Knowledge and Practice of Foot Care among Diabetics at King Hussein Medical Center, Jordan

Reem Moh'd Al-Qaddah, RN*, Abdallah Al Eyadeh,MD**, Ma'en Zaid Abu-Qamar, DN, Nidal Younes, MD****, Dina Al-Ryalat, RN*****, Fares Haddad, MD***

ABSTRACT

Objective: To assess the knowledge and practices of foot care among a diabetic Jordanian cohort.

Methods: A cross-sectional design was employed. The study implied a randomized study selecting every other patient who is suffering from diabetes and attending the endocrine and internal medicine clinics of a large tertiary hospital in Amman. Written consent was obtained from participants who were interviewed on individual bases using a questionnaire seeking information on knowledge and practice of foot self-care. Medical records were checked for latest reading of HbA1C. Data obtained were analyzed using Statistical Package for Social Sciences (SPSS) version 17. Levels of knowledge as well as levels of foot care practices were classified as good, satisfactory or poor according to scores computed for participants' responses to questionnaire items. Each correct response worthed one score (point).

Results: A total of 982 participants, were involved in the study, 505 (51.4%) were males and 477 (48.6%) were females. The mean age is 52.16 years (SD ±13.4). Of all participants, 156 (15.9%) were illiterate, 640 (65.2%) had an education of high school or less, and 186 (18.9%) had more than high school education. Out of 982 participants, 16.6% had poor knowledge; 41.9% had satisfactory and 41.5% had good knowledge scores of diabetic foot care. The mean knowledge score for the participants was 6.6 (SD ±2.1). Regarding practice scores, 24.8% of the study participants had poor practice, 56.9% had satisfactory score and only 18.2% had good practice of diabetic foot self-care. The mean practice score for the participants was 7.1 (SD ±2.3).

Conclusion: Our study documented variations between knowledge and practice of diabetic foot self-care. Specifically, patients' satisfactory knowledge is associated with inadequate practices of foot self-care. In order to improve concordance between knowledge and practice of foot self-care; staff and patient's education must be encouraged and carried out at all primary health care centers and hospitals. Furthermore, measures must be taken to improve patient compliance to proper foot care practices.

Key words: foot care, knowledge, practice.

JRMS Sep 2016; 23(3):55-63/DOI:0029074/10.12816

Introduction

Foot problems are common and serious complications of diabetes [(1)] accounting for many hospital admissions [(2)] and are recognized as a major cause of amputation. [(3)] Specifically, foot problems are responsible for 85% of non-traumatic lower extremity

*Diabetes Education Clinic, King Hussein Medical Center(KHMC), Royal Medical Services, Amman, Jordan
** JBIM,JBED, SC(Endocrine and Diabetes) UK
***DN, MScn(edu.), BSc, RN, Lecturer, School of Nursing and Midwifery, Curtin University, Perth, Western Australia and Associate Professor, Department of Adult Health Nursing, Faculty of Nursing, Mu´tah University, Mu´tah, Jordan
****MA, Endocrine Surgeon and Diabetic Foot Consultant, Department of General Surgery, University of Jordan, Amman, Jordan
*****Nursing (KHMC), Royal Medical Services, Amman, Jordan.
Correspondence should be addressed to Reem Moh'd Al-Qaddah PO Box 13165, Amman 11855 Jordan E-mail: reem.alqaddah@yahoo.com
Manuscript received Jan 13 ,2016. accepted July 28,2016.

amputations among diabetic population. [4] It is estimated that 15% of those with diabetes encounter foot ulcers during their lifetime and this percentage is subject to reach 25%.[5] diabetes-related foot problems represent a challenging health and social issue, because treating such poorly healed wounds consume substantial proportion of hospital resources, and put heavy burden on patients, their families and the community as a whole. The prevalence of Diabetes Mellitus (DM) and Impaired Fasting Glucose (IFG) was estimated to be 17.1% for DM and 7.8% for IFG. [6]

Diabetic foot frequently results from a combination of factors including neuropathy, peripheral vascular disease, deformity, callus, previous ulcer and amputation. [7] Accordingly, avoiding these risk factors would reduce the incidence or at least the severity of foot ulcer. Diabetic foot ulcers can be prevented through proper foot education, which is best provided by a multidisciplinary diabetes care team.[8] In fact, foot care knowledge must be provided to all patients with diabetes because gaining such knowledge would improve patient's confidence and compliance towards translating the gained knowledge into real practice.[9] Foot care education programs should be incorporated within routine diabetes care. In so doing, patients will stay updated with knowledge necessary to practice lifelong foot self-care.

Unfortunately, healthcare providers do not give adequate patient education during routine foot examination.[10,11] The lack of education on foot care is an alarming issue, considering the increased prevalence of morbidity and mortality resulting from diabetic foot ulceration. [2] Reviewing the literature has identified few studies examining knowledge and practices of foot care among patients with diabetes.[12-18] The knowledge and practices of foot care vary worldwide; some studies show poor knowledge and practice on foot care [12-16] while others have shown a satisfactory knowledge but poor practices. [17,18]

In Jordan only one study was found to examine the knowledge and practice of foot care. [19] The study found that despite the fact that foot care education is not incorporated within the context of diabetes care, good level of foot self-care knowledge was found among Jordanians with diabetes. But, practices of foot self-care were limited and include harmful behaviors. [19] Therefore, additional research is required to verify the findings of previous research especially in developing countries like Jordan that face an alarming prevalence of diabetes. The purpose of the present study was to assess knowledge and practice of diabetic foot care in the capital of Jordan-Amman.

Methods

A cross-sectional design was employed to describe knowledge and practice of foot care among patient with diabetes mellitus (DM) attending Medical and Endocrine clinics at King Hussein Medical Center (KHMC); a large tertiary referral centre located in Amman-Jordan.

The target population of the present study was all patients visiting the hospital during the study period aged >18 years. Patients were excluded from the study if they had deafness or mental problems that preclude comprehension of the survey items.

Data were collected using a structured questionnaire in Arabic language that was previously used in a study from southern part of Jordan to collect information on knowledge and practice of foot care [19] after taking permission. The questionnaire based on the American Diabetes Association (ADA) guidelines for diabetes foot care as well as recommendations of the American College of Foot and Ankle Surgeons plus international consensus on the diabetic foot care. [20-22] the questionnaire is made up from 10 and 15 items on knowledge and practice of foot care, respectively. Items of knowledge sought information on the effect of blood glucose control and smoking on diabetes-related foot complication and sought information on foot self-examination, foot wear, and proper foot care. The items of practices, sought information on participants' practices of foot wear, toenails care, and foot hygiene. Demographic and basic clinical data were also included (see appendix A questionnaire).

From December 2011 to February2012, every other patient was randomly selected once accept and signed informed consent. Patients

were interviewed by same author (RQ). Medical records were reviewed for documented readings of hemoglobin HbA1C (glycated Hemoglobin).

Table I: Socio-demographic characteristics of the participants (982)

Characteristics	N	(%)
Age (year)		
<50	356	36.3
50-59.9	303	30.9
≥ 60	323	32.9
Mean age 52.16 years ± 13.4.		
Gender		
Male	505	51.4
Female	477	48.6
Employment		
Employed	233	23.7
Not employed	476	48.5
Retired	273	27.8
Educational level		
Illiterate	156	15.9
1- 12 grades	640	65.2
> 12 grades	186	18.9
Monthly income(JD)*		
≤ 300	472	48.1
>300	510	51.9
Marital status		
Married	784	79.8
Not married	198	20.2
Duration of DM (year)		
<10	499	50.8
≥10	483	49.2
Mean duration 10.13 years ± 7.82.		
Type of DM		
Type I	129	13.3
Type II	853	86.9
Smoking		
Smoker	219	22.3
Non smoker	571	58.1
Former smoker	192	19.6
HbA1c		
≤7	221	22.5
>7	761	77.5
Mean HbA1c 8.78 ± 2.03.		
Presence of complication		
Numbness	560	57
Diabetic foot ulcer	138	14.1

*JD = 1.40$

Ethics Aspects

Ethical approval was obtained by The Research Ethics Committee at King Hussein Medical Center (KHMC) and the National Center for Diabetes, Endocrinology and Genetics (NCDEG), Amman, Jordan.

Results

The collected data were analyzed using Statistical Package for Social Sciences (SPSS) version 17. The responses to questions on knowledge and practice were scored that one mark was given for each correct answer, after that a total score of knowledge and a total score of practice were computed for each individual participant. The obtained scores were classified as; good, satisfactory and poor, similar to previous research. [14,16] If the knowledge score was >7, it was regarded as good. If the score ranged between (5-7) or <5, it was considered satisfactory and poor, respectively. Regarding practice scores, they were classified as good practice if they were ≥10, satisfactory practices if they ranged between (6-9). Those scores below 6 were ranked within the class of poor practice. Descriptive statistics were done to describe study variables and population. Multivariate analysis was used for the adjustment of potential confounders. P values ≤0.05 was considered statistically significant.

Socio-demographic and clinical characteristics of the participants are shown in Table I.

Knowledge about foot care

The analysis showed that 60.9% of the participants were aware of the importance of blood glucose control in preventing foot complication. The vast majority (86.9 %) of the study population understood that patient with diabetes are required to practice special foot care. Less than one-third of the study participants were knowledgeable that smoking causes poor foot circulation. The majority of participants 67.6% were aware of the importance of wearing special shoes to minimize risk of foot problems; also 79.4% of them were knowledgeable that they should regularly inspect their feet. A large proportion of our participants 81.5% were aware of the need for medical consultation when redness/infection develops in their feet. Responses to knowledge questions are shown in Table (II).

Table II: Participants knowledge of foot care.

Knowledge	Percentage	
	Yes (%)	No* (%)
Importance of blood glucose control to prevent complication	60.9	39.1
Practice special foot care	86.9	13.1
Not to smoke because smoking causes poor foot circulation	30.5	69.5
Wearing shoes with special character is a required practice by those with diabetes	67.6	32.4
Regular foot inspection is a required practice by those with diabetes	79.4	20.6
Regular foot washing is a required practice by those with diabetes	70.4	29.6
It is necessary to check water temperature before use	59.9	40.1
First thing to do If you have a corn	64.2	35.8
First thing to do If you have foot redness, (signs of infection)	81.5	18.5
First thing to do If you have foot dryness, (hard skin lesion)	65.3	34.7

*No: false / don't know

The mean score for knowledge was 6.6 (±2.1). On classifying the study population by their knowledge scores, it was found that 163 (16.6%) had poor knowledge of diabetic foot care. ([n=411] 41.9%) had satisfactory knowledge and ([n= 408] 41.5%) had good knowledge of diabetic foot care.

Practices of foot care

The analysis revealed that less than half (41.6%) of the study population reported that they practice foot inspection on regular basis. The majority (81%) of the study population mentioned that, indoors, they do walk barefooted. Out of the total study population, 33.8% reported that they dry their feet properly after washing, and only 31.5% dry in between their toes.

Certain practices were positive for example, 48.5% inspect inside their shoes before wearing, 43.5% wear fitting (closed) shoes outdoors, 45.6% not adding irritants to water before feet cleaning, and 54.2% change socks daily. Of all participants only 15.5% reported the use of lotion to prevent dryness skin, 63% of them mentioned that they do not apply lotion in the inter-digital spaces. Responses to practice questions of foot care are shown in Table (III).

Table III: Participants practice of foot care.

practice	Percentage	
	Yes (%)	**No (%)**
Inspection of feet regularly	41.6	58.4
Not walking barefooted indoors	19.0	81.0
Wear fitting (closed) shoes outdoors	43.5	56.5
Wear comfortable non-compressed socks	68.6	31.4
Wear cotton socks	39.6	60.4
Change socks daily	54.2	45.8
Check inside the shoes before wearing	48.5	51.5
Not adding irritants to water before feet cleaning	45.6	54.4
Dry the feet after washing properly	33.8	66.2
Dry in between the toes properly	31.5	68.5
Keep skin of the feet soft to prevent dryness	15.5	84.5
Not applying lotion in the interdigital spaces	63	37
Not cleaning nails with sharp instrument	89.4	10.6
Trim toe nails straight manner	21.9	78.1
Not applying hot patches	94.5	5.5

The mean practice score obtained in this study was 7.1 (SD. 2.3). Poor practice of diabetic foot care was found in 244 (24.8%). n=559 (56.9 %,) were within the class of satisfactory practice and only 179 (18.2%) were classified as good practice of diabetic foot care.

Multivariate analysis of the study variables

Multivariate analysis was used to determine whether or not there were associations

between study variables and knowledge and/ or practice of foot care. The analysis showed a statistically significant association between age group and knowledge score (p=0.05) as well as the practice score (p=0.000). Specifically, the highest mean of the total knowledge scores was among the age group 50-59.9 years; whereas the highest mean of practice one was among those aged 60 years or above (Table IV). A statistically significantly association was found between the mean of knowledge scores and certain variables but not with practice scores. These certain variables included gender, educational level, income status, diabetes duration, marital status and the presence of numbness. Males had a slightly higher mean knowledge score than females (p-value 0.024). Similarly, knowledge scores were higher among participants with higher level of education, longer diabetes duration, and higher income, married or suffering of numbness. Mean practice score was non statistically significantly higher among females than males.

Participants with chronic complications such as diabetic foot ulcers had a higher practice score with statistically significant association (p-value 0.03). But not between these chronic complications and knowledge scores (Table IV).

Table IV: relationships between study variables *NS: not significant

Demographic Factors	Knowledge Score Mean	(SD)	P value	Practice Score Mean	(SD)	P value
Age						
<50	6.7	(2.1)		6.6	(2.1)	
50-59.9	6.9	(2.1)	0.05	7.4	(2.4)	0.000
≥ 60	6.4	(2.2)		7.6	(2.4)	
Gender						
Male	6.7	(2.1)	0.024	7.1	(2.1)	NS*
Female	6.6	(2.1)		7.2	(2.6)	
Education						
Illiterate	5.9	(2.5)		7.0	(2.7)	
1-12	6.7	(2.0)	0.000	7.2	(2.3)	NS*
>12	7.1	(1.8)		7.3	(2.3)	
Economic status						
≤ 300	6.4	(2.2)	0.016	7.0	(2.5)	NS*
>300	6.9	(2.0)		7.3	(2.2)	
Diabetes duration						
< 10	6.3	(2.3)	0.000	6.9	(2.2)	NS*
≥ 10	7.0	(1.9)		7.5	(2.5)	
Marital status						
Married	6.8	(2.1)	0.007	7.2	(2.3)	NS*
Not married	6.3	(2.3)		7.0	(2.4)	
Numbness						
Yes	6.8	(2.0)	0.005	7.3	(2.5)	NS*
No	6.5	(2.3)		7.0	(2.2)	
Diabetic foot ulcer						
Yes	7.3	(1.6)	NS*	8.0	(2.7)	0.035
No	6.6	(2.2)		7.0	(2.2)	
Knowledge scores						
<5				5.9	(1.9)	
5-7		–	–	7.0	(2.3)	0.000
>7				7.9	(2.4)	

Discussion

This study has shown a discrepancy between diabetic patient's knowledge where patients scored inadequate knowledge, and practices where patients scored satisfactory practices that come in concordance with previous data from Jordan.[19] In the present study, the overall mean of knowledge scores was higher than those reported in previous studies.[12-14,16,23] Such differences could be explained by the fact that illiteracy rate was low (15.9%)

enabling them to read and understand educational materials. Again this study has come in accordance with previous research [13-16] in establishing a statistically significant association between lower knowledge of foot care and poor educational level. Accordingly, new strategies should be considered for improving knowledge of foot care among less educated patients.

Within the context of association between knowledge and reading abilities, it was found that the age group 50-59.9 years, compared to other age groups, had statistically significant higher knowledge scores. This could be because members of their age group have the life experience with social relations enabling them to obtain information. As well as having chronic illnesses enabling frequent visit to treat their illness exposing them to obtain direct information from healthcare professionals.These results and those from the south of Jordan, [19] in contrast to the findings from UK, Iran, Nigeria, and USA; [12,13,16,24] showed no differences among age groups in terms of foot-care knowledge which are attributed to socio-economic, regional variation between these countries and Jordan.

In our study, male gender was found to have a statistically significant association with higher knowledge of foot care. These findings are consistent with data from Nigeria, but contrasts data from the UK studies that found females patients are having significantly higher knowledge scores. Such a variation could be explained from a cultural perspective that females in the UK may have better opportunities than those in Nigeria and Jordan to learn about self care.

The significant associations between diabetes duration and foot-care knowledge in current study comes in contrast to previous studies,[12,13,25,26] and this could be explained by the discrepancy in the established foot care education programs among different health care systems.

Hasnain S *et al* [14] from Pakistan has established a higher percentage of satisfactory practices, compared with those having satisfactory knowledge, of foot care. That was explained by religious practices, frequent foot washing, required for Moslems that also have increased the frequency of foot practices among participants of the present study. As well as "Wudhu" that is a religious practice (a five times/day including foot washing) is a good chance for foot inspection enabling immediate discovery of any foot ulcerations.

Despite of the fact that practice scores obtained from the present study were higher than those of previous studies, nevertheless they obtained inadequate scores; a large percentage of participants of this study walk indoors barefooted and do not regularly inspect their feet and inside the shoes. Additionally improper foot drying after washing with incorrect trimming of toe nails was found to be common practices among participants. These undesirable practices are known to increase the risk of diabetic foot and can directly lead to the development of foot ulcers. [12]

The present study revealed that participants with chronic complications such as diabetic foot ulcers were more likely to have statistically significant higher practice score than those without complications. Diabetic foot ulcers often occur in patients with long standing diabetes. Accordingly, it is reasonably expected that patient with chronic complication to be aware to their disease because of frequent medical follow-up. [17]

Conclusion

Our study showed variation in knowledge and practice of foot care among patients with diabetes in Jordan. Specifically, most of the participants had a satisfactory knowledge of foot care, yet they still have inadequate foot care practices. In order to improve knowledge and practice of foot care among patient with diabetes; staff and patient's education must be encouraged and carried out at all primary health care centers and hospitals. Furthermore, measures must be taken to improve patient compliance to proper foot care practice

Limitations

The limitation of this study being a questionnaire-based survey study in which answers might be over optimistic. The survey contains questions related to personal hygiene for which participants responses might not reflect the actual status of self-care.

Additionally, participants my not feel at ease when asked about income.

References

1. **Singh N, Armstrong DG, Lipsky BA.** Preventing foot ulcers in patients with diabetes. *JAMA* 2005; 293: 217 – 228.

2. **Tennvall GR, Apelqvist J.** Health-economic consequences of diabetic foot lesions. *Clinical Infectious Diseases* 2004; 39(2): 132–139.

3. **Boulton AJM.** The diabetic foot: grand overview, epidemiology and pathogenesis. *Diabetes Metab Res Rev* 2008; 24 (Suppl 1): S3–S6.

4. **Dang CN, Boulton AJ.** 2003. Changing perspectives in diabetic foot ulcer management. *Int J Low Extrem Wounds*, 2:4–12.

5. **Lavery LA, Armstrong DG, Wunderlich RP, *et al.*** Diabetic foot syndrome: evaluating the prevalence and incidence of foot pathology in Mexican Americans and non-Hispanic whites from a diabetes disease management cohort. *Diabetes Care* 2003; 26: 1435– 1438.

6. **Ajlouni K, Khader Y, Batieha A, *et al.*** An increase prevalence of diabetes mellitus in Jordan during ten years. *Journal of diabetes and its complications* 2008; 22: 317-324.

7. **Lavery LA, Peters EJG, Armstrong DG.** What are the most effective interventions in preventing diabetic foot ulcers? *Int Wound J* 2008; 5: 425– 433

8. Bakker K, Riley P. The year of the diabetic foot. *Diabetes Voice* 2005; 50: 11-14.

9. **Corbett CF.** A randomized pilot study of improving foot care in home health patients with diabetes. *Diabetes Educ* 2003; 29: 273-782.

10. **De Berardis G, Pellegrini F, Franciosi M, *et al.*** Are type 2 diabetic patients offered adequate foot care? The role of physician and patient characteristics. *J Diabetes Complications* 2005; 19: 319-327.

11. **Fletcher J.** Full nursing assessment of patients at risk of diabetic foot ulcer. *Br J Nurs* 2006; 15: S18 – S21.

12. **Pollock RD, Unwin NC, Connolly V.** Knowledge and practice of foot care in people with diabetes. *Diabetes Res Clin Pract* 2004; 64: 117–122.

13. **Khamseh ME, Vatankhah N, Baradaran HR.** Knowledge and practice of foot care in Iranian people with type 2 diabetes. *Int Wound J* 2007; 4(4): 298-302.

14. **Hasnain S, Sheikh NH.** Knowledge and practices regarding foot care in diabetic patients visiting diabetic clinic in Jinnah Hospital, Lahore. *J Pak Med Assoc* 2009; 59(10): 687-690.

15. **Chandalia H, Singh D, Kapoor V, *et al.*** Footwear and foot care knowledge as risk factors for foot problems in Indian diabetics. *Int J Diabetes Developing Countries* 2008; 28(4): 109–113.

16. **Desalu O, Salawu F, Jimoh A, *et al.*** Diabetic foot care: self reported knowledge and practice among patients attending three tertiary hospital in Nigeria. *Ghana Medical Journal* 2011; 45(2): 60-65.

17. **Jinadasa CVM, Jeewantha M.** A study to determine the knowledge and practice of foot care in patients with chronic diabetic ulcers. *International Journal of Collaborative Research on Internal Medicine & Public Health* 2011; 3(1): 115-122.

18. *Barbui EC, Cocco MI.* Knowledge of the diabetic patient on foot care. *Rev Esc Enferm USP* 2002; 36 (1): 97-103

19. **Abu-Qamar MZ.** Knowledge and Practice of Foot Self-Care among Jordanians with Diabetes: An Interview – Based Survey Study. *Journal of Wound Care* 2014; 23(5): 247-254.

20. American Diabetes Association. Preventive foot care in diabetes. Diabetes Care 2004; 27: S63–64.

21. **Bakker K, Schaper NC.** The development of global consensus guidelines on the management and prevention of the diabetic foot. *Diabetes Metab Res Rev* 2012; 28: 116–118.

22. **Pinzur MS, Slovenkai MP, Trepman E.** Guidelines for diabetic foot care. The Diabetes Committee of the American Orthopaedic Foot and Ankle Society. *Foot Ankle Int* 2005; 26(1): 113-119.

23. **Ekore R, Ajayi I, Arije A, *et al.*** Knowledge of and attitude to foot care amongst Type 2 diabetes patients attending a university-based primary care clinic in Nigeria. *African Journal of Primary Health Care &Family Medicine* 2010; 2(1): 1-3.

24. **Murata GH, Shah JH, Adam KD, *et al.*** Factors affecting diabetes knowledge in Type 2 diabetic veteran. *Diabetologia* 2003; 46: 1170-1178.

25. **Neil JA.** Assessing foot care knowledge in a rural population with diabetes. *Ostomy Wound Manage* 2002; 48: 50–56.

26. **Abu-Qamar MZ.** Diabetic foot screening: why is it neglected? *Int Wound J* 2006; 3: 203 213

Appendix A

المعرفة و الممارسة للعناية بالقدم السكرية عند مرضى السكري الذين يراجعون مدينة الحسين الطبية في عمان – الأردن

تهدف هذه الدراسة إلى تحديد معارف و ممارسات مرضى السكري للعناية بأقدامهم في مدينة الحسين الطبية.

أولا: المعلومات الشخصية

1. العمر..... 2. الجنس 1- ذكر 2- أنثى

3. الدخل الشهري.....
4. المهنة 1- يعمل 2- لا يعمل 3- متقاعد
5. الحالة الاجتماعية 1- متزوج 2- أعزب 3- مطلق 4- أرمل

6. التدخين 1- مدخن 2-غير مدخن 3- مدخن سابق
7. المستوى التعليمي 1- أمي 2- توجيهي أو أقل 3- أكثر من التوجيهي

8. أي أمراض أخرى (التاريخ المرضي)
1- .....
2-.....
3-.....

ثانياً: مرض السكري

9- مدة الإصابة بالسكري.....سنوات

10- نوع مرض السكري 1- النوع الأول (معتمد على الأنسولين)
2- النوع الثاني (غير معتمد على الأنسولين)
3- أخرى حدد .....

11- السكرالتراكمي.....
12- مضاعفات السكري :
1. إنسداد الأوعية الدموية الطرفية
2. خدران ونمنمة في القدمين
3. تصلب الشرايين
4. جلطة دماغية
5. ضعف البصر
6. قدم سكرية
7. هبوط \ فشل كلوي

ثالثا : المعرفة

يهدف هذا الجزء إلى تحديد مدى إلمام مرضى السكري بالمعلومات المتعلقة بالقدم السكرية و كيفية العناية بها

13.هل تعتقد بأن ضبط مستوى السكرفي الدم يمنع حدوث تقرحات القدم؟
1- نعم 2- لا 3- غيرذلك,حدد.....

14. هل تعتقد بأنه على مريض السكري أن يمارس عناية خاصة بقدمية ؟
1- نعم 2- لا 3- غير ذلك,حدد.....

15. لماذا؟----------

16 . هل تعتقد بأن التدخين له آثار جانبية على قدمي مريض السكري؟
1- نعم 2- لا 3- غير ذلك,حدد.....

17. لماذا ؟----------

18 . هل تعتقد بأنه على مريض السكري أن يرتدي حذاء ذا مواصفات خاصة؟

1- نعم 2-لا 3- غيرذلك,حدد.....

19. ما هي ؟----------

20.هل تعتقد بأنه يجب على مريض السكري أن يتفحص قدميه بشكل دوري؟

1- نعم 2-لا 3-غيرذلك,حدد.....

21. إذا كانت الإجابة بنعم حدد كم مرة تقوم بذلك:

1- كل يوم 2- مرة أو أقل في الأسبوع 3- 2-6 مرات أسبوعيا 4- عندما يكون عندي مشكلة 5-لا أتفقدهم

22. هل تعتقد بأنه يجب على مريض السكري أن يغسل قدميه بإستمرار ؟ 1- نعم 2-لا 3- غيرذلك,حدد.....

23. إذا كانت الإجابة نعم حدد كم مرة تقوم بذلك:

1- يوميا 2- 3-5 مرات يوميا 3- يوم بعد يوم 4- عند الوضوء

24 . ماهي حرارة الماء التي تتوقع يجب استخداها لغسل قدميك ؟

1- ساخن 2- دافيء 3- بارد

25. ماذا تتوقع من مريض السكري أن يفعل إذا :

أ عانى من مسمار لحم ؟

.....

ب لاحظ احمراريدل على إلتهاب في القدم ؟

.....

ت لاحظ جفاف و قشور أسفل القدم ؟

.....

رابعا: العناية الذاتية بالقدم :-

يهدف هذا الجزء إلى التعرف على ممارسات مرضى السكري للعناية بأقدامهم

26.هل تمشي حافيا داخل المنزل؟ 1- دائما 2- غالبا 3- أحيانا 4-نادرا 5- لا

27. ماهو طبيعة الحذاء الذي تنتعله في معظم الأحيانخارج المنزل؟

1- صندل 2- حفاية 3- كندرة 4- بوط رياضة 5- غير ذلك,حدد.....

28. الجوارب التي ترتديها في معظم الأحيان تكون :

1- ذات مطاط ضاغط 2- بدون مطاط 3- غير ذلك,حدد.....

29. في العادة، الجوارب التي ترتديها تكون مصنوعة من

1- الصوف 2- القطن 3- النايلون 4- غير ذلك,حدد.....

30. في العادة، أبدل جواربي

1- يوميا 2- يوم بعد يوم 3- أسبوعيا 4- غير ذلك, حدد.....

31. هل تتفقد حذاءك من الداخل قبل إرتدائه ؟ 1- نعم 2- لا 3- غيرذلك,حدد....

32. اذا كانت الاجابة بنعم، فان تفقدك لحذاءك يكون:

1- يوميا 2- يوم بعد يوم 3- قبل أن أرتديه 4- غير ذلك

33. هل تضيف مواد منظفة الى الماء الذي تستخدمة لتنظيف قدميك؟ 1- نعم 2- لا

34. ..... أجفف قدمي بعد الغسيل؟

1- دائما 2-غالبا 3-أحيانا 4- نادرا 5- لا

35. .....أجفف بين الأصابع ؟ 1- دائما 2-غالبا 3-أحيانا 4- نادرا 5- لا

36.....أستخدم مراهم مطرية بعد غسيل القدمين؟

1- دائما 2-غالبا 3- أحيانا 4- نادرا 5- لا

37. .....أستخدم مراهم مطرية بين الأصابع ؟

1- دائما 2-غالبا 3-أحيانا 4- نادرا 5-لا

38. .....أستخدم أداة حادة للتنظيف تحت أظافري؟

1- دائما 2-غالبا 3- أحيانا 4- نادرا 5-لا

39. من يقلم أظافرك في العادة؟ 1- بنفسي 2- بمساعدة آخرين، حدد ---

40. في العادة أقلم أظافري :

1- بشكل مائل 2- بشكل مستقيم 3- غيرذلك,حدد.....

41. .....أستخدم قرب الماء أو اللزقات الساخنة على قدمي؟

1- دائما 2-غالبا 3- أحيانا 4- نادرا 5- لا

شكرا لوقتك وجهدك في الإجابة على الأسئلة. هل ترغب بإضافة أي معلومات اخرى؟

.....