

KNOWLEDGE AND PRACTICE REGARDING FOOT CARE AMONG TYPE 2 DIABETES MELLITUS PATIENTS AT A TERTIARY CARE HOSPITAL IN COASTAL SOUTH INDIA

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ABSTRACT

Objective: The present study was designed to assess the knowledge and practice among diabetic patients in a tertiary care hospital regarding diabetic foot care.

Methods: A cross-sectional study was conducted in government district hospital of Mangalore in the month of January 2014. A pre-designed semi-structured questionnaire was used to collect the information pertaining to the knowledge and practices of the diabetic patients regarding foot care. The collected data were analyzed using Statistical Packages for Social Sciences version 11.5. The results obtained were expressed in proportions.

Results: A total of 133 subjects were assessed regarding their knowledge and practice regarding diabetic foot care. Around three-fourth (75.2%) of participants had adequate knowledge. More than half (55.5%) of the subjects had adequate practice. No significant association was found between study variables such as gender, socioeconomic status, and education status with awareness regarding diabetic foot care in the present study ($p > 0.05$). Gender, socioeconomic, and educational statuses were found to be significantly associated with diabetic foot care practices.

Conclusion: The gap between knowledge and practice regarding self-care among diabetic patients can be bridged by providing continuous health education by the health workers. Foot care should be promoted at all available opportunities whenever the patient comes in contact with the health system.

Keywords: Mangalore, Foot care, Diabetes.

INTRODUCTION

Globally, non-communicable diseases (NCD) such as hypertension, diabetes mellitus, and cardiovascular disease are the leading cause of death attributing to 63% of overall causes of mortality. Over nine million deaths due to chronic disorders occur below the age of 60 years, and 90% of them are from middle and low-income countries [1]. Around three million deaths worldwide occur due to diabetes among 347 million people suffering from it. According to World Health Organization (WHO) projections by the year 2030, it will be the seventh leading cause of death [2-4]. In India, NCD contributes to 53% of total mortality, and around 2% of it is contributed by diabetes mellitus [5]. Diabetes can lead to several complications, the important being the complications related to foot [6]. A lower limb is lost every 30 seconds globally, and it is estimated that at least 25% cases of diabetes are at risk of developing a foot ulcer. 40-70% of lower limb amputations are related to diabetes [7,8]. People suffering from any diabetic related to complications, uncontrolled diabetes, males, and having diabetes for more than 10 years have increased the risk of developing foot-related complications. Routinely foot examination in diabetic individuals is done annually. People with neuropathic disorders are advised to get a visual inspection of their foot during every visit. Patients are examined for the presence of bony deformities, callous formation, erythema, and limitation in joint mobility [9,10]. The most cost effective measure of preventing foot-related complications is enhancing the knowledge and awareness among diabetic patients [11,12]. Patients with preexisting complications are mainly provided with health education [13]. Patients with low risk are usually neglected [14,15]. If diabetes is not controlled, even patients with low risk can also develop complications [16]. American Diabetic Association and International working group on diabetic foot have issued guidelines regarding diabetic subjects with

low risk [17,18]. Various studies have indicated that adequate self-care of foot is not followed among diabetic patients [13,19-21]. There was no research conducted among diabetic patients on knowledge and practice regarding foot care. In coastal part of Karnataka, so the present study was designed to assess the knowledge and practice among diabetic patients in a tertiary care hospital regarding diabetic foot care.

METHODS

This cross-sectional study was conducted at two tertiary care teaching hospitals of Kasturba Medical College (Manipal University), Mangalore. The study population included Type 2 diabetic patients who have been diagnosed for the duration of more than 1 year. The sample size of 133 was calculated by considering the awareness regarding foot care among diabetic patients as 75% [22], with a relative precision of 10% and 95% confidence interval with a non-response error of 20%. Data were collected using a semi-structured questionnaire prepared after an extensive review of the literature and consultation with experts. It consisted of 4 sections. Section A: Sociodemographic profile of participants, Section B: Diagnosis and treatment details of diabetes, Section C: Knowledge regarding diabetic foot care, Section D: Practice regarding diabetic foot care. The knowledge part of questionnaire consisted of eight questions with a correct and wrong answer. One point was assigned for every correct response and zero for wrong. A total score of ≥ 5 was considered as adequate knowledge. The practice part consisted of eight questions with a yes or no response. One point was assigned for every yes response and a zero for every no answer. A total score of ≥ 5 was considered as good practice.

Institution Ethics Committee approval was obtained prior to the commencement of the study. After obtaining permission from the

