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The Study to Assess the Prevalence of Diabetic Foot Syndrome and Associated Risk Factors among People with Diabetic Mellitus

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ABSTRACT

AIM: the present study aims to assess the prevalence of diabetic foot syndrome and associated risk factors among people with diabetic mellitus at SMCH.

METHODS AND MATERIALS: A quantitative research design was used for the present study. A total 100 samples were collected using non probability purposive sampling technique. The demographic variable and prevalence of diabetic foot ulcer among diabetic patient was assessed using structured questioner and visual assessment, followed by that data was gathered and analyzed.

RESULTS: The results the study revealed that there is a significant association between level of prevalence with selected demographic at the level of $p<0.01$

CONCLUSION: Thus, the present despites that factors associated with level of prevalence with selected demographic.

KEYWORDS: *diabetic foot syndrome*

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INTRODUCTION

Diabetes is now common and major health problem in India. The estimated prevalence of diabetes in urban areas in North was thought to be around 19% in comparison with 2.5% in rural regions. Like other developed and developing countries, high prevalence of uncontrolled diabetes (85%) is noted in India individuals with type 2 diabetes. Diabetic foot ulcer is one of the severe complications of diabetes mellitus with a lifetime risk of 15% in all diabetic patients and associated with major morbidity, mortality, costs, and reduced quality of life. A global prevalence of diabetic foot ulcer is 6.3% with regional variation from 3.0% in Oceania to 13.0% in North America and 86.7% in India. The incidence of DFU is 1.0% – 4.0% and the prevalence is between 5.3% and 10.5%. Diabetic foot ulcer is becoming a drastic health problem among clients diagnosed with diabetes and leads to irreversible loss such as extremities amputation. Approximately, 20% of hospital admissions among DM patients are the result of foot problems which is a major reason of uncontrolled diabetes and lack of physical care and especially foot care. Diabetic foot ulcer is responsible for more days of hospital stay than any other complication. The diabetic foot disease is a growing major public health problem for diabetes patients in clients at poverty line. Diabetic foot disease typically presents as ulcers, infection, and Charcot foot in the presence of peripheral neuropathy or peripheral arterial disease in people with diabetes, and it is the most important factors for lower extremity amputations. Diabetic foot ulcer is usually considered a marker of diabetes complication and typical marker for neuropathy and associated vascular disease in the foot. Several studies have attempted to identify the source of diabetic foot in those with diabetes, which resulted from the side effect of hyperglycemia indirectly from peripheral neuropathy and diabetic nephropathy. Diabetic foot ulcer is predominantly caused by neuropathy. Moreover, the presence of comorbidities like

hypertension, obesity, and cardiovascular complications is the fuel for the diabetic foot and its outcome.

MATERIALS AND METHODS:

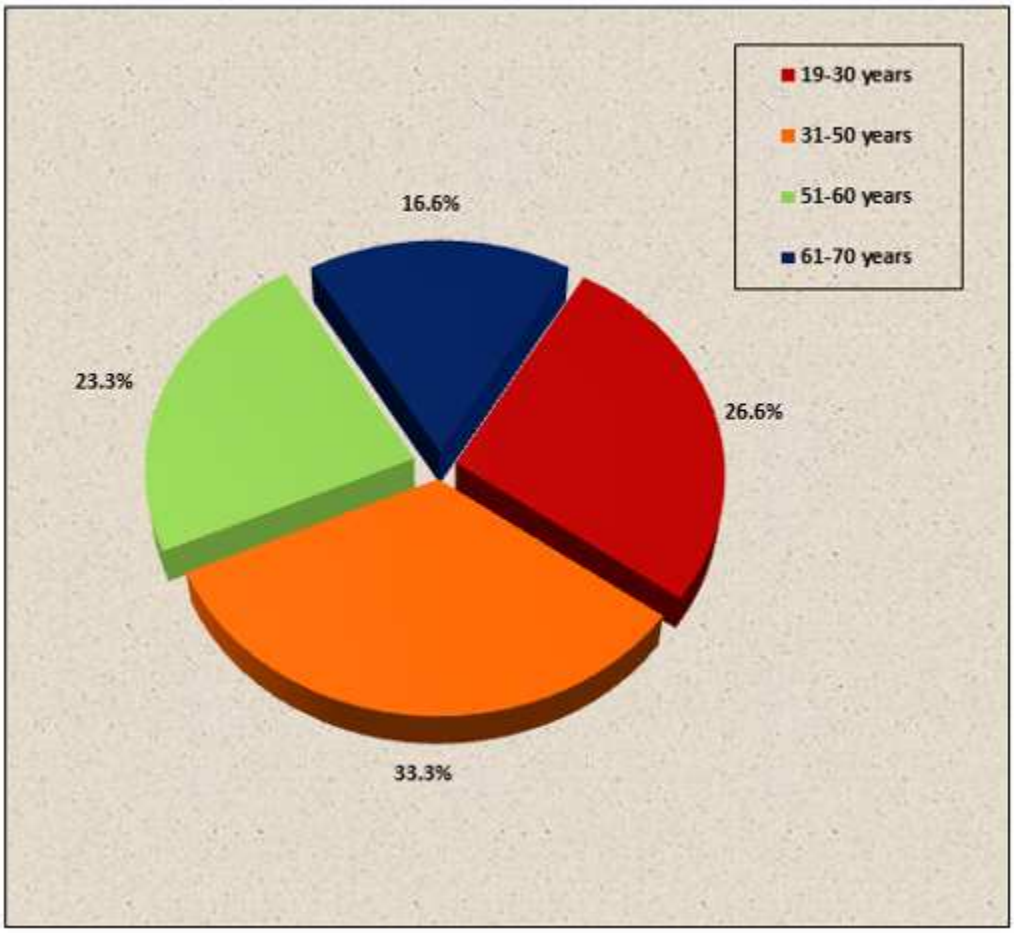
After obtaining and ethical clearance from the institutional ethical committee of Saveetha Institute of Medical and Technical Science and formal permission letter obtained from the head of the SMCH, present study was conducted. For the present study quantitative approach with descriptive research design was adopted. The samples were collected using a non-probability random sampling technique from sixty samples. The inclusion criteria for the study, participants, who are available during the study period and who are cooperative and who understand both Tamil and English. Exclusion criteria for the study are, samples who are not willing to participate in the study .The purpose of the study was explained by the investigator to each of the study participants and a written informed consent was obtained from them. The demographic and the prevalence of diabetic foot ulcer data was collected from the samples using semi structured questionnaire .the data were analyzed by biostatistics. The sample characteristics were described using frequency and percentage. Chi- square was used to associate the level of prevalence with their selected demographic variables

RESULTS AND DISCUSSION

SECTION A: Description of the demographic variables of the diabetic patients

The table shows that maximum of them were in age group 31-50 years, 16.6% were females 56.6% were Hindu, 36.6% had no formal education, 43.3% were coolie, maximum of them were residing in urban area, 53.3% were of co- morbid illness hypertension, 66.6% 2 to 5 years and 66.6% had no family history of DM

Figure1



Percentage distribution of age

SECTION B: ASSESSMENT OF LEVEL OF PREVALECNCE OF DIABETIC FOOT SYNDROME AND ITS ASSOCIATED RISK FACTORS

Table 2: Frequency and percentage distribution of level of prevalence of diabetic foot syndrome

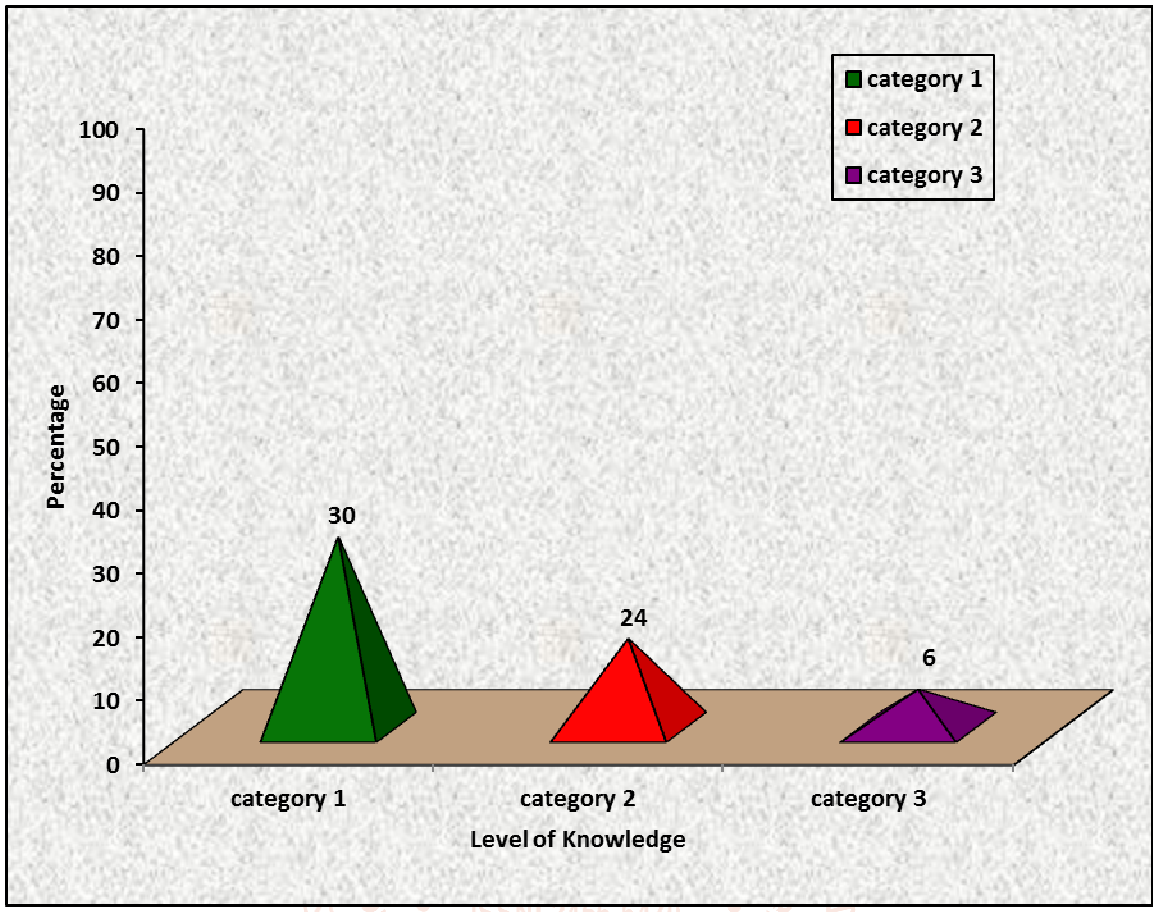
N = 60

Prevalence	Category 1		Category 2		Category 3	
	No.	%	No.	%	No.	%
Diabetic foot syndrome	24	40.0%	28	46.6%	8	13.3%

This table despites that, 40% were in category 1, 46.6% were in the category 2 and 13.3% in category 3.

Risk factors	Stage 1		Stage 2		Stage 3	
	No.	%	No.	%	No.	%
Diabetic foot syndrome	30	50.0%	24	40.0%	6	10.0

This table despites that, maximum of them 50.0%, 40.0% were in stage 2 and 10.0% were of stage 3



Percentage distribution of level of prevalence of diabetic foot ulcer

SECTION C: ASSOCIATION OF LEVEL OF KNOWLEDGE WITH SELECTED DEMOGRAPHIC VARIABLES.

Demographic variables such as no. of years and family history of diabetes mellitus shows significant association prevalence of diabetic foot ulcer.

CONCLUSION

From the results of the present study shows significant improvement for researcher.

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