IJPPR
INTERNATIONAL JOURNAL OF PHARMACY & PHARMACEUTICAL RESEARCH
An official Publication of Human Journals
ISSN 2349-7203
HUMAN

A Prospective Study on Renal Biomarkers and their Correlation with Comorbidities in Chronic Kidney Disease Patients

IJPPR
INTERNATIONAL JOURNAL OF PHARMACY & PHARMACEUTICAL RESEARCH
An official Publication of Human Journals

Mitali M[1], Richa P[1], Kajal P[1], Shivani P[1], Radhika B[1], Lavanya S*[1], Abhay Dharamsi[1]

[1]Department of Pharmacy Practice, Parul Institute of Pharmacy, Parul University, Vadodara, Gujarat, India

Submission: 22 December 2019
Accepted: 28 December 2019
Published: 30 January 2020

Keywords: Chronic kidney disease, Prevalence, Renal biomarkers, Glomerular filtration rate, Co-morbidities

ABSTRACT

Introduction: Impact of renal biomarkers and their correlation with co-morbidities in chronic kidney disease (CKD) patients is importantly evaluated with use of standardized tool to estimate the serum creatinine, blood urea nitrogen (BUN) and glomerular filtration rate (GFR) from national kidney foundation (NKF) practice guidelines. **Aim:** The aim of the study is to assess the importance of renal biomarkers in association with co-morbidities in CKD patients. **Methods:** A prospective observational study was conducted at a tertiary care hospital in Vadodara from September 2018 to February 2019. All adult CKD patients less than 60 ml/min of GFR and undergoing dialysis were included. Renal function was estimated from serum creatinine using Cockcroft-Gault formula and dose appropriateness was determined. **Results:** Overall prevalence of CKD varied widely and increased with the age, which was highest in middle aged adults. Male gender and substantial decline in GFR was significant factors whereas addiction demonstrates a borderline significance. Increased prevalence of CKD can be partly explained by the high prevalence of diabetes, hypertension and both in the screened population (5.71%, 40.00% and 22.86% respectively). **Conclusion:** CKD, with its high prevalence, morbidity and mortality, is a crucial public health problem but the prognostic significance of its co-morbidities is not well understood. In current scenario where health illnesses like diabetes and hypertension are gaining more awareness, CKD is silently progressing and yet remains unrecognized. Early intervention, planning for preventive health policies, allocation of more resources for treatment and awareness are imperative for disease prevention.