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Effect of Foot Care Training Program on Knowledge and Practices of Nurses Caring for Diabetic Geriatric Patients

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1.ABSTRACT

Background: Diabetic foot is an essential cause of morbidity and mortality in diabetic geriatric patients. Diabetic foot ulcer prevention is highly recommended for diabetic elderly patients. So it is important for gerontological nurses to be proficient in recognizing, and managing this problem early to decrease its burden. **Aim**: to assess the effect of foot care training program on knowledge and practices of nurses caring for diabetic geriatric patients **Method:** A quasi-experimental pre/ post research design was utilized. A convenient sample of 50 nurses who were available during the period of data collection and provided direct care for geriatric patients. **Setting:** The study was carried out at Diabetic & endocrinology unit, Diabetic intensive care unit and diabetic outpatient clinic in the Specialized Medical Hospital that affiliated to Mansoura University. **Tools of data collection**: Three tools were used: demographic structured sheet, foot care knowledge assessment sheet, and observational check list for nurse's practices regarding foot care. **Results** Training program of foot care had a significant statistical effect on increasing knowledge and practices of the nurses after program implementation. **Conclusion:** The foot care training program proved to be efficient in improving nurses' knowledge and practices of foot care of diabetic elderly. **Recommendations:** The developed foot care booklet should be distributed to nurses in other hospital settings caring for diabetic geriatric patients to increase their knowledge and practices.

Keywords: *Diabetic Geriatric Patients, Foot Care, Knowledge, Nurses, Practices, Training Program*

2.Introduction

Diabetes Mellitus is becoming an alarming public health problem in developed and even in developing countries especially in old age. It is the third most common non communicable disease among general population; it is one of the most frequent disorders affecting the elderly **(Sharoni et al., 2018)**.Geriatric patients with uncontrolled diabetes experience many complications that lead to damage of large or small blood vessels. Those macro and micro angiopathies, which can be observed even in newly diagnosed patients, causing damage of the foot nerves and leg, and decreased the ability to feel injuries **(Gómez-Huelgas et al., 2018)**. The motor nerves that control the foot shape are also damaged, leading to deformities of the bony prominences such as the interphalangeal joints, tip of the toes, heel **(Rosyid, 2017)**. So diabetic geriatric patients are specially burdened by foot disease that caused by peripheral neuropathy, deformities of the foot and peripheral arterial disease. In addition to other risk factors that increase the burden as poor vision, abnormalities of gait, decreased mobility and associated comorbidities. All of these factors increase the risk of problems of diabetic foot which are the main cause of hospitalization and are also it leads to lower limb amputations in 50% of diabetic cases and even death if the appropriate care is not given **(Guerrero et al., 2020).**

The risk of amputations of lower-extremities can be decreased by prevention and management of diabetic-related foot complications (**Geraghty & LaPorta, 2019).** Appropriate daily foot care is a critical, low-cost, and effective option for prevention of diabetic foot ulcer (DFU). Daily foot care routines allow diabetic patients to notice abnormalities and injuries of foot earlier, so decrease or even avoid the risk of foot ulceration successfully ***(Bus et al., 2020).***

Diabetic education is the key for prevention. Nurses must seek out information based on evidence to improve the diabetic educational foundation. They must maintain a knowledge base that is accessible and precise to promote self-care among diabetic elderly. Improving foot care practices have been shown is the best efficient methods of minimizing diabetic foot complications. Therefore, gerontological nurses have a special

responsibility to seek out this information and incorporate it into their educational foundations ***(Ibrahim, 2017)***. Continuing medical education is an important for educating people with diabetes about examining their feet regularly and caring for them. This includes regular self-assessments to identify risks of foot ulceration. It also includes examination for Patients at high risk of this complication. This can reduce the likelihood of having an ulcerated lower extremity, which can decline the care cost and enhance patients' quality of life (**Ahmadi, Hannani & Sadati, 2019).**

2.1Study Aim:

The current study aimed to assess the effect of foot care training program on knowledge and practices of nurses caring for diabetic geriatric patients.

2.2Research hypotheses:

Knowledge and practices of nurses caring for diabetic geriatric patients will improve after foot care training program implementation.

3.Method

3.1Study Design:

Pre/post quasi-experimental design was used. It was designed around an intervention; usually, the main goal of the study is to estimate the extent to which an intervention affects a given outcome without randomization **(Handley, Lyles, McCulloch, & Cattamanchi, 2018).**

3.2Study Setting:

The study was conducted at diabetic & endocrinology unit, Diabetic intensive care unit and diabetic outpatient clinic in the specialized medical hospital, Mansoura University.

3.3Subjects:

A convenience sample of all nurses (50) who were available during the period of data collection that were willing to participate in the study and providing direct care for geriatric patients.

3.4Data collection tools:

Tool I: Demographic structured sheet: it was designed by researcher after reviewing literature. It was composed of nurse's age, sex, marital status, educational level, and attendance of diabetic foot care courses.

Tool II: Foot care knowledge assessment sheet: it was developed by the researcher after reviewing literature to assess knowledge of nurses about foot care as effects of diabetes on foot, definition, causes, signs and symptoms of diabetic foot. **Scoring system for Nurse's knowledge about diabetic foot care questionnaire:** The correct answer for each question gets a score of one grade, while wrong answer gets a score of zero. The total knowledge score was 80. It was computed and converted into percent.

The total knowledge score *(Waheida, Elshemy & Basal, 2015)*: -

- **Good knowledge:** Score of 60 or more (75% and more)
- **Fair knowledge:** Score of 48 to less than 60 (60% to less than 75%)
- **Poor knowledge:** Score less than 48 (Less than 60%)

Tool III: Observational check list for nurse's practices regarding foot care, it was developed by the researcher after reviewing the relevant literature to assess nurse's practices about foot care for diabetic geriatric patients as: regular assessment of foot, washing, dryness, feet inspection for: cuts, cracks, blisters, sores, and any signs of infection. **Scoring system for observational check list for nurse's practices regarding foot care:** Scores was estimated to evaluate nurses' level of performance for foot care; in which each step done correctly completely scored two grade and step done incompletely correct scored one, while zero was given for both false and not done. The total knowledge score was 40. It was computed and converted into percent.

The total practice score *(Waheida, Elshemy & Basal, 2015)*:-

- **Poor practice:** Less than 20 score = less than 50%.
- **Good practice:** Equal or more than 20 score =equal or more than 50%

3.5Validity of the tool

The research tools were checked by a jury of 9specialists of gerontological nursing and medical-surgical nursing field for the validity, feasibility, clarity, relevance and applicability, and necessary modifications were made.

3.6Reliability

These tools were tested by test of Cronbach's Alpha and proved to have sensitivity and a specificity of 81% and 89% respectively with an internal consistency of 0.87.

3.7Pilot Study

It was conducted on 10% of nurses (5), who met the inclusion criteria, and they were excluded from the study to test feasibility and clarity of the tools; and accordingly the needed modifications were done.

3.8Field work

Once obtaining the necessary approval, the researcher began collecting data from January 2021 to June 2021, and started data collection by introducing herself to the studied subjects and explaining the aim of the study and assured them that they would have no harm from this study. Then, the nurses were approached, informed of the study goals and asked to provide verbal informed consent.

Phase one: Assessment and Preparation: It was done by the researcher for each nurse individually to confirm that the nurses were eligible for the inclusion criteria using Tool I (Demographic structured questionnaire), Tool II (Nurse's knowledge about diabetic foot care questionnaire), and Tool III (Observational check list for nurse's practices regarding foot care) pretest.

Phase two: Implementation: based on the finding of assessment and reviewing of the pertinent literature the proposed program was designed and implemented on the study subjects. The content of program was covered in 4 sessions 2 educational sessions for providing knowledge about diabetic foot (definition, causes, signs, and complications), and 2 training sessions for foot care procedure over one month, one session per week, lasted 30 - 45 minutes and in a group of 3–5 nurses.

- **First educational session: -** introduction about diabetic foot; The researcher introduced herself at the beginning of this session then explained the aim of the training program and the teaching methods which will be used and this include simple introduction about diabetes mellitus, effects of diabetes on foot, and diabetic foot definition, causes, signs and symptoms, and complications.
- **Second educational session**; foot care for diabetic geriatric patients:- It was covered the following items ; importance of foot care, prevention of diabetic foot, types of shoes and socks recommended and instructions followed before and after wearing shoes for foot safety.
- **First training session**: It covered the following items; Preparation of the necessary equipment for foot care and identified the correct steps of foot examination.
- **Second training session**: Included items related to foot care procedure and care of foot problem.
- The booklet covering the components of program and provided to the study nurse to attract their attention, motivate them and enable home review and support for home practice.
- The nurse was informed that she could be contacted by telephone with the researcher at any time for guidance.
- **Phase three: Evaluation:** Reassessment of each study subject was done for two times. (Post I) done immediately post the program by tool II, III. The second evaluation (Post II) was done post month from the program implementation **(Waheida et al, 2015).**

3.9Ethical Considerations:

Ethical approval was obtained from the Faculty of Nursing, Mansoura University research ethics committee. Post explanation of study aim an official approval was gained from the administrative authority of Specialized Medical Hospital. Verbal consent was got from the participants' before the start of the study after explaining the study purpose. Each assessment sheet was coded and subjects' names will not appear on the sheets for the privacy and confidentiality.

3.10Data analysis:

Data were extracted from the interview questionnaire and computerized. The analysis was undertaken by SPSS (statistical package for social science) version 22.0. Numbers and percentages were used to represent qualitative data. Quantitative data are described using mean and standard deviation (SD). The Qui-square. test (X2) was utilized to compare qualitative variables. When p value ≤ 0.05 mean a significant level while p value > 0.05 shows non-significant findings.

4.Results

Table (1):-clarifies that the relation between total score of knowledge before, immediately after and one month post training program implementation and all demographic data of the subjects was not significant except place of work, as nurses working in diabetic outpatient clinic and diabetic ICU had a significant higher score of knowledge before training program than those working in diabetic and endocrinology unit (P= 0.009). Also, nurses having nursing bachelor education had a significant (P =0.001) increase in knowledge scores post training, than nurses with less education level.

Table (2):- shows that the relation between total score of practices and place of work was significant, as nurses working in diabetic outpatient clinic and diabetic ICU had a significant higher practice score than those working in diabetic and

endocrinology unit. Moreover, the relation between practice score and years of experiences was significant, as nurses who had experiences years 2- 5 years had a significant higher practice score than others. Furthermore, the relation between total practice score and both previous participation in training courses, level of education after the program was significant (P= 0.010, P= 0.046) respectively.

Table (3) reveals that, 90% of the nurses surveyed their knowledge were improved after program implementation, compared to the 8% of them before the program, this shows just how effective the training program was. Immediately after it finished, 90% of nurses surveyed learned well, while all others learned well one month later. (p<0.001).

Figure (1) shows that, the percentage of good practices among nurses increased from 14% to 100% before and one month after training programs of foot care. Additionally, the results showed that the program had a statistically effect on improving nurses' practices (p=0.001).

Figure (2) reveals that, there was positive moderate, significant correlation between total score of knowledge and total practice score of the nurses immediately after implementation of the program(r = 0.476, P<0.001).

Figure (3) clarifies that, there was positive moderate, significant correlation between total score of knowledge and practices scores of the nurses one month after the program (r = 0.472, P= 0.001).

Table (1): Relation between total score f knowledge of the studied nurses and their demographic data.

Characteristics	N	Total Knowledge score before training program (Mean + SD)	Post I total Knowledge score (Mean + SD)	Post II total Knowledge score (Mean + SD)
Age (years)				
20- <25	7	29.43 ± 8.87	58.28 ± 3.04	54.71 ± 5.02
25- < 30	17	26.89 ± 11.5	57.64 ± 3.02	52.47 ± 4.69
30- < 35	10	28.90 ± 7.94	56.10 ± 3.48	52.50 ± 5.25
35- 40	16	33.56 ± 10.6	58.44 ± 2.85	53.63 ± 4.51
Significance test		F=1.208 P = 0.318	F=1.303 P= 0.285	F=0.475 P= 0.701
Residence				
Rural	36	29.36 ± 10.40	57.50 ± 3.24	52.58 ± 4.98
Urban	14	30.86 ± 10.38	58.14 ± 2.74	54.64 ± 3.71
Significance test		t=0.457 P= 0.650	t=0.656 P =0.515	t=1.399 P= 0.168
Sex				
Males	3	33.67 ± 12.43	59.00 ± 3.61	57.67 ± 5861
Females	47	29.53 ± 10.16	57.60 ± 3.08	52.87 ± 4.56
Significance test		t=0.670 P = 0.506	t=0.759 P= 0.452	t=1.741,P 0.088
Marital status				
Single	6	29.33 ± 10.54	57.00 ± 3.03	54.17 ± 3.97
Widow	1	25.00 ± 00.00	57.00 ± 0.00	50.00 ± 0.00
Married	43	29.95 ± 10.50	57.79 ± 3.16	53.09 ± 4.87
Significance test		F=0.115 P =0.892	F=0.190 P= 0.827	F=0.356 P= 0.703

Table (1) cont: Relation between total score f knowledge of the studied nurses and their demographic data.

Characteristics	N	Total Knowledge score before training program (Mean + SD)	Post I total Knowledge score (Mean + SD)	Post II total Knowledge score (Mean + SD)
Level of education				
Nursing secondary school	17	31.29 ± 11.11	57.53 ± 3.41	50.12 ± 3.74
Nursing technical diploma	29	28.24 ± 10.02	57.48 ± 2.87	54.14 ± 4.34
Nursing Bachelor	4	34.50 ± 08.66	59.75 ± 3.30	59.00 ± 2.45
Significance test		F=0.922 P =0.405	F=0.974 P =0. 385	F=9.822 P =0.001
Experience years				
< one year	3	35.00 ± 12.17	56.67 ± 2.52	53.33 ± 5.03
2- 5 years	13	25.15 ± 08.12	58.15 ± 2.97	54.33 ± 5.40
> 5 years	34	31.09 ± 10.59	57.68 ± 3.23	52.74 ± 4.50
Significance test		F=2.051 P = 0.140	F=0.319 P =0.728	F=0.464 P =0.631
Place of work				
Diabetic outpatient clinic	23	31.26 ± 10.27	57.87 ± 3.17	53.22 ± 4.86
Diabetic & endocrinology unit	7	19.00 ± 05.39	56.43 ± 2.51	50.57 ± 4.79
DM ICU	20	31.85 ± 09.64	57.90 ± 3.23	54.00 ± 4.24
Significance test		F=5.240 P= 0.009	F=0.657 P =0.523	F=1.394 P= 0.258
Previous training courses				
Yes	14	34.14 ± 10.90	59.21 ± 2.91	56.64 ± 4.33
No	36	28.08 ± 09.70	57.08 ± 2.99	51.81 ± 4.18
Significance test		t=1.916 P = 0.061	t=2.279 P = 0.027	t=3.639 P= 0.001

Post I means immediately after the program Post II means one month after the program

Table (2): Relation between practices score of the studied nurses and their demographic data before, and after implementation of the program.

Characteristics	N	Total score of Practice before training program(Mean + SD)	Post I total Practice score (Mean + SD)	Post II total Practice score (Mean + SD)
Age (years)				
20- <25	7	13.00 ± 2.28	33.57 ± 2.30	32.86 ± 2.54
25- < 30	17	13.71 ± 5.28	33.67 ± 1.35	32.41 ± 2.21
30- < 35	10	12.50 ± 3.13	33.70 ± 1.34	32.10 ± 2.18
35- 40	16	13.44 ± 3.18	34.31 ± 1.40	32.75 ± 2.24
Significance test		F=0.171 P = 0.915	F=0.604 P=0.616	F=0.235 P = 0.871
Residence				
Rural	36	13.75 ± 4.44	33.75 ± 1.61	32.30 ± 2.29
Urban	14	12.07 ± 3.89	34.29 ± 1.14	33.07 ± 1.94
Significance test		t=1.239 P = 0.221	t=1.136 P= 0.262	t=1.105 P=0.275
Sex				
Males	3	15.33 ± 4.62	35.00 ± 1.73	34.67 ± 2.31
Females	47	13.15 ± 4.32	33.83 ± 1.48	32.38 ± 2.15
Significance test		t=0.846 P = 0.402	t=1.318 P= 0.194	t=1.776 P= 0.082

Post I means immediately after the program Post II means one month after the program

Table (2) cont: Relation between practices score of the studied nurses and their demographic data before, and after implementation of the program

Characteristics	N	Total score of Practice before training program (Mean + SD)	Post I total ractice score (Mean + SD)	Post II total Practice score(Mean + SD)
Marital status				
Single	6	12.67 ± 2.86	33.17 ± 2.40	32.17 ± 2.48
Widow	1	07.50 ± 0.00	32.50 ± 0.00	32.00 ± 0.00
Married	43	13.51 ± 4.45	34.05 ± 1.33	32.58 ± 2.22
Significance test		F=1.186 P =0.314	F=1.775 P =0.181	F=0.117 P= 0.890
Level of education				
Nursing secondary school	17	13.94 ± 4.84	33.88 ± 1.41	31.47 ± 2.29
Nursing technical diploma	29	12.45 ± 4.03	33.97 ± 1.35	33.00 ± 1.87
Nursing Bachelor	4	16.50 ± 2.38	33.50 ± 3.00	33.50 ± 3.00
Significance test		F=1.913 P= 0.159	F=0.165 P =0.849	F=3.285 P= 0.046
Experience years				
< one year	3	12.00 ± 2.65	34.67 ± 2.31	33.00 ± 3.46
2- 5 years	13	16.00 ± 5.64	33.46 ± 1.81	32.54 ± 2.44
> 5 years	34	12.35 ± 3.44	34.00 ± 1.30	32.47 ± 2.08
Significance test		F=3.897 P = 0.027	F=1.021 P= 0.368	F=0.077 P= 0.926
Place of work				
Diabetic outpatient clinic	23	13.13 ± 3.49	34.17 ± 1.40	32.52 ± 2.27
Diabetic and endocrinology unit	7	17.28 ± 5.02	33.14 ± 1.21	31.43 ± 1.99
DM ICU	20	12.05 ± 3.32	33.85 ± 1.66	32.90 ± 2.17
Significance test		F=4.350 P= 0.018	F=1.299 P= 0.282	F=1.161 P= 0.322
Previous training courses				
Yes	14	12.79 ± 2.99	34.36 ± 1.86	33.79 ± 1.67
No	36	13.47 ± 4.76	33.72 ± 1.36	32.03 ± 2.21
Significance test		t=0.619 P = 0.564	t=1.354 P = 0.182	t=2.685 P= 0.010

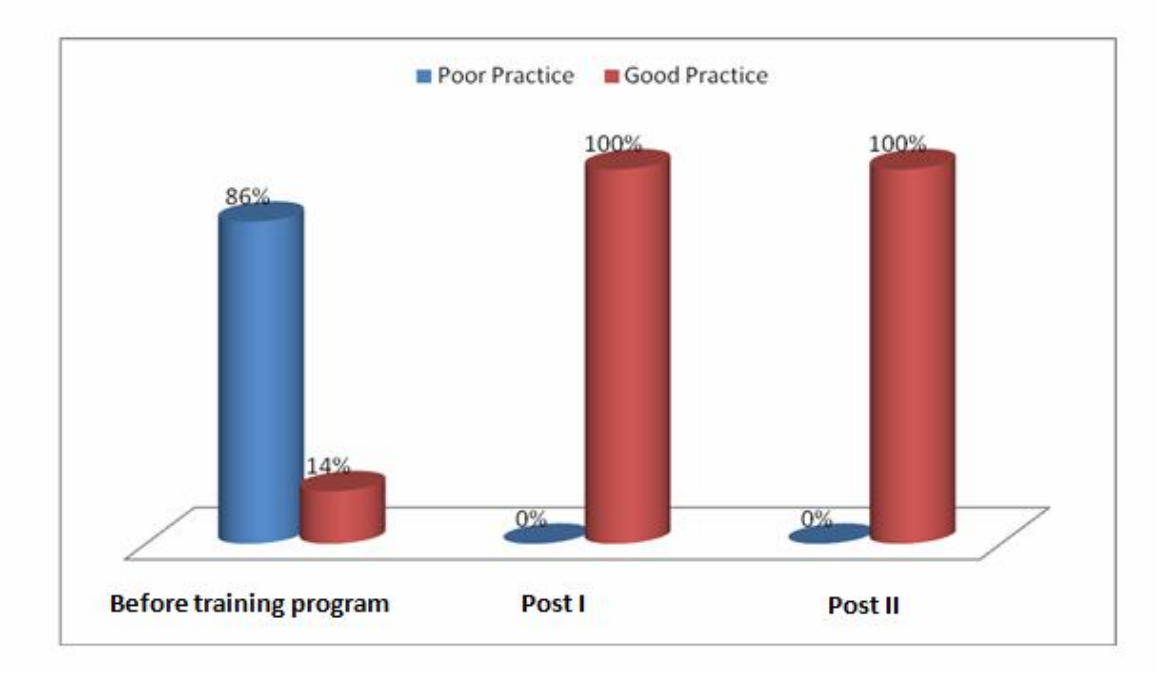
Table (3): Effect of foot care training program on knowledge of the studied nurses

Knowledge level	Before		Post I		Post II		Significant test (paired t- test)		
	N	%	N	%	N	%	P1	P2	P3
Poor knowledge	31	62	0	0	0	0	20.307 (<0.001)*	18.428 (<0.001)*	09.040 (<0.001)*
Fair knowledge	15	30	0	0	5	10			
Good knowledge	4	8	50	100	45	90			
Mean ± SD	29.78±10.31		57.68 ± 3.09		53.16± 4.72				

Post I means immediately after the program

Post II means one month after the program

Paired t- test (P2)= Comparing before and Post I



Post I means immediately after the program *Post II means one month after the program*

Figure (1): Level of Practice of the nurses before & immediately after and at one month after program

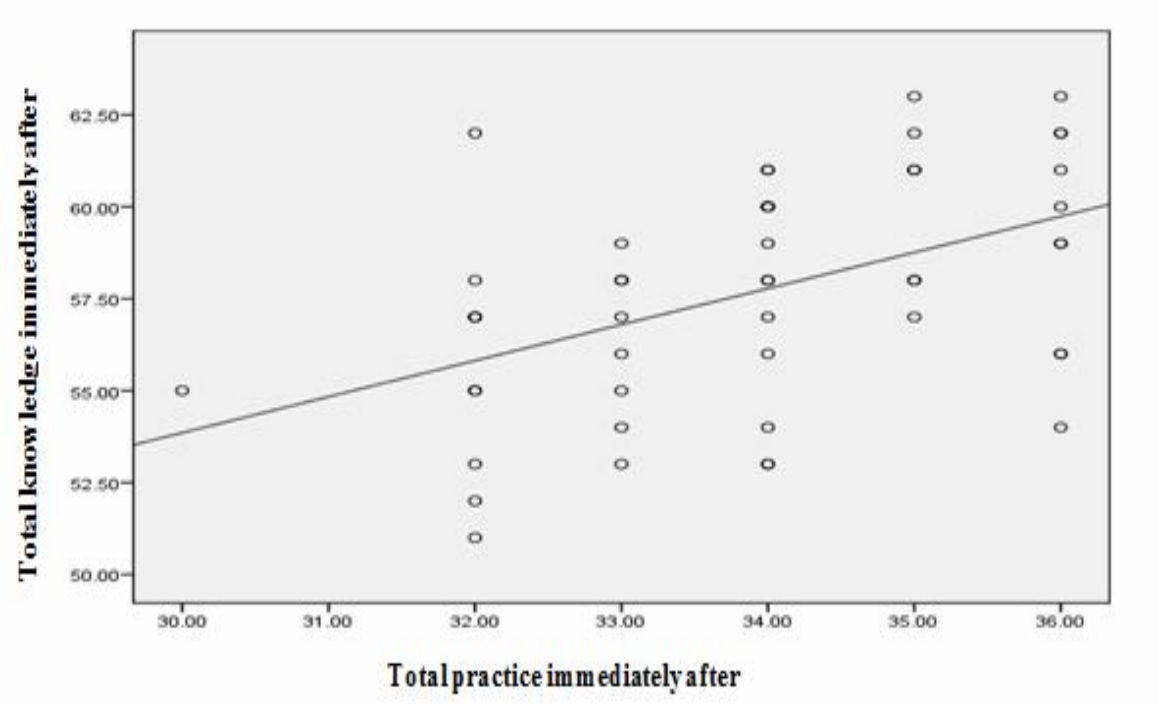


Figure (2):- Correlation between total score of knowledge and total practice score of the nurses immediately after the foot care training program

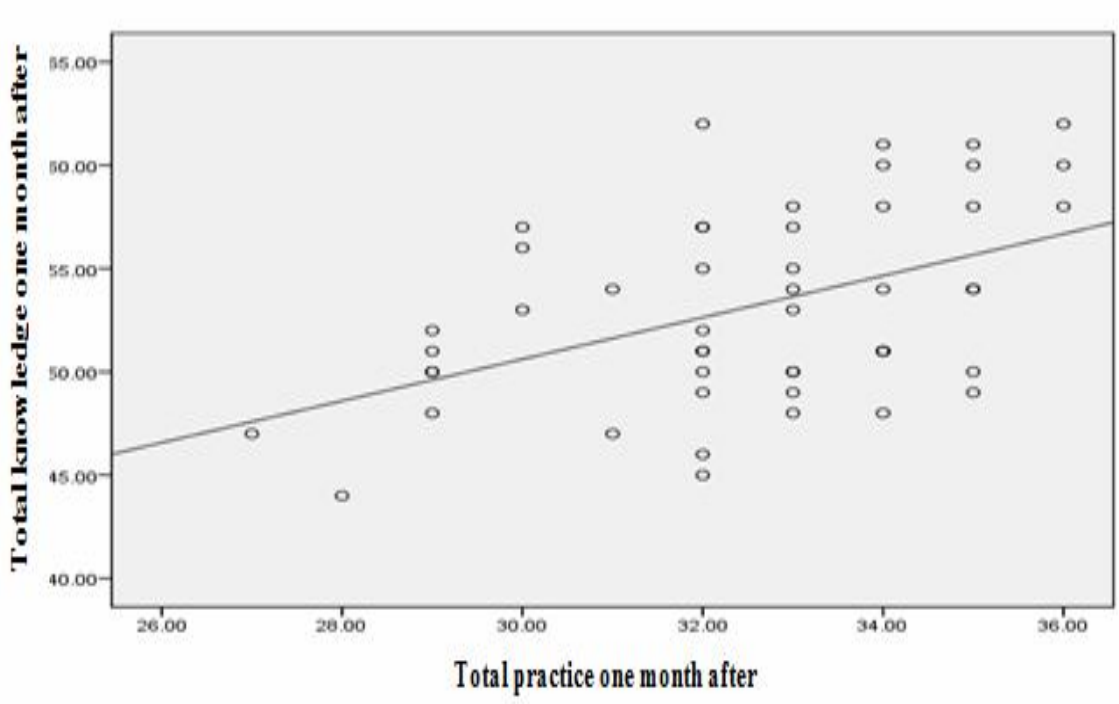


Figure (3): Correlation between total score of knowledge and total practice score of nurses at one month after the program

5.Discussion:

In fact, care of the patients is the main responsibility of nurses, so they should play a significant role in the management of diabetic geriatric patients in developed countries. Nurses are in dire need of specialized training on diseases and health promotion. With the increased prevalence of diabetes, there is a massive need for patient education and counseling. Foot ulcers and amputations caused by diabetic patients are considered one of the most important health concerns. This is why it's imperative that nurses focus on this issue. By reducing these complications, they're helping diabetic patients avoid amputations and other foot problems (***Abo Deif & Abdelaziz. 2019; Adeyemi et al., 2021).***

Regarding to nurses score of knowledge, the current study shows that most of nurses had pad knowledge before program. This result may attributed to inadequate information that was provided to nurses about diabetic foot and how to care with it as a result of shortage in nurses numbers which increase their workload that made them hadn't time to be interested to attend training courses on these topics or following any new medical information.

After the training, all nurses had good knowledge regarding foot care. These results were congruent with many studies in Pakistan by ***(Bilal et al., 2018)***; in Malaysia by ***(Wui et al., 2020)*** and in Egypt by ***(Tehseen et al. 2020)*** founded that most of their subjects had good knowledge concerning care of foot after training. In accordance, a study done in Egypt by ***(Abd-El Rohman et al., 2017)*** stated that 90.3% of their participants had poor knowledge regarding care of diabetic foot pre intervention. Moreover another study done in Egypt by ***(Elkashif et al., 2021)*** showed that 72% of their subjects had good knowledge about foot care comparing to 37% of them before educational program. This is in the same line with many studies carried out in Palembang by ***(Frisca ., 2021)*** and in Brazil by ***(Felix et al., 2021***) that reported that there was an increase in nurses knowledge about care of foot after the intervention than before intervention.

As regards to total score of nurses practices the study results revealed that after implementing a training program, it was determined that a majority of nurses improved their foot care practices. However, no nurse improved their care for other conditions in the immediate phase of the program (when most nurses were unavailable). Additionally, only one nurse improved care for both conditions after one month. This may be related to increasing nurse's knowledge about care of foot and their regular performance of the procedure leaded to improving their skills.

In this context, a study by ***(Abd-El Rohman et al., 2017)*** founded that (62.8%) of their participants had pad practices about foot care. Additionally, another study by ***(Abu-elenin et al., 2018)*** found that (62.2%) of the sample had inadequate foot care practice. The same results were stated by another study by ***(Kassar &Khudur, 2021)*** who described that foot care practices among study participants improved after the educational program than before it. Moreover many studies done in Japan by **(Fujii, 2019)**, in USA by **(Reed, 2021)** and by (***Allen, 2022)*** showed that foot care educational guidelines increase foot care knowledge and ability to perform foot care practices among nurses caring for diabetic patients. Similar result was reported in Spain by ***(Romero-Castillo et al., 2022***) revealed that the knowledge of their participants improved after one month and 3 months from the intervention.

The present results stated that the relation between total score of practice and experience years was significant, as nurses who had experiences years 2-5 years had a significantly higher practice score than others. This is due to younger nurses are more easily changing their practice and gaining new techniques. Also, they are newly graduated so they still remember how to demonstrate this procedure. Conversely, a study done in Japan by ***(Fujii & Stolt, 2020)***, and in Egypt by **(*Abdullah et al., 2017)***. This difference may be due to difference in the sample characteristics and training duration.

The current study showed that the relation between total score of knowledge and practice, and level of education of nurses after program implementation was significant, as nurses having nursing bachelor education had a significant (P = 0.001 and P= 0.046) higher knowledge and practical scores respectively, than nurses with less education level. Also, another study done in Baghdad by ***(Kassar & Khudur, 2021)*** showed that there was significant relation between levels of knowledge and educational level of their subjects (P = 0.008). This is a result of advanced educational programs containing more information and various skills.

The current study showed that there was a positive moderate, significant correlation between total knowledge score and total practice score of the subjects after the program immediately, and after one month of the program. This might be attributed to the effectiveness of the training program that provided to nurses, including correct information and techniques. This result in consistent with study was done in Iran by ***(Pourkazemi et al., 2020)*** who mentioned there was an association between nurses' educational achievement and their clinical practice. Similar results reported by studies done in Egypt by ***(Alhuqayl et al., 2019; Abdelhamid et al., 2019)*** and in turkey by ***(Ataseven et al., 2020)*** found that a significant relation between level of knowledge and practices. Additionally, the studies done by ***(Abdullah et al., 2017; Abd-El Rohman et al., 2017, Abu-elenin et al., 2018***, ***Yoon-Kyung et al., 2020, and Elkashif et al., 2021)*** observed that there was statistical relation was found among total knowledge and practice score regarding foot care among study participants (P< 0.0001). These results were in disagreement with other studies done by ***(Barranco-Cuevas et al., 2019, Fujii & Stolt, 2020,*** and ***Nursalam et al., 2020)***. This may be due to variation in size of the sample, level of educational and average age of participants.

6.Conclusion:

Foot care training program evidenced to be effective in enhancing nurses' knowledge and practices about foot care of diabetic geriatric patients.

7.Recommendations:

- Ongoing implementation of diabetic foot care theoretical and practical in-service training programs in order to address nurses training needs
- Nurses should follow recent publications related to diabetic foot care; also they should be encouraged for continuous participation in different scientific activities.
- The designed foot care booklet should be distributed to all nurses in other hospitals setting that caring diabetic geriatric patients.

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