Evaluation of Frequency of Proteinuria among Diabetic Patients at Peoples Medical College Hospital Nawabshah Pakistan

Amir Shahzad Malik¹, Hamid Ali Kazi², Safdar Ali Parvez Tunio³, Arslan Ahmer⁴, Jabbar Abbas⁵, Tahseen Ahmed⁶, Niaz Hussain Jamali⁷

Department of Medicine, People's University of Medical and Health Sciences, Nawabshah, Pakistan, ²Institute of Pharmaceutical Sciences, People's University of Medical and Health Sciences, Nawabshah, Pakistan. ³Department of Medicine, KMC Civil Hospital Khairpur, Pakistan. ⁴Institute of Pharmaceutical Sciences, People's University of Medical and Health Sciences. Nawabshah, Pakistan. ⁵Institute of Pharmaceutical Sciences, People's University of Medical and Health Sciences, Nawabshah, Pakistan. 6Institute of Pharmaceutical Sciences, People's University of Medical and Health Sciences, Nawabshah, Pakistan. 7Institute of Pharmaceutical Sciences, People's University of Medical and Health Sciences. Nawabshah, Pakistan.

Correspondence Address: Amir Shazad Malik Assistant Professor Medicine PUMHS, SBA, Pakistan. E-mail: <u>draamishahzad82@gmail.com</u> Cell# +92333327680

ABSTRACT

Background: Diabetes mellitus (DM) occur due to disordered metabolism and due to deficiency or inefficiency of insulin which causes chronic hyperglycemia. Objective: The objective of the current study is to determine the frequency of proteinuria among Diabetes Mellitus Type II patients. Methodology: The descriptive cross-sectional study was conducted on 210 patients for the period of 8 months from May 2019 to December 2019 at Peoples Medical College Hospital Nawabshah. Consecutive non probability sampling method was used to collect the samples. Results: The frequencies and percentages for proteinuria were recorded in 100 (47.61%). The overall rate of prevalence of proteinuria was high (47.61%) among the studied subjects. Conclusion: It was concluded that prevalence rate of proteinuria is considerably high (47.61%) so frequent screening for proteinuria should be done for all diabetic patients and early treatment is crucial for slowing progression to late stages of diabetic nephropathy and reducing cardiovascular risks.

Key words: Diabetic Nephropathy, Proteinuria, Type II Diabetes Mellitus

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INTRODUCTION

Diabetes mellitus (DM) occur due to disordered metabolism and due to deficiency or inefficiency of insulin which causes chronic hyperglycemia. Diabetes usually cannot be reversible; however patients can survive in their normal life style. Late complications of Diabetes include coronary artery disease and stroke, increased incidence of peripheral vascular disease and macro vascular disease, while micro vascular damage can cause diabetic

Diabetes mellitus (DM) Type 2 is very common in all the populations and it has increased in with the implementation of a western lifestyle and by increase of obesity. 25–50% of patients were found with vascular complications already at the time of diagnosis because before diagnosis frank Diabetes or intolerance of Glucose may be present in subclinical or an undiagnosed type for years. Some factors i.e pregnancy stress, undercurrent illness or treatment with drug may accelerate Diabetes onset.⁷⁻⁹ The prevalence of Diabetes mellitus (DM) Type retinopathy and nephropathy can reduce expectancy of life as well as serious health problems. Neuropathy is also a major complication.^{1,2} The prevalence of diabetes was estimated worldwide to be 2.8% in 2000 and 4.4% in 2030.3 Over the past few decades, Diabetes mellitus has quickly increased to epidemic proportions.⁴ The world health organization (WHO) estimated 171 million diabetes mellitus patients worldwide in 2002 and predicted its increase to 366 million patients by 2030.5,6 II is 2-4 times greater in people of Africa, South Asia and Caribbean ancestry from UK, which increases above 30% risk of lifetime in these groups. 4-6% prevalence of Diabetes mellitus (DM) Type 2 is within the UK and 15-20% is life-time risk.^{10,11} Proteinuria can be defined as excessive protein excretion in the urine, which ranges from 150-160 mg/24h in adults. When 1-2 g/d protein is found it is a sign of significant proteinuria in the abnormality of kidney especially related to glomerular.⁵ Presence of protein in urine is a known risk factor of progression of cardiac and renal diseases