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MDES Conference 2026

DIABETES CARE: BRIDGING PRACTICE, TECHNOLOGY, AND PATIENT EMPOWERMENT

E-PROGRAMME BOOK

mdes2026@dreamz.com.my

www.mdesconference2026.com

Organised By:

mdEs
MALAYSIAN DIABETES EDUCATORS SOCIETY

Table Of Contents

Welcome Message from the President of the Malaysian Diabetes Educators Society

Dear Colleagues, Partners, and Friends,

It is with great pride and heartfelt enthusiasm that I welcome you to the Malaysian Diabetes Educators Society (MDES) Conference 2026. As President of MDES, I am delighted to announce that we are bringing together a vibrant community of professionals united by a shared commitment: to improve the lives of people affected by diabetes through education, empowerment, and evidence-based care.

According to the National Health and Morbidity Survey (NHMS) 2023, 15.6% of Malaysian adults aged 18 and above are living with diabetes. Among those diagnosed, only two in five own a glucometer, and 56% do not have good diabetes control. These figures underscore the urgent need for early detection, culturally sensitive education, and sustained community outreach—areas where diabetes educators play a transformative and essential role.

At the heart of MDES lies a dedicated mission, to support and elevate the role of diabetes educators in Malaysia by promoting excellence in education, advocacy, and professional development. This conference is a living embodiment of that mission, bringing together healthcare providers, researchers, policymakers, and advocates to exchange knowledge, spark innovation, and strengthen our collective impact.

On behalf of the MDES Executive Committee I would like to thank Professor Dr Norlaila Mustafa and Professor Dr Muhammad Yazid Jalaludin chairing the scientific committee, Ms Ooi Yong Xuan and Dr Tan Ming Yeong for organising the conference.
I look forward seeing you in the conference.

Ms Yong Lai Mee
President, Malaysian Diabetes Educators Society

Welcome Message from the Organising Chairperson

Dear Friends and Esteemed Colleagues,

It is my great pleasure to welcome you to the Malaysian Diabetes Educators Society (MDES) Conference 2026, which will be held from 15th to 17th May 2026 at Four Points by Sheraton, Puchong, Selangor.
This year, the conference theme, "Diabetes Care: Bridging Practice, Technology, and Patient Empowerment," reflects our collective aspiration to close the gap between knowledge and real-world impact. In an era where innovation and digital health are rapidly transforming diabetes care, our focus remains clear, empowering healthcare professionals and individuals with diabetes working together towards better outcomes.

Over three days, MDES Conference 2026 will showcase an inspiring programme that redefines how we deliver diabetes care and education. Through a modern lens of innovation, technology, and empowerment, the conference will highlight the integration of digital tools, behavioural strategies, and nutrition innovations that support meaningful and sustainable self-management. The conference will also feature the latest updates in diabetes medical management and complication prevention, translating new evidence into better patient outcomes. Hands-on workshops will provide practical learning opportunities to strengthen educators' skills and confidence in applying evidence-based approaches. By bridging clinical expertise with technology and human connection, we aim to enhance collaboration between healthcare providers and people living with diabetes in transforming knowledge into confident, empowered action.

Together, let us strengthen our role in empowering people with diabetes to live not just longer, but better. More than a learning experience, MDES Conference 2026 is a celebration of collaboration, resilience, and our shared commitment as clinicians, educators, and partners to advance diabetes management and education in transforming lives through empowerment and care.

We look forward to welcoming you to an enriching experience together, where practice meets progress, and every connection inspires change.

Ms Ooi Yong Xuan
Organising Chairperson, MDES Conference 2026

Welcome Message From Scientific Chairperson

On behalf of the Scientific Committee, it is our great pleasure to welcome you to the Malaysian Diabetes Educators Society (MDES) Conference 2026, taking place from 15 – 17 May 2026 at the Four Points by Sheraton Puchong.

This year's conference carries the theme, "Diabetes Care: Bridging Practice, Technology, and Patient Empowerment." This theme was thoughtfully chosen to capture the transformation taking place in diabetes care today, where clinical excellence, technological advancement, and patient empowerment converge to shape a new standard of practice. As diabetes management becomes increasingly complex, healthcare professionals are called to bridge the gap between emerging innovations and the realities of daily clinical practice. Equally vital is our shared commitment to empower patients through education, enabling them to take an active role in achieving better outcomes and quality of life.

The scientific programme reflects this vision, offering a broad spectrum of topics including Adult Diabetes, Diabetes Education, Dietetic & Nutrition, and the latest developments in Diabetes Complications. It also highlights the evolving role of diabetes educators in managing conditions such as neuropathy, chronic kidney disease (CKD), and cardiovascular disease (CVD) emphasizing the value of multidisciplinary collaboration and continuous learning.

Through plenary lectures, interactive symposiums, hands-on workshops, and real-world case discussions, MDES 2026 offers an engaging platform for dialogue, discovery, and professional growth.
We invite you to join us on this journey to exchange ideas, embrace innovation, and strengthen our shared commitment to advancing diabetes education and care across the region.

Professor Dr Norlaila Mustafa
Scientific Chairperson, MDES Conference 2026

MALAYSIAN DIABETES EDUCATORS SOCIETY (MDES)

Empowering Diabetes Educators, Transforming Lives

Who We Are

The Malaysian Diabetes Educators Society (MDES) is a leading professional body dedicated to advancing diabetes education, improving patient outcomes, and strengthening multidisciplinary collaboration across Malaysia.

Through education, research, and advocacy, MDES continues to play a pivotal role in shaping the future of diabetes care.

Our Vision

To enhance the lives of individuals affected by diabetes through optimal health, wellness, and evidence-based care.

Our Mision

To lead and advocate best practices in diabetes education by empowering individuals with knowledge, promoting healthy lifestyles, and strengthening self-management capabilities.

What We Do

MDES plays a pivotal role in strengthening diabetes care through:

Facilitating Collaboration
Building strong networks between diabetes educators, healthcare systems, and communities

Improving Access
Enhancing availability of quality diabetes education services

Supporting Professionals
Providing training, capacity building, and advocacy for diabetes educators

Promoting Excellence
Driving personalised, patient-centred diabetes education

Our Impact

- Over 13+ Years Of Experience
- 100+ Events Organized
- Nationwide Engagement In Diabetes Education And Awareness Initiatives

Publications & Programmes

MDES contributes through education manuals, national workshops, public awareness campaigns, and collaborative healthcare programmes.

Programmes

DLP 2023

DLP 2024

Cardiometabolic Therapeutic Communication Workshop (CARE) 2024

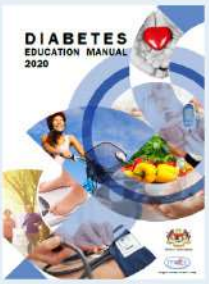
DLP 2025

Diabetes Education Workshop 2025

Cardiometabolic Therapeutic Communication Workshop (CARE) 2025

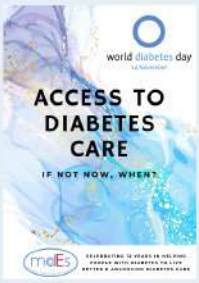
Diabetes Educator Mentorship Programme

Publications

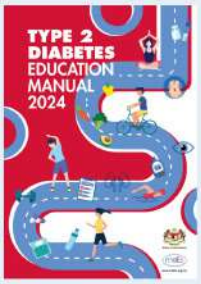


Diabetes Education Manual 2020

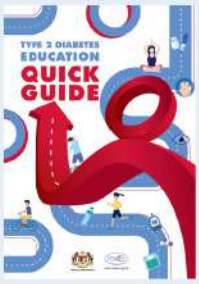
FITMY 1st Edn



Access to Diabetes Care



Diabetes Education Manual 2024



T2DM Manual Quick Guide

FITMY 2nd Edn

Membership:

MDES membership is open to a wide range of healthcare professionals, including:

- Doctors
- Nurses
- Diabetes Educators
- Dietitians
- Pharmacists
- Psychologists & more

Benefits include:

- Scholarships & professional development opportunities
- Exclusive access to members-only resources
- Latest updates in diabetes education
- Discounts for MDES events and programmes

JOIN US

Be part of a community that is shaping the future of diabetes care in Malaysia.

Website: mdes.org.my
Email: mdes0507@gmail.com

Together, We Educate. Together, We Empower. Together, We Transform Lives.

Organising Committee

Ms Ooi Yong Xuan
Organising Chairperson

Dr Tan Ming Yeong
Co-Chairperson

Ms Yong Lai Mee
Committee Member

Ms Choong Shiau Yin
Committee Member

Dr Luqman Ibrahim
Committee Member

Ms Jessica Saw Ching Yee
Committee Member

Ms Woo Li Fong
Committee Member

Scientific Committee

Professor Dr
Norlaila Mustafa
Scientific Chair

Professor Dr
Muhammad Yazid
Scientific Co-Chair

Professor Dr
Winnie Chee Siew Swee
Dietetic & Nutrition

Ms Choong Shiau Yin
Diabetes Educator

Dr Tan Ming Yeong
Diabetes Educator

Ms Ooi Yong Xuan
Diabetes Educator

Dr Wong Ping Foo
Family Medicine Specialist (FMS)

Acknowledgement

We would like to express our sincere appreciation to all our sponsors for their generous support and commitment towards the success of MDES CONFERENCE 2026. Your contributions have played a vital role in making this conference possible, and we are truly grateful for your partnership and trust.

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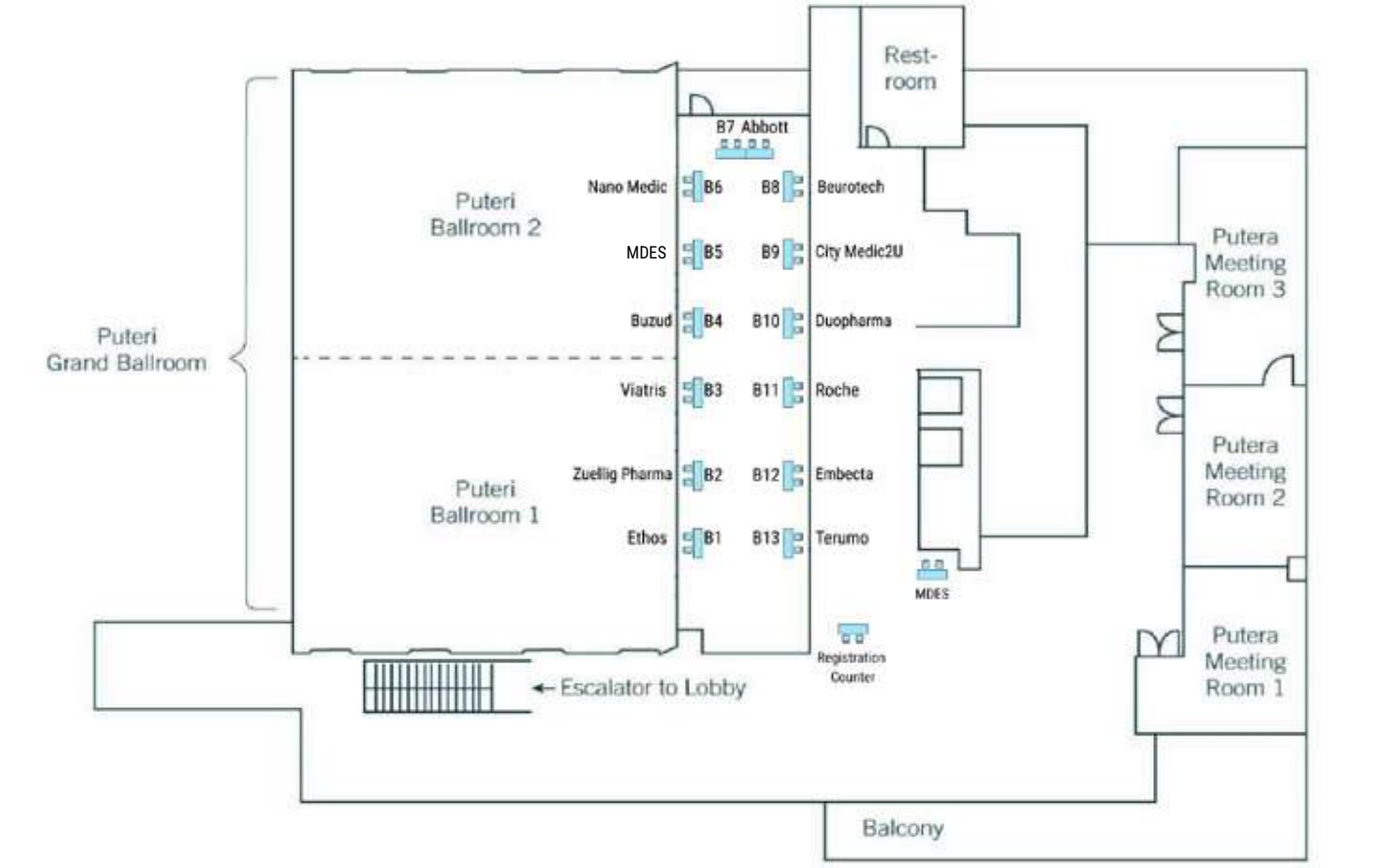
Exhibition Floor Plan



B1	ETHOS	B2	ZUELLIG PHARMA	B3	VIATRIS
B4	BUZUD	B5	MDES	B6	NANO MEDIC
B7	ABBOTT	B8	BEUROTECH	B9	CITY MEDIC2U
B10	DUOPHARMA	B11	ROCHE	B12	EMBECTA
B13	TERUMO				

KEY EVENT

OPENING CEREMONY

15 MAY 2026 | 0900 - 1030 | GRAND PUTERI BALLROOM

MALAYSIAN DIABETES EDUCATORS SOCIETY ANNUAL GENERAL MEETING

15 MAY 2026 | 1700 - 1830 | GRAND PUTERI BALLROOM

CLOSING CEREMONY

17 MAY 2026 | 1300 - 1330 | PUTERI 1 BALLROOM

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* 226 patients with diabetes on insulin treatment were studied with a 150mm visual analog scale (mean scores of >0mm; clinically significant difference of =5mm). BD Nano™ 2nd Gen demonstrated superiority vs all comparator groups combined for ease of attachment [(P<0.05) (mean +21.8mm, 95% CI, +16.1 to +27.6mm)], ease of grip and removal of the inner shield [grip (P<0.05) (mean +23.8mm, 95% CI, +18.1 to +29.4mm)]; [removal (P<0.05) (mean +24.4mm, 95% CI, +18.9 to +29.9mm)], more comfortable throughout injection experience [(P<0.05) (mean +18.0mm, 95% CI, +11.6 to +24.3mm)].
^ N=230 patients with diabetes across Canada. Participants answered a survey as part of the cross-sectional observational behavioral study. BD helped fund this study.
† Based on mathematical calculations and not clinical study data compared to other 4mm pen needles.
‡ Patients were unblinded to the pen needle they were using.
# Ultra-thin wall was introduced as an ISO standard for inner wall diameter in 2016.
§ 198 patients with diabetes were included in this prospective, multicenter, randomized, open-label, 2- period, crossover study to evaluate differences in perceived thumb force and in confidence that the full dose of insulin was delivered, between the participants' usual pen needle (PN) and the corresponding extra-thin wall (XTW) pen needle while using a manually-operated insulin pen. Both outcomes were considered statistically significant if the 95% confidence interval (CI) for the mean VAS score was either positive (XTW preferred) or negative (current PN preferred). Significant differences favoring XTW pen needles were seen for perceived thumb force and confidence that the full dose was delivered by 28.4 mm (95% CI, 23.7-33.2), and 24.4 mm (95% CI, 19.7 – 29.1), respectively; (all, P < 0.001).

1 Whooley S, Briskin T, Gibney MA, et al. Evaluating the user performance and experience with a reengineered 4 mm x 32G pen needle: a randomized trial with similar length/gauge needles. Diabetes Ther. 2019;10(2):697-712. **2** Bari B, Corbeil MA, Farooqui H, et al. Insulin injection practices in a population of Canadians with diabetes: an observational study. Diabetes Ther. 2020;11(11):2595-2609.
3 Rini C, Roberts BC, Morel D, et al.Evaluating the impact of human factors and pen needle design on insulin pen injection. J Diabetes Sci Technol. 2019;13(3):533-545. **4** Hirsch LJ, Strauss KW. The Injection Technique Factor: What You Don't Know or Teach Can Make a Difference. Clin Diabetes. 2019 Jul;37(3):227-233. doi: 10.2337/cd18-0076. PMID: 31371853; PMCID: PMC6640874. **5** Frid AH, Kreugel G, Grassi G, et al. New insulin delivery recommendations. Mayo Clin Proc. 2016;9(19):1231-1255. **6** Hirsch L, Gibney M, Berube J, Manocchio J. Impact of a modified needle tip geometry on penetration force as well as acceptability, preference, and perceived pain in subjects with diabetes. J Diabetes Sci Technol. 2012;6(2):328-335. **7** Aronson R, Gibney MA, Oza K, et al. Insulin pen needles: effects of extra-thin wall needle technology on preference, confidence, and other patient ratings. Clin Ther. 2013;35(7):923-933.

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INVITED FACULTY

Professor Dr Mette Juel Rothmann
University of Southern Denmark

Dr Sivarajan Ramasamy
Ministry of Health, Malaysia

Professor Dr Barakatun Nisak Mohd Yusof
Universiti Putra Malaysia, Malaysia

Professor Dr Muhammad Yazid Jalaludin
University of Malaya Medical Centre, Malaysia

Professor Dr Norlaila Mustafa
Hospital Canselor Tuanku Muhriz UKM, Malaysia

Professor Dr Shireene Ratna Vethakkan
University of Malaya Medical Centre, Malaysia

Professor Dr Winnie Chee Siew Swee
IMU University, Malaysia

Associate Professor Dr Azriyanti Anuar Zain
University of Malaya Medical Centre, Malaysia

Associate Professor Dr Khoo Ching Soong
Hospital Canselor Tuanku Muhriz UKM, Malaysia

Associate Professor Dr Tan Kit Mun
University of Malaya Medical Centre, Malaysia

Datuk Dr Zanariah Hussein
Ministry of Health, Malaysia

Dr Annie Leong
University of Malaya Medical Centre, Malaysia

Dr Devamalar Selvi Naicker
Ministry of Health, Malaysia

Dr Eleza Nazefah Rosli
Ministry of Health, Malaysia

Dr Farah Yasmin Hasbullah
IMU University, Malaysia

Dr Hariyati Shahrima Abdul Majid
IJN University College, Malaysia

Dr Lee Ching Li
IMU University, Malaysia

Dr Luqman Ibrahim
Regency Specialist Hospital, Malaysia

Dr Mohamad 'Ariff Fahmi Ahmad Zawawi
Ministry of Health, Malaysia

Dr Navin Kumar Loganadan
Ministry of Health, Malaysia

*Invited speakers as of 5 February 2026. Subject to change.

Dr Nalini M Selveindran
Ministry of Health, Malaysia

Dr Rokiah Ismail
University of Malaya Medical Centre, Malaysia

Dr Tan Ming Yeong
IMU University, Malaysia

Dr Thum Chan Ho
National Heart Institute, Malaysia

Dr Wan Rohaslizan Wan Daud
Hospital Canselor Tuanku Muhriz UKM, Malaysia

Dr Wong Ping Foo
Ministry of Health, Malaysia

Mr Muhammad Hazrin Husin
University of Malaya Medical Centre, Malaysia

Ms Ani Norita Muhamad Samudi
Ministry of Health, Malaysia

Ms Nur Wahida Amanin
University of Malaya Medical Centre, Malaysia

Ms Elsie Liaw Sze Ying
University of Malaya Medical Centre, Malaysia

Ms Mumtas Abu Gani
Ministry of Health Malaysia

Ms Rohana Jaafar
Hospital Canselor Tuanku Muhriz UKM, Malaysia

Ms Siti Zarina Yaakop
University of Malaya Medical Centre, Malaysia

Ms Teong Lee Fang
Ministry of Health, Malaysia

Ms Toh Peik Khiam
Ministry of Health, Malaysia

Ms Yong Lai Mee
Subang Jaya Medical Center, Malaysia

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^Minimum accuracy requirements of ISO15197: 2013 standard require ≥95% of the measured values to fall within ±0.83v mmol/L at glucose concentrations <5.5 mmol/L or within ±15% ≥5.5 mmol/L of the referenced results.

1. Klaft L et al. Accuracy and User Performance of a New Blood Glucose Motoring System [published online ahead of print, 2020 Nov 26h J Diabetes Sci Technol. 2020; https://doi.org/10.1177 /1932296820974348. 2. CONTOUR®PLUS ELITE User Guide, November 2019, Revision 11.19. 3. Richardson JM et al. Clinical Relevance of Reapplication of Blood Samples During Blood Glucose Testing. Poster presented at the 20th Annual Diabetes Technology Meeting (DTM); November 12-14, 2020.

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ETHOS HEALTHCARE

ASCENSIA Diabetes Care

DAY 1

15 May 2026 , Friday

0730 - 1600	Registration

Grand Puteri Ballroom, Level 1

0830 - 0900	KEYNOTE SESSION **National Strategic Plan NCD (2026 – 2030): What's New, What's Next** ***Dr Sivarajan Ramasamy*** *Public Health Medicine Specialist, Disease Control Division, Ministry of Health, Malaysia* **Chairperson: Dr Wong Ping Foo**
0900 - 0930	PLENARY 1 **Beyond Glycaemic Control: The Expanding Role of GLP-1 and GIP in Obesity and Cardiovascular Health** ***Professor Dr Norlaila Mustafa*** *Hospital Canselor Tuanku Muhriz UKM, Malaysia* **Chairperson: Professor Dr Muhammad Yazid Jalaludin**
0930 - 1000	**Opening Ceremony with Launching of Forum for Injection Technique Malaysia 2026 (2nd Edition)**
1000 - 1030	Morning Tea and Booth Visit

Grand Puteri Ballroom, Level 1	The Heron, Level 2
1030 - 1130	CASE STUDY 1: ELDERLY **Challenges of Polypharmacy In Complex Older Persons** ***Associate Professor Dr Tan Kit Mun*** *University of Malaya Medical Centre, Malaysia* ***Ms Yong Lai Mee*** *Subang Jaya Medical Centre, Malaysia* **Chairperson: Ms Choong Shiau Yin**	CASE STUDY 2: LIFESTYLE MANAGEMENT **Diabetes at the Crossroads: Early Detection, Early Action** ***Dr Farah Yasmin Hasbullah*** *IMU University, Malaysia* ***Dr Wong Ping Foo*** *Ministry of Health, Malaysia* **Chairperson: Ms Woo Li Foong**

Grand Puteri Ballroom, Level 2

1130 - 1230	LUNCH SYMPOSIUM (Sponsored by TERUMO) **Transforming Glucose Data into Intelligence** ***Associate Professor Dr Shu Meguro, MD, PhD*** *Keio Diabetes Preemptive Medicine Centre, Japan* **Grand Puteri Ballroom, Level 2**
1230 - 1400	Lunch & Friday Prayer **Level 1 Foyer**

Grand Puteri Ballroom, Level 1	The Heron, Level 2
1400 - 1530	WORKSHOP 1: DIABETES EDUCATION **The Stories Behind the Numbers: Addressing Psychosocial Issues** ***Dr Hariyati Shahrima Abdul Majid*** *IJN University College, Malaysia* ***Dr Tan Ming Yeong*** *IMU University, Malaysia* **Chairperson: Dr Tan Ming Yeong**	WORKSHOP 2: FOOT CARE **Foot Assessment and Wound Care: Myths, Facts and Practical Insights** ***Dr Eleza Nazefah Rosli*** *Ministry of Health, Malaysia* ***Dr Siti Khamsiah Abdul Shukor*** *Ministry of Health, Malaysia* **Chairperson: Mr Zulhusaini Bin Ahmad**

1530 - 1615	HI TEA SYMPOSIUM 1 (Sponsored by ETHOS HEALTHCARE) **From Accuracy to Action: Practical Approach to Optimise the Use of BGM in the CGM Era** ***Dr Wendy Mak*** *Ascensia Diabetes Care, Australia* **Grand Puteri Ballroom, Level 1**
1615 - 1630	Afternoon Tea and Booth Visit **Level 1 Foyer**

Grand Puteri Ballroom, Level 1

1615 - 1630	**Malaysian Diabetes Educators Society Annual General Meeting**

DAY 2

16 May 2026 , Saturday

0730 - 1600 | Registration

Grand Puteri Ballroom, Level 2

0830 - 0900

PLENARY 2

Food as Medicine: Integrating Traditional Diets for Glycaemic Control

Professor Dr Winnie Chee Siew Swee
IMU University, Malaysia

Chairperson: Ms Yong Lai Mee

Grand Puteri Ballroom, Level 1	The Heron, Level 2

0900 - 1000

Grand Puteri Ballroom, Level 1	The Heron, Level 2
CASE STUDY 3: DIABETES COMPLICATION	CASE STUDY 4: PREGNANCY
Living with Chronic Kidney Disease and Diabetes	**Which Insulin is Suitable During Pregnancy**
Dr Wan Rohaslizan Wan Daud *Hospital Canselor Tuanku Muhriz UKM, Malaysia* ***Ms Rohana Jaafar*** *Hospital Canselor Tuanku Muhriz UKM, Malaysia* ***Ms Teong Lee Fang*** *Ministry of Health, Malaysia*	***Professor Dr Shireene Ratna Vethakkan*** *University of Malaya Medical Centre, Malaysia* ***Ms Toh Peik Khiam*** *Ministry of Health, Malaysia* ***Professor Dr Barakatun Nisak Mohd Yusof*** *Universiti Putra Malaysia, Malaysia*
Chairperson: Ms Choong Shiau Yin	**Chairperson: Ms Woo Li Foong**

1000 - 1030 | Morning Tea and Booth Visit

Level 1 Foyer

1030 - 1200

Grand Puteri Ballroom, Level 1	The Heron, Level 2
SYMPOSIUM 1: WHAT'S NEW IN NUTRITION	SYMPOSIUM 2: DIABETES COMPLICATION - WHAT'S NEW (SPONSORED BY NOVARTIS)
Beyond the Primary Diagnosis: Medical Nutrition Therapy for the Complicated Patient ***Ms Teong Lee Fang*** *Ministry of Health, Malaysia*	**Diabetes Retinopathy: New Horizons in Preventive Care** ***Dr Mohamad 'Ariff Fahmi Ahmad Zawawi*** *Ministry of Health, Malaysia*
Inside Out: Can Gut Microbiome Really Drive Metabolic Health? ***Professor Dr Barakatun Nisak Mohd Yusof*** *Universiti Putra Malaysia, Malaysia*	**Managing Diabetes-Related Neuropathy** ***Associate Professor Dr Khoo Ching Soong*** *Hospital Canselor Tuanku Muhriz UKM, Malaysia*
Integrating Technology, Behaviour and Nutrition for Better Glycaemic Outcomes ***Professor Dr Winnie Chee Siew Swee*** *IMU University, Malaysia*	**The Intertwined Link Between Diabetes & Heart Health** ***Dr Thum Chan Ho*** *National Heart Institute, Malaysia*
Chairperson: Professor Dr Winnie Chee Siew Swee	**Chairperson: Ms Tan Wen Hui**

Grand Puteri Ballroom, Level 2

1200 - 1230

PLENARY 3

Empowering Diabetes Education Through Technology and Innovation

Professor Mette Juel Rothmann
University of Southern Denmark

Chairperson: Dr Tan Ming Yeong

1230 - 1430 | Posters Presentation / Lunch and Booth Visit

Level 1 Foyer

1430 - 1600

Grand Puteri Ballroom, Level 1	The Heron, Level 2
WORKSHOP 3: DIABETES EDUCATION AND TECHNOLOGY	WORKSHOP 4: NUTRITION AND DIETETICS
From Data to Decisions: Interpreting and Utilising Continuous Glucose Monitoring (CGM) Data for Patient Education ***Dr Luqman Ibrahim*** *Regency Specialist Hospital, Malaysia* ***Dr Tan Ming Yeong*** *IMU University, Malaysia*	**Carbohydrate Counting and Meal Planning** ***Dr Rokiah Ismail*** *University of Malaya Medical Centre, Malaysia* ***Mr Muhammad Hazrin Husin*** *University of Malaya Medical Centre, Malaysia* ***Ms Nur Wahida Amanin*** *University of Malaya Medical Centre, Malaysia*
Chairperson: Dr Tan Ming Yeong	**Chairperson: Ms Jessica Saw**

1600 - 1645

HI TEA SYMPOSIUM 2 (Sponsored by VIATRIS)

Diabetic Peripheral Neuropathy Screening and Management: A Practical Guide for Diabetes Educator

Dr See Chee Keong
Subang Jaya Medical Centre, Malaysia

Grand Puteri Ballroom, Level 1

1645 - 1730

HI TEA SYMPOSIUM 3 (Sponsored by EMBECTA)

Advancing Insulin Injection Technique and Education with FITTER Forward

Datuk Dr Zanariah Hussein
Ministry of Health, Malaysia

Grand Puteri Ballroom, Level 1

1730 | Afternoon Tea and Booth Visit

DAY 3

17 May 2026 , Sunday

0730 - 1600	Registration	
	Puteri Ballroom 1, Level 1	**Puteri Ballroom 2, Level 1**
0830 - 1000	SYMPOSIUM 3: EMPOWERING CARE - ENHANCING ADHERENCE **Strengthening Medication Adherence and Engagement** ***Dr Navin Kumar Loganadan*** *Ministry of Health, Malaysia* **Empowering Dietary Adherence** ***Dr Lee Ching Li*** *IMU University, Malaysia* **Beyond the Prescription: Clinical Strategies for Enhancing Exercise Adherence** ***Dr Devamalar Selvi Naicker*** *Ministry of Health, Malaysia* **Chairperson: Dr Wong Yong Kai**	SYMPOSIUM 4: PAEDIATRIC DIABETES **Automated Insulin Delivery Systems in Type 1 Diabetes** ***Professor Dr Muhammad Yazid Jalaludin*** *University of Malaya Medical Centre, Malaysia* **Updates on Type 2 Diabetes Hypoglycaemic Agents** ***Dr Nalini M Selveindran*** *Ministry of Health, Malaysia* **Continuous Glucose Monitoring in Paediatric Diabetes** ***Dr Annie Leong*** *University of Malaya Medical Centre, Malaysia* **Chairperson: Ms Ooi Yong Xuan**
1000 - 1100	CASE STUDY 5: INPATIENT CARE **Inpatient Diabetes Management** ***Datuk Dr Zanariah Hussein*** *Ministry of Health, Malaysia* ***Ms Ani Norita Muhamad Samudi*** *Ministry of Health, Malaysia* ***Ms Mumtas Abu Gani*** *Ministry of Health, Malaysia* **Chairperson: Ms Choong Shiau Yin**	CASE STUDY 6: PAEDIATRIC - TYPE 1 DIABETES **Managing Patients With Complex Type 1 Diabetes** ***Associate Professor Dr Azriyanti Anuar Zain*** *University Malaya Medical Centre, Malaysia* ***Dr Rokiah Ismail*** *University Malaya Medical Centre, Malaysia* ***Ms Siti Zarina Yaakob*** *University Malaya Medical Centre, Malaysia* **Chairperson: Professor Dr Muhammad Yazid Jalaludin**
1100 - 1130	Morning Tea and Booth Visit **Level 2 Foyer**	
1130 - 1300	WORKSHOP 5: DIABETES EDUCATION **Ask the Right Question: Effective Communication in Diabetes Care** ***Dr Hariyati Shahrima Abdul Majid*** *IJN University College, Malaysia* ***Dr Lee Ching Li*** *IMU University, Malaysia* **Chairperson: Ms Tan Wen Hui**	WORKSHOP 6: PAEDIATRIC WORKSHOP **The Art of Connection: Integrating Empathetic Communication and Motivational Interviewing** ***Ms Elsie Liaw Sze Ying*** *University of Malaya Medical Centre, Malaysia* **Chairperson: Ms Wong Soh San**
1300 - 1330	Prize Giving & Closing Ceremony **Puteri Ballroom 1, Level 1**	
1330	Lunch & See You Next Conference	

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1. Seagrove Diabetes Bluebook 2024. 2. dQ&A Endocrinologist Perspectives 2022 Summary Report.

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1. Welsh JB, et al. *J Diabetes Sci Technol*. 2024;18(1):143-7; 2. Data on file, 2023; 3. Dexcom, Data on File, 2023; 4. Psavko S, et al. et al. *JMIR Hum Factors*. 2022;9(4):e42057; 2024; 5. Beck RW, et al. *JAMA*. 2017;317(4):371-378; 6. Beck RW, et al. *Ann Intern Med*. 2017;167(6):365-374; 7. Martens T, et al. *JAMA*. 2021;325(22):2262-2272; 8. Laffel LM, et al. *JAMA*. 2020;323(23): 2388-2396. 9. dQ&A Endocrinologist Perspectives 2022 Summary Report.

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KEYNOTE SESSION

National Strategic Plan NCD (2026 – 2030): What's New, What's Next

Dr Sivarajan Ramasamy
Ministry of Health, Malaysia

Malaysia stands at a critical juncture in its non-communicable disease (NCD) trajectory, with NCDs accounting for approximately 72% of all deaths, driven largely by interconnected cardiorenal metabolic conditions such as diabetes, cardiovascular disease, obesity, and chronic kidney disease. Historically managed through parallel programmes, these conditions have resulted in fragmented and suboptimal care. The National Strategic Plan for NCD (2026–2030) introduces Malaysia's first integrated Cardiorenal Metabolic (CRM) framework, recognising shared risk factors and biological pathways that require a unified, system-wide response. The plan advances integrated prevention, consolidated screening, coordinated multidisciplinary care, and a single national performance architecture. This presentation highlights key innovations, implementation priorities, and Malaysia's ambition to lead regionally in integrated NCD management. By shifting to a whole of system, patient-centred CRM approach, the NSP aims to reduce premature mortality, improve population health, and ensure long-term sustainability.

PLENARY 1

Beyond Glycaemic Control: The Expanding Role of GLP-1 and GIP in Obesity and Cardiovascular Health

Professor Dr Norlaila Mustafa
Hospital Canselor Tuanku Muhriz UKM, Malaysia

Glucagon-like peptide-1 receptor agonists (GLP-1 RAs) are developed for the treatment of T2DM. It mimicked the GLP-1 hormone, which stimulates insulin production, slows gastric emptying and increases satiety. GLP-1 RAs enhance glycemic control by stimulating glucose-dependent insulin secretion and suppressing glucagon release, with low risk of hypoglycaemia. Recent studies have showed the importance of another incretin, Glucose-dependent insulinotropic polypeptide receptor agonist (GIPRE) in reducing hyperglycaemia through the same mechanism as GLP-1 RA. Not only that, both agonists also facilitate significant weight loss by regulating appetite and slowing gastric emptying leading to its important indication as weight reducing agent. Beyond these main effects, GLP-1 and GIP RAs reduce cardiovascular risks and mortality as shown in SURPASS CVOT study. The combination GLP-1/GIP agent represents significant shifts in modern medicine, moving from diabetes management to comprehensive metabolic protection.

PLENARY 2

Empowering Diabetes Education Through Technology and Innovation

Professor Mette Juel Rothmann
University of Southern, Denmark

Living with diabetes requires continuous self-management and decision-making in everyday life. Nurses play a key role in empowering people with diabetes to develop confidence, skills, and emotional resilience, and digital technologies offer new opportunities to support this process. This presentation explores how nurses can use digital and technology-supported approaches to enhance empowerment in daily diabetes care.

Two practice-based examples will be presented. First, the use of guided self-determination delivered via video consultations and supported by a digital solution, illustrating how reflective dialogue, structured tools, and remote interaction can strengthen patient engagement and shared decision-making. Second, a stepped care model for reducing diabetes-related distress, combining unguided digital resources with guided nurse-supported interventions, tailored to individual needs and levels of distress.

Finally, the presentation will address how nurses can actively contribute to the co-development of new digital approaches and solutions alongside people with diabetes, emphasizing participatory design, clinical insight, and everyday relevance. Together, these examples highlight how nursing practice, technology, and patient partnerships can support empowerment and more sustainable diabetes self-management.

PLENARY 3

Food as Medicine: Integrating Traditional Diets for Glycaemic Control

Professor Dr Winnie Chee Siew Swee
IMU University, Malaysia

Type 2 diabetes has reached epidemic proportions in Malaysia, where one in six adults lives with the condition and more than 80% carry multimorbidity. Despite advances in pharmacotherapy, glycaemic control remains suboptimal and complications continue to rise, and yet most are preventable on the plate! Landmark lifestyle trials (DPP, Da Qing, Finnish DPS) achieved 51–58% reductions in diabetes incidence, DM remission studies (DiRECT,DIADEM) showed that ≥10 kg weight loss delivers remission in as high as 60% of patients. Multiple eating patterns — Mediterranean, DASH, low-carbohydrate, plant-based, and structured meal replacement — consistently lower HbA1c and cardiometabolic risk. Translating this evidence requires cultural fidelity. Traditional Asian diets, when thoughtfully constructed around whole grains, legumes, vegetables, fish, fermented foods, and spices, already align with these principles. This plenary equips diabetes educators with practical, culturally grounded tools to deliver food as medicine approach to patients.

SYMPOSIUM 1: WHAT'S NEW IN NUTRITION

Beyond the Primary Diagnosis: Medical Nutrition Therapy for the Complicated Patient

Ms Teong Lee Fang
Ministry of Health, Malaysia

Patients with multiple chronic conditions often present with overlapping nutritional risks, conflicting dietary recommendations, polypharmacy, and disease-related malnutrition. This session highlights the role of medical nutrition therapy (MNT) beyond the primary diagnosis, focusing on how dietitians can support doctors, nurses, and allied health professionals in managing nutritionally complex patients. Using practical case-based examples such as diabetes with chronic kidney disease and heart failure, as well as obesity with sarcopenia, the session will explore how to prioritise nutrition goals, individualise protein and energy prescriptions, identify malnutrition risk, and manage key drug–nutrient interactions. Emphasis will be placed on validated screening and diagnostic tools alongside evidence-based recommendations from ESPEN, ASPEN, and other clinical nutrition guidelines. The talk will also highlight the importance of interdisciplinary collaboration in translating nutrition assessment into safe, realistic, and patient-centred care plans. Participants will gain a structured approach to navigating complex MNT decisions in patients whose nutritional needs extend beyond a single disease label.

Inside Out: Can Gut Microbiome Really Drive Metabolic Health?

Professor Dr Barakatun Nisak Mohd Yusof
Universiti Putra Malaysia, Malaysia

The gut microbiome has emerged as a key modulator of metabolic health, influencing postprandial glycaemia, insulin sensitivity, and systemic inflammation. For diabetes educators, understanding this “inside-out” mechanism offers a novel lens to strengthen dietary counselling and patient engagement. Objective: This presentation explore the role of the gut microbiome in glycaemic control and its practical implications for diabetes education and medical nutrition therapy (MNT). Methods: A narrative synthesis of clinical and mechanistic evidence was undertaken, focusing on diet–microbiome interactions relevant to Type 2 Diabetes Mellitus (T2DM), particularly within carbohydrate-based dietary patterns. Results: Dietary strategies that enhance microbial diversity, such as increased intake of fibre, resistant starch, legumes, and plant-based foods, are associated with improved glycaemic responses and reduced glycaemic variability. Microbiota-derived metabolites, particularly short-chain fatty acids, contribute to improved insulin sensitivity and appetite regulation. Conversely, diets high in refined carbohydrates and ultra-processed foods promote dysbiosis and exacerbate glycaemic excursions. However, inter-individual variability in microbiome response remains a key limitation. Conclusion: For diabetes educators, the microbiome provides a powerful narrative to reinforce dietary adherence, shifting counselling from “what to avoid” to “what to build.” Emphasising food diversity, fibre enrichment of staple meals, and sustainable dietary patterns can enhance metabolic outcomes. Integrating microbiome-informed messaging into education strategies may improve patient understanding, motivation, and long-term glycaemic control.

Integrating Technology, Behaviour and Nutrition for Better Glycaemic Outcomes

Professor Dr Winnie Chee Siew Swee
IMU University, Malaysia

For decades, dietitians have managed diabetes through food records and HbA1c and often end up not knowing for sure what the patients ate and how it affected their metabolic goals. Continuous glucose monitoring (CGM) closes that gap. It transforms glucose from a single number into data points every day, revealing exactly which foods, which timings, and which behaviours matter for each patient. CGM data deliver value only when paired with evidence-based nutrition — carbohydrate quality and quantity, food sequencing, fibre, second-meal effects, and glycaemic index — and translated through skilled behaviour change. The real opportunity lies in integrating all three pillars: technology that sees, nutrition that acts, and behaviour that sustains. Real CGM cases will demonstrate how three patients with seemingly identical HbA1c can hide three completely different risks — and require three entirely different conversations.

SYMPOSIUM 2: DIABETES COMPLICATION - WHAT'S NEW

Diabetes Retinopathy: New Horizons in Preventive Care

Dr Mohamad 'Ariff Fahmi Ahmad Zawawi
Ministry of Health, Malaysia

In 2026, Diabetic Retinopathy (DR) remains a leading cause of preventable blindness among working-age adults. Despite robust screening guidelines, the "silent" nature of early-stage DR often leads to late-stage presentation and irreversible vision loss. As we align with the Health White Paper, from sick-care to health-care, the paradigm of care is shifting from reactive treatment to a technology-enabled, proactive preventive framework. This session aims to explore the "New Horizons" in DR care by evaluating the integration of Artificial Intelligence (AI) in primary care screening, the emergence of novel biomarkers for personalized risk assessment, and the evolving role of the Diabetes Educator in the digital health era. To bridge technology with preventive care, this session analyse the implementation of AI-integrated screening tools (such as DR MATA). We discuss how real-time, automated grading at the Klinik Kesihatan level reduces the burden on tertiary ophthalmology services and provides immediate teachable moments for patients. We will also review the latest evidence on the neuroprotective roles of Fenofibrate and the early application of Anti-VEGF therapies to stall progression in high-risk non-proliferative cases. The emphasis will be on the future of DR care in Malaysia that lies in vision preservation rather than damage repair. By embracing AI-driven diagnostics and personalized medical prevention, Diabetes Educators can bridge the gap between clinical practice and patient empowerment, ensuring that no Malaysian loses their sight to a preventable complication.

Managing Diabetes-Related Neuropathy

Associate Professor Dr Khoo Ching Soong
Hospital Canselor Tuanku Muhriz UKM

Diabetic neuropathy is one of the most common chronic complications of people suffering from types I and II diabetes mellitus. It significantly impairs their quality of life as well as contributes to their mortality and morbidity rates. With the alarmingly escalating prevalence of diabetes mellitus globally driven by poor diet and sedentary lifestyle, the impact of diabetic neuropathy continues to rise. Despites its severity, it unfortunately receives less attention compared to the other known diabetes related complications, such as nephropathy and retinopathy. The management of diabetic neuropathy remains challenging. Therapies aimed at halting or reversing diabetic neuropathy are elusive. Current strategies focus on alleviating symptoms and mitigating pain. The armamentarium available on the market remains limited. These medications have limited efficacy and are constantly associated with unwanted side-effects. In this talk, I shall walk you through some possible strategies to manage this debilitating condition to improve the patients' outcomes and quality of life.

The Intertwined Link Between Diabetes And Heart Health

Dr Thum Chan Ho
National Heart Institute, Malaysia

Diabetes mellitus significantly accelerates the development of cardiovascular disease, with patients experiencing a 2 to 4 fold increased risk of coronary artery disease, heart failure and stroke. Pathophysiological mechanisms include endothelial dysfunction, chronic hyperglycemia–induced oxidative stress, dyslipidemia and pro-inflammatory states that promote atherosclerosis and microvascular damage. Hypertension and obesity further compound this risk, creating a complex interplay of metabolic and vascular factors. This presentation will examine the clinical evidence linking diabetes and cardiovascular disease, review current guidelines for risk stratification and management and highlight the critical role of diabetic educators in reinforcing adherence to pharmacologic therapy, lifestyle modification and routine cardiovascular screening. By integrating these strategies into patient education, educators can help reduce cardiovascular morbidity and mortality in the diabetic population.

SYMPOSIUM 3: EMPOWERING CARE - ENHANCING ADHERENCE

Strengthening Medication Adherence and Engagement

Dr Navin Kumar Loganadan
Ministry of Health, Malaysia

Improving medication adherence in diabetes is essential for achieving optimal glycemic control, preventing complications, and reducing healthcare costs, yet many patients face barriers such as complex regimens, limited understanding, psychological resistance, or lack of support. Effective strategies must be multifaceted and patient-centered. Education and empowerment are foundational, ensuring patients understand the importance of their therapy through clear communication, culturally appropriate materials, and practical tools like infographics or simplified dosing instructions. Simplifying treatment regimens—such as using once-daily dosing or fixed-dose combinations—can reduce pill burden and align therapy with daily routines. Technology also plays a growing role, with mobile apps, SMS reminders, and smart pillboxes providing timely prompts and tracking adherence. Pharmacist-led interventions add value by offering personalized counseling, monitoring, and reinforcing physician guidance within collaborative care models. Family and social support further strengthen adherence, as caregivers and peer groups can provide encouragement and accountability. At the system level, regular follow-ups, adherence assessments, and multidisciplinary teams help address medical, psychological, and social barriers comprehensively. Among these strategies, motivational interviewing (MI) stands out as a powerful behavioral approach. By using open-ended questions, reflective listening, and affirmations, MI helps patients explore ambivalence, connect medication-taking with personal values, and shift from external pressure to internal motivation. This technique fosters autonomy and sustainable commitment, making adherence more meaningful and achievable. Ultimately, improving adherence in diabetes requires integrating education, simplification, technology, support systems, and motivational interviewing into a holistic framework that empowers patients, strengthens collaboration, and enhances long-term outcomes.

Empowering Dietary Adherence

Dr Lee Ching Li
IMU University, Malaysia

While nutrition is a core component of the diabetes self-management education and support care process, long-term dietary adherence remains a persistent challenge. This session presents an evidence-based framework to help diabetes educators improve dietary adherence across clinical and community settings. With diabetes literacy as a foundational determinant, the framework's core pillars include: implementing structured education; integrating behaviour change techniques to enhance eating self-regulation; leveraging technology for accountability and sustained dietary behaviour change; and employing a multidisciplinary team approach with the diabetes educator playing a central coordinating role. Collectively, these pillars translate into a practical framework with actionable strategies for implementation, tailored to the Malaysian context.

Beyond the Prescription: Clinical Strategies for Enhancing Exercise Adherence

Dr Devamalar Selvi Naicker
Ministry of Health, Malaysia

Exercise is recognised as one of the pillars alongside nutritional and behavioural therapy in the management of chronic disease. The session will begin by exploring the benefits and aims of exercise therapy for disease management and weight control. The impact of resistance exercise will be discussed in detail. It is also important to understand the concept of energy expenditure and how it relates to our day-to-day activities and exercise. This will then serve as the foundation to discuss challenges of weight loss and the role of exercise in weight management. As exercise requires time and effort, it is not surprising that adherence is a big challenge to everyone and more so in diabetic patients due to some unique issues they may encounter. I will discuss regarding the various issues and barriers that need to be considered to plan an exercise program. We will explore the different ways to improve on exercise adherence. Monitoring is one of the important tools to help us identify setbacks and progress. It is a cornerstone of promoting adherence to an exercise program and hence will be explored in greater detail. This presentation aims to equip healthcare professionals with the knowledge to integrate exercise therapy into holistic management plans for adults with diabetes, ultimately fostering long-term lifestyle change and better disease management.

SYMPOSIUM 4: PAEDIATRIC DIABETES

Automated Insulin Delivery Systems in Type 1 Diabetes

Professor Dr Muhammad Yazid Jalaludin
University of Malaya Medical Centre, Malaysia

Type 1 diabetes (T1D) in children presents unique challenges in achieving optimal glycaemic control while minimising hypoglycaemia and treatment burden. Advances in diabetes technology have led to the development of Automated Insulin Delivery (AID) systems, which integrate continuous glucose monitoring (CGM), insulin pumps, and control algorithms to dynamically adjust insulin delivery. These systems represent a paradigm shift in paediatric diabetes management.
This presentation aims to review the principles and components of AID systems, summarise current evidence on their clinical effectiveness and safety in children with T1D, and discuss practical considerations for implementation in real-world clinical settings, particularly within the Malaysian context.

A narrative review of key clinical trials, real-world studies, and international guidelines on AID systems in paediatric T1D will be presented, alongside local clinical experience. Emphasis will be placed on outcomes relevant to HCP, including time-in-range, hypoglycaemia reduction, quality of life, and user engagement.

Evidence consistently demonstrates that AID systems improve glycaemic outcomes, particularly time-in-range, while reducing hypoglycaemia and glycaemic variability in children and adolescents. Benefits extend beyond metabolic control, with improvements in sleep quality, caregiver confidence, and treatment satisfaction. Successful use, however, depends on structured education, appropriate patient selection, and ongoing multidisciplinary support.

AID systems offer transformative potential in the management of paediatric T1D. Diabetes educators play a pivotal role in supporting initiation, education, troubleshooting, and long-term adherence. Addressing challenges related to access, cost, digital literacy, and health system readiness is essential to ensure equitable adoption and maximise benefits for children living with T1D in Malaysia.

Updates on Type 2 Diabetes Hypoglycaemic Agents

Dr Nalini M Selveindran
Ministry of Health, Malaysia

The increasing prevalence of type 2 diabetes mellitus (T2DM) in children and adolescents represents a growing clinical challenge, with early disease onset associated with more aggressive progression and higher risk of complications. In view of that latest guidelines from international societies have advocated a more aggressive management approach and widened the therapeutic landscape beyond metformin and insulin. This now includes newer agents such as glucagon-like peptide-1 (GLP-1) receptor agonists and the like some of which are now approved or being evaluated for paediatric use.
This session will provide an up-to-date overview of emerging pharmacotherapies in paediatric T2DM, focusing on key clinical trial data, efficacy in glycaemic control, and additional benefits including weight reduction and cardiometabolic risk improvement. Practical guidance on patient selection, initiation, and combination therapy will be highlighted, alongside challenges unique to the paediatric population such as adherence, psychosocial factors, and transition of care.

Continuous Glucose Monitoring in Paediatric Diabetes

Dr Annie Leong
University of Malaya Medical Centre, Malaysia

Continuous glucose monitoring (CGM) allows real-time glucose tracking in children, improving diabetes management beyond finger-prick testing. The talk emphasised better glycaemic control, reduced hypoglycaemia, and improved time-in-range. CGM features such as trend data and alerts support safer decision-making for children and caregivers. Evidence shows enhanced treatment adherence and quality of life, especially when combined with insulin pumps or automated systems. The talk cover the evidence based data on the CGM use in children with diabetes (Type 1 and Type 2) and key to consider include sensor accuracy, cost, skin tolerance, education, and the importance of personalised clinical follow-up.

CASE STUDY 1: ELDERLY

Challenges of Polypharmacy In Complex Older Persons

Associate Professor Dr Tan Kit Mun
University of Malaya Medical Centre, Malaysia

Ms Yong Lai Mee
Subang Jaya Medical Centre, Malaysia

Older persons living with diabetes are very diverse and can range from being very fit and independent to severely frail and dependent. In older people with diabetes, they are more likely to have multiple comorbidities and polypharmacy to treat the conditions. The presence of geriatric syndromes including cognitive impairment, incontinence, risk of falls, frailty, malnutrition, low body weight and sarcopenia must also be taken into consideration. Polypharmacy is not always a bad thing as appropriate polypharmacy is required to optimise treatment in an older person and maintain quality of life while reducing side effects and complications such as severe hypoglycaemia.

This session will focus on strategies in the care plan of an older person living with diabetes, minimising potentially inappropriate medications, side effects, drug-drug interactions and drug-disease interactions and maximising adherence to treatment. Non-pharmacological measures and multidisciplinary care are also essential to complement medical treatment. It is important to emphasize this to older persons and their carers, as many may think that taking medications is the only treatment required for diabetes. Consistency in oral intake and physical activity are also major components in the care plan of the older person with diabetes. This session will include case studies of complex older persons with diabetes and the challenges encountered.

CASE STUDY 2: LIFESTYLE MANAGEMENT

Diabetes at the Crossroads: Early Detection, Early Action

Dr Farah Yasmin Hasbullah
IMU University, Malaysia

Dr Wong Ping Foo
Ministry of Health, Malaysia

This case study highlights the critical role of early detection and early action for prediabetes remission. Data from large-scale global analysis found that while many individuals progress to type 2 diabetes, over a third can achieve remission through targeted changes. The case study demonstrates how a multidisciplinary team supported a patient newly diagnosed with prediabetes in achieving significant weight loss and improved metabolic markers within months. By adopting lifestyle changes that includes mindful eating and increasing physical activity, the patient successfully lost weight, normalised their glucose levels and reduced the need for medication.

CASE STUDY 3: DIABETES COMPLICATION

Living with Chronic Kidney Disease and Diabetes

Dr Wan Rohaslizan Wan Daud
Hospital Canselor Tuanku Muhriz UKM, Malaysia

Ms Rohana Jaafar
Ministry of Health, Malaysia

Ms Teong Lee Fang
Ministry of Health, Malaysia

Diabetes remains a leading cause of Chronic Kidney Disease (CKD), contributing significantly to morbidity, mortality, and global healthcare burden. The coexistence of diabetes and CKD presents complex challenges in glycemic management, medication adjustment, dietary modification, and prevention of further complications. For Diabetes Educators, this complexity requires a practical, patient-centered approach to care.

This case study highlights the journey of a patient living with both diabetes and CKD, focusing on the multifaceted role of the Diabetes Educator in supporting safe and effective self-management. Key issues addressed include individualized glycemic targets, increased risk of hypoglycemia with declining renal function, medication optimization, and tailored nutrition strategies.

The session emphasizes real-world challenges such as fluctuating blood glucose levels, dietary restrictions, treatment adjustments, and emotional burden. It will demonstrate how Diabetes Educators translate clinical recommendations into simple, actionable strategies that patients can apply in their daily lives, while providing ongoing behavioral and psychosocial support.

Through this practical case-based discussion, participants will gain applicable strategies to support patients with diabetes and CKD, enhance self-management, and improve overall quality of life within a multidisciplinary care framework

CASE STUDY 4: PREGNANCY

Diabetes at the Crossroads: Early Detection, Early Action

Professor Dr Shireene Ratna Vethakkan
University Malaya Medical Centre, Malaysia

Ms Toh Peik Khiam
Ministry of Health, Malaysia

Professor Dr Barakatun Nisak Mohd Yusof
Universiti Putra Malaysia, Malaysia

Insulin therapy in pregnancy requires careful selection, safe delivery and regular adjustment to achieve good maternal glucose control while protecting fetal health. This case-based session, delivered by a multidisciplinary team comprising a diabetes educator, endocrinologist and dietitian, highlights the essential principles of insulin management in diabetes in pregnancy. Through two clinical cases, the session discusses early diagnosis, when to start insulin, suitable insulin options, prevention of hypoglycaemia and practical insulin delivery approaches. The first case focuses on overt diabetes detected in early pregnancy, where rapid glucose control is important during fetal development. It also highlights the role of medical nutrition therapy, including consistent carbohydrate intake, adequate protein, avoidance of meal skipping and appropriate meal planning. The second case focuses on type 1 diabetes in pregnancy and demonstrates the importance of carbohydrate counting, insulin-to-carbohydrate ratio, continuous glucose monitoring and insulin pump therapy. Key issues such as changing insulin needs during pregnancy, post-meal hyperglycaemia, dawn phenomenon and postpartum hypoglycaemia are also addressed. The session also introduces chrononutrition and meal sequencing strategies, including appropriate meal timing and consuming vegetables and protein before carbohydrate foods, to help reduce post-meal glucose excursions. Overall, this session emphasizes that insulin care in pregnancy is not only about prescribing insulin. It requires coordinated input from the diabetes team, patient education, nutrition support, glucose monitoring and individualized adjustment throughout pregnancy and after delivery

CASE STUDY 5: INPATIENT CARE

Inpatient Diabetes Management

Datuk Dr Zanariah Hussein
Ministry of Health, Malaysia

Ms Ani Norita Muhamad Samudi
Ministry of Health, Malaysia

Ms Mumtas Abu Gani
Ministry of Health, Malaysia

Mrs A is a 76-year-old lady with Type 2 diabetes mellitus for more than 20 years. She has been on regular follow-up at a Klinik Kesihatan near her home. Her medical history includes chronic kidney disease stage 3B, hypertension, dyslipidaemia and ischaemic heart disease. She is independent in basic activities of daily living, but stays alone during the daytime while her daughter is at work. Her previous HbA1c was 8.9%, indicating suboptimal glycaemic control. She was on insulin basal bolus. She does self monitoring blood glucose infrequently, and she had been experiencing recurrent early morning headaches, raising the possibility of unrecognized nocturnal hypoglycaemia.

She was brought to the Emergency Department by her daughter after being found unresponsive at home. She had been unwell with URTI symptoms and poor oral intake for several days. Her capillary blood glucose in the Emergency Department was 2.3 mmol/L. She was resuscitated accordingly with intravenous dextrose and close glucose monitoring, and was subsequently admitted to the medical ward for further management.

Further assessment identified several contributing factors, including poor hypoglycaemia awareness, reduced oral intake, insulin–meal mismatch, possible repeated insulin dosing when she was unsure whether the dose had already been taken, chronic kidney disease with reduced insulin clearance, and limited daytime supervision.

During admission, the Diabetes Educator performed a structured bedside assessment to review her insulin routine, glucose monitoring practices, hypoglycaemia management and home support. Education focused on recognizing and treating hypoglycaemia using the Rule of 15, matching insulin doses to meal intake, avoiding repeated dosing, and reinforcing the importance of regular self-monitoring of blood glucose. Her caregiver was also trained on hypoglycaemia recognition, emergency management and supervision of insulin administration.

Before discharge, the Diabetes Educator worked closely with the multidisciplinary team to ensure that both patient and caregiver understood the treatment plan, demonstrated correct injection technique and were confident to continue diabetes care safely at home. This case highlights the important role of the Diabetes Educator in identifying the root causes of severe hypoglycaemia, translating the inpatient treatment plan into practical self-management skills, and supporting a safe transition from hospital to home.

CASE STUDY 6: PAEDIATRIC - TYPE 1 DIABETES

Inpatient Diabetes Management

Associate Professor Dr Azriyanti Anuar Zain
University Malaya Medical Centre, Malaysia

Dr Rokiah Ismail
University of Malaya Medical Centre, Malaysia

Ms Siti Zarina Yaakob
University of Malaya Medical Centre, Malaysia

This multidisciplinary case follows a young woman diagnosed with T1DM at age seven, whose journey involves recurrent hospitalizations and long-term struggles with glycemic control. Her transition into young adulthood was complicated by family instability, academic challenges, and a period of severe depression. However, a tuberculosis diagnosis in her late teens served as a turning point. Through insulin pump therapy and intensive nutritional and psychosocial support, she has now achieved stability. This discussion explores her clinical progression and the vital role of holistic rehabilitation.

WORKSHOP 1: DIABETES EDUCATION

The Stories Behind the Numbers: Addressing Psychosocial Issues

Dr Hariyati Shahrima Abdul Majid
IJN University College, Malaysia

Dr Tan Ming Yeong
IMU University, Malaysia

Diabetes mellitus is a lifelong chronic illness with a complex pathophysiology that impacts every facet of a person's life. The impact of diabetes extends far beyond physical symptoms; emotional distress and psychosocial factors often diminish quality of life (QoL) and complicate effective disease management. These challenges can hinder optimal glycemic and metabolic control, ultimately leading to acute and chronic complications. Despite their significance, healthcare providers rarely address these unmet emotional and psychosocial needs during routine clinical visits.

This workshop explores the psychosocial factors linked to poor glycemic outcomes, shares techniques to encourage people living with diabetes to discuss their struggles, and provides actionable approaches to improve management. Participants will learn actionable strategies to enhance diabetes management, supported by real-life case study discussions.

WORKSHOP 2: FOOT CARE

Foot Assessment and Wound Care: Myths, Facts and Practical Insights

Dr Eleza Nazefah Rosli
Ministry of Health, Malaysia

Dr Siti Khamsiah Abdul Shukor
Ministry of Health, Malaysia

This interactive workshop provides practical and evidence-based insights into foot assessment, wound care management, and foot health optimisation. Participants will gain hands-on knowledge and clinical strategies applicable to daily practice. The workshop will be divided into three sections:

1. Foot Assessment, Screening & Risk Stratification
Covers essential foot examination techniques, neurological and vascular assessment, screening methods, and risk stratification for early identification and prevention of foot complications.
2. Wound Care & the TIMES Framework
Focuses on practical wound assessment and management using the TIMES framework, including tissue management, infection control, moisture balance, wound edge assessment, and surrounding skin care.
3. Footwear & Foot Health
Highlights the importance of appropriate footwear, offloading principles, preventive foot care, and patient education to support long-term foot health and reduce complications.

This workshop aims to bridge clinical knowledge with practical application to enhance patient care outcomes.

WORKSHOP 3: DIABETES EDUCATION AND TECHNOLOGY

From Data to Decisions: Interpreting and Utilising Continuous Glucose Monitoring (CGM) Data for Patient Education

Dr Luqman Ibrahim
Regency Specialist Hospital, Malaysia

Dr Tan Ming Yeong
IMU University, Malaysia

Continuous glucose monitor (CGM) is increasingly being used for the care of people with diabetes. The system has been proven to improve glycaemic control, reduce the risk of hypoglycaemia, reduce diabetes related hospitalizations, and recently, cardiovascular risk as well. On top of that, CGM has also helped improve patient-reported outcomes, including improving treatment burden, treatment distress, and fear of hypoglycaemia.

However, some patients have also reported alarm fatigue and skin-related adverse reactions to CGM, hence a clear process for CGM prescription and troubleshooting is essential for the diabetes care provider.

During this session, the speakers will share the basics about patient selection, selecting the appropriate CGM systems, and interpreting and communicating the CGM reports to the person with diabetes.

This session will include case studies on the use of CGM for type 1 diabetes, type 2 diabetes, and diabetes during pregnancy. It will also include tips for initiating the conversation about CGM to people with diabetes, troubleshooting CGM-related problems, and incorporating CGM in daily clinical workflow, including remote monitoring and teleconsultations.

WORKSHOP 4: NUTRITION AND DIETETICS

Carbohydrate Counting and Meal Planning

Dr Rokiah Ismail
University of Malaya Medical Centre, Malaysia

Mr Muhammad Hazrin Husin
University of Malaya Medical Centre, Malaysia

Ms Che Shafini Johari
University of Malaya Medical Centre, Malaysia

This workshop focuses on managing Type 1 Diabetes (T1D) through real-world scenarios, requiring teams to analyze four distinct situations involving hypoglycemia, irregular meal timing, festive celebrations, and physical activity. Participants will evaluate how improper treatment leads to significant glucose fluctuations. By integrating food label education, teams will learn to identify macronutrients and calculate precise carbohydrate exchanges for T1D treatment. Ultimately, each group must collaborate and reach a consensus on practical solutions and present their collective findings to the other participant.

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WORKSHOP 5: DIABETES EDUCATION

Ask the Right Question: Effective Communication in Diabetes Care

Dr Hariyati Shahrima Abdul Majid
IJN University College, Malaysia

Dr Lee Ching Li
IMU University, Malaysia

Effective communication is a critical yet often under-optimized component of diabetes care. Clinical encounters frequently rely on directive, information-heavy approaches that may overlook patients' emotional experiences, beliefs, and readiness for change. This 1.5-hour interactive workshop aims to strengthen healthcare professionals' skills in using purposeful, patient-centered questioning to enhance engagement and self-management in individuals living with diabetes.

Grounded in principles of patient-centered care and motivational interviewing, the session focuses on how question framing influences patient responses, trust, and behavior. Participants will examine common pitfalls—such as closed, leading, or judgmental questions—and learn to transform them into open-ended, empathetic, and autonomy-supportive inquiries. Practical frameworks, including Ask–Tell–Ask and structured IF–THEN questioning, will be introduced to support shared decision-making and behavior change.

By the end of the workshop, participants will be able to: (1) recognize ineffective questioning patterns; (2) apply patient-centered communication techniques; (3) address psychological barriers to diabetes self-management; and (4) facilitate collaborative, goal-oriented consultations.

This workshop is designed for multidisciplinary healthcare professionals involved in diabetes care and aims to improve both patient experience and clinical outcomes through more effective communication.

WORKSHOP 6: PAEDIATRIC WORKSHOP

Ask the Right Question: Effective Communication in Diabetes Care

Ms Elsie Liaw Sze Ying
University of Malaya Medical Centre, Malaysia

The Art of Connection is an interactive, skill-based workshop that integrates principles of Motivational Interviewing (MI) and empathetic communication. Effective communication forms the foundation of meaningful and trusting therapeutic relationships, and this session focuses on enhancing engagement, collaboration, and behaviour change in professional practice. Through an activity-based approach, the session aims to help participants experience how these communication approaches can reduce resistance and strengthen connection. The workshop integrates guided reflection, small-group exercises, and structured skill-building activities to enhance participants 'ability to recognise emotional cues and shift conversations from directive or problem-solving modes toward collaborative dialogue. The session centres on the idea that meaningful change often begins not with advice, but with the experience of being heard.

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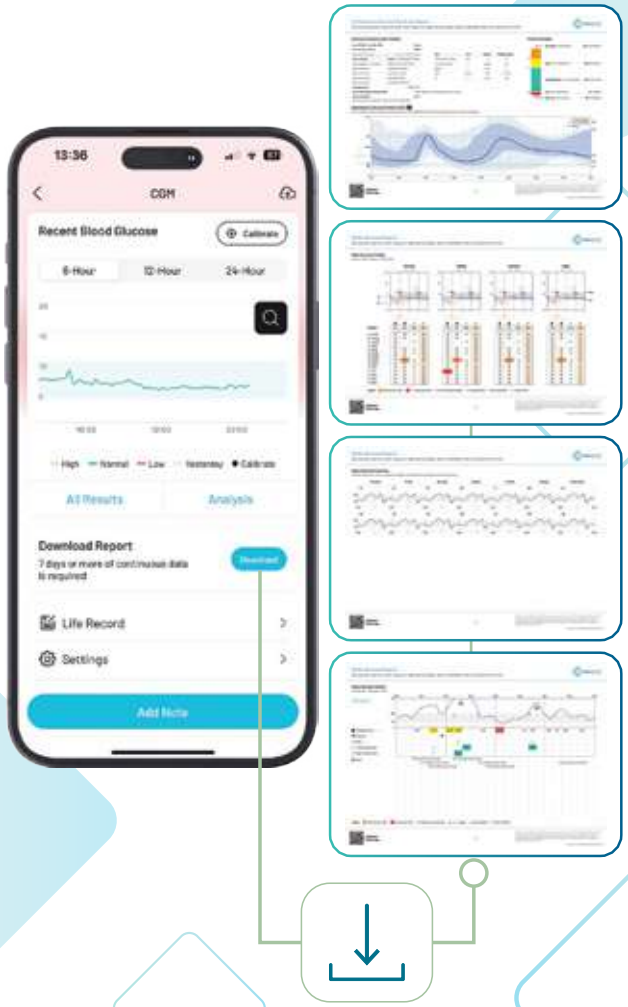

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List of Poster Presentations

ADULT DIABETES & PREGNANCY

AD01

Is Diabetes Remission Cost-Effective In Malaysia? Protocol For An Economic Evaluation Of Total Diet Replacement In The Redial-My Randomised Controlled Trial.

DR ZUBALQIAH BINTI ZULKIFLI, IMU University

AD02

Breaking The Cycle: Structured Lifestyle Intervention For Type 2 Diabetes Remission In Malaysian Adults

CHEOW YI QI, IMU University

AD03

The Efficacy Of A Structured Lifestyle-First Workplace Intervention On Body Composition And Glycemic Control Among Public Officers In Putrajaya

SITI MUNIRAH ABDUL BASIR, Universiti Putra Malaysia

DIABETES EDUCATION

DE01

From Intensive Care To Insulin-Free: Diabetes Nurse Educator - Led Insulin Deintensification In An Adolescent With New - Onset Diabetes

NURSHAZWIN BINTI RAMLI, Hospital Melaka

DE02

Pharmacist-Led Re-Education Improves Insulin Technique And Glycaemic Control Without Dose Intensification: A Malaysian Primary Care Study

TAI CHIA WOON, Mahmoodiah Health Clinic Johor Bahru

DE03

Routine Practice: Could It Be Risky?

CHOW LI YUET, Hospital Jerantut

DE04

From Co-Design To Prototype: Developing And Evaluating The Mydiamind Digital Mental Health Intervention For Individuals With Type 2 Diabetes

DR HAMIMATUNNISA JOHAR, Monash University Malaysia

DE05

Diabetic Foot Assessment And Foot Care In A Private Clinic: A Quality Improvement Initiative

WOO LI FONG, Puchong Medical Specialist Centre

NUTRITION & DIETITIANS

ND01

Real-World Feedback On Continuous Glucose Monitoring Systems (Cgms): Insights From A Malaysian Pilot Project

ASHA DEES, IMU University

ND02

Daietto 2025: Transforming Body Composition Through A Structured Multidisciplinary Weight Management Program

MARDHIAH BINTI MAT DIN, University Malaya Medical Centre

ND03

One-Month Meal Replacement Following Diet Harmonisation: A Workplace Case Series In Adults With Obesity

SITI MUNIRAH ABDUL BASIR, Universiti Putra Malaysia

ND04

Audit Of Knowledge On Healthy Eating Patterns For Type 2 Diabetes Among Nutrition Students Using A Pre–Post Educational Intervention

MOHD NAZRI ABDUL RAHMAN, Universiti Malaysia Sabah

ND05

Virtual Versus Physical Dietetic Consultation In Gestational Diabetes Mellitus: Comparison Of Post Consultation Nutrition Knowledge Scores And Item Level Knowledge Gaps

NUR HAFIZAH MAHAMAD SOBRI, Ministry of Health Malaysia

PRIMARY CARE

PC01

Glycaemic And Metabolic Outcomes Of Empagliflozin In Type 2 Diabetes In Malaysian Primary Healthcare Clinics

TAI CHIA WOON, Mahmoodiah Health Clinic Johor Bahru

PC02

The Association Of Sociodemographic Factors With Depression Among Type 2 Diabetes Mellitus At Hospital Rehabilitation Cheras

KUNAMALAR KARUNANEETHE, Hospital Rehabilitasi Cheras

PC03

Prevalence And Determinants Of Elevated Capillary Glucose In A Large-Scale Community Diabetes Screening Programme In Batu Lanchang, Penang, Malaysia

YEAP WEI LIN, Penang Adventist Hospital

PC04

Bridging Practice And Empowerment: A Meta-Analysis Proving The National Impact Of Malaysian Dmtac On Hba1c And Medication Adherence

OOI ZI XIAN, PKD Seberang Perai Tengah

PAEDIATRICS

PA01

Optimizing Glycemic Control In Type 1 Diabetes With Cgm And Nutritional Therapy Compared To Conventional Monitoring

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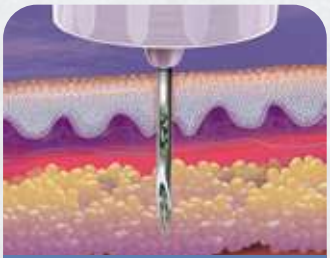
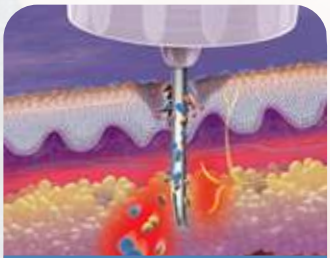
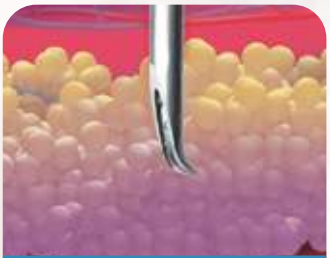
Risk of Needle Reuse:



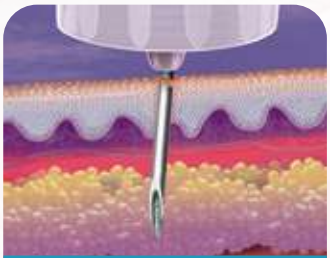
Needle blockage and clogging[2]



Accumulation of bacteria on the needle[3]



Bent needle tips[4]



Whole needle breakage[4]

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2. Complete compatibility information available on owenmumford.com.
3. King L. Subcutaneous insulin injection technique. Nursing Standard. 17, 34, 45-52. Date of acceptance: February 17 2003.
4. Misnikova IV, Dreval AV, Gubkina VA, Rusanova EV. The risks of repeated use of insulin pen needles in patients with diabetes mellitus. Journal of Diabetology. 2011 Jan 1;2(1):2.

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POSTER PRESENTATION ABSTRACT

MDES2026-AD01

Is Diabetes Remission Cost-Effective in Malaysia? Protocol For An Economic Evaluation of Total Diet Replacement in the ReDiaL-MY Randomised Controlled Trial.

Z Zulkifli[1], SM Aljunid[1], WSS Chee[1], Z Hussein[2], N Rejab[3], N Ibrahim[4], CL Lee[1], FY Hasbullah[1], M Lean[5] & ReDiaL-My Study Group

[1] *IMU University, Kuala Lumpur, Malaysia*
[2] *Institut Endokrin, Hospital Putrajaya, Putrajaya, W.P. Malaysia*
[3] *Klinik Kesihatan Seremban, Negeri Sembilan, Malaysia*
[4] *Kinik Kesihatan Putrajaya Presint 18, Putrajaya, W.P. Malaysia*
[5] *University of Glasgow, Scotland, United Kingdom*

Introduction:
Type 2 Diabetes Mellitus (T2DM) affects approximately 17% of Malaysian adults and contributes substantially to healthcare costs. While pharmacotherapy remains the cornerstone of diabetes management, emerging evidence suggests that intensive lifestyle interventions such as Total Diet Replacement (TDR) can induce diabetes remission. However, evidence on the economic value of TDR interventions in Malaysia remains limited. This study aims to evaluate the cost-effectiveness of a structured TDR intervention compared with usual care for adults with T2DM in Malaysia.

Methodology:
An economic evaluation is being conducted alongside the ReDiaL-MY open-label, randomised waitlist-controlled trial. Adults aged 18-70 years with T2DM diagnosed within three years are randomised (1:1) to a structured TDR programme or usual care. The economic evaluation adopts a societal perspective over the 6-month randomised comparison phase. Costs include direct medical, direct non-medical and indirect costs. Health- related quality of life is assessed using the EQ-5D-5L instrument, and quality-adjusted life years (QALYs) are estimated using the area-under-the curve approach. Incremental cost-effectiveness ratios (ICERs) will be estimated as cost per QALY gained and cost per case of diabetes remission at six months.

Results:
Participant recruitment commenced in December 2025, with data collection for clinical and economic outcomes continuing through 2027.

Discussion/Conclusion:
This study will generate the first trial-based evidence in Malaysia on the cost-effectiveness of a TDR intervention for diabetes remission. The findings are expected to inform healthcare policy, resource allocation, and evidence-based decisions on integrating remission-focused lifestyle interventions into national diabetes care programmes.

POSTER PRESENTATION ABSTRACT

MDES2026-AD02

Breaking the Cycle: Structured Lifestyle Intervention for Type 2 Diabetes Remission in Malaysian Adults — The ReDiaL-MY Trial

YQ Cheow[1], Z Hussein[2], N Rejab[3], N Ibrahim[4], SM Aljunid[1], CL Lee[1], FY Hasbullah[1], M Lean[5], WSS Chee[1] & the ReDiaL-MY Study Group

[1] IMU University, Kuala Lumpur, Malaysia
[2] Institut Endokrin, Hospital Putrajaya, Putrajaya, W.P. Malaysia
[3] Klinik Kesihatan Seremban, Negeri Sembilan, Malaysia
[4] Kinik Kesihatan Putrajaya Presint 18, Putrajaya, W.P. Malaysia
[5] University of Glasgow, Scotland, United Kingdom

Introduction:
Malaysia bears a critical diabetes burden, with 18% of adults living with T2DM and only 30% achieving glycaemic targets. Globally, TDR-based lifestyle interventions have achieved remission rates of 43–61%, yet no such evidence exists for Malaysian populations. ReDiaL-MY aims to determine whether a structured lifestyle intervention can induce T2DM remission in Malaysian adults and assess its cost-effectiveness from a societal perspective.

Methodology:
This open-label, randomised waitlist-controlled trial recruits 92 adults with T2DM duration <3 years and BMI >25 kg/m² from Klinik Kesihatan Seremban, Presint 18 Putrajaya, and Institut Endokrin, Hospital Putrajaya. Participants are randomised 1:1 to immediate intervention or 24-week waitlist control. The intervention comprises TDR (~800–850 kcal/day) for 8–12 weeks, structured food reintroduction for 12–16 weeks, and supported weight maintenance for 24 weeks, with dietitian-led consultation throughout. Primary outcome is T2DM remission at 6 months (HbA1c ≤6.5%, no diabetes medication).

Results:
Eight participants have been enrolled (4 intervention, 4 waitlist control); recruitment is ongoing. The cohort is ethnically diverse (Indian 50%, Malay 37.5%, Chinese 12.5%) with equal sex distribution. Mean age was 47.8 ± 7.9 years, HbA1c 7.4 ± 0.7%, body weight 115.9 ± 46.1 kg, and waist circumference 119.7 ± 23.3 cm. Hypertension was present in 37.5% and hyperlipidaemia in 75%. The majority (62.5%) were from low-income households.

Conclusion:
Early enrolment confirms feasibility of recruiting ethnically and socio-economically diverse Malaysian population. ReDiaL-MY will generate the first local evidence on TDR-based diabetes remission, directly informing national clinical practice guidelines and scalable primary care programmes.

POSTER PRESENTATION ABSTRACT

MDES2026-AD03

The Efficacy of a Structured Lifestyle-First Workplace Intervention on Body Composition and Glycemic Control among Public Officers in Putrajaya

SM Abdul Basir[1], BN Mohd Yusof[1], F Mukhtar[2], Z Abu Zaid[1], H Abu Saad[3], S Rahamat[1], Z Ibrahim[1], SN Adznam[1], N Omar[1], NB Md Yusop[1], OC Ng[4], R Abdul Ghani[5]

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[2] Department of Psychiatry, Faculty of Medicine and Health Sciences, Universiti Putra Malaysia, 43400, Serdang, Selangor, Malaysia
[3] Department of Nutrition, Faculty of Medical and Health Sciences, Universiti Putra Malaysia, 43400, Serdang, Selangor, Malaysia
[4] Department of Medicine, Faculty of Medicine and Health Sciences, Universiti Putra Malaysia, 43400, Serdang, Selangor, Malaysia
[5] Faculty of Medicine, Universiti Teknologi MARA, KS359 Pintu Utama UiTM, 42300 Puncak Alam, Selangor, Malaysia

Introduction:
Workplace-based interventions are critical for managing obesity and reducing non-communicable disease (NCD) risks. Evidence for multi-component interventions that integrate clinical oversight with environmental alignment, particularly in high-risk government settings remains limited. This study evaluated the impact of a 12-week structured lifestyle-first workplace intervention program on body composition and glycemic markers among public officers in Putrajaya.

Methodology:
A total of 165 participants (ages 25–55, BMI ≥27 kg/m²) participated in a 12-week intervention comprising five modules: clinical education, dietary modification, physical activity, behavioral strategies, and environmental alignment. Modules were delivered through 12 weekly virtual classes, six supervised strength training sessions, and supported by individual counseling sessions A sub-sample (n=90) with biochemical data was analyzed using Linear Mixed Models (LMM) to account for missing data at follow- up.

Results:
At baseline, 18.9% of participants were diabetic and 30.0% were pre-diabetic. LMM analysis revealed significant improvements ($p < .001$) across all anthropometric markers: body weight (mean change: -2.4 kg), BMI (-1.0 kg/m²), body fat (-1.2%), and waist circumference (-1.8 cm). Regarding glycemic control, HbA1c significantly improved (-0.13%, $p < .001$), while no significant effect was observed for fasting blood glucose (+0.44, $p = .334$).

Discussion/Conclusion:
A structured, lifestyle-first workplace intervention effectively reduced body weight and improved glycemic markers in a high-risk sedentary population. These findings support the implementation of holistic wellness programs in public sector settings to mitigate metabolic health risks.

POSTER PRESENTATION ABSTRACT

MDES2026-DE01

From Intensive Care to Insulin-Free: Diabetes Nurse Educator–Led Insulin Deintensification in an Adolescent with New-Onset Diabetes

N Ramli[1], F Osman[1], R Ahmed Sawi[1]

[1]*Diabetes Resource Centre Malacca Hospital, Malacca, Malaysia*

Introduction:
Adolescents presenting with hyperglycaemia and ketosis may pose diagnostic and therapeutic challenges. Although early insulin therapy is often required failure to reassess insulin needs may lead to overtreatment and hypoglycaemia. Diabetes Nurse Educators play an important role in structured monitoring, patient education and safe insulin deintensification.

Methodology:
Clinical data were collected retrospectively from hospital records and clinic follow-up notes including laboratory results, treatment regimen and monitoring parameters.
Structured diabetes education sessions delivered by a Diabetes Nurse Educator during admission were documented.

Results:
Glycaemic control improved markedly following acute management and structured diabetes education by the Diabetes Nurse Educator with sustained stability during nurse-led follow-up. HbA1c decreased from 14.9% at initial admission (October 2024) to 5.2% (January 2025) and remained stable at 5.4% (May 2025), 5.7% (September 2025) and 5.5% (January 2026).

Serial SMBG profiles consistently showed values largely within target ranges throughout follow-up. Early post-discharge readings were within 4–7 mmol/L for most pre-meal measurements. During insulin dose reduction, only three mild hypoglycaemic episodes were documented and associated with reduced food intake. No nocturnal hypoglycaemia or severe hypoglycaemic events occurred.

Stepwise insulin deintensification was successfully performed including reduction and cessation of prandial insulin followed by gradual basal insulin tapering. Insulin therapy was completely discontinued in October 2025. Glycaemic control remains stable without insulin and currently maintained on Tablet Metformin 1g BD and Tablet Empagliflozin 25 mg OD.

POSTER PRESENTATION ABSTRACT

MDES2026-DE02

Pharmacist-Led Re-education Improves Insulin Technique and Glycaemic Control Without Dose Intensification: A Malaysian Primary Care Study

CW Tai[1]

[1] *Mahmoodiah Health Clinic Johor Bahru, Johor, Malaysia*

Introduction:
Improper insulin injection technique (IT) contributes to poor glycaemic control in patients with type 2 diabetes mellitus (T2DM). While initial education is standard, structured re-education is often lacking in primary care. This study assesses the effect of pharmacist-led IT re-education on glycaemic control and injection behaviour in a public health clinic in Johor Bahru Malaysia.

Methodology:
A prospective study was conducted at Mahmoodiah Health Clinic among 100 adults with T2DM on insulin for ≥12 months, HbA1c ≥7%, and poor IT. Participants received pharmacist-led re-education and were reassessed after six months. Insulin IT was evaluated using a 16-item checklist. Primary outcome was the change in glycosylated haemoglobin (HbA1c). Secondary outcomes included improvement in ITs and associations with baseline practices.

Results:
Mean HbA1c improved significantly from 9.93% (SD 1.57) to 8.82% (SD 1.60) post-intervention (mean reduction: 1.11%, $p < 0.001$). ITs improved across all 16 checklist items, particularly pen priming (from 64% to 93%), needle removal (56% to 84%), and insulin flow checks (75% to 96%). Needle reuse three times or more declined from 68% to none. Participants with unchanged or de-intensified insulin regimens also showed significant HbA1c improvements. Participants with a small insulin injection zone at baseline was associated with greater HbA1c reduction (1.42% vs. 0.67%, $p = 0.011$). Lipohypertrophy was linked to higher hypoglycaemia risk (OR = 3.72).

Discussion/Conclusion:
Pharmacist-led insulin re-education significantly improved insulin ITs and glycaemic control, including among participants without insulin regimen intensification. Routine re-education should be incorporated into primary diabetes care.

POSTER PRESENTATION ABSTRACT

MDES2026-DE03

Routine Practice: Could It Be Risky?

L.Y. Chow [1]

[1] *Hospital Jerantut, Malaysia*

Background:
Incorrect insulin administration among chronic insulin users can often be overlooked in routine practice, potentially leading to dermatological complications and negatively impacting diabetes management outcomes.

Case Presentation:
A 28-year-old Malay woman with a diagnosis of type 2 diabetes mellitus (T2DM) presented to the endocrinology clinic for a routine follow-up. She has a history of gestational diabetes mellitus during her first pregnancy and has been treated with insulin for over two years. During her visit, localized lipohypertrophy, bruising, and blistering were observed at her insulin injection sites. These findings indicate issues with improper injection technique and possible allergic skin reactions.

During the assessment, a multidisciplinary diabetes care team, which included a diabetes nurse educator and a pharmacist specialized in diabetes care, was involved. The nurse educator conducted a thorough review of the patient's injection practices, site rotation, and issues concerning the maintenance and replacement of injection equipment. Meanwhile, the diabetes-trained pharmacist evaluated factors such as medication adherence, insulin handling, and potential drug-related contributions to the observed skin reactions. The findings from both professionals were reviewed with the attending endocrinologist, leading to a shared decision with the patient to discontinue insulin therapy and start oral glucose-lowering drugs (OGLDs). Following this intervention, the patient successfully maintained optimal glycemic control using OGLDs alone.

Conclusion:
This case emphasizes the importance of consistent patient education on proper insulin injection techniques to ensure optimal glycemic control and minimize skin complications. It underscores the significance of collaborative relationships among diabetes educators from various fields in improving patient care, safety, and therapeutic outcomes.

POSTER PRESENTATION ABSTRACT

MDES2026-DE04

From Co-Design to Prototype: Developing and Evaluating the MyDiaMind Digital Mental Health Intervention for Individuals with Type 2 Diabetes

H Johar[1,2], N Halim[1], B Ahmad[1], S Atasoy[3,4] and TT Su[1,2]

[1] Jeffrey Cheah School of Medicine and Health Sciences, Monash University Malaysia, Subang Jaya, Malaysia
[2] Heidelberg Institute of Global Health, Faculty of Medicine, University of Heidelberg, Heidelberg, Germany
[3] Department of Psychosomatic Medicine and Psychotherapy, Klinikum rechts der Isar, Technische Universität München, Munich, Germany
[4] Department of Psychosomatic Medicine and Psychotherapy, University of Giessen and Marburg, Giessen, Germany

Introduction:
Psychological distress significantly impairs quality of life and glycaemic control in Type 2 Diabetes (T2D). This study outlines the development of MyDiaMind, a digital mental health intervention (DMHI) co-designed with and for individuals living with T2D.

Methodology:
Using a participatory co-design framework, mapped through four phases: Exploratory, Planning, Development, and User Testing, we collaborated with healthcare professionals, researchers, and individuals with lived experience. Thematic analysis of focus group discussions (FGDs) informed the content and features. A web-based prototype was evaluated in a user testing session for usability and acceptability among multi-ethnic study participants (Malay, Chinese, and Indian).

Results:
Participants (n=10, 50% women; mean age 61.1±10.2 years) and the research team (n=6) identified two core themes: diabetes distress (the burden of living with T2D) and multidimensional coping (problem-solving, emotional regulation, and social support). Users prioritized dietary information and goal setting, preferring delivery via physician-led short videos and peer support. The resulting DMHI integrates modules on mental health and diabetes distress, cognitive-behavioural psychoeducation, and practical problem-solving for lifestyle management. In user testing, both healthcare professionals and individuals with lived experience rated MyDiaMind as high quality and relevant. Bite-sized videos and infographics boosted comprehension and user engagement, with participants expressing a strong intention to revisit the platform.

Conclusion:
A co-design approach is feasible for developing culturally appropriate DMHIs. Findings suggest that effective digital support must move beyond general mental health toward highly customized, diabetes-specific interventions. Centering lived experience ensures a scalable, specialised model to improve psychological well-being of individuals with diabetes.

POSTER PRESENTATION ABSTRACT

MDES2026-DE05

Diabetic Foot Assessment And Foot Care In A Private Clinic: A Quality Improvement Initiative

LF Woo[1], LF Lee[1], FL Hew[1].

[1]*Puchong Medical Specialist Centre (PMSC), Selangor, Malaysia*

Introduction:
Diabetic foot complications are largely preventable through early detection and appropriate foot care. International guidelines recommend routine foot assessment and risk-based follow-up for all individuals with diabetes. This audit evaluated diabetic foot risk and foot care practices in a private outpatient clinic to identify opportunities for prevention.

Methodology:
Consecutive patients attending the diabetic clinic between October 2023 and December 2025 underwent a structured assessment using a modified Inlow's 60-second Diabetic Foot Screen. The assessment included evaluation of neuropathic symptoms, 10-g monofilament testing, peripheral pulse examination, inspection of skin and nails, footwear assessment, and diabetic foot ulcer (DFU) risk stratification. Targeted education was delivered during the assessment to reinforce self-care practices.

Results:
A total of 143 patients were assessed; 55.2% were female. 88.2 % were aged above 50 years. Loss of protective sensation was detected in 36.4% of patients. Common clinical findings included dry skin (72.7%), callus formation (49.0%), nail abnormalities (48.3%), and inappropriate footwear (46.9%), predominantly slippers. Risk stratification revealed that 58.0% were at low risk, 37.8% at moderate risk, and 4.2% high risk for DFU. These findings highlight a high burden of modifiable risk factors despite a low prevalence of active ulcerations.

Discussion & Conclusion:
Structured foot assessment combined with point-of-care education is feasible in a private outpatient setting and may strengthen DFU prevention. However, limited staffing and time constraints pose challenges in providing intensive follow-up for high-risk patients.

POSTER PRESENTATION ABSTRACT

MDES2026-ND01

Real-World Feedback on Continuous Glucose Monitoring Systems (CGMS): Insights from a Malaysian Pilot Project

A Dees[1], WSS Chee[1,2] & CL Lee[1,2]

[1] The Center for Transformative Nutrition & Health, Institute of Research, Development, & Innovation (IRDI) IMU University, Kuala Lumpur, Malaysia

[2] Division of Nutrition, Dietetics & Food Science, School of Health Sciences, IMU University, Kuala Lumpur, Malaysia

Introduction:
The increasing use of Continuous Glucose Monitoring Systems (CGMS) prompts inquiry into the technology's potential to foster health-promoting behaviors in individuals with and without diabetes. This project explored user-experiences with a newly introduced device in Malaysia, which provides real-time glucose monitoring, customizable hypo/hyperglycemia alerts, an AI powered food diary, and ambulatory glucose profiles via its mobile application.

Methodology:
This study employed structured, virtual interviews with 18 IMU University staff who voluntarily used the BUZUD CGMS 2.0 for 15 days following its free distribution at IMU's 2025 World Diabetes Day Screening Event. Interview questions explored users' experiences with the CGMS, perceived empowerment, discoveries of dietary and lifestyle factors impacting glucose levels, and reflections on potential behavioural changes. Qualitative data was analysed thematically in the Dedoose software and with descriptive statistics for close-ended questions.

Results:
A total of 89% of participants agreed or strongly agreed that the CGMS helped them make better lifestyle choices. Thematic analysis revealed that CGMS fostered a deeper appreciation for the role of exercise in maintaining glucose levels. Users also reported meaningful personal discoveries about specific foods that elevated their blood glucose levels including bananas, aloo-masala, and lontong. These observations often motivated surprised users to compare the effects of different dietary choices like natural versus added sugar or varying carbohydrate sources. Observing glucose fluctuations prompted some participants to modify their mealtimes and portion sizes.

Conclusion:
Preliminary findings suggest CGMS may encourage health-consciousness and behavioral modifications related to diet and exercise, warranting further research in Malaysia with larger samples.

POSTER PRESENTATION ABSTRACT

MDES2026-ND02

Daietto 2025: Transforming Body Composition Through A Structured Multidisciplinary Weight Management Program

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Introduction:
Traditional weight loss programs often fail by focusing solely on nutrition while neglecting physical activity, mental well-being, and medical health. Additionally, many programs lack interactive practical sessions and consistent support groups, making it difficult for participants to sustain lifestyle changes. The Daietto 2025 program was developed to provide a comprehensive, structured intervention addressing these gaps through a multidisciplinary approach.

Methodology:
Conducted over three months (April–July 2025), the program involved 50 participants. It utilized three core approaches: Foundation Classes (theoretical knowledge), Action Labs (practical sessions like shopping trips and healthy cooking), and Team Talks (face-to-face bi-weekly group discussion for continuous support). Participants were supported by a multidisciplinary team, including dietitians, medical officers, sports officers, and psychologists.

Results:
Out of 50 initial participants, 41 successfully completed the program. Analysis showed a significant mean reduction in BMI (SD -0.41 kg/m2, P = 0.014) and body weight (SD -1.11 kg/m2, P = 0.011). The most successful participant lost 8.1 kg of body weight and 5.9 kg of fat mass. Furthermore, 99% of participants expressed satisfaction, and 100% agreed the program was relevant and met their needs.

Conclusion:
Daietto 2025 demonstrates that a structured, multidisciplinary, and interactive approach is effective in achieving measurable weight loss and high participant engagement. The combination of practical skills and digital support groups serves as a successful model for sustainable weight management.

POSTER PRESENTATION ABSTRACT

MDES2026-ND03

One-Month Meal Replacement Following Diet Harmonisation: A Workplace Case Series in Adults with Obesity

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Introduction:
Long-standing obesity is often resistant to lifestyle advice, particularly in workplace settings where breakfast options are suboptimal. Workplace-based interventions incorporating structured nutritional strategies, such as meal replacement (MRP) using diabetes-specific formula (DSF), may offer a practical approach to improve weight and metabolic outcomes. This study evaluates the effects of a workplacebased, stepwise intervention incorporating MRP as a breakfast strategy on weight change, fasting blood glucose (FBG), and user experience in adults with obesity.

Methodology:
This case series included four adult female employees (aged 39–57 years) with baseline BMI ranging from 32.5 to 49.3 kg/m² (Class I–III obesity), without confirmed diabetes. Weight trends were observed fromJuly (baseline) to October (pre-intervention). Participants who volunteered to initiate MRP underwent a 1 month intervention in November, replacing workplace breakfast with DSF. Weight and FBG were assessed from baseline to post-intervention. User feedback on satiety and acceptability was collected.

Results:
Weight increased from July to October, indicating progressive gain without structured intervention. Following MRP, all participants demonstrated weight reduction (100%), ranging from 2.0 to 2.3 kg over one month, consistent with expected therapeutic range (2–4 kg/month). FBG improved in 3 of 4 participants (−0.1 to −0.3 mmol/L), while one showed a slight increase. Participants reported sustained satiety, supporting adherence during working hours, although excessive sweetness was noted.

Discussion/Conclusion:
This workplace-based intervention demonstrates that replacing suboptimal breakfast with DSF-MRP can reverse weight gain and support early metabolic improvement. MRP represents a practical and scalable strategy for obesity management in real-world workplace settings.

POSTER PRESENTATION ABSTRACT

MDES2026-ND04

Audit of Knowledge on Healthy Eating Patterns for Type 2 Diabetes Among Nutrition Students Using a Pre–Post Educational Intervention

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Introduction:
Nutrition therapy is a key component in the management of Type 2 diabetes (T2D), with current guidelines emphasizing healthy eating patterns rather than prescriptive dietary approaches. Ensuring adequate knowledge among future nutrition professionals is essential. This audit aimed to assess baseline knowledge and evaluate the impact of an educational intervention among undergraduate students.

Methodology:
A pre–post educational audit was conducted among 74 third-year students from Food Science & Nutrition and Nutrition programs. A validated 15-item questionnaire was administered before and after a structured educational session based on current recommendations. Audit standards were set at ≥70% correct responses. Data was analyzed using descriptive statistics, focusing on changes in correct responses and identification of knowledge gaps.

Results:
Overall performance improved from 89.82% correct responses in the pre-test to 95.05% in the post-test. Both groups demonstrated improved knowledge, with greater reduction in incorrect responses observed among Food Science & Nutrition students. Despite overall improvement, specific knowledge gaps persisted. Questions related to carbohydrate reduction for glycaemic control and interpretation of guideline-based recommendations showed minimal improvement or slight deterioration, indicating areas of conceptual misunderstanding.

Discussion/Conclusion:
The educational intervention was effective in improving general knowledge; however, targeted gaps remain in key concepts. Enhanced teaching strategies, including case-based learning, simplified explanations, and reinforcement of core principles, are required. A re-audit is recommended to evaluate the effectiveness of these improvements and support continuous quality improvement in diabetes nutrition education.

POSTER PRESENTATION ABSTRACT

MDES2026-ND05

Virtual Versus Physical Dietetic Consultation in Gestational Diabetes Mellitus: Comparison of Post Consultation Nutrition Knowledge Scores and Item Level Knowledge Gaps

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Introduction:
The expansion of virtual dietetic consultations in Malaysian public health settings raised questions about whether delivery mode influences post-consultation nutrition knowledge acquisition in women with gestational diabetes mellitus (GDM). This study aims to compare post consultation nutrition knowledge scores and item level knowledge error patterns between GDM women attending virtual versus physical dietetic consultations across public health facilities in Malaysia.

Methodology:
A cross sectional study from 6,189 GDM women who attended a registered dietitian consultation between August and December 2025. Nutrition knowledge was assessed using a 10 item post consultation questionnaire; MYGDMQ (score range zero to 10; good knowledge: ≥8). Sociodemographic was analysed descriptively and chi square tests compared overall knowledge score achievement by consultation mode. Item level error rates (percentage incorrect per question) were computed and compared between groups to identify differential knowledge gaps.

Results:
Good knowledge rates did not differ significantly between virtual (83.8%) and physical (85.7%) groups (χ^2=3.12, p=0.077). Item level analysis identified five of ten items with significant intermode differences (p<0.05). The hardest items were in the Carbohydrate Exchange (Q2) rank 1; DI=0.577; overall 42.3% error) and Q3 (rank 2; DI=0.681; overall 31.9% error). For Q3, physical consultations showed significantly lower error than virtual (21.8% vs 35.9%; χ^2=114.69, p<0.001; OR=0.497), indicating physical consultations confer an advantage for this concept. Q2 also showed physical to be marginally better (39.0% vs 43.6%; χ^2=10.92, p=0.001; OR=0.827).

Discussion/Conclusion:
Virtual dietetic consultation is non inferior to physical consultation for overall GDM nutrition knowledge acquisition. However, specific item level gaps persist across both modes and require targeted curriculum reinforcement regardless of consultation format. These findings support the sustained integration of virtual dietetic services in GDM management while highlighting priority areas for content improvement.

POSTER PRESENTATION ABSTRACT

MDES2026-PC01

Glycaemic and Metabolic Outcomes of Empagliflozin in Type 2 Diabetes in Malaysian Primary Healthcare Clinics

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Introduction:
In Malaysia, many type 2 diabetes mellitus (T2DM) patients remain suboptimally controlled despite complex regimens. This study evaluated empagliflozin's real-world impact on glycaemic control, metabolic parameters, and insulin de-intensification in primary healthcare clinics (PHCs).

Methodology:
This cross-sectional, retrospective, multicenter study in 14 Johor Bahru PHCs included adult patients with T2DM initiated on empagliflozin between August 2022 and January 2025. Pre- and post-treatment clinical data were analyzed using Wilcoxon signed-rank tests for non-normally distributed parameters and binary logistic regression for predictors.

Results:
Of 571 patients, 69.2% were insulin-treated. Empagliflozin therapy led to significant median reductions in HbA1c (1.00%, interquartile range, IQR: -2.15 to -0.15, $p<0.001$) and body mass index (0.39 kg/m², IQR: -1.23 to -0.45, $p<0.001$). Significant median improvements were also observed in systolic blood pressure (SBP 3.50 mmHg), triglycerides (0.10 mmol/L), and insulin sensitivity (eGDR) ($p<0.001$). For the whole cohort, achieving ≥ 1% HbA1c reduction was independently predicted by higher baseline HbA1c (OR=1.86), T2DM duration ≥ 5 years (OR=2.68), and lower baseline SBP (OR=0.98 per 1 mmHg increase, $p=0.011$). Among 413 insulin users, 36.6% experienced insulin de-intensification. De-intensification was significantly associated with achieving ≥ 1% HbA1c reduction (60.0% vs 47.3%, $p=0.025$), with baseline insulin total daily dose per kilogram (TDD/kg) being the strongest predictor of successful dose reduction (OR=14.55, $p<0.001$).

Discussion/Conclusion:
In a real-world mixed T2DM cohort, empagliflozin produced consistent glycaemic and cardiometabolic benefits across insulin and non-insulin users and enabled clinically meaningful insulin de-intensification, supporting its broader use in Malaysian primary care.

POSTER PRESENTATION ABSTRACT

MDES2026-PC02

The Association of Sociodemographic Factors with Depression among Type 2 Diabetes Mellitus at Hospital Rehabilitation Cheras

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Introduction:
Depression is a common yet often under-recognised comorbidity among patients with type 2 diabetes mellitus (T2DM) and may adversely affect self-management, glycaemic control, and quality of life. This study aimed to determine the prevalence of depression and examine its association with selected sociodemographic factors among T2DM patients at Hospital Rehabilitasi Cheras.

Methodology:
A quantitative cross-sectional study was conducted among 165 T2DM patients attending the Diabetes Resource Centre, wards, and outpatient specialist clinic at Hospital Rehabilitasi Cheras. Participants were selected using stratified random sampling. Data were collected using a sociodemographic questionnaire and the Patient Health Questionnaire-9 (PHQ-9). Descriptive statistics, chi-square analysis, and multivariate logistic regression were used for data analysis.

Results:
The prevalence of moderate to severe depression was 38.8%, comprising 23.0% moderate, 12.7% moderately severe, and 5.5% severe depression. Significant predictors were age below 30 years (OR=3.85, p=0.006), primary education (OR=2.75, p=0.009), single marital status (OR=2.12, p=0.023), and monthly income below RM1000 (OR=3.10, p=0.003).

Discussion/Conclusion:
Depression affected more than one-third of participants, indicating a substantial psychological burden among patients with T2DM. These findings underscore the importance of routine mental health screening and targeted psychosocial support, particularly for socially vulnerable groups, to strengthen holistic diabetes care and improve overall patient outcomes.

Keywords: Type 2 diabetes mellitus, depression, PHQ-9, sociodemographic factors

POSTER PRESENTATION ABSTRACT

MDES2026-PC03

Prevalence and Determinants of Elevated Capillary Glucose in a Large-Scale Community Diabetes Screening Programme in Batu Lanchang, Penang, Malaysia

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Introduction:
Diabetes is a leading cause of morbidity in Malaysia, with a substantial proportion of cases remaining undiagnosed. This study aimed to determine the prevalence of known diabetes and high-risk undiagnosed hyperglycaemia, and to identify demographic predictors within a large-scale community screening programme in Batu Lanchang, Penang, Malaysia.

Methodology:
A cross-sectional study was conducted among 3,050 adults. After excluding 162 participants due to incomplete data, age below 18 years, gestational diabetes mellitus, or type 1 diabetes, 2,888 participants were included. High-risk undiagnosed hyperglycaemia or suboptimal glycaemic control was defined as fasting glucose ≥5.6 mmol/L or postprandial glucose ≥7.8 mmol/L. Associations were analysed using chi square tests, and logistic regression was performed to identify predictors.

Results:
The mean age was 55.1 ± 17.7 years (61.1% female, 38.9% male). Prevalence of type 2 diabetes was identified in 10.6%, prediabetes reported as 1.2%, while 24.4% had high-risk undiagnosed hyperglycaemia, significantly exceeding the NHMS 2023 estimate (~8.5%). Age was a significant predictor of abnormal glucose (OR 1.82, 95% CI 1.57–2.10, $p < 0.001$), while gender was not. In addition, fasting tests detected significantly more abnormalities than postprandial tests (44.6% vs. 28.8%, $p < 0.001$).

Discussion/Conclusion:
Community screening revealed a burden of undiagnosed hyperglycaemia far exceeding national estimates. Strengthening targeted outreach and early detection is essential. Furthermore, the highersensitivity of fasting tests suggests they should be prioritised in community-based screening settings to improve diabetes prevention and management.

POSTER PRESENTATION ABSTRACT

MDES2026-PC04

Bridging Practice and Empowerment: A Meta-analysis Proving the National Impact of Malaysian DMTAC on HbA1c and Medication Adherence

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Introduction:
Malaysia faced a significant public health burden with high diabetes prevalence, necessitating effective multidisciplinary care. The pharmacist-led Diabetes Medication Therapy Adherence Clinic (DMTAC) was implemented to optimize therapy, yet national evidence on its combined clinical and behavioral impact remained fragmented. This study consolidated national evidence to evaluate DMTAC's effectiveness in bridging clinical practice with patient empowerment.

Methodology:
Following PRISMA guidelines, a systematic search of four databases identified 10 studies conducted across Malaysian tertiary and primary care settings (N = 2,894 patients). Meta-analysis was performed using a random-effects model. Outcomes included HbA1c reduction (clinical impact), MMAS-8 adherence scores (empowerment), and clinical intervention frequency (practice intensity). Subgroup analysis compared outcomes between hospital and primary care settings.

Results:
DMTAC demonstrated a robust national reduction in HbA1c of -1.31% (95% CI: -1.45, -1.17; $P < 0.00001$). Patient empowerment significantly improved, evidenced by a pooled +1.23-point increase in MMAS-8 adherence scores ($P < 0.00001$). Clinical practice intensity was high; pharmacists performed a mean of 2.39 interventions per patient. Subgroup analysis confirmed program standardization, as no significant difference in effectiveness was found between hospital and primary care settings ($P = 0.71$).

Discussion/Conclusion:
The Malaysian DMTAC model effectively bridged the gap between clinical practice and patient empowerment. Standardized, high-intensity pharmacist interventions achieved significant glycemic improvements regardless of the healthcare tier. These findings supported the continued national expansion of DMTAC as a vital system to empower high-risk patients and reduce long-term diabetes-related complications.

POSTER PRESENTATION ABSTRACT

MDES2026-PA01

Optimizing Glycemic Control in Type 1 Diabetes with CGM and Nutritional Therapy Compared to Conventional Monitoring

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Background:
Tight glycemic control is necessary for managing Type 1 Diabetes (T1D) to reduce the risk of complications, and this is typically accomplished via finger-pricking self-monitoring of blood glucose (SMBG). However, finger-prick provides limited data and can miss glucose fluctuations. Continuous Glucose Monitoring (CGM) offers real-time insights and alerts, allowing for better glucose self-management and improved clinical outcomes.

Case:
An 18-year-old female with a known history of T1D presented to the emergency department with fever and vomiting. Initial evaluation revealed fatigue, unintentional weight loss, and significantly elevated blood glucose levels (Fasting Blood Sugar: 12.9 mmol/L; HbA1c: 18.6%). The patient reported poor adherence to insulin therapy, irregular blood glucose monitoring using conventional fingerstick methods, frequent hypoglycemia, and poor dietary management.

Methodology:
The primary goals were to achieve glycemic control and improve quality of life. The patient initiated a CGM device, received individualized diabetes education, including insulin therapy adjustment and advance carbohydrate counting.

Results:
The patient wore the CGM sensor continuously for 14 days per cycle and reviewed during follow-up visits. The patient reported increased confidence in self-management, including adherence to insulin therapy, carbohydrate intake, and reduced anxiety regarding hypoglycemia. By the end of the 12-week CGM period, HbA1c had further improved to 7.7%, with 68% time-in-range (TIR) and reduced glycemic variability.

Conclusion:
This case highlights the use of CGM and nutritional therapy in this patient with poorly controlled T1D significantly improved glycemic outcomes and enhanced treatment adherence. CGM proved to be an effective tool in supporting better self-management, particularly in young patients struggling with conventional monitoring methods.

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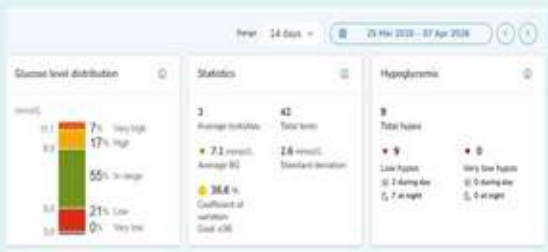

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