), emesis (2.9%), abdominal pain (10.3%), loss of appetite (14.7%), heartburn (10.3%), acid reflux (7.5%), and abdominal bloating (14.7%). Higher dose of methadone was significantly (p<.05, 1-tailed) correlated with acid reflux (r=.47), bloating (r=.37), constipation (r=.36), abdominal pain (r=.29), and heartburn (r=.31). Higher dose of suboxone was significantly (p<.05, 1-tailed) correlated with more frequent nausea (r=.47) and emesis (r=.42). Years of opiate use were unrelated to bowel dysfunction.

**Conclusions**: Constipation was the most frequent symptom. The bowel dysfunction was more frequent in patients with higher methadone and suboxone dose.

### Alterations in Serum Levels of CD200 in Alcohol-Dependent Patients during Alcohol Withdrawal

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### Abstract:

**Background**: Cluster of differentiation 200 (CD 200), a neuroimmune regulatory protein (NIReg) is one of the regulators of innate immune response and is responsible for silencing the innate immune response which gets overactivated and dysregulated with repeated alcohol consumption. The objective of the study was to evaluate the serum levels of CD200 protein in alcohol dependent patients during alcohol withdrawal and abstinence in comparison with healthy controls.

**Methodology**: Seventeen patients with alcohol dependence admitted for alcohol detoxification treatment at Shree Dharmasthala Manjunatheshwara De-addiction and Research centre, Ujire were enrolled in the study. 12 healthy controls were also enrolled to compare CD200 levels in patients and controls. Blood samples were collected from patients on day 1 and day 8 of the camp and one month after the last day of the camp. Serum CD200 levels were measured using sandwich ELISA. Blood was also collected from the healthy controls for measurement of CD200 levels.

**Result**: 76.47 % (n=13) of the alcohol dependent participants remained abstinent during 1 month following alcohol detoxification camp. Serum CD200 levels of the alcohol dependent group (on day 1) was significantly lower compared to the healthy controls (p=0.003, Cohen's d=1.22). Serum CD200 levels of patients after 1 month of abstinence was higher than day 1 levels, but the difference was not significant (p = 0.677).

**Conclusion**: Our data confirm that serum CD200 levels decreases in alcohol dependence and start improving with abstinence, thus it may have a role in the long-term maintenance of abstinence.

### **Poster 13** On the Right Track? A Comparative Study of Pathways to Care among Patients with Substance Use Disorders with and without Co-Occurring Psychiatric Disorders

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### Abstract:

**Background**: There is a paucity of comparative literature on pathway to care of patients with substance use disorder with and without co-occurring disorders.

**Objectives**: Findings on the pathways to care among patients with substance use disorders with and without co-occurring psychiatric disorders are compared.

**Method:** A cross sectional observational study was carried out on treatment seekers at a tertiary care de-addiction center. Participants included two groups, those with and without co-occurring psychiatric and substance use disorders who were matched in age, socio-economic status and employment status.

**Results:** Four hundred male treatment seekers participated in the study (Mean age  $\pm$  S.D. 33.49  $\pm$  11.96 years). The appearance of comorbid psychiatric symptoms did not have a significant impact on the duration of untreated illness and duration of journey to carer. On their first visit, both groups were more likely to access psychiatric services than non-psychiatric services. Around 69% of the participants specifically sought de-addiction services from their carer at some point on the care pathway. Older age (p=0.039) and having a psychiatrist as the first carer (p=0.026), was significantly associated with receiving de-addiction services earlier on in the care pathway. Of all the participants, 9.3% visited a faith healer on their first treatment-seeking attempt. Those having a co-occurring psychiatric and substance use disorders were 4.03 times more likely to visit a faith healer as their first carer as compared to those with only a substance use disorder diagnosis.

**Conclusions:** Most treatment seekers make an attempt to seek psychiatric services for substance use disorders and co-occurring psychiatric disorders. It is important to integrate mental health services into existing health care networks to reduce their dependence on faith healing practices and quicken access to deaddiction services.

### *Poster 14* Addiction and Stigma in Morbidly Obese Patients in a Bariatric Clinic in South India: A Cross Sectional Study

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#### Abstract:

**Background:** The obesity epidemic has led to the postulation that highly palatable foods may be "addictive" as there are overlaps in brain circuitry that underlie addictive behaviour and overeating. Obesity is also associated with significant low self-stigma and others perception of the individual's body image and identity.

**Objectives:** This study aimed at identifying primarily the dysfunctional eating patterns and substance use disorders in obese patients. The second objective was to assess the associated stigma in obesity.

**Methods:** This is a cross-sectional study done in a bariatric clinic of a tertiary hospital in South India. Seventy four obese patients were evaluated by psychiatrists and data from medical records were collected and analysed. Psychiatric assessment was adapted from the guidelines issued by American Society for Bariatric Surgery. Eating disorders and substance use disorders were diagnosed based on DSM-IV TR criteria. Stigma was assessed using The Weight Self-stigma questionnaire.

**Results:** 63.5% of the population had multiple dysfunctional eating patterns. 12.2% had substance abuse and 25.7% had a psychiatric diagnosis. The Weight self-stigma questionnaire mean total score was 35.74. Self- perceived stigma score was 21.36 and stigma about other's perception was 14.38. Patients with stigma had increased prevalence of psychiatric disorders which had statistically significant association.

**Conclusions:** Majority of the population had dysfunctional eating patterns, which strengthens the hypothesis of "food addiction" and significant prevalence of substance abuse also supports the "addiction hypothesis". This study highlights the association of obesity with addiction, and using the principles of treating addiction could be rewarding.

### *Poster 15* Changing Trends of Substance Use Disorder Patients among In-Patients in a Tertiary Care Hospital over the Last 5 Years in Kashmir Valley

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#### Abstract:

**Introduction**: Mental health issues are on the rise worldwide and so is the substance use. Substance use is growing and more and more people especially adolescents and young adults are getting into it. Kashmir has particularly seen an increase in the substance users over the last few years as is evident by media reports and various studies from the valley. While initially most of the patients would not seek any treatment, currently most of the people avail services of de addiction in the two available de addiction centers at Shri Maharaja Hari Singh Hospital (community general hospital unit) and Police Control room Srinagar. Over the last few years, the armed conflict and occurrence of natural disaster in the form of flood and snow storms did play a role. A change in pattern and mode of use has also been witnessed over these years. From using cannabis only at one time, the usage has shifted to predominant opioid use over these years. We reviewed the socio demographic profile and pattern of use of substances in the admitted patients in a tertiary care center in Kashmir valley over the last 5 years.

**Methodology:** A retrospective reviewing of medical records of admitted patients at the center was done. A note of the co-morbid diagnosis, type of substance and mode of use of substance made.

**Results:** While earlier most of the patients were unemployed youth, currently a lot of the patients are employed and socio-occupationally functioning. There has been an increase in the number of opioid users and a significant rise in injectable opioid users. Among opioid users, the usage has shifted from prescription opioids to exclusively heroin use. An increase in number of admissions from 92 in 2014 through to 374 in 2019 till date was observed. Percentage of patients with use opioid use increased from 15 to 56 percent of patients from 2014-2018 and almost >90 % of the patients admitted in 2019 were observed to be opioids users.

**Conclusion:** A worrisome rising trend of opioid and injectable opioid users has been seen over the last few years in a place where the substance use was a rarity some time back. Multiple factors pertaining to the political scenario in the state, natural and man-made calamities may have played a role in this.

### *Poster 16* Suicide Risk of Community Ketamine Users in Taiwan

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### Abstract:

**Background:** Ketamine is a non-competitive NMDA receptor antagonist used in anesthesia and analgesia. Recently, its therapeutic potential in treatment-resistant depression has been unveiled. Despite its clinical use, ketamine misuse has become a prevailing problem over the past decade in many Asian countries, including Taiwan. Suicidality for the individuals with ketamine misuse is a critical issue, but remains unclear.

**Objective**: The study aimed to investigate the suicidality and its risk factors for the hidden community ketamine users using a social network approach.

**Methods:** A total of 250 community ketamine users were recruited by snowball sampling in the northern Taiwan. Suicide risk was evaluated using the Mini International Neuropsychiatric Interview for Suicidality. Urine drug testing, and clinical assessments for psychiatric comorbidity and sleep disturbance were administered. All participants were grouped by their suicide risk for further analysis.

**Results:** The percentages for no-risk (NR), low-risk (LR) and mod-to-high-risk (MHR) groups were 62.7%, 27.9% and 9.3%, respectively. Both LR and MHR had significantly higher severity of methamphetamine use and sleep disturbance in comparison with NR. Relative to NR, factors associated with LR were female (aOR=3.72, p<0.01), poor sleep quality (aOR=2.51, p<0.05), amphetamine-positive urine screen (aOR=2.20, p<0.05) and current mood disorders (aOR=6.90, p<0.01), while only current mood disorders was significantly associated with MHR (aOR=16.23, p<10<sup>-4</sup>).

**Conclusions:** More than one-third of community ketamine users were identified with any suicide risk. Combined use of methamphetamine, sleep disturbance and mood disorders play significant roles. Efforts are needed to engage the at-risk ketamine users in treatment.

### Poster 17 Refractory Alcohol Withdrawal Syndrome: Benzodiazepine Resistance and Beyond

#### Ganesh R, Singh S, Verma R

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#### Abstract:

**Background:** Alcohol withdrawal syndrome (AWS) is a common condition in treatment settings, presenting with symptoms ranging from as mild tremulousness, palpitations, anxiety to seizures, hallucinations, delirium tremens (DT). DT is a medical emergency with high mortality rate without treatment, and requires prompt diagnosis and treatment. Benzodiazepines are the mainstay treatment of AWS/DT. However, there is a lack of knowledge about the management of benzodiazepine refractory AWS/DT.

**Objective:** To review the available literature on management of benzodiazepine refractory AWS/DT.

**Methodology:** A systematic PubMed search for articles published in English with the terms "Alcohol", "Withdrawal", "Delirium", "Resistance" and "Refractory" was conducted. Full-text of articles were obtained after screening of title and abstract, followed by manual search for any other relevant paper in their cross-references.

**Result:** There is a lack of standard uniform criteria for diagnosing refractory AWS, with most common method criteria used in studies was failure to control symptoms with doses > 40mg of diazepam (or equivalent benzodiazepine) in one hour. There is increased risk of nosocomial pneumonia, mechanical ventilation, and prolonged intensive care unit stay. The lack of effect on glutamatergic receptors and reduced sensitivity of the GABAergic receptors to benzodiazepines were suggested as the possible causes. Phenobarbital, propofol, dexmedetomidine, ketamine, antiepileptics (Levetiracetam), and antipsychotics (haloperidol) have been used in the management of benzodiazepine refractory alcohol withdrawal.

**Conclusion:** There is limited available evidence on management of refractory AWS/DT, with lack of consensus for the best treatment strategy. There is a need to systematically compare the efficacy of different treatments in randomized controlled trials.

### An Observational and Descriptive Study on Anxiety/Depression Levels in Mothers of Pediatric Population Suffering from Gluten Allergy/Celiac Disease

### Kaur N<sup>1</sup>, Kumar R<sup>2</sup>, Sharma A<sup>2</sup>, Arora M<sup>3</sup>, Bansal P<sup>4</sup>, Kaur N<sup>2</sup>

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### Abstract:

**Background:** Celiac disease (CD) is an autoimmune disorder precipitated in genetically susceptible individuals by the ingestion of gluten. Mostly the patients are predominantly symptomatic, showing both gastrointestinal and extra-intestinal manifestations whereas in asymptomatic patients the diagnosis is often delayed and may lead to severe mucosal damage till suspected. It is a life time disease that cannot be treated throughout the life though the symptoms may disappear by commitment to a life-long gluten-free diet. The celiac disease is accompanied with mental health issues and as a matter of fact depression and anxiety goes hand on hand due to the complete exclusion of gluten diet. However, the positive diagnosis for gluten allergy may disrupt the daily life of the patients as well as their attendants and may induce the illness behavior amongst them which may finally lead to anxiety and depression followed by psychiatric disorders. Hence the present study was conducted to investigate the level of depression in the family members of paediatric population suffering from gluten allergy/celiac disease. This observational and descriptive study was conducted on 50 subjects (all mothers of celiac disease patient).

**Methods**: The study was conducted as per ethical guidelines issued by competent authority after having written and informed consent. The data was collected in pre-validated case report forms such as HAM-A and HAM-D.

**Results**: Mothers of Celiac Disease (CD) patients showed high levels of state depression and anxiety in a significantly higher percentage according to Hamilton Depression Rating Scale (HAM-D) and Hamilton Anxiety Rating Scale (HAM-A). Out of 50 subjects, 33.5% mother's behaved normal after knowing about the disease to their ward whereas 66.5% mothers were found depressed with least moderate severity. Moreover, there was 69% showed the mild severity of the anxiety, whereas 19% and 14.5% were showed moderate severity and severe anxiety respectively.

### Poster 19 In Person v/s Computerized Counselling with a Multilingual Interactive Software in SUD

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#### Abstract:

Medication Assisted Treatment with Substitution Therapy (Buprenorphine, Methadone) or Antagonist Therapy (Naltrexone) is safe and effective and it is associated decrease in morbidity and mortality associated with opioid use disorders. Results are better when patients receive psychosocial counselling along with MAT. Various studies show results are even better with more intensive counselling.

We present two groups of patients. First group of 30 patients using illicit opioids were detoxified by intensive outpatient regime and they continued with oral naltrexone as MAT. Patients received person to person counselling for relapse prevention during weekly clinic visit for first three months and after that every fortnight for next three month.

Second group of 30 patients using illicit opioids were detoxified and continued with naltrexone like first group. This group received relapse prevention counselling by a free Interactive Software developed by us, weekly for first three months and every fortnight for next three month.

In first group after three months 20 patients tested negative and 2 tested positive for illicit opioid in urine and continued with MAT and 8 relapsed back and stopped MAT. After Six month 16 (54 %) tested negative and 1 positive and continued with MAT and 13 patients relapsed back to illicit opioids.

Second group after three months 19 tested negative and 1 positives continued with MAT and 10 relapsed back. After six months 15(50 %) tested negative 1 positive continued with treatment and 14 patients relapsed back.

Result of interactive computerized counselling is comparable to in person counselling. This is especially significant for Primary care centers which offer MAT but have minimum resources for in person counselling.

### *Poster 22* Adult Attention Deficit Hyperactivity Disorder: An Overview

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#### Abstract:

ADHD is characterized by clinically impairing symptoms of inattention, hyperactivity/ impulsivity or both. Literature suggests that it is a heterogeneous condition. Subtypes are important- but likely to share core features. It has a significant impact on multiple functioning domains. Hospital and outpatient clinic-based studies in India have suggested prevalence ranging from 5.2% to 29.5%. The common understanding is that ADHD remits by adulthood and has a good prognosis. However, recent literature points towards the persistence of ADHD symptoms into adulthood with high comorbid psychiatric conditions, and dual diagnosis being common feature. Further, treatments for adult ADHD largely are CBT and cognitive remediation- based methods. Meta Cognitive Therapy, Mindfulness, and Emotion Regulation based therapy are only few and not guided by theory. Barkley (1997) provided a theoretical model of ADHD, which emphasized response inhibition/ self-regulation as a central component (across working memory, regulation of affect/motivation/arousal, internalization of speech, and reconstitution). The present review throws light on presentation of adult ADHD in a tertiary care hospital setting. Presentation of adults with ADHD is critically reviewed with emphasis on the diagnostic process and varied comorbid presentations (substance use disorders, mood disorders, anxiety spectrum disorders, OCD and related disorders, and personality disorders). The review also emphasises 'regulation' as an underlying transdiagnostic variable of clinical importance (across executive functions, emotion regulation and social cognition) in ADHD adults. Understanding the variables that impact clinical manifestations and functional outcomes using a transdiagnostic approach is likely to result in a more unified approach to interventions.

### *Poster 21* Hookah Use amongst Youth in India



#### Hussain K

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#### Abstract:

Tobacco use is one of the leading causes of preventable disease, disability, and death. In a recent cross-sectional study of smoking conducted in India it was found that an estimated fourteen percent of youth ages from 13-15 used tobacco. In another study, it was found that in patients with tobacco use roughly about 25% used tobacco for the first time before the age of 15. While this is quite disturbing, it is expected to continue to rise with the trend in youth across the world and in India using flavoured tobacco in the form of Hookah use. Hookah also known as a water pipe and shisha, has become a global epidemic. In this presentation we will examine some of the psychosocial factors that can contribute to hookah use amongst youth. Then we will also discuss the potential health complications of hookah use. We will also discuss some of the misconception youth have about Hookah use and discuss strategies to control the epidemic of Hookah use. In the end, we will discuss if Hookah use can put the youth at the risk of use of other substances.

### **Poster 22** Socio Demographic and Clinical Profile of Admitted Patients in Tertiary Care Drug Deaddiction Center in Kashmir Valley

Rasool U, Hassan Y, Roub F

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#### Abstract:

Drug abuse has seen a significant rise in the last decade in the valley of Kashmir. A rise that people and administration have not been able to understand, leave aside taking measures to combat it. We plan to review the socio-demographic and clinical profile of the in-patients in our center with the aim of identifying a pattern and factors associated so that we may be able to find factors that can be addressed.

### **Poster 23** A Cross-sectional Study to Assess Psychiatric Co-Morbidity and Disability in Patients of Alcohol Dependence Syndrome

#### Jain A, Gupta R, Singh P, Purushottam

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#### Abstract:

**Background:** Alcohol use is a pervasive problem and its consumption has increased in recent decades in India. Excessive use of alcohol leads to disability because of comorbid physical and psychiatric problem.

**Objective**: We evaluated the association of psychiatric comorbidity and disability among treatment-seeking alcohol dependent patients.

**Methods:** Cross-sectional assessment of 50 Patients with alcohol dependence syndrome (F10.2, ICD-10 criteria) attending the outpatient department at State Drug Dependence Treatment Centre of Pt. B.D. Sharma, PGIMS, Rohtak was done using World Health Organization Disability Assessment Scale (WHODAS) and Mini-International Neuropsychiatric Interview (MINI) to determine disability and psychiatric comorbidity, respectively.

**Results:** Psychiatric comorbidity was noted in 20 (40%) of the patients. Depression and General Anxiety Disorder were the most common co-occurring disorders. Maximum disability was seen in life activity and participation while least score was seen in self-care. There was statistically significant difference in self-care, life activities, participation, and overall disability between patients with and without psychiatric comorbidity. There was no statistically significant difference in cognition, mobility, getting along between patients with and without psychiatric comorbidity.

**Conclusions:** The result confirms the well-known high rate of psychiatric comorbidity in patients with alcohol dependence syndrome and its impact on disability. The results should alert clinicians managing alcohol dependence patients to screen for comorbid psychopathology and include findings in their treatment plan as this may improve patient's disability.

### **Poster 24 Buprenorphine Home Induction Mobile Application**

### **Rosenthal D**

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### Abstract:

**Background:** Opioid use disorder (OUD) is a global health crisis. United Nations (UN) Office on Drugs and Crime reported that of the 585,000 people who died across the world in 2017 as a result of drug use, two-thirds of those cases were as a result of opioid use. Self- home induction is safe and effective treatment for OUD. Guidance on self-induction is mostly paper based, less than five apps related to buprenorphine were available on the app stores as compared to over 300 for diabetes.

**Objective**: Design and develop a mobile app for buprenorphine self-home induction. Host it freely on iOS and android platforms. Evaluate clinical utility for patients and clinicians.

**Methodology:** Through human centered design principles, a web based sample app was created by a team of clinicians and Yale medical students. It was then user tested by patients who gave feedback to the team of developers. Professional developers then developed the beta version and launched on iOS and Android platform. Further development has focused on low literacy versions and Spanish language versions.

**Results:** The Bup Home Induction app was developed and hosted freely on the app stores. Within four months since launch over 500 unique downloads of the application.

**Conclusions**: A buprenorphine mobile application can be used for induction at home. It delivers on-demand, consistent, reliable patient education. There is potential to increase access to, utilization and safe use of buprenorphine, a live saving medication for people with opioid use disorder

### *Poster 25* Familial Density of Alcoholism and it's Risk



Min EJ<sup>1</sup>, Kim SG<sup>1,2</sup>

<sup>1</sup>Department of Psychiatry, Pusan National University Yangsan Hospital, Yangsan, Korea, <sup>2</sup>Department of Psychiatry, Pusan National University, Yangsan, Korea <u>ejmin74@hanmail.net</u>

### Abstract:

**Background:** Alcohol use disorders have been shown to be common within a particular family. The risk of alcohol use disorders is known to be about three to five times higher for subjects with alcoholic parents than the one with non-alcoholic parents. Consequently, to date numerous studies have examined the family history in regards to alcohol use problems among adolescents and early adults with drinking problems. However, most studies have only concentrated with the existence of alcoholism in families, and there were no reports of familial density among alcoholic patients.

**Objective:** The aim of this study was to investigate the familial density among people with alcohol abuse problems and to investigate the different characteristics of alcohol abuse problems based on their familial density.

**Method:** Familial density was investigated in patients at four community centers in Busan and Gyeongsangnam-do. The study involved 141 subjects (113 men and 28 women).

**Result:** From the results, 45.4% of the patients' parents had alcohol problems, 23.4% had siblings with alcohol problems, 14.9% had relatives from their father's side (grandparents, uncles or aunts) with alcohol problem, and 2.8% had the problem from their relatives on the mother's side grandparents, uncle or aunts.

**Conclusion:** The study revealed a difference in familial density among people with alcohol use problems. This study investigated familial density in patients with alcohol use disorder. These results could serve as evidence for another perspective on the effects of genetic and its risks in alcohol use disorder patients.

### *Poster 26* The Aftermath of Legalization of Cannabis Use in Canada

Cernovsky Z

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### Abstract:

**Background:** Canadian legalization of October 17, 2018 focused on "recreational" or "medical" use of dry or edible cannabis products. This legislation has not specifically facilitated medical research on the non-euphoric, non-addictive, but scientifically very promising therapeutic substances isolated from the more than 500 chemicals from the cannabis plants, especially cannabidiol (CBD).

**Methodology**: The availability of cannabis products from a major government approved laboratory controlled vendor was monitored over 9 month following the legalization date of October 17, 2018.

**Results:** The demand for dry cannabis as for recreational use had not exceeded the vendor's available supply. In contrast, the demand for therapeutically important CBD oils (proportions of 1:1 to THC, or oils with more CBD than THC) increased within short time so dramatically that this vendor was out of stock for several months. For several months following the legalization, these CBD oils were still available only with medical prescription, yet most MDs have remained reluctant to prescribe it, not being adequately familiar with its indications.

**Discussion and Conclusions**: Although high quality scientific evidence shows that non-euphoric, non-addictive CBD oils are much needed for intractable epilepsy (Dravet syndrome), severe autism, and even for schizophrenia, scientific investigation and hence also clinical use of these oils in Canada are still obstructed by the stigma and legal restrictions, e.g., those on transporting them to outside of Canada (penalty of up to 14 years in jail), to countries where CBD research on conditions such as Parkinson or Alzheimer would be duly fast-tracked and promoted.

### **Poster 27 Predictors of Relapse to Alcohol Use After Living Donor Liver Transplantation**

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#### Abstract:

**Background:** End-stage alcohol related liver disease (ARLD) is a common indication for liver transplantation. Outcomes may be limited by return to drinking. Previous studies have identified few predictors of drinking relapse.

Aim: This study will examine novel postulated predictors of relapse to drinking.

**Method:** The case notes of all patients transplanted for ARLD at the Institute of Liver and Biliary Sciences from 2015-2018 will be reviewed. Pre-transplant characteristics (socio-demographic, clinical, treatment related and substance use related) and post-transplant outcomes will be recorded using a semi-structured proforma created based on available information and literature review.

Results and Conclusions: Will be discussed in during the conference

### *Poster 28* Neuromodulation: The Future of De-addiction? A Narrative Review

Rajkumar S, Verma R, Kumar N

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#### Abstract:

**Background:** Addiction is a chronic relapsing illness and a global public health concern. The advances in knowledge of structure, function and chemistry of brain has not translated to treatment benefits. Neuromodulation might be the missing piece of puzzle to solve this problem.

**Objective:** To perform an extensive literature search and review the evidence supporting neuromodulation as treatment of addiction.

**Methodology:** We searched MEDLINE databases using PubMed for studies involving transcranial direct current stimulation (tDCS), (repetitive) transcranial magnetic stimulation (rTMS), and deep brain stimulation (DBS) using appropriate search terms to include all articles in English published till date.

**Results:** The number of tDCS and rTMS sessions delivered to treat addiction was less compared to the standard recommendation for psychiatric illness (5 or more vs 20-30). tDCS was studied for Nicotine, Alcohol and Cocaine addiction with modest positive effect targeting Dorso Lateral Prefrontal Cortex (DLPFC). rTMs was studied for Nicotine, Alcohol, Methamphetamine, Food, Nicotine, Alcohol and Cocaine. DLPFC was the most common target followed by insula and medial prefrontal cortex. There were a few promising findings along with numerous negative and inconstant outcomes. DBS for addiction involved Nucleus Accumbens (NAc) and Subthalamic Nucleus (STN).

**Conclusion:** Based on the current state of evidence, it will be time before any of the modalities concerned with neuromodulation can be recommended as a standalone intervention for addiction. Combining neuromodulation with standard interventions and individualizing the interventions by grouping individuals based on cognitive or neural profiles may yield better outcomes than targeting addiction as a unitary entity.

### *Poster 29* Intravenous Abuse of Tapentadol, a Novel Opioid Analgesic in India: A Case Report

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#### Abstract:

**Background**: Tapentadol, an opioid analgesic with norepinephrine reuptake inhibition, has got approval for pain management as an oral formulation. The injectable form has not been tested in human nor yet been marketed. Abuse-related data for tapentadol is also scanty.

**Important clinical findings**: We present a case of a young male who presented with the complaint of tapentadol use by IV route. The patient reported that it was a common practice among his friends to start with injection use directly without experimenting with the oral route. One of his friends introduced injection use as a "chief guaranteed high". He, along with his friends, forged prescription and got tablets of tapentadol from the pharmacy. He used to crush and dissolve the tablets in distilled water easily and then inject. Significant dose escalation was noted within two weeks of first use. He continued regular use with further dose escalations for next 6 months. Patient tested positive for Hepatitis C infection after admission.

**Interventions and outcomes**: Buprenorphine was started to treat withdrawal and later continued as maintenance therapy. Anti-viral therapy for Hepatitis C was also initiated. At three months follow up, the patient was abstinent except for one lapse in between.

**Conclusion**: In India, tapentadol tablets are readily available in the pharmacy. Tablets are easily miscible in water. Drug manufacturing, dispensing, and scheduling policy should consider these factors to prevent a potential epidemic of Tapentadol injection use.

### Is 4:1 Combination of Buprenorphine and Naloxone is Really Deterrent Enough for Buprenorphine Diversion? A Double blind, Randomized, Crossover Design study

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#### Abstract:

**Background:** The diversion and misuse of Buprenorphine and 4:1 combination of Buprenorphine and Naloxone (BPN-NX) well documented all around the globe. It becomes an important public health challenge. Hence experimental studies will helps us in understanding the phenomenon of intravenous 4:1 BPN-NX misuse in a better way.

**Objective:** To evaluate and compare the effect of intravenous 4:1 combination ratio Naloxone dose on euphoric effect and other subjective experiences of intravenous Buprenorphine (2mg) in patients stabilized on sublingual Buprenorphine.

**Methodology:** This study was a double blind, randomized, within subject, crossover design. Buprenorphine maintained opioid dependent volunteers who were had a history of injecting drug use recruited (n =14). After informed consent and baseline assessment, experimental sessions assessed and compared the reinforcing and subjective effects of Intravenous (IV) buprenorphine-naloxone in 4:1 combination (i.e. Buprenorphine 2mg + Naloxone 0.5mg) and Plain Buprenorphine (2 mg), and Normal saline.

**Results:** No significant difference in perceiving the 4:1 BPN-NX combination from plain Buprenorphine after administration the test (p=0.95). In Euphoria (assessed using Visual Analogue Scale (VAS) and Morphine Benzedrine Group (MBG) Scale), in Sedation, (assessed using VAS (p=0.008) and Pentobarbital Chlorpromazine Alcohol Group Scale (PCAG, p= <0.001). and in opiate sensation scores with 4:1 BPN-NX combination had no difference with plain Buprenorphine across all time points of post-test at 5, 30, 60 and 120 minutes but both BPN and 4:1 BPN-NX were significantly higher than normal saline (p= <0.001). In Sedation, (assessed using VAS and Pentobarbital Chlorpromazine Alcohol Group Scale (PCAG)) and in opiate sensation scores, No significant opioid withdrawal reported with 4:1 BPN-NX combination. The drug liking scores were compared between plain Buprenorphine and 4:1 BPN-NX, no significant difference was noted (except at 5 minutes of post-test) but persistently higher than normal saline (p= <0.001).

**Conclusions:** Naloxone ratio or dose in 4:1 combination of Buprenorphine and Naloxone proved ineffectiveness in production of opioid withdrawals as well as in suppression of Buprenorphine's agonist effects. It indicates 4:1 BPN-NX combination is a poor deterrent option for Buprenorphine maintained opioid dependents.

### *Poster 31* Adult ADHD with Stimulant Dependence and Behavioural Addiction: A Case Report

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#### Abstract:

**Background**: In adult substance users, the prevalence of adult ADHD is significantly high. Relationship between ADHD and substance use is well studied. Treatment is tricky in the case of stimulant users with ADHD. In our case report, we will discuss that particular issue. Psychological treatment also has been highlighted.

**Important clinical findings**: 56 years old gentleman presented with the complaint of methamphetamine, cannabis, and tobacco use in dependence pattern. The patient incurred severe financial loss owing to his gambling disorder. Clinical interview, as well as Adult ADHD Self-Reporting Scale (ASRS) established ADHD diagnosis. He has used methamphetamine as attention-enhancing as well as wakefulness promoting substance. He was in the preparation phase to stop stimulant and cannabis use. But initially, the patient was in denial with regards to gambling disorder.

**Interventions and outcomes**: During inpatient care, following cardiological evaluation, Methylphenidate OROS up to 36mg/day was prescribed for ADHD symptoms. Naltrexone was considered as anti-craving for gambling disorder. Psychological intervention in the form of 10 individual and 2 conjoint (with family member) sessions of cognitive behaviour therapy (CBT) has been offered. It targeted impulsivity, low threshold for boredom, interpersonal dysfunction, craving, and lapse management. On six months follow up, he was maintaining well in the occupational domain with a lapse on gambling behaviour but no lapse for stimulant use. No side effects or abuse have been reported in regards to methylphenidate.

**Conclusion:** The case taught us that methylphenidate OROS might be used safely and effectively in a patient of adult ADHD with co-morbid stimulant dependence

### Management of Substance Use Disorders in the Hearing-Impaired and Challenged Patient: A Case Report

### Pakhre A, Tripathi R, Bhad R

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### Abstract:

**Introduction:** Substance-use disorders are common in hearing-impaired and challenged population as in the general population. However, there is lack of research on this. We describe a case of the hearing –impaired and challenged patient and management difficulties faced while treating team.

**Case Description:** A 36 year-old man with a history of dependence on tobacco and alcohol presented to tertiary de-addiction centre of India for treatment. Detailed assessment revealed congenital total deafness diagnosed at age of six months and absence of speech development. His primary mode of communication was through sign language and writing. He initiated alcohol use at the age of eighteen years and developed features of dependence within six-seven years. The severity of his alcohol use and associated physical and psychosocial complications prompted his family members to seek treatment. The assessment required greater time and his brother and sister in law served as interpreter between him and clinician. Obstacles were faced in assessment of diagnosis and communicating the laboratory result findings and treatment options. The treating clinician had to resort to sign language and writing for communication. Patient was started on Tab. Naltrexone 50 mg after management of withdrawal symptoms using benzodiazepines. The option of starting a deterrent agent (Tab. Disulfiram 250 mg) was also communicated and his consent was obtained for the same. Psychoeducation and relapse prevention sessions using pictures and sign language interpreters were planned.

**Conclusion**: This case demonstrates the problems encountered in the management of substance use disorders in the hearing-impaired and challenged patient.

### Development of Strategies for Prevention and Control of Substance Use Problems in India: Need to Focus on Country Specific Factors

### Gupta DK

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### Abstract:

Success of programs for prevention and control of alcohol, tobacco and other drugs (ATOD) in a country depends on strategies that guide these programs. A wide range of country specific factors needs to be considered in order to develop appropriate strategies for prevention and control of ATOD in any country. This presentation will highlight how country specific factors are relevant for the development of such strategies for India. Based on their potential impact on strategies, the following categories of factors are selected for the presentation:

(i) Availability of ATOD (ii) ATOD use patterns (iii) Profile of ATOD users (iv) Health care system (v) Familial and sociocultural systems (vi) Socio-demographic factors (vii) Medical training (viii) Multiplicity of problems and scarcity of resources (ix) Governance and law enforcement (x) Ongoing transitions- economic, societal and others. Significance of these factors in relation to development of strategies, and prevention and treatment programs in India will be discussed.

Strategies that emerged as important based on these factors include-

(i) Low cost interventions involving non-specialist care providers

(ii) Abstinence oriented prevention and treatment approaches for majority of the population

(iii) A combination of generic and specific approaches suitable to various population subgroups

(iv) Decentralization of planning and implementation of interventions

(v) Integration of ATOD services with primary health care system

(vi) Community and family-oriented interventions

(vii) Community participation in ATOD prevention and control activities

(viii) Approaches that combine science and spirituality

Feasibility and implications of these strategies will be discussed in the light of above-mentioned factors.

## Trends in Prescription Opioid Use in a General Hospital in South Korea

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 <sup>2</sup> Wonju Addiction Care Integration Supporting Center
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#### Abstract:

In recent years, there has been increased emphasis on treating pain in hospitals, coinciding with mounting concerns regarding the abuse potential of prescription opioids. In this study, we describe trends in opioid prescribing in outpatients in one hospital in South Korea over the past decades.

Data from the 2008-2018 in Yonsei University Wonju Severance Christian Hospital which is one of the major hospitals in South Korea, were analyzed. Specific opioids analyzed included codeine, hydrocodone, pethidine, tramadol, and combination-opioid preparations.

The overall use of opioid analgesics in clinic visits increased from 1.35% to 2.52% between 2008 and 2018 (P<0.001). The most frequently prescribed opioid analgesic was pethidine in 2008 and tramadol in 2018. The prescription of tramadol included combination-tramadol preparations (e.g. tramadol/acetaminophen) has risen most dramatically as 0.49% to 1.50% (P=0.015). We confirmed that the use of opioid drugs by outpatients increased steeply.

The findings of this study are consistent with recent reports highlighting the increasing trend in prescription of opioids in many other countries. Prescription opioids are essential to medicine, particularly in the management of caner and of acute pain from surgery or injury. However, the staggering consumption of prescription opioids in some developed countries is supposed to be not driven by the outsized clinical need, when considering that of other countries with prevalence of population pain and quality of pain management. There is an urgent need for a multifaceted, collaborative public health and law enforcement approach to the opioid epidemic, including implementing the guideline for prescribing opioids for pain.

## Poster 35 An Audit of Physical Health Monitoring in Patients with Hypersexuality who take Antilibidinals

#### Goslin R

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#### Abstract:

**Background:** In a rapidly changing world, especially with the proliferation of social media, hypersexualised behaviour may be becoming increasingly common. A small minority of people have paraphilias (disorders of sexual preference), which can be seen as an addiction; and a smaller minority are sex offenders. The treatment of sex offenders is controversial, with important historical and ethical considerations. There are few options for high-risk, highly recidivist sexual offenders. Increasingly we are turning to pharmacological means of treatment. Gonadotropin-releasing hormone analogues, such as triptorelin, have emerged as effective treatment for paraphilias. These drugs can have significant physical health side effects.

**Objective:** To audit the monitoring of 'pre-test' and 'during-treatment' physical health parameters in all patients who are prescribed triptorelin for paraphilia, in a high-secure forensic setting.

**Methodology:** The electronic pharmacy records for a high-secure hospital in the UK identified all patients who were commenced on triptorelin during the period 2013-2018. Physical health records of each of these patients were interrogated for the presence and value of each physical health test parameter.

**Results:** Nine patients started triptorelin in study period. All nine had baseline full blood count, prolactin, and weight recorded. However, luteinizing hormone (LH) and follicle stimulating hormone (FSH) were only recorded for four (LH) and five (FSH) patients. Bone densitometry was only recorded in six of nine patients. Even fewer had these recorded at six months.

**Conclusions:** In high-secure settings, for patients who take triptorelin, we need to improve the recording of testosterone, LH, and FSH; the six-monthly testing of testosterone, LH, and FSH; and annual bone densitometry monitoring. There should be a standardized proforma for the physical health monitoring of patients who take gonadotropin-releasing hormone analogues.

## The Toll of Opioid: Can TLR-4 be an Answer to the Enigma of Opioid Dependence? A Longitudinal Study Protocol.

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#### Abstract:

**Background:** Immunological mechanism is one of the various postulated molecular mechanisms for opioid abuse. Pre-clinical studies show opioids to stimulate Toll-Like Receptor 4 (TLR 4) on the microglial surface, which has a connection with increased dopaminergic activity in the reward circuit (nucleus accumbens). So TLR 4 receptor modulation may help in management of craving for opioids and opioids devoid of TLR 4 activity may act as potent analgesic without abuse liability.

**Objectives:** To compare the baseline Serum TLR 4 level among patients with opioid dependence and normal control. To determine intra-group and inter-group differences in the serum concentration of TLR 4 of patients following 1 month of treatment with BNX or NTX (from baseline to end point). To correlate the concentration of the TLR4 with the craving for opioids (both at the baseline and at the follow-up) and pain associated with opioid withdrawal.

**Methodology:** Longitudinal controlled survey with purposive sampling is planned. 60 patients having opioid dependence without any other psychiatric (including substance related) and physical comorbidities will be equally distributed in 2 groups which will be treated with NTX and BNX maintenance for 1 month. 30 age and sex matched healthy controls will be selected. The patient and control group will be assessed at baseline, while the patient groups will be compared after 1 month of maintenance treatment for serum TLR-4 level, craving for opioids, perceived stress, pain and medication adherence wherever applicable. The TLR 4 level will be compared between groups at the baseline and both within and between groups comparisons will be carried out after one month.

## **Poster 37 Prevalence of Substance Use and Co-Morbid Psychiatric Illness in Medical Students**

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#### Abstract:

**Background:** The use of various psychoactive substances such as alcohol, cannabis and opioids has been observed in India for centuries. Alcohol is the most common psychoactive substance used by Indians. Nationally, about 14.6% of the population (between 10 and 75 year of age) uses alcohol. Research regarding patterns of alcohol and drug use among medical students has led to ongoing concerns.

**Objective:** The objective of the investigation is to estimate the prevalence of illicit drug use among medical interns and postgraduates in SGT Medical College, Delhi NCR.

**Design:** A cross sectional study to be done in tertiary care setting. A total of 200 medical students (interns and postgraduates) will be included in this survey for 4 months duration. After taking written Informed consent, all relevant/baseline information will be collected with help of semi-structured questionnaire, substance use/ abuse history by WHO-ASSIT and for comorbid psychiatric illness MINI- SCREEN will be used. Primary outcome of study is to study the prevalence of illicit drug use. Secondary outcome will be any co-morbid psychiatric illness in same sample size. The protocol has been approved by institute ethics committee. SPSS V 24.0 will be used for statistical analysis.

**Result**: To be presented at the time of presentation.

**Conclusion**: To be presented at the time of presentation.

## Cross Sectional Study of Pattern of Mental Health Problems, Drug Abuse Problems and Relationship Problems in Family Members of Patients with Alcohol Use Disorder

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#### Abstract:

**Background**: In alcohol use disorder, family members can play a significant role in start or perpetuation of problem behaviour, at the same time they can be valuable therapeutic partners in community. Hence, holistic assessment must involve assessment of drug abuse problems, mental health problems and relationship pattern of entire family besides the client.

**Objective**: To study Pattern of mental health problems, drug abuse problems and relationship problems in family members of patients with alcohol use disorder

Methodology: Cross sectional study was conducted over a period of 1 year Family history subsection of Addiction Severity Index (ASI) was administered on 90 patients admitted in psychiatry and deaddiction ward of Lady Harding Medical College with diagnosis of alcohol use disorder as per DSM5. Participants were categorized into family history high risk groups for each 'problem domain' based on the number of first & second degree relatives with alcohol, drug or psychiatric problems. Socio demographic variables were analysed using descriptive statistics, logistic regression was used for assessing association.

**Result**: High rates of mental health problems, alcohol and drug problems were found across all the family members' categories; being highest for siblings. Of the entire high risk group, 30% were in the 'psychiatric problem' domain, 70% in the 'alcohol problem' domain and 55% in the 'drug problem' domain. Across problem domains, relationship problems encountered with parents/siblings was more in the high-risk group. Also, the siblings/parents too reported increased rates of lifetime emotional and physical problems as compared to low or moderate-risk group. Higher rate of poor interpersonal familial relationship was associated with family history of psychiatric problems, drug and alcohol problem.

**Conclusion**: Holistic assessment of not just the index client but entire family for these parameters can help in planning integrative therapy and better relapse prevention strategies.

## *Poster 39* Prevalence of Substance Use in First Time Visitors to Psychiatry Outpatient Unit

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#### Abstract:

**Background**: The data of substance users needing treatment in patients visiting for the first time to outpatient of psychiatry centre are sparse in India. Indian research is mostly on prevalence of co-morbidity in a particular type of substance use disorder or psychiatric disorder. The current study aims to assess the prevalence of substance users needing interventions in patients visiting for the first time to outpatient of psychiatry

**Methods**: All the patients attending the walk-in clinic of Psychiatry OPD of a tertiary care centre from 11<sup>th</sup> Apr to 20<sup>th</sup> Jun 2016 were approached for the study. The consenting patients were assessed for the inclusion (aged > 12yrs) and exclusion criteria (not consenting for the study). Those qualifying for the inclusion criteria were approached for the study. They were interviewed by trained interviewers with pre-tested questionnaires in their privacy after obtaining informed consent. Those who are consenting for the study were assessed on sociodemographic profile, clinical profile and The Alcohol, Smoking and Substance Involvement Screening Test (ASSIST). The psychiatric diagnosis was made by the qualified psychiatrist.

**Results:** During the study period 3324 patients attended the outpatient services. Among them 3049 participants were included in the study. The mean age and years of education were 38yrs and 11 years respectively. Majority of them were male (54%), married (69%), house wives (38%), belonging to Hindu religion (67%), hailing from nuclear family (53%) and from rural background (55%). The most common psychiatric diagnosis group was Neurotic, stress related and somatoform disorders (42%), followed by mood disorders (33%) and schizophrenia, schizotypal and delusional disorders (10%). The prevalence as per ASSIST +ve was 21%. The common substance used was Tobacco (16%) followed by alcohol (9%) and opioid (2%). The ASSIST +ve cases were more in Neurotic, stress related and somatoform disorders (34%) and schizophrenia, schizotypal and delusional disorders (34%) and schizophrenia, schizotypal and delusional disorders (34%) and schizophrenia, schizotypal and delusional disorders (9%) **Conclusion:** The study screened the largest number of first time psychiatric patients visiting the psychiatric outpatient of a tertiary care centre. The study reported that one person among five first time persons visiting the psychiatric outpatient of a tertiary care centre need interventions for the substance use. The prevalence reported in our study is lower than reported in some western hospital based and community based studies.

## **Poster 40** Sexual Dysfunction in Men with Substance Use Disorders: A Systemic Review

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#### Abstract:

**Background**: Illicit drugs are often used as aphrodisiacs to enhance the sexual performance and/or pleasure. However, the available data suggest that most illicit drugs have adverse effects on sexual function in men and that these effects are not fully understood. So we present a systemic review of current literature on the sexual dysfunctions associated with the substance use.

**Objective**: To study the effects of various substances on male sexual health.

**Methodology**: A systemic search of PubMed, Scopus, PsycINFO and Cochrane database was performed. The search was restricted to published papers pertaining to sexual dysfunction and substance use disorders. Studies of all designs were included except case reports.

**Results**: Cannabis, opioid and alcohol were associated with erectile dysfunction. Decreased sexual desire was commonly seen in heroin users. Increased ejaculation latency was also reported with the use of opioids and numerous other illicit substances.

**Conclusions**: Illicit drug male abusers were prone to have ED, decreased sexual desire, and increased ejaculation latency. ED and decreased sexual desire were most commonly seen with Heroin while increased ejaculation latency occurred commonly in all of the abusers.

## **Poster 41** A Study on Prevalence of Nicotine Use and Dependence in Depression and Schizophrenia

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#### Abstract:

**Introduction:** Individual with depression and schizophrenia have high prevalence of nicotine use contributing higher mortality and morbidity. Despite of this understanding, there is paucity of study on prevalence of nicotine use and dependence in patients with depression and schizophrenia.

**Objectives:** The study aimed at determining the prevalence of nicotine use, dependence and motivation to quit in patients with depressive disorders and schizophrenia.

**Materials and Methods:** A total of 218 patients including schizophrenia (n=97) and depression (n=121) were enrolled from inpatient and out patients with diagnosis of depression and schizophrenia at department of psychiatry and mental health, Tribhuvan University Teaching Hospital (TUTH). Data were collected using semi-structured proforma and WHO STEPS Instrument for Nicotine Use. If patient was found to be tobacco user, Fagerström Test for Nicotine Dependence, Modified Fagerström - Smokeless Tobacco, Heaviness of Smoking Index, and Assessment of Motivation: Readiness to Quit Ladder were applied.

**Results:** Total respondents with nicotine use was 56.42% (n=123) with 38.07% (n=83) dependence. Prevalence of nicotine use disorder in schizophrenia and depression was 55.67% (n=97) and 57% (n=121). The level of dependence was not significantly different between two diagnoses. Median value of readiness to quit tobacco (4) was statistically significant (p<0.05) for both diagnoses.

**Conclusion:** Prevalence of nicotine use and dependence was found higher among both depression and schizophrenia. Use of standardized and translated screening tools can be used efficiently to evaluate the burden of nicotine use in standard clinical practice in low resource setting like Nepal.

## **Poster 42** Changing Pattern of Substance Use in Patients Attending State Drug Dependence Treatment Centre in North India

Sunila, Kumar V, Singh P, Gupta R

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#### Abstract:

**Background:** The pattern of abuse of psychoactive substances change over time, and it is important to document such changes. National level prevalence has been calculated for many substances of abuse, but regional variations are quite evident. Rapid assessment surveys have facilitated the understanding of changing patterns of use. Substance use among women and children are increasing causes of concern.

**Objectives:** The present retrospective study was carried out to document these changes in patients registered in a State drug dependence treatment centre in north India over three years **Methods:** Case notes of all patients registered in State drug dependence treatment centre, institute of mental health, University of Health Sciences, Rohtak January 2015 to December 2018 were reviewed. Comparisons were made for three years.

**Results:** The number of registered subjects increased over the years, and age of the subjects presenting for the treatment decreased. Total patients registered were 4906 over three years. The percentages of subjects presenting for the treatment with opioid dependence were 22.6 per cent (n=339), 28.5 per cent (n=456) and 34.3 per cent (n=620), respectively for the three years The proportion of subjects using natural opioids decreased over the three years (49.3, 29.2 and 18.3%), with a concomitant emergence and/or increase of newer and prescription opioids such as buprenorphine, codeine and heroin. Dependence on tobacco and sedative-hypnotics also increased, and inhalant abuse was reported especially in 2018. Polysubstance dependence increased significantly over the years.

**Interpretation & conclusions:** Our results reflect major shifts in the patterns of substance abuse in clinic-attending patients in North India over the three years January 2016 to December 2018. These have important implications for all the stakeholders concerned with combating the challenge of psychoactive substance abuse in our society.

## **Poster 43** Marital Satisfaction and Quality of life in Patients with Alcohol and Opioids Dependence Syndrome: A Hospital Based Study

#### Kumar V, Sunila, Gupta R

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#### Abstract:

**Back Ground:** Opioid and alcohol consumption is considered as an on-going stressor, not only for the individual, but for family members as well. Spouses are particularly affected given the intimate nature of their relationship and constant exposure to the behavior of the dependent persons. Quality of life has emerged as an important treatment outcome measure for alcohol and opioid dependence whose natural course comprises of remission and relapse.

**Objective:** to assess the quality of life, Marital adjustment and among the patients of alcohol and opioid dependence syndrome.

**Methods:** A cross sectional hospital based study with total number of 100 (50 alcohol dependence and 50 opioid dependence) patients diagnosed as per ICD-10 DCR and taking treatment from SDDTC were selected. Informed consent was sought from participants. Socio demographic profile data was collected by using DAMS and WHO QOL- Bref was administered for measuring quality of life and Marital adjustment was administered to know the level of marital satisfaction.

**Result**: Mean age of onset being 22.3±4.4 years for opioids and 20.8±6.4 for alcohol dependence. Mean duration of use was 19.8±5.3 years. Quality of life score is significantly higher in Physical (19.86 alcohol, 22.4 opioid), Psychological (15.76 alcohol, 17.76 opioid), Social (8.06 alcohol, 9.46 opioid), and environmental (21.93 alcohol, 24.73 opioid) domains in the opioid dependence patients. Similarly marital satisfaction is significantly good in opioid dependence in comparison to alcohol dependence participants.

**Discussion:** Improved marital adjustment are most important part of improved quality of life and its sustainability plays key role in preventing relapse and reaching to the recuperation.

## *Poster 44* Very Late Onset Mania in a Patient with Alcohol Abuse

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#### Abstract:

**Background**: The incidence of mania in the population aged more than 75 years is around 2 per 100,000. Organicity is the main reason for development of mania in elderly patients. Primary psychiatry diagnosis should only be made after ruling out the organic cause. We report a case of a 76-year-old man who was diagnosed with the first episode of mania after detailed evaluation.

#### **Case History:**

A 76-year-old married male presented to Psychiatry outpatient department (OPD), with 15 days history of elated mood, over-talkativeness, increased activity level, restlessness, and decreased need for sleep. Onset of illness was acute with no treatment received for current illness. There was a history of regular alcohol intake of around 360ml-540ml of Indian Made Foreign Liquor (IMFL) from past 5 years with total duration of alcohol intake was about 30 years. No history of head trauma, cognitive decline, or altered consciousness was obtained. No significant past or family history of any medical or psychiatric illness was present. He was well-adjusted premorbidly. Mental status examination at the time of presentation revealed increased psychomotor activity, elated affect, pressured speech, circumstantiality, ideas of grandiosity with preserved higher mental functions and general physical examination was within normal limits. Liver function revealed elevated GGT. MRI brain was within normal limits. Diagnosis of first manic episode without psychotic symptoms as per ICD-10 was made. He was started on quetiapine and lorazepam to manage symptoms.

**Discussion:** In review of literature case reports have shown late onset mania having an organic basis. It is important to rule out secondary causes by detailed evaluation and investigations before confirming the diagnosis. There are a few studies in late-onset manic episodes which suggest an average age of onset be around 56 years. This patient's age is much higher than reported in previous studies.

**Conclusion:** This case signifies the potential role of alcohol in first episode of mania at a late age.

## **Poster 45** Retrospective Chart Review of Treatment Seeking Older Adults at a Tertiary Mental Health Care Centre

#### Shantaram GD

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#### Abstract:

**Background:** The patterns of substance use in the elderly are poorly studied with scant research from India.

**Objective:** To review the patterns of substance use in the elderly, thus guiding their assessments and approach to management.

**Methodology:** This is a retrospective chart review of the data collected through a customized application developed for data capture CAMSOFT at Centre for Addiction Medicine, NIMHANS, from January 2017 to December 2018. Various sociodemographic and clinical details of the treatment-seeking elderly individuals (age>60 years) were studied and compared with similar parameters for adults (age between 20- 60 years).

**Results:** 236 elderly adults with a mean age of 65.71 years (SD= 4.47) were registered for treatment, the majority being males (93%). Alcohol (82%) and nicotine (77%) were the most commonly used substances followed by sedative- hypnotics (9%); in contrast to the use of cannabis (15%) in adults being third most common. The age of first use of alcohol in older adults was later (mean= 27 years) compared to adults (mean= 20 years), with subsequent development of dependence at a later age for older adults as compared to the adults. The development of physical, psychiatric as well as withdrawal related complications were delayed in the older population compared to the adults.

**Conclusions:** Use of sedative-hypnotics was much higher in this group, warranting a specific inquiry about their use in older adults. The older adults were found to have a later age of first use, later onset of dependence and further complications.

## Treatment Adherence Of Patients Following Discharged From Drug-Deaddiction Centre Of A Tertiary Mental Health Care Centre

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#### Abstract:

**Background:** Substance use is a serious health concern in India. The prevalence of substance use and mortality associated with alcohol and drug abuse has been increasing and many individuals and families are affected. The factors associated with the abuse can be multifactorial which may require individualized care to the patient. However most of the patients, who receive treatment, don't comply with the treatment plan and tend to relapse after discharge from treatment centers. The present study was conducted with the aim to study the clinical & demographic profile of patients with reference to treatment adherence following discharge from drug de-addiction centre (DDC) of a tertiary care mental healthcare setup in North-East India.

**Objective:** to study demographic variables of the patients admitted in DDC their clinical profile and to find out their treatment adherence.

**Methodology:** A descriptive research design was used, after taking ethical clearance from the Institutional Ethics Committee. The feasibility check was done through retrospective file review of all the patients who got admitted in DDC ward of LGBRIMH from 1<sup>st</sup> Jan 2018 to 31<sup>st</sup> Dec 2018. Total 202 patients were admitted during the period. The preliminary review showed that the persons were treated with the combination of both pharmacological and psychosocial methods by the multidisciplinary mental health professional team. Majority of the patients had alcohol related problems and also found that patient had irregular follow-up with the prescribed treatments after being discharged from the hospital.

**Results:** Majority of the patients had alcohol related problems and also found that patient had irregular follow-up and inadequate adherence to prescribed treatments after discharge from the hospital. There were some who were given routine advises and others were counseled with a protocol, the latter were better in adherence.

## Poster 47 Moderators of Naltrexone Treatment Response in Alcohol Dependent Patients of South Indian Ethnicity

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#### Abstract:

**Background:** Various factors have been elucidated in previous studies as moderating the influence of naltrexone in the treatment of alcohol dependence however evidence has been mixed so far.

**Objective:** To examine severity of alcohol dependence, craving, OPRM1 Asn118Asp genotype and family history of alcohol dependence as potential moderators of naltrexone treatment response in a South Indian population sample.

**Methodology:** An open-label prospective cohort study of 12 weeks duration of 30 patients with alcohol dependence fulfilling inclusion criteria on outpatient basis. Subjects were administered SADQ scale at baseline and OCDS scale at baseline and follow up. They were started on treatment with Naltrexone 50mg/day after routine detoxification and followed up for a period of 12 weeks. Genotyping was done at the end of 12 weeks by TaqMan assay. Treatment outcome was measured by abstinent status and OCDS score improvement.

**Results:** Statistical analysis done showed that there was no statistically significant association between treatment outcome and severity of alcohol dependence, craving, or OPRM1 Asn118Asp genotype. However there was an association between family history of alcohol dependence and good clinical response with patients not having a positive family history responding better to the drug.

Conclusion: Patients not having positive family history of alcohol dependence showed better treatment response to naltrexone. This study did not support the role of severity of alcohol dependence, craving or OPRM1 genotype as moderators of treatment response to naltrexone. However sample size was small and attrition was high.

# Behavioural problems and Temperamental Characteristics among Children with Opioid Use Disorder

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#### Abstract:

**Background**: Previous research has concluded that children of substance use disorders are thought to be at greater risk of social, behavioral, emotional and mental problems. Substance use among parents has an influence on children's behavior by disruptive parenting. Opioids have been conducted in rural areas of Rajasthan, and prevalence of natural opium use was 6.4-8.9%. It has been postulated that there is increased risk of emotional and behavioural issues, poor academic performance and poor social skills among children with opioid dependence. This further increased the risk of addiction in these children. Most of the studies in India have assessed behavioural issues and psychiatric morbidity among children of alcohol use disorders. There is no study in Indian context which have assessed behavioural problems in children with opioid use disorder.

**Objective**: To assess behavioural problems and temperamental characteristics among children with opioid dependence syndrome.

**Methodology**: This study will be conducted at the Out-Patient Department of Psychiatry, AIIMS, Jodhpur. Study sampling will be purposive. Thirty children aged between 9 and 18 years of fathers diagnosed with opioid dependence syndrome will be recruited as per the inclusion criteria. Thirty age and gender-matched children from Pediatrics OPD with no parental psychiatric illness will be taken as controls. The mother will be interviewed using a socio-demographic sheet, Child Behavior Checklist (CBCL), and the Malhotra's Temperament Schedule (MTS).

**Results and Conclusion**: The results of the study will be discussed in the poster presentation.

Do Patients who Use Cannabis Experience Stigma? Sociodemographic Correlates of Internalized Stigma in a Sample of Patients with Substance Use Disorder with Co-Morbid Psychosis

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#### Abstract:

**Objective:** There has been controversy surrounding the use of cannabis around the globe in recent years. This study examines the prevalence and correlates of internalised stigma among a sample of patients with cannabis use disorder.

**Method:** This cross sectional study was conducted among sixty four (64) respondents who met criteria for a diagnosis of mental and behavioural disorder due to use of cannabinoids according the ICD-10 (F-12). All the respondents were administered a sociodemographic and clinical questionnaire, the Brief Psychiatric rating scale and the internalised stigma of mental illness (ISMI) scale.

**Results:** The mean age of the respondents was 33.14 (±8.93). Majority of respondents 96.9% were male, single (79.7%) and unemployed (73.4%). The mean age of onset of cannabis use and psychosis was 20.98 (±3.95) and 23.67 (±3.21) years respectively. About at third (31.3%) of the respondents reported self-stigma. Following univariate analysis, the following correlates of self stigma were identified: previous hospital admission ( $X^2$ =4.921, p=0.013), experience of medication side effects ( $X^2$ =13.465, p=<0.001), level of social support ( $X^2$ =11.869, p=0.005), average monthly income (t=2.972, p=0.004), level of psychopathology (t=-4.746, p=<0.001).

**Conclusion:** Self-stigma is a common phenomenon among patients who use marijuana and may be mediated by a number of sociodemographic and clinical factors. Our findings suggest a need for appropriate interventions to address self-stigma among patients with substance use disorders.

## **Poster 50** A Study of Relationship between Psychopathology and Mobile Phone Use among Indian Youth

#### Singh P, Sharma MK

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#### Abstract:

**Background**: Despite many positive benefits, mobile phone use can be associated with detrimental effects on mental health. Only a limited number of studies have tried to evaluate this among the youth in India.

**Aim:** To assess the correlation between problematic internet use and depression, anxiety and stress symptoms among Indian youth.

**Methodology:** This was a cross sectional study randomly carried on youth in the age group of 16-30 years using a door to door survey. They were asked questions regarding sociodemographic, mobile use while severity of problematic mobile phone use was assessed using problematic mobile phone use questionnaire (PUMPQ), DASS-21 was used to assess depression anxiety and stress.

**Results**: A total of 784 adults were surveyed. Mean age of the sample was 20.93  $\pm$ 3.1 years, majority of the sample consisted of females (62%), were single (87.6%), belonged to nuclear families (68%), with predominant use of smartphones (86%). Bivariate analysis showed significant correlation of total PUMPQ scores with depression (r=0.241, p<.001), anxiety (r=0.261, p<.001) and stress (r=0.275, p<.001). This positive correlation of DASS-21 scores was also observed with PUMPQ subscales of dangerous use, dependence, prohibit use and financial. **Conclusion**: Youth with problematic mobile phone use have higher scores on depression, anxiety and stress. However, longitudinal studies are needed to establish the causality.

## **Poster 51** Measuring Sexual Addiction and Compulsivity in A Pilot study of Self-Reported Problematic Behaviours in India.

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#### Abstract:

**Objectives:** To screen for sexual compulsion and addiction as well as psychiatric comorbidity in persons presenting with self reported concerns of excessive sexual behaviours.

**Materials & Methods**: A cross-sectional, pilot study carried out in 100 sexually active men and women presenting with self/partner reported concerns regarding their sexual behaviours to the Psycho-sexual Clinic, Dept. of Psychiatry, ESIC Hospital, New Delhi. Approval was taken from the Institutional Ethics Committee, written informed consent obtained from all participants aged 18–45 years who were sexually active since past 1year. 86 men and 14 women were studied over a period of 2 years using semi-structured demographic proforma and clinical history (including details of time and money spent on pursuing sexual behaviours). Sexual Addiction Screening Tool-Revised (SAST-R), Sexual Compulsivity Scale (SCS) and MINI were used by the interviewing psychiatrist. Appropriate statistical analysis was done using SPSS 21.

**Results:** Pornography use was the most frequently reported specifier in men (n=81), followed by phone sex (n=70) and visiting massage parlours for sexual favours (n=60). Partnered sexual activity was more common amongst women as compared to men. However, the most common hypersexual behaviour in women was also masturbation (n=12) and porn watching (n=9). 55% (n = 55) of the entire sample (49 men and 7 women) met the criteria for sexual addiction according to SAST-R; out of which 47% had cybersex addiction. Significant association was seen between distress related to sexual behaviours and scoring above the cut-off on SAST-R (p=0.01). Gender was significantly related to the mean score (p=0.03). Women also reported clinical depression, anxiety more than men (p<.05) but not substance use disorders which was higher among men.

**Conclusion:** The SAST-R and SCS can be used clinically as screening tools for problematic sexual behaviours which is a neglected area among non-substance related addictions in the changing Indian social milieu.

## Tramadol: A Viable Option for Detoxification of Mild to Moderate Opiate Withdrawal

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#### Abstract:

**Background**: Tramadol is an atypical centrally acting synthetic analgesic and its O-demethylated metabolite M1, has greater affinity for the mu-opioid activity which makes it a candidate for opiate withdrawal treatment.

**Objective**: To study the efficacy of tramadol in the treatment of mild to moderate opioid withdrawal and compare it to Buprenorphine.

**Materials and methods**: We attempt to assess the efficacy of tramadol compared to that of buprenorphine in treating mild to moderate heroin withdrawal through a randomized open label parallel group study design. 58 patients with opioid dependence with daily heroin use (poppy husk) were assigned into two treatment groups i.e. tramadol and buprenorphine and further subdivided into mild and moderate using the stratified proportionate sampling and both groups were matched for age, sex, and self-reported average quantity of heroin used per day. Mild group had 15 patients in each category and moderate had 14 patients in each group. Flexible dosing schedule was followed and drug was titrated using (COWS) Clinical Opiate Withdrawal Scale and (CGI) Clinical Global Impression.

**Result**: Tramadol had comparable clinical efficacy with buprenorphine in the mild group with early full remission and early partial remission being 53.33% and 33.33% in tramadol group compared to 36.0% and 46.66% in the buprenorphine group. The mean CGI at the end of 2 and 12 weeks was not statistically significant. However, in the moderate group tramadol appeared to have better efficacy in detoxification and relapse prevention with better CGI-I scores at the end of 12 weeks, i.e. 8.066±25.72 compared to buprenorphine 9.133±25.45 and p value of 0.02. **Conclusion:** These preliminary data suggest that tramadol may be comparable to buprenorphine in the management of mild to moderate (poppy husk) heroin withdrawal. These findings, if reproduced in larger studies with stronger research designs, have potentially great implications for the management of opioid withdrawal in both the inpatient and outpatient setting.

## *Poster 53* Quality of Life among Methadone Maintenance Treatment Clients in RSKO Jakarta during 2013 – 2016

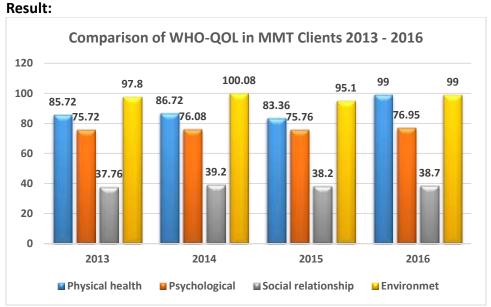
#### Rahayu DP

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#### Abstract:

**Introduction:** Methadone Maintenance Treatment (MMT) is an effective substitution therapy for opioids abuse because it could be increase the quality of life. As the result of therapy, quality of life of MMT clients can be vary depend on treatment programme. This study aimed to describe the comparison of quality of life among MMT clients from 2013 to 2016.

**Method:** Active MMT clients in RSKO Jakarta and all satelites from January 2006 until July 2016. All clients have been assessed with WHO-QOL questionnaire.



**Conclusion:** The quality of life of MMT clients are tend to be stable from 2013 – 2016. All clients have good quality of life but the social relationship not fulfilled.

# Baclofen Induced Suicidality in a Patient with Alcohol Dependence: An Interesting Case with Literature Review?

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#### Abstract:

**Background:** Baclofen is a GABA-B agonist widely used as an anti-craving for alcohol use. Its relatively safer and now increasingly being used for young patients having alcohol dependence. Reports of suicidality induced by baclofen is sparse.

**Objective:** The current report describes a middle-aged man who developed suicidality while on baclofen for alcohol dependence. It tries to unearth a dreadful side effect of this widely used anti-craving agent.

**Methodology:** This is a case report of a middle-aged man having alcohol dependence syndrome. He was admitted with simple alcohol withdrawal and after detoxification, was started on baclofen as an anticraving agent. He developed suicidality while on baclofen and a previous history also suggested the same while he was earlier on this pharmacological agent.

**Results:** The patient developed suicidal ideations after days of starting baclofen. His concomitant agitation was colouring his suicidality which was revealed after a thorough MSE. He had a previous similar history while on baclofen earlier also. Naranjo adverse drug reaction probability scale yielded a score of 6 suggesting 'probable' causation. Baclofen was stopped and he was prescribed acamprosate for his alcohol dependence syndrome. Rechallenge with baclofen was not done due to ethical issues. The details will be presented in the conference.

**Conclusion:** The report points to an important and dreadful side effect of baclofen thus requiring a thorough evaluation of mental status examination (MSE) of any patient before starting baclofen. Non-psychiatrists often use baclofen in alcoholic liver diseases which warrants a word of caution without a thorough MSE.

## **Poster 55** Burden of Care, Quality of Life and Psychiatric Morbidity in Caregivers of Patients with Opioid Dependence

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#### Abstract:

**Background:** Opioid dependence is major public health problem in India. Continuous use of opioids leads to syndrome of opioid dependence. India in particular have 2 million opioid users of which 17 to 26% are opioid dependent. Study showed that substance dependence was associated with substantial burden for the family members, more for subjective and objective burdens in rural location with low income, and more for alcohol+opioid dependence group followed by opioid dependence group. Opioid dependence leads to increase financial burden so it also affects the quality of life of primary care giver. Though studies based on psychiatric morbidity among primary care giver of opioid dependence patient are very less but there is definitive increase in prevalence of psychiatric morbidities among primary caregiver of opioid dependence patient.

**Objective**: To study burden of care, quality of life and psychiatric morbidity in caregivers of patients with opioid dependence

**Methodology:** Cross Sectional sampling was done. Fifty caregivers of patients with opioid dependence attending, State Drug Dependence Treatment Centre, Department of Psychiatry, PGIMS, Rohtak were taken meeting the inclusion criteria.

**Results**: Among the study population 8 (16%) of caregivers were found to be suffering from psychiatric diagnosis at the time of interview and all of them had mild depressive disorder. In our study all four domains viz physical health, psychological health, social relationship and environment domain score were calculated. The lowest score was seen in psychological health domain which is 10.13 with standard deviation of 2.05 and the maximum was in social relationship domain that is 10.08 with standard deviation of 2.99. Physical health domain score is 10.26 with standard deviation of 2.5.The mean burden score was 79.52 and 27 (54%) were noted to have moderate burden while 23 (46%) had severe burden,

**Conclusions**: Findings suggest that opioid dependence leads to high burden on the family, psychiatric morbidity and also impairs the quality of life of caregivers on the domain of physical, psychological, environmental and social relationship.

## **Poster 56** Socio-Demographic and Clinical Profile of Patients Attending State Drug Dependence Treatment Centre in Northern India

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#### Abstract:

**Introduction**: Substance abuse is emerging as a major public health challenge. The menace of illicit substance use especially among youth is causing significant burden in terms of declined productivity both at individual and national level.

**Background and objectives**: Substance abuse in India is undergoing an ever changing trend. Various social and cultural factors affect substance use since time immemorial. Substance use results in various physical and psychiatric comorbidity. In addition patients with psychiatric disorders are more prone to develop substance use disorder. The current study was aimed at studying socio-demographic and clinical profile of patients attending de-addiction services at a tertiary care centre over a period of 1 year.

**Methodology**: A retrospective structured chart review was done of the patients with substance use disorder coming to a State Drug Dependence Treatment Centre in Northern India between January 2018 to December 2018. The socio-demographic and clinical profile was then assessed by appropriate statistical analysis.

**Results**: The total sample of those seeking treatment for substance use disorder at State Drug Dependence Treatment Centre was 1806 in the year 2018, which was included in the analysis. The mean age of the patients was 36.04. 99% of the patients were males with majority educated up to middle education level to graduation. Comorbidity profile: significant medical and psychiatric concurrent illnesses were present in the study sample.

**Conclusion:** The socio-demographic factors can help us identify vulnerable groups in the society. A comprehensive strategy based on socio-demographic and clinical profile can help in effective management in patients with substance use disorder.

A Social Perspective on Addictive Disorders: A Cross Sectional Observational Study to Assess Suitability of Indian Disability Evaluation Scale (IDEAS) to Assess Disability among Individuals with Alcohol Use Disorders.

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#### Abstract:

**Background:** Alcohol use disorders contribute substantially to the global disease and disability burden. The disability measurement tool, Indian Disability Evaluation and Assessment Scale (IDEAS), has seldom been used to measure disability in those with alcohol use disorders.

**Objectives:** To assess the suitability of using IDEAS to quantify disability among individuals with alcohol use disorders by measuring the level of agreement between IDEAS and World Health Organization Disability Assessment Schedule version 2.0 (WHODAS 2.0).

**Methods:** A cross sectional measurement of disability and quality of life measures was carried out on treatment seekers for alcohol use disorders. Correlational analyses and Bland Altman plot analysis was done to measure the level of agreement between IDEAS and WHODAS2.0.

**Results:** Eighty-nine participants (mean age 33.9±9.8 years) were assessed for disability and quality of life measures. The scores on the WHODAS and IDEAS show significant positive correlation (Rho: 0.435, p=0.0001) indicating convergent validity. There was a significant level of agreement of disability scores using both tools. The IDEAS score had significant negative correlation with the WHO Quality of Life brief version (WHOQoL BREF-Hindi) measures (Rho: - 0.301, p=0.003) indicating divergent validity. Those with greater severity of alcohol use disorder had higher IDEAS scores ( $\beta$ =1.9, p=0.046).

**Conclusions:** IDEAS scores correlate with disability scores measured with WHODAS 2.0 and quality of life assessment using WHOQOL-BREF Hindi in those with alcohol use disorders. This instrument can be used to quantify disability and provide socio-economic compensations to these individuals.

## *Poster 58* SUD Practice in India - The Missing Links

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#### Abstract:

Though there is huge problem of SUD in India in recent times, still certain medicines and treatment modalities with proven clinical efficacy in numerous studies are not available in armamentarium of addiction specialists in India. Some of the missing links are mentioned below:

Antagonist Therapy – Naltrexone a pure opioid antagonist is very effective in producing abstinence by decreasing craving and blocking positive reinforcement in SUD but has major issue with its compliance on oral use. To curb this problem extended release preparations of naltrexone in the form of monthly I/M injections Vivitrol, FDA approved for AUD in 2006 and OUD in 2010 and subcutaneous naltrexone implants Prodetoxone approved in Russia are being used extensively in many countries with positive outcome. Recently even some drug court programs have started advising Vivitrol in addition to buprenorphine in MAT

Substitution Therapy - Both Suboxone buprenorphine sublingual film FDA approved in 2010 and Probuphine buprenorphine implant approved in 2016 as maintenance in MAT have less chance of diversion and misuse than buprenorphine tablet.

Overdose education and naloxone dispensing program (OEND) which has saved thousands of lives in Opioid overdose cases is virtually non-existent here at present, what to talk of newer preparation of naloxone in the form of prefilled syringes and Narcon nasal sprays

Author of this article has a vast satisfactory experience with some of medicines and treatment modalities mentioned here.

Unfortunately addiction is still considered as a moral failure rather than a chronic disease. This can be judged from the fact that unlike in other chronic diseases like Diabetes and Hypertension clients with SUD hardly get any reimbursement from Insurance companies during their hospital stay.

In nutshell India yet has to go a long way in implementing the evidence based practice in certain fields of substance use disorders.

## *Poster 59* An Unusual Case of Lorazepam Dependence: A Case Report

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#### Abstract:

**Introduction**: Lorazepam is a short-acting benzodiazepine. High potency and relatively short elimination half-life lead to dependence. High dose-dependence is associated with increased risks of complications, including seizure and can be fatal on withdrawal.

**Case**: 35 year old widower with past history of alcohol dependence, abstinent for last 6 years started having features suggestive of anxiety disorder and on one occasion he was very apprehensive and lost consciousness. He was taken to a hospital where he was given lorazepam injection and his symptoms were relieved. After that he started injecting himself with lorazepam intravenously occasionally, which he used to buy from pharmacy without prescription. Gradually number of injections increased day by day. Finally he was taking 36-48 mg of Lorazepam/day.

**Investigation**: Routine investigations were within normal limit. Hepatitis B, C was non reactive but he was HIV positive.

**Treatment**: He was started on tab chlordiazepoxide 100 mg and tab clonazepam 2 mg in divided doses and tab zolpidem 12.5 mg at bed time. Hospital stay was uneventful except some withdrawal features in initial days. Doses were gradually tapered, stopped over 16 days and was discharged on tab paroxetine 25mg at bedtime.

**Discussion**: In two studies, lorazepam above 10 mg/day and above 27 mg/day was considered as high dose-dependence. This case highlights some important issues with regard to benzodiazepine use and its complications. Use that began for the purpose of self medication for anxiety, finally lead to high dose dependence.

## *Poster 60* Methadone Clinic: Experiences from a Tertiary Care Center in India

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#### Abstract:

**Background:** Opioid substitution therapy (OST) is an evidence-based intervention for opiate dependent patients which replaces illicit drug use with medically prescribed orally administered opiates. While buprenorphine has been available over two decades, methadone has been recently introduced in Indian settings. Institute of mental health, Rohtak initiated MMT program in 2016 as a part of strengthening the Drug De-Addiction Programme scheme.

**Objective:** To share the initial experiences and the challenges faced while initiating the MMT at a tertiary center catering to both rural and urban population.

**Methodology:** The charts of the patients started on MMT were retrospectively reviewed for the period of October 2016 to June 2109 and data was collected regarding the methadone doses and compliance. Descriptive statistics were used for analysis.

**Results:** A total of 94 patients were started on MMT over this period. The average first day methadone dose was dose 13.5mg (range= 5-30mg) while maintenance dose was 23.5mg, highest dose being 100mg. Over the past 30 months there was a steady increase in compliance. Only 14% of patients took methadone for >25 days during initial months in 2016, while it increased to 50% in 2019. Similarly, there was a decline in dropout over this period.

**Conclusion:** With time, compliance improved in the patients attending MMT clinic in our center. However, further studies are required which explores the reason for early drop out in patients on methadone maintenance therapy in Indian settings.

## **Poster 61** Psychiatric Morbidity among First Degree Relatives of Patients with Alcohol and/or Substance Dependence

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#### Abstract:

**Background**: Alcoholism and substance dependence are known as family disease. Alcoholism is responsible for more family problems than any other single cause.

**Objective**: To determine the frequency and nature of psychiatric morbidity in family members of patients with alcohol and/ or substance-related disorders

**Methodology**: Study design - Hospital-based cross-sectional study. Study setting - Psychiatry Department of GMC Patiala. Study units – 201 first degree relatives of 60 adult patients attending the Department of Psychiatry, over a period of six months, with a diagnosis of alcohol and/or substance dependence constituted the population. After obtaining written informed consent from each of the concerned subjects, demographic details and history of psychiatric illness were noted as per "Indian Psychiatric Schedule" (IPS). The psychiatric diagnosis was made according to the information on interview and as per ICD-10 criteria. Subsequently, the "Drug Abuse Schedule" was administered to the first degree relative.

**Results:** The age group of most of the patients and the first degree relative with psychiatric morbidity was found to be 40-49 years (33.33%) and 20-29 years (27.94) respectively. Most of the substance dependent patients were Males (95.00%) who lived in Nuclear families (73.33%). Mostly the first-degree relatives having psychiatric morbidity were the children (39.71%) followed by mothers (25.00%) & brothers (13.24%). The most common single diagnosis was depression (30.16%) followed by substance use (22.22%).

**Conclusions**: Mental health of family members of patients with addiction often goes unnoticed and there's a need for identification and interventions for a holistic treatment approach.

## *Poster 62* Nicotine Dependence & Motivation for Tobacco Cessation in Psychiatric Patients

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#### Abstract:

**Background:** A great deal of evidence suggests the high prevalence of nicotine dependence in psychiatric patients. Although, tobacco cessation interventions can be successfully implemented in these patients, yet only a few studies have been conducted, especially in the northern region of our country to assess its severity and motivation for cessation. Not only considering the negative impact it imparts over both the physical and mental health, but also the Indian tobacco containing more nicotine content, especially in bidis, we hereby try to shed some light over the severity and motivation for leaving tobacco in a tertiary care hospital in Punjab.

**Aims and objectives:** To asses the severity of nicotine dependence and motivation for tobacco cessation in psychiatric patients, and to compare them after 1 month.

**Material and methods:** A total of 122 patients presenting to OPD/IPD of the department of Psychiatry, GGS medical college, Faridkot, diagnosed with a psychiatric disorder based on ICD-10 criteria, were recruited for the study after fulfilling the inclusion and exclusion criteria and taking an informed consent. The severity of nicotine dependence was assessed using the FTND (Fagerstrom Test for Nicotine Dependence) and FTND-ST (Fagerstrom Test for Nicotine Dependence- Smokeless Tobacco). The motivation for tobacco and the Stage of Change cessation was assessed using the RTQL (Readiness to Quit Ladder). The respective scores were assessed and compared using appropriate statistical analysis at baseline i.e. just after the initial intervention for psychiatric disorder and brief intervention for tobacco use upon improvement of patient's insight; and then at 1 month ; with variable no. of follow-ups in between.

**Results:** Of the 122 patients, 37.7% were diagnosed as SUDs, 35.2% mood disorders 11.5% Psychotic disorders, and 15.6% belonged to other psychiatric diagnoses. Categorically, 45.9% consumed chewed forms (jarda/gutkha), 26.2% cigarettes, 11.5% bidis, and 16.4% used a combination of these. The severity of nicotine dependence was found to be low, moderate and high in 21.3%, 41.8% and 36.9% at baseline and 33.6%, 37.7% and 28.7% at 1 month, with mean FTND/ST scores of 4.80 and 4.04, respectively, suggesting an overall moderate dependence in the given population. Regarding motivation for tobacco cessation, patients in precontemplation, contemplation, preparation and action were 50%, 30.3%, 12.3%, 7.4% at baseline and 45.1%, 29.5%, 13.1%, 12.3% at 1 month, with labourers having the least motivation.

**Conclusion:** Tobacco use and nicotine dependence are highly prevalent in psychiatric patients. However, self-reported motivation for tobacco cessation is noteworthy, emphasizing that brief intervention measures including cessation advice and appropriate follow-up care should be provided to the patients.

Neurohaemodynamic Correlates of Efficacy of Yoga and Meditation (YAM) in Improving Cognitive Functions, Drinking Related Outcomes and Psychological Well-Being in Alcohol Dependence Syndrome: A Prospective Study

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#### Abstract:

**Background:** Alcohol Use Disorder is characterized by excessive alcohol consumption, loss of control, craving and withdrawal symptoms. In India, the prevalence of AUD is approximately five percent. Majority of AUD patients develop deficits in learning and remembering, inhibiting inappropriate responses, planning their actions and processing speed. These deficits interfere with counselling/ psychotherapy and make long-term treatment of AUD challenging. Emerging evidence show that Yoga and Meditation enhance cognitive functions in healthy individuals. In this study, we propose to study the efficacy of a structured YAM intervention in improving the cognitive functioning of AUD patients.

**Objective:** To evaluate the feasibility and efficacy of a yoga and meditation package in patients with AUD along with standard treatment and to evaluate the neurological correlates of effects of yoga and meditation on cognition.

**Methodology:** Minimum of 12 subjects are required in each group for 80 % power in task-based fMRI and, 20 subjects are required for inter subject correlation analysis. We will recruit 50 subjects in Group 1 (Treatment as usual) and 50 subjects in Group 2 (Treatment as usual + Yoga and meditation) with a DSM 5 diagnosis criteria of AUD with at least a moderate level of AUD as specified in DSM 5 through convenience sampling. Keeping in mind all inclusion and exclusion criteria; psychological assessment, fMRI and intervention module would be applied on all group. **Result & Conclusion:** This is prospective study if the intervention is found to be effective attempts will be made to integrate it in a package of interventions for AUD.

## *Poster 64* A systematic review on tramadol toxicity in Iran – A distinct profile

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#### Abstract:

**Background:** Tramadol, an opioid analgesic, was introduced as safe pain medication in 2002 in the pharmaceutical market of Iran. Nevertheless, rising reports of tramadol toxicity, tramadol induced seizures, and tramadol related mortality, incompatible with previous studies in other countries, resulted in the implementation of control policies since 2007 in Iran.

**Objective:** We aimed to systematically review all the relevant studies on tramadol toxicity and its health consequences in Iran.

**Methodology:** Four international (Web of Science, Scopus, Medline) and one local (SID) databases were systematically searched up to June 2019 using a comprehensive search strategy. Any study providing data on tramadol toxicity on the Iranian population was eligible. Data on tramadol toxicity and its health outcomes were presented without pooling due to high heterogeneity.

**Results:** In total, 56 records investigated tramadol toxicity in Iran. Tramadol toxicity patients were mostly under 30 years and were males. The most common reason for toxicity were suicidal attempts. The mean dose resulting in toxicity was 363.2 to 3248 mg. Previous tramadol abuse or dependence was reported by 3.8% to 66.4% of the patients. Seizure prevalence ranged from 12.0% to 69.3%; however, the most prevalent clinical manifestations were nausea, vomiting and altered mental status. The mortality rate due to tramadol toxicity ranged from 0% to 10.0%. **Conclusions:** Tramadol toxicity remains a public health challenge in Iran in spite of control measures. Most toxicity cases were young males attempting suicide. Tramadol related seizures and also tramadol related fatal cases had been reported in numerous studies.