THE KNOWLEDGE REGARDING FOOT CARE AMONG THE DIABETES PATIENTS

Mr. Kailash Chandra Saini* I Dr. Rajendra Prasad Sharma**

*Associate Professor, Apex University, Jaipur, Rajasthan, India.

**Associate Professor, Mahatma Gandhi Nursing College, Jaipur, Rajasthan, India.

DOI: <http://doi.org/10.47211/idcij.2021.v08i03.013>

ABSTRACT

Diabetes Mellitus is recognized as one of the leading causes of death & disability worldwide. India is in leading position with largest number of Diabetes cases. The physical, social & economic factors involved in the occurrence & management of diabetes mellitus. Besides morbidities & increased health care expenditures, diabetes is related to many catastrophic life-threatening complications such as neuropathy [24.6%], coronary heart disease [23.6%], renal disease [21.1%], retinopathy [16.6%], foot ulcers [5.5%], stroke. Similarly, body fat percentage, greater than 25% in males & 30% in females, waist circumference more than 80 cm in females & 90 cm in males is associated with increased of diabetes in Indian population.

Key Words: Gestational diabetes, premature disability and death

ABOUT AUTHORS:

Author Mr. Kailash Chandra Saini is working as Associate Professor, Apex University, Jaipur, Rajasthan, India. He has attended various webinars, seminars and conferences.

Author Dr. Rajendra Prasad Sharma is working as Associate Professor at Mahatma Gandhi Nursing College Jaipur, Rajasthan, India. He is a Research Guide for PG and Ph.D. Scholar. He has Presented Papers at Various Seminars and Conferences.

INTRODUCTION

Diabetes is a chronic disease that occurs when the pancreas does not produce enough insulin, or alternatively, when the body cannot effectively use the insulin it produces. People with impaired glucose tolerance or impaired fasting glucose are at high risk of progressing to type 2 diabetes, although this is not inevitable.

Type 1 diabetes is characterized by a lack of insulin production in the body (Without daily administration of insulin). Type 2 diabetes results from the body's ineffective use of insulin. Type 2 diabetes comprises 90% of people with diabetes around the world, and is largely the result of excess body weight and physical inactivity. This type of diabetes was seen only in adults but it is now also occurring in obese children. Gestational diabetes is hyperglycemia which is first recognized during pregnancy. Gestational diabetes is most often diagnosed through prenatal screening, rather than reported symptoms.

Diabetes is one of the most frequently occurring chronic diseases in the world affecting nearly 15-20% of the population (World Health Organization, 2016). Research studies have shown that the progress of diabetes is also associated with a high risk of developing vascular, renal, retinal and neuropathy complications leading to premature disability and death.

Type 2 diabetes is the most common form of diabetes, and affects 85 to 90 per cent of all people with diabetes. While it usually affects mature adults, younger people are also now being diagnosed in greater numbers, as rates of obesity and people being overweight High blood glucose levels over time can cause damage to various parts of the body. These are referred to as diabetes complications.

The diabetic patient should inspect the feet daily for cuts, blisters, redness, and swelling or nail problem. Use a magnifying hand mirror to look at the bottom of the feet. The person with diabetes should do the foot the examination daily. Uses a water-based moisturizer every day to prevent dry skin and cracking. Always cut the nail with a safety clipper, cut them straight and never too short. Diabetic patient should wear comfortable shoes to be sure, one can concern with podiatrist (foot doctor).

The diabetic patient should do the regular exercise to improve the bone and joint health of feet, improve circulation. The diabetic patient should avoid the smoking, because tobacco damages the blood vessels leads to poor circulation.

For controlling the diabetes, patient should take therapeutic diet, medications, check the blood sugar level regularly, exercising regularly and maintain the good communication with the physician.

OBJECTIVES OF THE STUDY

- 1 To assess the level of knowledge regarding Diabetic foot care among the diabetic patient.
- 2 To develop and validate an information booklet on Diabetic foot care
- 3 To find out the association between knowledge scores and selected demographic variables i.e. age, gender, qualification, duration of illness and occupation.

ASSUMPTIONS

1. Diabetic patient may have inadequate knowledge about Diabetic foot care.
2. Diabetic patient knowledge regarding diabetic foot care may vary with their selected demographic variables.

HYPOTHESIS

- H_1 – There will be significant association between knowledge on diabetic foot care among diabetic patient with their selected demographic variables.

DELIMITATIONS

- The study is delimited only to diabetes patient in selected hospital.
- Only knowledge regarding foot care is assessed

RESEARCH METHODOLOGY

A research methodology defines what the activity of research is; how to proceed, how to measure progress & what constitute success. The methodological paves crucial implications for validity & credibility of the study findings. Methodology of research indicates the general pattern for organizing the procedure for the empirical study together with the method of obtaining valid & reliable data for an investigation.

Fig: 1 Schematic Representation of Research methodology

ANALYSIS AND INTERPRETATION

Analysis is the process of categorizing, ordering, manipulating and summarizing the data to obtain answers to research questions. The purpose of analysis is to reduce data to intelligible and interpretable from the relations of research problems can be studied and tested.

SECTION I ANALYSIS OF DEMOGRAPHIC DATA

Table -1. It deals with the analysis of the demographic data of the samples N=100

Sr. No.	Demographical data	Frequency	Percentage
1	AGE (IN YEARS)		
	20-30 years	13	13.0
	31-40 years	17	17.0
	41-50 years	48	48.0
	Above 50	22	22.0
2	Gender		
	Male	58	58.0
	Female	42	42.0
3	EDUCATION		
	Illiterate	14	14.0
	Primary	16	16.0
	Higher Secondary	5	5.0
	Graduate	44	44.0
	Post Graduate	21	21.0
4	Family income		
	5000-10000 Rs/month	12	12.0
	10001-15000 Rs/month	17	17.0
	15001-20000 Rs/month	45	45.0
	Above 20000 Rs/month	26	26.0
5	Religion		
	Hindu	65	65.0
	Muslim	30	30.0
	Christian-	3	3.0
	Others (Specify)	2	2.0
6	Marital Status		
	Single	18	18.0
	Married	62	62.0
	Divorced	5	5.0
	Separated	15	15.0
7	Occupation		
	Labour	21	21.0
	Government Services	41	41.0
	Self-Work/ Private Service	15	15.0
	Other	23	23.0
8	Diabetic Foot care Awareness Programme		
	Yes	20	20.0
	No	80	80.0
	If, yes -20		
	New Papers	9	45.0
	Conference/Seminar	8	40.0
	Television	3	15.0
	Radio	0	0

Sr. No.	Demographical data	Frequency	Percentage
9	Period of Diabetic		
	Less than 10 years	46	46.0
	More than 10 years	54	54.0

SECTION-II-DESCRIPTION AND ANALYSIS OF STRUCTURED KNOWLEDGE QUESTIONNAIRE REGARDING DIABETIC FOOT CARE

This section deals with the analysis and interpretation of the data related to knowledge of diabetic foot care. This helps in identifying the deficiencies in knowledge and to decide the priority needs of the diabetic foot care.

Knowledge scores of diabetic foot care were obtained by administering a structured knowledge questionnaire.

(a) FREQUENCY AND PERCENTAGE DISTRIBUTION OF KNOWLEDGE SCORE REGARDING DIABETIC FOOT CARE.

Table-2.1: Frequency and percentage distribution of knowledge score regarding diabetic foot care.

N=100

S .no	Level of Knowledge	F	%
1	Inadequate	55	55.0
2	Moderate	25	25.0
3	Adequate	20	20.0
		100	100.0

(b) DESCRIPTION OF ASPECT WISE ANALYSIS OF KNOWLEDGE REGARDING DIABETIC FOOT CARE.

Table 2.2 Aspect wise analysis of knowledge regarding diabetic foot care

Aspects of Knowledge	No. Of questions	Mean score	Standard Deviation
Items on knowledge regarding di and diabetic foot	12	6.14	1.61
Items on knowledge regarding diabetic foot care	18	7.51	1.87
Total knowledge score regarding diabetic foot care	30	13.65	3.48

SECTION III ANALYSIS OF DATA TO FIND AN ASSOCIATION BETWEEN KNOWLEDGE SCORE OF THE DIABETIC FOOT CARE WITH THEIR DEMOGRAPHIC VARIABLES [AGE, GENDER, MARITAL STATUS, RELIGION, EDUCATION, OCCUPATION, INCOME, SOURCE OF INFORMATION, DURATION OF DIABETES]

This section deals with an association between knowledge score of the diabetic foot care with their demographic variables. It was associated by using chi square test.

Table 3: Association between knowledge score of the diabetic foot care with their demographic variable

N=100									
S. No.	Demographic variables	F	Poor	Average	Good	Chi. square	d.f.	Table value	Remark
1	AGE (IN YEARS)								
	20-30 years	13	8	1	4	9.455	6	12.591	NS
			61.5%	7.7%	30.0%				
	31-40 years	17	11	4	2				
			64.7%	23.5%	11.0%				
	41-50 years	48	28	14	6				
			58.3%	29.2%	12.0%				
	Above 50	22	8	6	8				
2	GENDER								
	Male	58	28	17	13	2.564	2	5.278	NS
			48.3%	29.3%	22.0%				
	Female	42	27	8	7				
			64.3%	19.0%	16.0%				
3	EDUCATION								
	Illiterate	14	12	0	2	17.27	8	.027	Sig
			85.7%	0.0%	14.0%				
	Primary	16	9	6	1				
			56.3%	37.5%	6.3%				
	Higher Secondary	5	3	1	1				
			60.0%	20.0%	20.0%				
	Graduate	44	20	16	8				
			45.5%	36.4%	18.0%				
	Post Graduate	21	11	2	8				
			52.4%	9.5%	38.0%				
4	FAMILY INCOME								
	5000-10000Rs/month	12	12	0	0	13.045	6	12.591	Sig
			100.0%	0.0%	0.0%				
	10001-15000 P.M	17	10	3	4				
			58.8%	17.6%	23.0%				
	15001-20000 P.M.	45	22	14	9				
			48.9%	31.1%	20.0%				
	More than 20001 P.M.	26	11	8	7				

5	RELIGION								
	Hindu-	65	33	18	14	3.541	6	12.591	NS
			50.8%	27.7%	21.1%				
	Muslim	30	18	7	5				
			60.0%	23.3%	16.1%				
	Christian	3	2	0	1				
			66.7%	0.0%	33.1%				
	Others (Specify)	2	2	0	0				
			100.0%	0.0%	0.0%				
6	MARITAL STATUS								
	Single	18	15	3	0	8.777	6	12.591	NS
			83.3%	16.7%	0.0%				
	Married	62	29	17	16				
			46.8%	27.4%	25.1%				
	Divorced	5	3	1	1				
			60.0%	20.0%	20.1%				
	Separated	15	8	4	3				
			53.3%	26.7%	20.1%				
7	OCCUPATION								
	Labour	21	17	3	1	35.202	6	12.591	Sig
			81.0%	14.3%	4.8%				
	Government Services	41	30	8	3				
			73.2%	19.5%	7.3%				
	Self-Work/Private Service	15	6	4	5				
			40.0%	26.7%	33.1%				
	Other	23	2	10	11				
			8.7%	43.5%	47.1%				
8	DIABETIC FOOT CARE AWARENESS PROGRAMME								
	Yes	20	11	6	3	.563 ^a	2	5.991	NS
			55.0%	30.0%	15.1%				
	No	80	44	19	17				

8a	If, yes								
	New Papers	9	5	2	2	4.444 ^a	4	7.448	NS
			55.6%	22.2%	22.2%				
	Conference/Seminar	8	4	4	0				
			50.0%	50.0%	0.0%				
	Television	3	2	0	1				
			66.7%	0.0%	33.3%				
	Radio								
9	PERIOD OF DIABETIC								
	Less than 10 years	45	30	6	9	6.479 ^a	2	5.991	Sig
			66.7%	13.3%	20.0%				
	More than 10 years	55	25	19	11				
			45.5%	34.5%	20.0%				

CONCLUSION

The purpose of the study was to assess the knowledge Regarding Foot Care among the Diabetes Patient in selected Hospitals at Jaipur in view to develop information booklet. The whole study was cost effective, simple & carried out in an acceptable way to assess the level of knowledge. The result shows that the diabetic foot patients had moderately adequate knowledge regarding diabetic foot care, hence the researcher felt the need to develop an information booklet to enhance their knowledge in related area.

REFERENCES

1. G.N.Prabakar, "Text Book of Community health for Nurses", 1st Edition, Delhi, 2004. PP 205-207.
2. Porth Matterson Carol, "Essentials of Pathophysiology Concepts of Altered Health Status", 6th Edition; Lippincott Williams and Wilkins Publishers, Philadelphia, (2004): 191-230 PP.
3. Dr.Baride J.P, Kulkarni A.P, "Text book of medicine" 3rd Edition, Vora Medical Publications, Mumbai, 2006: PP 497
4. World health organization, "Preventing and Managing the Global Epidemic", Report of a WHO Consultation on obesity; Geneva, Switzerland (1997)
5. Ghai .O.P Gupta, "Text book of Preventive and Social Medicines", 2nd Edition; CBS Publishers, New Delhi, (2002); 456-463.