

# KSN 2016 Abstract Submission

## *CKD & associated complications*

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### Prevalence of chronic kidney disease among diabetic patients visiting out patient department in India

Salman Hussain<sup>\* 1,2</sup>, Darpelly Mahesh<sup>2</sup>, Ashok Kumar Gupta<sup>2</sup>, Mohammad Azharuddin<sup>2</sup>, Krishna Pandey<sup>3</sup>, Chandra Shekhar Lal<sup>4</sup>, Pradeep Das<sup>5</sup>

<sup>1</sup>Faculty of Pharmacy, Jamia Hamdard, Hamdard University, New Delhi, <sup>2</sup>Department of Pharmacy Practice, National Institute of Pharmaceutical Education and Research, Hajipur, <sup>3</sup>Department of Clinical Medicine, <sup>4</sup>Department of Clinical Biochemistry, <sup>5</sup>Department of Microbiology, Rajendra Memorial Research Institute of Medical Sciences (RMRIMS), Agamkuan, Patna, India

**Background:** Diabetes is one of the core risk factor for the increasing prevalence of Chronic Kidney Disease (CKD) worldwide. The rising incidence of CKD in India will pose health and economic burden in future.

**Methods:** This was a prospective observational study conducted at the diabetic Out Patient Department (OPD). A total of 168 diabetic patients were enrolled in the study. Patients clinical parameter were recorded in pre specified data extraction template. Estimated Glomerular Filtration Rate (eGFR) was calculated using the cockroft-gault equation. CKD was staged according to the kidney disease improving global outcomes system.

**Results:** Amongst 168 patients 54.16% (91) were male and 45.84% were female (77). The mean age of male and female was 54.703±9.888 years and 53.558±10.118 years respectively. Mean duration of diabetes was 4.020±4.098 years. Among these diabetic patients 48.80% (82) had co-morbid hypertension. A total of 6% (11), have GFR value in the range of 30-44 ml/min/1.73 m<sup>2</sup>, which is classified as moderate to severe loss of kidney function (stage-3b CKD).

Likewise, we found a total of 16% (27) patients were categorised as stage-3a CKD, i.e. mild to moderate loss of kidney function (GFR value: 45-59 ml/min/1.73 m<sup>2</sup>). Maximum of 39% (65) comes under satge-2 CKD i.e. kidney damage with mild loss of kidney function (GFR value: 60-89 ml/min/1.73 m<sup>2</sup>) and similar number observed in case of kidney damage with normal kidney function (stage-1 CKD).

**Conclusion:** We found a high prevalence of CKD among diabetic patients in India. Robust screening procedure should be done in order to prevent the progression and complications of CKD.

**Table:** Clinical characteristics of patients

Characteristics	Total N(168)	Male(91)	Female (77)	p-value
Age	54.178±9.981	54.703±9.888	53.558±10.118	0.460
Duration of disease	4.020±4.098	3.847±3.968	4.226±4.263	0.552
Height	157.190±8.920	162.868±6.701	150.480±6.133	0.000
Weight	61.625±9.552	62.813±9.140	60.220±9.893	0.080
Waist circumference	35.619±3.622	35.142±3.315	36.181±3.902	0.064

<b>Hip circumference</b>	38.946±3.361	38.131±2.879	39.909±3.642	0.001
<b>SBP</b>	132.619±17.517	135.274±19.739	129.980±13.445	0.032
<b>DBP</b>	85.416±10.257	87.252±11.062	83.246±8.802	0.011
<b>BMI</b>	25.025±3.970	23.698±3.320	26.594±4.121	0.000
<b>HbA1c</b>	8.567±2.320	8.350±2.315	8.824±2.254	0.188
<b>FBS</b>	184.303±70.61	178.692±72.273	190.935±68.472	0.264
<b>Urea</b>	29.422±4.086	29.824±4.113	28.948±4.029	0.167
<b>Creatinine</b>	1.050±0.229	1.067±0.206	1.029±0.254	0.298
<b>GFR</b>	72.522±17.813	79.869±15.445	67.840±16.545	0.000

**Keywords:** Chronic Kidney Disease, Diabetic Kidney Disease, Glomerular Filtration Rate