

Abstract: PUB130

Prevalence of Co-Morbidities by Ethnicity in a UK Primary Care CKD Cohort

Session Information

- [Publication Only](#)

Category: Chronic Kidney Disease (Non-Dialysis)

- 301 CKD: Risk Factors for Incidence and Progression

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Group or Team Name

- PSP-CKD Study

Background

Cardiovascular (CV) and endstage renal disease events in CKD are more common in non-white ethnicities compared to white ethnicities. The prevalence of co-morbidities in CKD in Black and South Asian ethnicities outside of North America is poorly studied but may account for these higher renal and CV event rates.

Methods

We analysed cross-sectional data from the PSP-CKD study (ClinicalTrials.gov NCT01688141). Individuals were analysed if they had a baseline EPI eGFR <60 ml/min/1.73m² and an ethnicity code. The groups' baseline characteristics between ethnicities were compared using t-tests and Chi².

Results

18,058 (78.1%) individuals out of 23,129 had ethnicity recorded. Of these, 17,264 (95.6%) were White, 263 (1.5%) Black and 243 (1.4%) were South Asian. Individuals of Black and South Asian ethnicities were more likely to be male and younger. Mean EPI eGFRs were similar across ethnicities but South Asians had higher mean ACR in both those with and without diabetes mellitus (DM). In Black individuals a diagnosis of hypertension (HTN) was less common but both systolic and diastolic blood pressures had higher mean values. DM was more prevalent in South Asians and HbA1c was higher too. Both Black and South Asian groups had lower rates of CV disease.

Conclusion

In South Asians with CKD, DM was present in more than 40% and glycaemic control was worse. A HTN diagnosis was less common in Black individuals but blood pressure was more poorly controlled. Both groups had lower rates of previous CV events. Targeted management of these co-morbidities in South Asian and Black populations with CKD may be warranted.

Cohort Characteristics by Ethnicity

Variable	White	South Asian	p-value	Black	p-value
n	17,264	243		263	
Female	62.9%	54.0%	0.01	55.1%	◇
Age	75.8 (11.1)	69.7 (11.4)	◇	64.5 (14.4)	◇
Mean EPI eGFR	50.6 (9.6)	49.9	0.23	50.6 (11.6)	0.97
ACR (mg/mmol)	6.8 (18.0)	13.3 (27.3)	0.03	12.5 (25.1)	0.10
CV Disease	17.4%	11.5%	0.02	10.7%	◇
HTN	91.0%	90.1%	0.65	84.8%	◇
Systolic BP	134.3 (16.3)	134.7 (18.9)	0.65	136.7 (18.2)	0.02
Diastolic BP	74.8 (10.0)	75.2 (10.7)	0.58	79.1 (11.3)	◇
DM	23.1%	44.0%	◇	29.3%	0.02
HbA1c % if DM	7.4 (1.4)	7.8 (1.6)	0.01	7.5 (1.5)	0.68

p-values refer to comparison to White ethnicity. For continuous variables values refer to means and figures in parentheses refer to standard deviations.