



PRACTICE AND BARRIERS OF FOOT CARE AMONG DIABETIC PATIENTS

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ABSTRACT

Introduction: Diabetic patients are generally observed to have a mixture of proper and improper information and beliefs which eventually result in lot of barriers to cure. The foot in diabetes can be affected by ulceration, infection, and gangrene, and is a source of major morbidity and mortality. Good foot care can help prevent conditions that can cause damage – sometimes permanent – to the feet and toes. **Objectives:** The aim of the study was to analyse the Practice and barriers of foot care in patients with diabetes mellitus in Urban areas of Bangalore. **Methodology:** Cross sectional descriptive study was conducted among 206 diabetic patients selected by convenient sampling technique. A structured and validated questionnaire was administered to them. Descriptive statistics and inferential statistics were employed to assess the practice and barriers of diabetic foot care. The study included 206 Diabetic patient They were interviewed about their knowledge and barriers of foot care. A structured and validated questionnaire was administered to them. **Results:** Majority of respondents were female (54.85%). The mean age was 56.61 with patients between 51 to 60 years. Total of 168 respondents had encountered barriers, 119 (57.76%) cited that they do not know how to take care of their foot, 97(46.06 %) participants reported that the doctors and nurses had never told them about foot care, and 89 (43.20%) participants reported that they do not know foot care is important. These were the major barriers frequently mentioned **Conclusion:** Maximum of the respondents do not know how to take care of foot in diabetes and there was less communication between health care worker and patient. Respondents had good foot care practices in the areas of washing of feet and not walking barefoot. It is necessary to first develop awareness of diabetes foot care. Certain educational strategies should be established by both the health care personnel to create awareness of effective foot care.

KEYWORDS

Practice, Barriers, Diabetic patient, Foot care

INTRODUCTION

Diabetes mellitus (DM) is a major systemic disease affecting 415 million people in the world. It is increasing at an alarming rate and will become an epidemic in next few years. India is having number of patients of DM in the world with the prevalence rate of 8.7% in adult population. In 2015, there were 69.1 million patients with DM in India and would be more than 101.2 million by 2030. Complications of diabetes range from acute, life-threatening conditions such as severe hypoglycemia or ketoacidosis to chronic, debilitating complications affecting multiple organ systems, such as retinopathy, nephropathy, neuropathy, and cardiovascular disease¹.

Despite considerable advances made over the last 25 years, diabetic foot ulcers (DFUs) continue to present a very considerable health care burden—one that is widely unappreciated. They are a full-thickness wound penetrating through the dermis. It is estimated that about 5% of all patients with diabetes present with a history of foot ulceration, while the lifetime risk of diabetic patients developing this complication is 15%. The majority (60–80%) of foot ulcers will heal, while 10–15% of them will remain active, and 5–24% of them will finally lead to limb amputation within a period of 6–18 months after the first evaluation.²

Diabetic foot absorbs some 20% of the total health-care costs of the disease more than all other diabetic complications. Especially in a developing country, like India, treating diabetic foot may account for 40 percent of health resources. There are many barriers that must be recognised and overcome. Sound and cost-effective strategies need to be developed. Policymakers and health-care professionals should work together to remove the obstacles and facilitate the provision of adequate diabetic foot care. The impact of diabetic foot disease and amputations can be reduced only if sufficient attention is paid to the necessary preventive measures³.

Good foot care can help prevent conditions that can cause damage – sometimes permanent – to the feet and toes. Studies have shown that hyperglycaemia control, cessation of smoking, proper foot hygiene, daily inspection of feet for any trauma, use of proper footwear and early medical help can prevent the incidence of Diabetic foot ulcer by 50-60%. We, as health professionals need to emphasize the importance and need of the education regarding the preventive measures of diabetic foot so that the diabetic patients can be aware of the potential dangers and prevent harm.⁶

Statement of the problem

A study to assess the practice and barriers of foot care among diabetic patients in a selected urban area.

Objectives of the study

- To assess the practice of foot care among diabetic patients
- To assess the barriers of foot care among diabetic patients

METHODOLOGY

Quantitative research approach with cross sectional research design was used and 206 diabetic patients were selected by purposive sampling technique in urban community area. All patients above 30 years of age who are a known case of DM were included in the study. Exclude the Patients who denied consent to be part of the study and Patient who were already having diabetic foot, amputated foot, or foot ulcers. The tool used for data collection were structured questionnaire and rating scale to assess the barriers and practice of Diabetic patient. Content validity of tool were established by submitting the Seven experts including five experts in community health Nursing, two from Medical surgical Nursing. Ethical approval was obtained from the Institutional Committee for conducting the research study. The purpose for carrying out research project was explained to the study subject and assurance confidentiality was given.

RESULT :-

Table 1: Socio-demographic characteristics of diabetic patient

n=206

Variables	F(%)
Age(years)	
30-40	23(11.16%)
41-50	51(24.75%)
51-60	57(27.66%)
61-70	47(22.81%)
71-80	28(13.59%)
Sex	
Male	93(45.14%)
Female	113(54.85%)
Education	
Illiterate	26(12.62%)
Primary school	40(19.41%)
Middle school	71(34.46%)
High school	32(15.53%)
Graduate & above	37(17.96%)
OCCUPATION	
Unemployed/house wife	113(54.85%)
Self –employed/Business	47(22.81%)
Private job	28(13.59%)
Government Job	18(8.73%)
RELIGION	

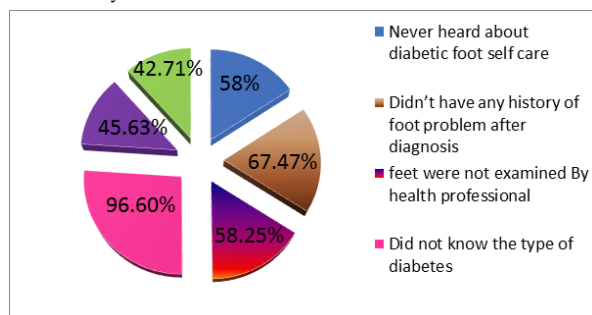
Hindu	135(65.53%)
Muslim	31(15.04%)
Christian	40(19.41%)
Monthly family income (Rs)	
>78063	21(10.19%)
39033-78062	23(11.16%)
29200-39032	31(15.04%)
19516-29199	89(43.20%)
11708-19515	42(20.38%)

II. CLINICAL STUDY OF PARTICIPANTS

Regarding the clinical history of 206 study participants, 121(58.73%), have never heard about diabetic foot self care before. Many respondents, 139 (67.47%) didn't have any history of foot problem after diagnosis of DM. As to the care by the health professional, 120(58.25%) reported that their feet were not examined by nurses or physician during their follow-up.

Apart from knowledge, majority of patients 199(96.60%) did not know the type of diabetes they are suffering with.

The minimum and maximum duration of diabetic therapy were 6 months and 20 years respectively. About 94(45.63%) live with diabetes less than five years, whereas 88(42.71%) had diabetes for more than 5 years.



III DIABETES FOOT CARE PRACTICE

Practice Question		Frequency	Percent (%)
Do you check Your Shoes Before you put Them on	Often	56	27.18
	Sometimes	105	50.97
	Rarely	19	9.22
	Never	26	12.62
Do you check your shoes when you take them off	Often	63	30.58
	Some Times	50	24.27
	Rarely	49	23.78
	Never	44	21.35
Do You have the practice of drying Your feet After Washing	Often	66	32.03
	Some Times	54	26.21
	Rarely	45	21.84
	Never	41	19.90
Do You use moisturizing cream for your feet ?	Often	39	18.93
	Some Times	45	21.84
	Rarely	29	14.07
	Never	93	45.14
Do you use cream to moisten the space between your toes?	Often	32	15.5
	Some Times	55	26.7
	Rarely	58	28.2
	Never	61	29.6
Do you walk in the house barefoot?	Often	91	44.2
	Some Times	58	28.2
	Rarely	17	8.3
	Never	40	19.4
Do you walk outside barefoot?	Often	3	1.5
	Some Times	69	33.5
	Rarely	27	13.1
	Never	107	51.1
Do you examine / inspect your foot?	More than once a day	34	16.5
	Once a day	24	11.5

	4-6 times a week	34	16.5
	Once a week or less	114	55.3
How frequently you wash your feet?	More than once a day	91	44.18
	Once a day	115	55.82
How frequently do you trim your Toe nails?	Once a month	93	44.15
	More than once a month	113	54.85
Do you wear sandals/shoes?	Most of the time a day	77	37.3
	Very rare	50	24.2
	Do not wear	50	24.2
Do you wear shoes without socks?	Yes	135	65.53
	No	71	34.46
Do you change your socks less frequently	Less than 4 times a week	107	51.9
	4-6 times a week	21	10.2
	Every day	78	38.4
Do you have habits of putting your feet near the fire?	Yes	29	14.1
	No	177	85.9
Do you apply dressing when your feet are exposed to blisters, cut or burns?	Yes	105	50.20
	No	101	49.8

PRACTICE SCORE

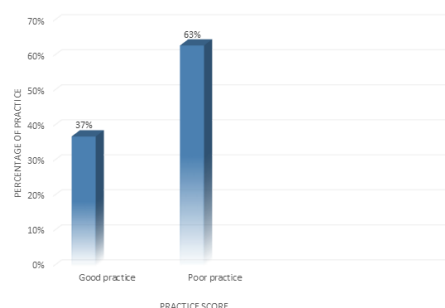


Fig :- 1 Distribution of Diabetic patient according to their Diabetic foot self-care practice.

4. BARRIERS OF DIABETIC FOOT CARE

When study participants were asked whether they encounter barriers that limit them from proper foot care 62% an 38% responded "yes" and "no" respectively.

As to the barriers of proper foot self-care practice, from total of 168 respondents who had encountered barriers, 119 (57.76%) cited "I did not know what to do", 97 (46.06%) participants reported that "doctor and nurses have never told me about foot care", and 89 (43.20%) Participants reported "I do not know foot care is important," are major barriers frequently mentioned.

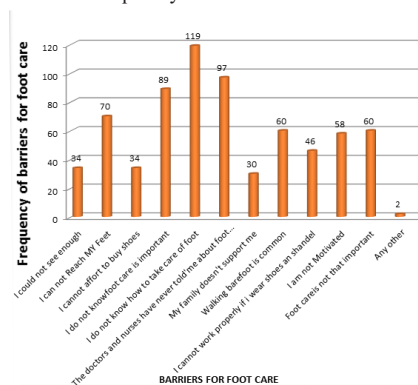


Figure 1: Frequency Distribution of participants perceived barriers of Diabetic Foot care practice

CONCLUSION :-

Based on the finding, the study concludes that the half of the study participants have good knowledge of foot care. Half of diabetic patients poorly practice proper foot care. Maximum of the Respondent do not know how to take care of foot in diabetes and less communication between health care worker and patient. Respondents had good foot care practices in the areas of washing of feet and not walking barefoot.

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