



# High Unawareness of CKD and its Risk Factors (Diabetes and Hypertension): Call to Action

**Ajay Kher\*, Md Muntazir Alam\*, Mayank Sharma\*, Saurabh Shukla\*,  
Shruti Bhattacharya\*, Vijay Kher\***

**\*Epitome Kidney and Urology Institute, New Delhi, India.**

## Introduction

Chronic kidney disease (CKD) is an asymptomatic disease for a large duration of its course and uremic symptoms present late. Diabetes and hypertension, the two main risk factors for CKD are also predominantly asymptomatic. In addition, even those who know about their diabetes and hypertension, majority of them are poorly controlled. Hence, it is imperative that patients get tested routinely to be aware of their risk factors and CKD status to allow interventions to slow the coming CKD epidemic. This study was conducted to assess the current level of awareness of Diabetes, Hypertension, CKD and the quantum of undiagnosed diabetes, hypertension and CKD.

## Methods

Community based population screening was done by door to door approach in Zakir Nagar, Delhi from June to Nov 2023. Those approached were offered temperature check, heart rate, pulse oximetry, blood pressure, blood sugar and urine dipstick testing. They were also assessed for any past medical history of diabetes, hypertension, kidney disease or kidney stones. In addition, a van was placed at heavy traffic places in south Delhi from October to November 2023, offering similar screening.

## Results

2200 were screened (door to door 1553, van 647) between age of 18-97 (mean 43), with 829 females (38%). 98% underwent Blood pressure check, 87% sugar check, while 54% provided a urine specimen. Of these 567 had a sugar > 140mg/dl and 235 > 200, while 625 had a systolic BP> 140 and an additional 145 had a diastolic >90. 75 out of 1181 who gave urine specimen had some level of proteinuria suggesting nephropathy and chronic kidney disease. In this cohort of 2200, 230 were known diabetics and 115 known hypertensive, however, 56 % and 80% of them respectively, were not controlled. The distribution by age group is shown in Table 1.

**Table 1. Distribution by age of kidney disease and its risk factors in screening population in Delhi.**

Age	No. s	High Sugar > 140	Known Diabetes	Controlled Diabetes	Systolic HTN	Only Diastolic HTN	Known HTN	Controlled HTN	Kidney Disease	Known Kidney Disease
18-24	151	8	5	2	21	5	3	1	2	0
25-44	1044	206	86	44	204	90	31	9	32	0
45-64	821	286	115	46	322	47	56	7	31	1
>64	166	67	24	10	78	3	25	6	10	0
<b>Total</b>	<b>2182</b>	<b>567</b>	<b>230</b>	<b>102</b>	<b>625</b>	<b>145</b>	<b>115</b>	<b>23</b>	<b>75</b>	<b>1</b>

## Conclusions

Our study shows significant unawareness in urban India for chronic kidney disease and its two most common risk factors (diabetes and hypertension). It also shows that even those who are aware of diabetes and hypertension are poorly controlled and not aware of the risks of kidney disease or presence of kidney disease from these. There is an increasing prevalence of CKD around the world, especially in India. More awareness is needed about CKD, its asymptomatic nature and the importance of regular screening for CKD and its risk factors.