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Knowledge, Attitude and Practice Towards Foot Care Among Patients with Diabetic Mellitus between Urban and Rural Area

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Abstract

Diabetic mellitus is the third leading cause of death by diseases. People with diabetics are prone to foot problem because the disease can cause damage to the blood vessels and nerve. This is in turn may result in decreased ability to sense trauma or pressure on the foot, so it is important to create awareness about foot care among diabetic patients. The present study was a comparative study to assess the level of knowledge, attitude and practice between urban and rural people towards foot care among patients with diabetes mellitus in selected areas of Puducherry.

Materials and methods: The research approach used for this study was quantitative research approach and descriptive research design was adopted. By using purposive sampling technique 60 samples (urban = 30 & rural = 30) were selected. The researchers used structured questionnaire to assess the level of knowledge, attitude and practice on foot are among the urban and rural people.

Results: According to the knowledge on foot care, more number of subjects 10(33.33%) are from urban area had adequate knowledge towards foot care when compared to the rural. According to the attitude towards foot care, more number of subjects 22(73.33%) are from urban area had positive attitude towards foot care when compared to rural. According to the practice towards foot care, more number of subjects 20(66.66%) are from urban area had adequate practice towards foot care when compared to rural area.

Conclusion: The major findings revealed that the subjects in urban area have adequate knowledge, attitude and practice towards foot care than the subjects in rural area.

Keywords: Foot Care; Diabetic; Attitude and Practice.

Introduction

The human foot is a strong and complex mechanical structure with multiple movable parts and walks about hundred and ten thousand miles-three to four times around the world in a lifetime. Diabetic mellitus is a metabolic disorder with heterogeneous aetiologies which is characterized by chronic hyperglycaemic and disturbances of carbohydrate, fat, and protein metabolism resulting from defects

in insulin secretion, insulin action or both. The long term relatively specific effects of diabetes include development of retinopathy, neuropathy and nephropathy. People with diabetes are also at increased risk of cardiac, peripheral, arterial and cerebrovascular diseases -WHO (2011)

Diabetic foot ulcer is a result of micro vascular and neuropathic complication in diabetes mellitus. It can lead to nerve damage in the feet and legs resulting in the loss of sensation. Any trauma or injury may not be felt and can even lead to serious problems such as ulcerations. Diabetic foot ulcers approximately develop in 50% of people with diabetes. 80% of lower limb amputation in diabetic patient is preceded by the development of foot ulcers (WHO).

The global diabetes prevalence in 2019 is estimated to be 9.3% (463 million people), rising to 10.2% (578 million) by 2030 and 10.9% (700 million) by 2045. The prevalence is higher in urban (10.8%) than rural (7.2%) areas.

Knowledge and skills acquired by patients have a significant impact on their therapeutic outcomes. Education is particularly important in chronic patients including patients with diabetic mellitus. The patients come to surgery very late with diabetic foot syndrome, and this leads serious consequences, for example sepsis or amputation of the lower extremity.

Statement of the Problem

A comparative study to assess the level of knowledge, attitude, and practice between urban and rural people towards foot care among patients with diabetic mellitus in selected areas of Puducherry.

Objectives

- To assess the level of knowledge, attitude and practice on foot care in urban and rural areas.
- To compare the knowledge, attitude and practice towards foot care between rural and urban people.
- To create awareness among the public regarding foot care.

Materials and Methods

- The quantitative research approach was followed to conduct the study. A descriptive research design was used to assess the knowledge, attitude and practice of diabetic patient on foot care. The study was conducted in selected urban (Lawspet) and rural (Sellipet) area in Puducherry. Totally 60 samples were selected (urban 30 and rural 30) using purposive sampling technique.
- After self introduction, the purpose of the study was explained to the subjects and requested their willingness and co-operation to participate in this study. The demographic data was collected and the level of knowledge, attitude and practice towards foot care was assessed from the subjects with the help of structured questionnaire. It took 20 to 30 minutes to collect the data from each subject.

Results and Discussion

Demographic Data of the Subjects:

Urban: The demographic data reveals that out of 30 subjects, 37% of them were in the age group of 50 to 70, 60% of them were male, 53% of them were illiterate, 63% of them were easy workers, 63% of them had family income less than 5000, 73% of them were married, 47% of them had the habit of smoking, 73% of them were non vegetarian, 53% of them had no history of diabetic mellitus and 40% of them had diabetic mellitus for a duration of 2 to 5 years.

Rural: The demographic data reveals that out of 30 subjects, 43% of them were in the age group of 50 to 70, 53% of them were female, 21% of them were illiterate, 37% of them were house hold workers, 73% of them had family income less than 5000, 67% of them were married, 40% of them had the habit of smoking, 80% of them were non vegetarian, 63% of them had no history of diabetic mellitus and 50% of them had diabetic mellitus for a duration of less than 5 years.

Table 1: Level of knowledge of the subjects in rural and urban areas. N=60

Variable	Urban (30)		Rural (30)	
	N	%	N	%
Adequate knowledge	10	33.33	5	16.66
Moderate knowledge	17	56.66	15	50
Inadequate knowledge	3	10	10	33.33

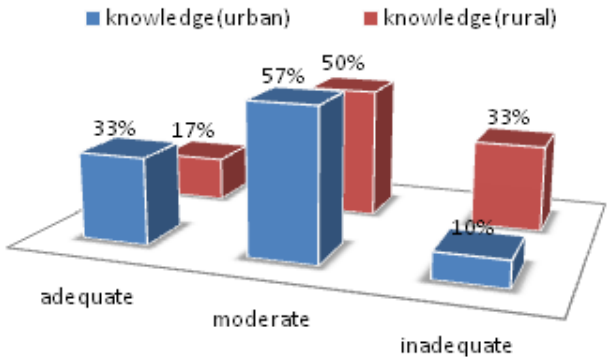

Figure 1: Distribution of the subjects by their knowledge.

According to the knowledge on foot care, more number of subjects 10(33.33%) from urban area had adequate knowledge towards foot care when compared to the rural as revealed by table 1.

Table 2: Level of attitude of the subjects in rural and urban areas.

Variable	Urban (30)		Rural (30)	
	N	%	N	%
Positive attitude	22	73.33	13	43.33
Negative attitude	8	26.66	17	56.66

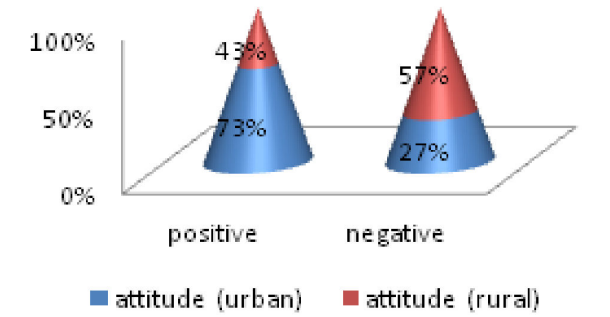

Figure 2: Distribution of the subjects by their attitude.

According to the attitude towards foot care, more number of subjects 22 (73.33%) are from urban area had positive attitude towards foot care when compared to rural as revealed by table 2.

Table 3: Level of practice of the subjects in rural and urban areas.

Variable	Urban (30)		Rural (30)	
	f	%	f	%
Adequate practice	20	66.66	14	46.66
Inadequate practice	10	33.33	16	53.33

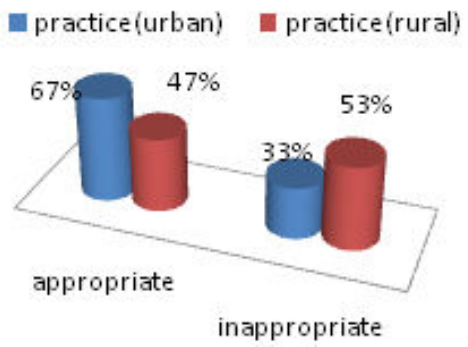

Figure 3: Distribution of the subjects by their practice.

According to the practice towards foot care, more number of subjects 20(66.66%) are from urban area had adequate practice towards foot care when compared to rural as revealed by table 3.

Conclusion

The study results show that urban people have adequate knowledge, attitude and appropriate practices towards foot care when compared with the rural people. Researchers provided health education o the public through flip chart and created awareness regarding foot care mong the public.

The major findings revealed that, it was crystal clear that the subjects in urban area have adequate knowledge, attitude and practice towards foot care than the subjects in rural area.

Recommendations

- This study may be replicated on larger samples.
- The study can be done by using experimental designs.
- The same study can be conducted for a longer duration.
- The experimental study can be done by pre-test and post-test method.
- Similar study can be done over rural and urban areas separately.

References

1. Bose A. Gasts et al (1997) 'medical surgical nursing' ; New Delhi, Jaypee Brothers publication

2. Juicy M.black et al (1993), Luckmann and Sorensen text book of medical surgical nursing (4th edition) Philadelphia;w,b, Saunders company.
3. Debra dally et al (1999), 'manual of medical surgical nursing' (1st edition) London little brown and company
4. Louis Mosby publication. Linda et al (1999)' understanding medical surgical nursing' (1st edition) Philadelphia. F.A davis company
5. Levim M: 'prevention of diabetic foot ulcer'. (1998)
6. Ahroni JH: 'teaching foot care creatively and successfully'. The diabetic educator 19(4)- 1993
7. Batista F, pinzur M, monteriro A,taira R, 'education for diabetic foot ' Einstein 2009
8. World health organization regional officer for south east asia , SEAR new delhi 2002
9. Diagnosis and treatment of diabetic foot infection ' Lipsky BA, Berebdt AR, Deery HG embil JM, joseph WS, 2004 oct 1; 39(7)
10. Abdulah M,AL-Wahbi.' Diabetic foot education program on lower limb amputation rate', vascular health and risk management 2010.