



# International Journal of Advanced Community Medicine

E-ISSN: 2616-3594  
P-ISSN: 2616-3586  
<https://www.comedjournal.com>  
IJACM 2023; 6(4): 27-32  
Received: 08-09-2023  
Accepted: 21-10-2023

**Aya Mohamed Mehana**  
Demonstrator, Department of  
Public Health and Community  
Medicine, Faculty of Medicine,  
Tanta University, Tanta, Egypt

**Amal Selim**  
Assistant Professor, Department  
of Internal Medicine, Faculty of  
Medicine, Tanta University,  
Egypt

**Shimaa M Saied**  
Assistant Professor, Department  
of Public Health and  
Community Medicine, Faculty of  
Medicine, Tanta University,  
Egypt

**Nadira Mansour Hassan**  
Professor, Department of Public  
Health and Community  
Medicine, Faculty of Medicine,  
Tanta University, Egypt

**Corresponding Author:**  
**Aya Mohamed Mehana**  
Demonstrator, Department of  
Public Health and Community  
Medicine, Faculty of Medicine,  
Tanta University, Tanta, Egypt

## Foot self-care: Awareness and practices among diabetic patients at Tanta University hospitals

**Aya Mohamed Mehana, Amal Selim, Shimaa M Saied and Nadira Mansour Hassan**

**DOI:** <https://doi.org/10.33545/comed.2023.v6.i4a.276>

### Abstract

**Background:** Diabetes mellitus is a dilemma and a fast-expanding issue. Also, diabetic foot problems are considered significant health issues in adults as a result of its high incidence recently.

**Methods:** A cross sectional study completed at the “Endocrinology Outpatient Clinic” at Internal Medicine Department, Tanta University Hospitals. The study subjects included 370 diabetic patients receiving routine foot care education at the clinic. The tool of the study was a structured questionnaire consisting of the following parts (1) Socio demographic data. (2) diabetic history of the patients. (3) awareness questions and practice questions.

**Results:** More than two thirds of studied patients were from 40 to 60 years. Nearly 51% of them were males and more than half of them (50.8%) were from rural areas. About 20.3% of patients had a good awareness level, and only 9.2% of them had satisfactory practice for foot self-care.

**Conclusion:** Routine patient education about foot self-care was insufficient. So, it is mandatory to incorporate a specific, structured, and periodic foot self-care educational sessions to diabetic outpatient clinics provided by a professionally trained health counsellor, this could improve awareness and practice levels of foot self-care among diabetic patients.

**Keywords:** Awareness, practices, foot self-care, diabetic, Tanta

### Introduction

One of the most prevalent non-communicable diseases in the world is diabetes mellitus. In many developing nations, it ranks as the fifth most common cause of death, and there is compelling evidence that it is widespread in many developing ones <sup>[1]</sup>.

The International Diabetes Federation forecasts that 15.2% of Egyptians are anticipated to be diabetics, but this figure could be inflated <sup>[2]</sup>. Also, the main cause of acute coronary syndrome, lower limb amputation, blindness, and chronic kidney failure in Egypt is diabetes mellitus <sup>[3]</sup>.

Since diabetes mellitus affects practically every function in the body, it often results in severe morbidity and death <sup>[4]</sup>. Compared to women and individuals with type I diabetes, males and those with type II diabetes have a greater prevalence of diabetic foot problems <sup>[5]</sup>.

As poor foot care can result in numerous complications like infection, ulcerations, gangrene, and amputations which are the primary causes of diabetes-related hospital admissions, diabetic foot problems have a significant negative economic and social impact on people, families, and the health system in both developed and developing nations <sup>[6]</sup>.

The frequency of diabetic foot problems is rising worldwide, especially in South America, Africa, and Asia's rapidly growing nations <sup>[7]</sup>. About 25% of diabetics will develop diabetic foot ulcers at some point in their lives. According to estimates, diabetes-related lower limb loss occurs every 30 seconds, and individuals with the disease account for almost 60% of non-traumatic lower limb amputations <sup>[8]</sup>.

The importance of early prevention of diabetic foot problems is demonstrated by the fact that patients with foot issues spent 32.3% of their entire income on therapy, compared to 9.3% for those without foot issues <sup>[9]</sup>. Diabetes-related foot problems have been linked to significant risk factors such as inadequate awareness and poor foot care practice levels. Therefore, to lessen, if not totally avoid, foot issues in diabetics, it is essential to determine the baseline awareness and practice levels of foot self-care.

### Aim of work

This study aimed to assess the degree of foot self-care awareness and practice among

diabetics attending the Internal Medicine Department's "Endocrinology outpatient clinic" at Tanta University Hospitals.

## Patients and Methods

### Study design, setting and duration

Cross sectional study was completed at the Internal Medicine Department's "Endocrinology outpatient clinic" at Tanta University Hospitals, Tanta city. The data was collected during six months from November 2021 to April 2022, during which all accessible patients attending the diabetic outpatient clinic for treatment and follow up were interviewed.

### Study inclusion criteria

Adult individuals over the age of 18 with a history of diabetic mellitus type I or II attending the Internal Medicine Department's "Endocrinology outpatient clinic" at Tanta University Hospitals.

### Exclusion criteria

Those who excluded from the study were diabetic patients with traumatic ulcers resulting from non-DM causes like accidents, patients in critical condition or receiving chemotherapy, immunosuppressive medications, or steroid therapy, and patients unable to respond to the questionnaire due to dementia, psychosis, or profound deafness.

### Study Tool

Patients were interviewed using a structured, validated questionnaire in order to gather data. The questionnaire specially designed after thorough literature review and it was divided into four parts; the first one included the sociodemographic data of the patients: age, sex, residence, education, occupation. The second part contained the disease history of the patients: type of diabetes, duration, type of treatment, presence of diabetic complications, presence of comorbidities, the third section contained questions regarding the awareness of the patients about daily foot care, daily self-inspection, using socks and shoes. This section was made up of 18 questions answered by correct or incorrect answers. The last one contained questions to evaluate the practice of daily foot care via 21 questions about: inspecting one's feet, checking shoes before putting them on, cleaning one's feet in warm water, patting one's feet dry, using emollients to dry skin, trimming one's toenails correctly, wearing (Sandals, slippers or pointed toed shoes), Go barefoot, wear shoes without socks, inspect and dry between toes, check the water temperature before taking a bath and seek expert assistance for any issues.

### Scoring system

In the awareness section each correct answer took one degree and incorrect answer took zero. Total score was 18 degrees. Awareness was considered poor if below 50%, average from 50% to 70% and good if more than 70% of the total score. In the practice section the responses were rated as a five points Likert scale and answered by (always, often, sometimes, rarely, and never) each of them took (4, 3, 2, 1 and 0) respectively. The score was reversed for the following questions: going barefoot; wearing shoes without socks; wearing sandals, slippers, or pointed-toed shoes. The practice was known to be unsatisfactory if it scored less than 60% of the total, and good if it scored more than 60%. The overall score was 84 degrees.

## Sample Size and Statistical Analysis

Every diabetic patient who attend the "Endocrinology Outpatient Clinic" when the data was being collected from November 2021 to April 2022 were considered as the study population. Resulting in total 370 patients. Data were gathered and added to an Excel document, then statistical analysis was carried out using SPSS Package 21 for Microsoft Windows. Shapiro Wilk test was done to test the normality of the quantitative data. The median and interquartile range (IQR) were used to display nonparametric quantitative data, whereas number and percentage were used to display qualitative data.

## Ethical considerations

The study was approved during the meeting of Ethical Committee of the Faculty of Medicine; Tanta University dated July 2021. An official permission letter was obtained. Research ethical rules applied in Tanta Faculty of Medicine were taken in consideration throughout the implementation of this study. The purpose of the study was explained to all participants and formal informed consent was obtained from all participants in the study.

## Results

**Table 1:** Sociodemographic characteristics of the studied patients.

Characteristics	N=370	%
<b>Age (in years)</b>		
< 40	32	8.6
40	248	67.1
≥ 60	90	24.3
Mean ± SD	52.16 ± 9.9	
Range	23 - 69	
Median	53	
<b>Sex</b>		
Male	189	51.1
Female	181	48.9
<b>Residence</b>		
Urban	182	49.2
Rural	188	50.8
<b>Educational level</b>		
Illiterate	117	31.6
Basic education	129	34.9
Secondary/technical education	101	27.3
University	23	6.2
<b>Family history of Diabetes</b>		
Negative	148	40.0
Positive	222	60.0
<b>Occupation</b>		
Not working	154	41.6
Working	216	58.4
<b>Income</b>		
Insufficient	179	48.4
Sufficient without saving	152	41.1
Sufficient and saving	39	10.5

Table (1) shows the patients' sociodemographic distribution; it was revealed that the mean age of patients under the study was (52.16 ± 9.9), the common age group was 40 up to 60 years constituting 67.1%, and about one fourth (24.3%) of them were aged more than 60 years. 51.1% were males and more than half of them (50.8%) were from rural areas. Regarding their educational level, about one third (31.6%) of the studied patients were illiterate, also (60%) of them had positive family history of diabetes and more than half (58.4%) were workers. Insufficient income has been reported in nearly half of patients (48.4%).

**Table 2:** Disease history among the studied patients.

Diabetic history	N=370	%
<b>Type of Diabetes</b>		
Type I	58	15.7
Type II	311	84.3
<b>Duration of Diabetes in years</b>		
< 5	111	30.0
5 -	161	43.5
≥ 10	98	26.5
<b>Treatment</b>		
Insulin	127	34.3
Oral hypoglycemics	148	40.0
Both	95	25.7
<b>Comorbidities</b>		
No	103	27.8
Yes	267	72.2
Hypertension	196	73.4
Hepatic	38	14.2
Renal	31	11.6
cardiac	2	0.8
<b>Complications of Diabetes</b>		
No	57	15.4
Yes (n=313)	313	84.6
Neuropathy	159	50.8
Nephropathy	110	35.1
Retinopathy	28	8.9
Others *	16	5.2
<b>Foot ulcer</b>		
No	254	68.6
Was present and healed	112	30.3
Currently present	4	1.1
<b>Regularly monitoring blood glucose</b>		
No	66	17.8
Yes	304	82.2
<b>Previously advised about foot self-care</b>		
No	192	51.9
Yes (n=178)	178	48.1
<b>Source of the advice (n=178)</b>		
Media	52	29.2
Physician	88	49.4
Nurse	9	5.1
Friend	16	9.0
Family member	13	7.3

\*: Complications including (diabetic keto acidosis (DKA), heart problems, lower extremity amputation)

Table (2) demonstrates the distribution of studied patients according to their disease history. The majority of patients (84.3%) were suffering from type II diabetes and more than one fourth (26.5%, 25.7%) of them had diabetes for more than ten years and receiving both insulin and oral hypoglycemic drugs, respectively. Hypertension was reported among nearly three fourths (73.4%) of studied patients. More than half (50.8%) of them complained about

numbness due to peripheral neuropathy caused by diabetes. More than two thirds (68.6%) of studied patients did not have foot ulcers and 82.2% of them were monitoring their blood glucose level regularly while more than half (51.9%) of them were not previously advised about foot self-care. As regard the source of advice in previously advised patients, physicians took the upper hand by a percent of (49.4%).

**Table 3:** Distribution of the studied patients with respect to foot self-care awareness (n=370).

Foot self-care awareness (N=370)	Incorrect answer		Correct answer	
	N	%	N	%
Taking diabetic medication regularly.	51	13.8	319	86.2
Frequency of feet inspection.	176	47.6	194	52.4
Frequency of washing feet.	132	35.7	238	64.3
Using warm or cold water for washing.	290	78.4	80	21.6
Checking temperature of water before washing.	136	36.8	234	63.2
Soaking feet in water.	338	91.4	32	8.6
Drying feet after washing.	139	37.6	231	62.4
Applying lotion after washing.	232	62.7	138	37.3
Keeping area between toes dry.	316	85.4	54	14.6
Shoes fitness.	139	37.6	231	62.4
Inspecting shoes before wearing.	59	15.9	311	84.1
Wearing shoes inside, outside home or both.	159	43.0	211	57.0

Frequency of Changing socks.	213	57.6	157	42.4
Walking barefoot.	133	35.9	237	64.1
Wearing pointed shoes or slippers.	321	86.8	49	13.2
Trimming toenail straight across.	242	65.4	128	34.6
Keeping blood flow while sitting.	297	80.3	73	19.7
Action done in case of redness, blister or wound.	301	81.4	69	18.6

Table (3) demonstrates the distribution of the studied patients regarding foot self-care awareness measures. It was found that the best awareness was present among studied patients regarding the following items: taking diabetic medications regularly (86.2%) and inspecting shoes before wearing (84.1%). While the worst awareness was observed among them regarding soaking feet in water (91.4%), wearing pointed shoes or slippers (86.8%), keeping area between toes dry (85.4%), action done in case of redness (81.4%), blister or wound (80.3%), keeping blood flow while sitting and using warm or cold water while washing by a percent of (80.3% & 78.4% respectively).

**Table 4:** Foot self-care awareness level among studied patients (N=370).

Awareness	n	%
Poor	182	49.2
Average	113	30.5
Good	75	20.3

Table (4) demonstrates the awareness level among studied patients as regard foot self-care, it was estimated that nearly half of our patients (49.2%) have poor foot self-care awareness and only one fifth of them (20.3%) had good foot self-care awareness.

**Table 5:** Distribution of studied patients with respect to foot self-care practices. (N=370)

Foot self-care practice (N=370)	Never		Rarely		Sometimes		Often		Always	
	N	%	N	%	N	%	N	%	N	%
Feet inspection	83	22.4	151	40.8	63	17.0	32	8.6	41	11.1
Feet washing	1	0.3	19	5.1	18	4.9	65	17.6	267	72.2
Changing socks	1	0.3	29	7.8	190	51.4	130	35.1	20	5.4
Using lotion or cream on feet	162	43.8	76	20.5	75	20.3	36	9.7	21	5.7
Using talcum powder between toes	227	61.4	65	17.6	31	8.4	41	11.1	6	1.6
Checking shoes before putting them on	14	3.8	47	12.7	198	53.5	77	20.8	34	9.2
Checking shoes after taking them off	69	18.6	88	23.8	172	46.5	18	4.9	23	6.2
Drying feet after washing.	59	15.9	47	12.7	103	27.8	143	38.6	18	4.9
Drying between toes after washing	100	27.0	190	51.4	63	17.0	16	4.3	1	0.3
Trimming toenails	12	3.2	39	10.5	92	24.9	216	58.4	11	3.0
Wearing sandals	1	0.3	22	5.9	127	34.3	169	45.7	51	13.8
Wearing slippers	3	0.8	19	5.1	104	28.1	191	51.6	53	14.3
Wearing pointed toed shoes	4	1.1	71	19.2	169	45.7	88	23.8	38	10.3
Breaking the new shoes gradually	62	16.8	90	24.3	154	41.6	45	12.2	19	5.1
Wearing artificial socks	40	10.8	203	54.9	91	24.6	31	8.4	5	1.4
Wearing shoes without socks	53	14.3	102	27.6	209	56.5	6	1.6	0	0.0
Walking barefoot outside home	86	23.2	107	28.9	164	44.3	11	3.0	2	0.5
Using a hot water bottle in bed	94	25.4	184	49.7	63	17.0	23	6.2	6	1.6
Checking temperature of water before washing	14	3.8	206	55.7	96	25.9	52	14.1	2	0.5
Putting a dry dressing on a blister or wound	5	1.4	64	17.3	141	38.1	147	39.7	13	3.5
Seeking professional help for any problem	10	2.7	58	15.7	104	28.1	153	41.4	45	12.2

Table (5) demonstrates the distribution of studied patients' responses regarding measures of foot self-care practice, and it was shown that applying lotion or cream to the feet was the primary poor foot self-care behavior among the patients under study. and using talcum powder between toes; they "never" do these practice measures by a percent of (43.8% & 61.4%, respectively). Followed by Drying between toes after washing, wearing artificial socks, bedtime use of a hot water bottle, and checking temperature of water before washing; studied patients reported that they "rarely" practice

this foot self-care measures by a percent of (51.4%, 54.9%, 49.7% and 55.7%, respectively).

On the other hand, the best practice reported among studied patients was regarding feet washing, nearly three fourths (72.2%) of them "always" do this practice measure. Also, good practice was observed among studied patients regarding the following items: changing socks (35.1%), drying feet after washing (38.6%), putting a dry dressing on a blister, or wound (38.1%) and seeking professional help for any problem (41.4%).

**Table 6:** Foot self-care practice level among studied patients (N=370).

Practice	n	%
Un satisfactory	336	90.8
Satisfactory	34	9.2

Table (6) shows the foot self-care practice level among studied patients, and it indicates that nearly all of the patients (94.3%) had unsatisfactory level of foot self-care practice.

**Discussion**

The current discovered that the greatest category (49.2%)

was poor foot self-care awareness. These results were consistent with those of Pourkazemi *et al.* (2020), who studied 375 diabetic patients in Guilan Province (north of Iran) in cross-sectional research to ascertain knowledge and practices related to DFU prevention and management. Whereas 84.8% of participants had inadequate knowledge [10].

These findings were also in concordance with Kassab *et al.*, (2022) who conducted a study in Alexandria, Egypt to among 100 diabetic patients to evaluate the knowledge and practice of diabetic foot care and its relation to microvascular complications and reported that only 25% of patients had good knowledge<sup>[11]</sup>.

Higher percentages were, however, reported by Alshammari *et al.* (2019), who carried out a study in Riyadh, Saudi Arabia to ascertain the knowledge, attitude, and practice regarding diabetic foot care among 368 patients with the condition. They found that a sizable portion of the population (76.6%) had good knowledge<sup>[12]</sup>. The yes-or-no questions in the research instruments of the above-mentioned studies may have affected the accuracy of the data collected and contributed to the variances seen in those investigations. The high proportion of knowledge and practices in these patients' responses may have resulted from their recent agreement to respond "yes" to many questions concerning knowledge and practices. Therefore, information through print, electronic, and well-designed educational initiatives that increase public knowledge of diabetes and its consequences may be easier to obtain.

When it comes to preventing diabetic foot problems, knowledge and awareness alone are insufficient; everyday health habits are required. Our study found that only 9.2% of the patients had adequate foot self-care practice, which is less than previous studies' findings that, according to Abulenin *et al.* (2018), 14.0% of patients had good practice level 14, and Kassab *et al.* (2022), 24% of patients had good practice<sup>[11]</sup>. Furthermore, it was shown that 22.4% of diabetes patients in Chinese research by Magbanua E *et al.*, (2017) knew enough about diabetic foot self-care to practise it and what variables influence it<sup>[13]</sup>.

This observation suggests a low level of patient compliance; although the patients were somewhat aware of the need for foot care, they did not put it into practice. This result was consistent with earlier research that found a similar relationship in foot care knowledge and behavior<sup>[14, 15]</sup>. Furthermore, after reviewing 58 research on diabetic foot care knowledge and practice, Manickum *et al.* (2021) concluded that while many diabetics have strong knowledge, less really practice appropriate foot care<sup>[16]</sup>. This discrepancy resulted from some procedures being carried out for religious purposes rather than from a good understanding of their significance for the treatment of diabetic feet<sup>[13]</sup>.

Regarding the replies to the questions about foot self-care awareness and practice, the current study found that 64.3% of participants reported knowing how often to wash their feet. However, almost three-quarters (72.2%) of patients "always" wash their feet more than once a day as a practice. These results were consistent with Kassab *et al.* (2022) observation that patients in the study wash their feet more frequently as a practice than as a knowledge, with percentages of 90% & 72%, respectively<sup>[11]</sup>.

According to Khan *et al.* (2020) study, which was carried out in the Jazan region in southwest Saudi Arabia to evaluate the habits and understanding of foot self-care among individuals with diabetes, 86.4% of the participants understood the significance of often cleaning their feet with the other hand<sup>[17]</sup>.

Although the majority of Egyptians are Muslims, they are required to wash their feet before each of the five daily prayers; nonetheless, the act of washing one's feet and praying itself provides a form of physical massage for the feet<sup>20</sup>. This conclusion makes sense given that Islamic tradition mandates that feet should be washed five times a

day prior to prayers<sup>[18]</sup>.

It is crucial that patients learn to check the water's temperature before using it, since this can help prevent burn injuries, particularly on diabetics' feet where neuropathy may make it difficult for them to feel pain. Patients should avoid showering or washing with water that is extremely hot or cold. The current study found that over three-quarters of the respondents (78.4%) did not know the ideal water temperature for patients to wash their feet in, and over half of them (55.7%) "rarely" put this knowledge into practice by checking the water's temperature before washing their feet.

According to a study by Seid A *et al.* (2015) in Ethiopia, which assessed diabetics' knowledge, practice, and barriers related to foot care, 74.1% of the patients in the study were unaware of the ideal water temperature to wash their feet, and 49.5% of them actually used it<sup>[19]</sup>.

These results, however, were at odds with those of Khan *et al.* (2020), who found that 82.4% of respondents were aware that they ought to check the water's temperature before washing their feet and that 73.5% of them actually do so<sup>[17]</sup>.

The differences between this study and the previously mentioned studies could be attributed to a number of factors, including different study populations, settings, designs, instruments used to assess foot self-care knowledge, attitude, and practice, data collection techniques, variations in the performance of health systems between nations, and greater socioeconomic and educational opportunities than in Egypt.

## Conclusion and Recommendations

Foot self-care awareness and practice level was poor among patients under the study so incorporation of specific, structured, and periodic foot self-care educational sessions to each diabetic outpatient clinic is mandatory. The educational sessions should be provided by a professionally trained, specialized diabetic educator or counselor with the assistance of a podiatrist to enhance foot screening practices and increase patient awareness.

## References

1. Tesfay FH, Zorbas C, Alston L, Backholer K, Bowe SJ, Bennett CM. Prevalence of chronic non-communicable diseases in Ethiopia: A systematic review and meta-analysis of evidence. *Frontiers in Public Health*. 2022 Aug 3;10:936482.
2. Riad M, Elshafei S. An Overview of Diabetes Mellitus in Egypt as a Major Public Health Problem. *National Journal of Health Sciences*. 2021;6(2):80-5.
3. Abouzid MR, Ali K, Elkhawas I, Elshafei SM. An overview of diabetes mellitus in Egypt and the significance of integrating preventive cardiology in diabetes management. *Cureus*. 2022 Jul 20, 14(7).
4. Daryabor G, Atashzar MR, Kabelitz D, Meri S, Kalantar K. The effects of type 2 diabetes mellitus on organ metabolism and the immune system. *Frontiers in immunology*. 2020 Jul 22;11:1582.
5. Déruaz-Luyet A, Raabe C, Garry EM, Brodovicz KG, Lavery LA. Incidence of lower extremity amputations among patients with type 1 and type 2 diabetes in the United States from 2010 to 2014. *Diabetes, Obesity and Metabolism*. 2020 Jul;22(7):1132-40.
6. Bansode B, Jungari S. Economic burden of diabetic patients in India: a review. *Diabetes & Metabolic Syndrome: Clinical Research & Reviews*. 2019 Jul 1;13(4):2469-72.
7. McDermott K, Fang M, Boulton AJ, Selvin E, Hicks

- CW. Etiology, epidemiology, and disparities in the burden of diabetic foot ulcers. *Diabetes Care*. 2023 Jan 2;46(1):209-21.
8. Kothari B. Clinical study and surgical management of diabetic foot: An observational study. *International Journal of Surgery*. 2022;6(1):130-3.
  9. Ahmed MU, Tannous WK, Agho KE, Henshaw F, Turner D, Simmons D. Prevalence and burden of diabetes-related foot disease in New South Wales, Australia: evidence from the 45 and Up Study survey data linked with health services data. *International Journal of Environmental Research and Public Health*. 2021 Nov 2;18(21):11528.
  10. Pourkazemi A, Ghanbari A, Khojamli M, Balo H, Hemmati H, Jafaryparvar Z, *et al*. Diabetic foot care: knowledge and practice. *BMC endocrine disorders*. 2020;20:1-8.
  11. Kassab HS, Ismaeel MT, Abd Elfattah T, Elaaty A. Diabetic foot care knowledge and practice in type 2 diabetes and relation to microvascular complications in Alexandria (Egypt). *Endocrine Regulations*. 2022;56(2):95-103.
  12. Alshammari ZJ, Alsaid LA, Parameaswari PJ, Alzahrani AA. Attitude and knowledge about foot care among diabetic patients in Riyadh, Saudi Arabia. *J Family Med Prim Care*. 2019;8(6):2089-94.
  13. Magbanua E, Lim-Alba R. Knowledge and practice of diabetic foot care in patients with diabetes at Chinese general hospital and medical center. *Journal of the ASEAN Federation of Endocrine Societies*. 2017;32(2):123.
  14. Muhammad-Lutfi A, Zaraihah M, Anuar-Ramdhan I. Knowledge and practice of diabetic foot care in an in-patient setting at a tertiary medical center. *Malaysian Orthopaedic Journal*. 2014;8(3):22.
  15. Chellan G, Srikumar S, Varma AK, Mangalanandan T, Sundaram K, Jayakumar R, *et al*. Foot care practice—The key to prevent diabetic foot ulcers in India. *The Foot*. 2012;22(4):298-302.
  16. Manickum P, Mashamba-Thompson T, Naidoo R, Ramklass S, Madiba T. Knowledge and practice of diabetic foot care: A scoping review. *Diabetes & Metabolic Syndrome: Clinical Research & Reviews*. 2021;15(3):783-93.
  17. Khan LA, Al-Nami AQ, Al-Gaseer H, Al-Neami IA. Foot Self-Care Knowledge and Practice Evaluation among Patients with Diabetes. *Journal of Diabetology*, 2020, 11(3).
  18. Ahmed A, Elsharief E, Alsharief A. The diabetic foot in the Arab world. *The Journal of Diabetic Foot*; c2011.
  19. Seid A, Tsige Y. Knowledge, practice, and barriers of foot care among diabetic patients attending Felege Hiwot Referral Hospital, Bahir Dar, Northwest Ethiopia. *Advances in Nursing*. 2015 Feb 11;2015:1-9.

**How to Cite This Article**

Mehana AM, Selim A, Saied SM, Hassan NM. Foot self-care: Awareness and practices among diabetic patients at Tanta university Hospitals. *International Journal of Advanced Community Medicine* 2023; 6(4): 27-32.

**Creative Commons (CC) License**

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International (CC BY-NC-SA 4.0) License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.