

Evaluation of Nurses' Knowledge Regards Diabetic Foot Care Management at Teaching Hospital in Al- Nasiriya city

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Abstract

Aimed this study to be evaluate the Nurse's Knowledge for Patients With Diabetic Foot Care Management at Teaching Hospital in Nasiriyah City and found the relationship between Nurse's Knowledge for Patients With Diabetic Foot Care Management and Sociodemographic Characteristics among nurses working in the Teaching Hospital in Nasiriyah city. The study Initiated from (December 2020 to February 2021), The research design was employed in this study a descriptive design. The sampling of this study was the purposive sample by 100 nurses working in governmental teaching hospital in province Nasiriyah city, Iraq. The results of data analysis was employed by Statistical Package for Social Science (SPSS version 25) that found the majority of the study sample a moderate level of knowledge ., as well there was significant difference between Knowledge level and educational Qualification of nurse's toward diabetic foot management, so there was no relationship between, age ,gender ,and social status with knowledge .The researchers found that Knowledge has a great impact on nurses in terms of their performance in providing services to patients, and they are recommended to increase and develop knowledge.

Keywords--- Nurses' Knowledge , Diabetic Foot.

1.Introduction

Diabetes mellitus of among the chronic diseases, the increase mortality rate every year As a result, it will worsen the lives of people with this disease due to the increase in the cost of treatment. Therefore, it is necessary for health care providers for diabetes patients Attention and

quality health care This is because the lack of control and control in the increase in blood sugar level leads to many and dangerous complications, including nephropathy, retinopathy, neuropathy, coronary artery disease and peripheral vascular disease .One of the most common complications is diabetic foot , where you lose pain and temperature as a result of neuropathy and other complications of the of diabetes is Peripheral nervous system, vascular Peripheral disease, limited movement of the joints and repeated shocks from the distribution of abnormal load on the foot, and this will lead to one of the main problems that force diabetic patients to enter hospitals and frequent hospitals, which is diabetic foot, which is one of the most common complications of diabetes that are feared to occur because it leads to amputation in particular(1).

Therefore, risk factors must be controlled. All diabetic patients must be examined at least once every year. If one of the potential factors for diabetic foot is found, the examination must be repeated from 3-6 Educate patients and caregivers It is expected that the prevalence of diabetes in all parts of the world will increase from 2.8% in 2000 to 4.4% in 2030, which means that 366 million people will be affected through this study. An assessment of the responsible nurses was conducted. About diabetic foot cases in order to know their practices and knowledge about diabetic foot and provide them with sufficient and good information in order to perform their work well and provide good health care to patients(2).

2. Methodology

2.1 Ethical consideration

Permission has been obtained from Thi-Qar health directorate to ensure their acceptance , cooperation and to arrange for the administrations of teaching hospital to do study as well nurses who have agreed to participate in the study .

2.2 Design and setting of study

A Descriptive study which related to evaluate the Nurse's Knowledge for Patients with Diabetic Foot Care Management Working at Teaching Hospitals in Thi-Qar province, Iraq. Initiated from (September 15th , 2020 – February 15th , 2021). This study was conducted through a purposive sample (100) nurses who were working in teaching hospitals through instrument of self-report.

2.3 Instrument of study

The researcher uses an instrument consist two axes demographic information data and the Nurses 'knowledge level model for diabetic foot management scale .

2.4 Statistical Analysis

The data of the present study is analyzed through using the Statistical Package of Social Sciences (SPSS) version (25). The following statistical data analysis approaches were used in order to analyze data and assess the results of the study. The researchers used descriptive and inferential data analysis to obtain results.

3.Resluts and discussion

Table (1) shows that the most of the study sample was female (77%) and age was ranged (20–25) years, which represents (43%), Results also show that (58%) of the sample were married .

The study in United States was showed the findings that 72.6% were females(3). While another study was indicated the majority of sample ageless 30 years old (4) and other supported study which findings revealed 85% of sample was female. As regarding the job description , the results reported (37%) of they were nursing school graduated. As well the present study agreed with a correlation deceptive study in England which study indicated that majority of nurses have nursing school graduated(5). Regarding years of experience in nursing field , this study found that the majority of rang years(1-5) was represented of study (69.%). In cross-sectional study of Bus he found that 55% of nurses had (1-5) years' experience in nursing .

Table (2) Shows the mean of the knowledge level was (2.33), the majority of the study sample a moderate level of knowledge. This results was agreed with study in Istanbul was found in their data analysis indicated that a moderate level of knowledge among nursing(6) . Table (3) revealed that there is no significant difference between knowledge levels and age . (P-value = 0.588) at the ($p \leq 0.05$) level of significance .

As well there is no significant difference between knowledge levels and gender.(P-value = 0.712) at the ($p \leq 0.05$) level of significance. there is significant difference between

knowledge levels and educational qualification group of nurse's toward diabetic foot management. (P-value = 0.008) at the ($p \leq 0.05$) level of significance. there is no significant difference between knowledge levels and social status. (P-value = 0.284) at the ($p \leq 0.05$) level of significance.

A cross-sectional Study in Turkey indicated that no significant difference between knowledge levels and age in p-value (0.33) and there was a significant difference in(p-value0.284) related to educational qualification with knowledge level (7). and there was no a significant difference in(p-value0.101) related to number of years of work experience with burnout level . In contrast other study cited with this study found that experience years in nursing were negatively correlated with knowledge level (8).

4. Conclusions

The results of this study showed that Worldwide, complications of diabetic foot are one of the major health problems that must be focused on and efforts should be made to reduce their risks. The nurses 'knowledge of diabetic foot management was moderate level, and it was found that there is a relationship between knowledge and education qualification .When evaluating a number of nurses about their knowledge about managing diabetic foot, this achieved for the nurses the focus and knowledge of some things that they were ignorant of and improved their performance in their field of work.

5. Recommendation

The researchers recommended the Brochures and posters about diabetic foot and how to manage it should be submitted by the Ministry of Health and Environment to increase awareness of nurses working in hospitals. Spread awareness among nurses about the dangers of diabetic foot and what are the complications through educational sessions and continuing education lectures.

Table (1): Distribution of the (100) Nurses According to the Demographical Characteristics:

Basic Information	Groups	Frequency	Percent
Age groups	20 – 25	43	43.0

	26 – 30	32	32.0
	31 – 35	6	6.0
	36 – 40	9	9.0
	41 and more*	10	10.0
	$\bar{x} \pm S.D.$	21.1 $\pm$ 1.325	
Gender	Male	23	33.0
	Female	77	77.0
Social status	Single	39	39.0
	Married	58	58.0
	Widower	2	2.0
	Absolute	1	1.0
Nursing qualification	Nursing School	37	37.0
	Diploma	32	32.0
	Bachelors	31	31.0
	Postgraduate	0	0.00
Years of Nursing Service	1-5	69	69.0
	6-10	15	15.0
	11-15	4	4.0
	16-20	5	5.0
	21 and more	7	7.0
	Total	100	100.0

Freq.=Frequencies, %=Percentages

Table (2): Evaluation of Nurse`s Knowledge toward Risk Factors for Diabetic Foot Study Group.

No.	Items Related To Nurses' knowledge	Statistics		
		MS	SD	Eval.
1	Poor glycemic control	2.21	0.946	M
2	An abnormal feeling of cold, pain, burning and tingling in the foot	2.05	0.968	M
3	Neuropathic foot (loss of sensory-motor function)	1.88	0.956	M
4	Peripheral vascular disease	1.97	0.969	M
5	Inadequate foot care and lack of hygiene	1.92	0.981	M
6	Presence of foot swelling	1.93	0.987	M
7	Presence of foot callus (thick layers of skin that appear	1.15	0.435	L

	when your skin tries to protect itself from friction and pressure)			
8	Dry and cracked foot skin	1.92	0.971	M
9	Those with diabetic foot history	1.84	0.972	M
10	Infection in the foot or both (redness, increased temperature in the foot)	1.80	0.921	M

M.S. =Mean of score , SD. = Standard Deviation , L= Low, M = Moderate, H= High

Table (3): Distribution and Association Between Nurse's Knowledge for Patients with Diabetic Foot Care Management and Demographic data of study.

Demographic data	Rating	F.	%	Knowledge level		p-value
				Mean	S.D.	
Gender	Male	23	23.0	1.816	0.112	F = 0.137 d.f. = 99 P = 0.712
	Female	77	77.0	1.803	0.172	
Age/ year	20-25	43	43.0	1.827	0.152	F = 0.708 d.f. = 99 P = 0.588
	26-30	32	32.0	1.825	0.105	
	31-35	6	6.0	1.846	0.173	
	36-40	9	9.0	1.765	0.148	
	41 and more	10	10.0	1.669	0.275	
Number of years of work experience	1-5	69	69.0	1.825	0.141	F = 1.997 d.f. = 99 P = 0.101
	6-10	15	15.0	1.774	0.129	
	11-15	4	4.0	1.807	0.993	
	16-20	5	5.0	1.846	0.105	
	21 and more	7	7.0	1.659	0.344	
Social status	single	39	39.0	1.842	0.123	F = 1.284 d.f. = 99 P = 0.284
	Married	58	58.0	1.779	0.181	
	Widower	2	2.0	1.865	0.135	
	Absolute	1	1.0	1.846	0.000	
Nurses Educational	Nursing	37	37.0	1.777	0.208	

Qualification	school					F = 2.478 d.f. = 99 P = 0.008
	Diploma	32	32.0	1.792	0.130	
	Bachelors	31	31.0	1.856	0.110	

F = Fisher test, d.f. = degree of freedom, P = probability value, , NS : Non Significant at $P \geq 0.05$, S : Significant at $P < 0.05$.

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