

Challenges Of Type Diabetic Foot Ulceration And Role Of Health Care Social Work In Saudi Arabia 2024

Awad Saad Al-Qarni¹, Emad Hamaad Anazi², Hani Sultan Idris alghanas³, Mohammed Nasser Albulayhid⁴, Majed Ali Alqarni⁵, Saad Mohammed Alkhaldi⁶, Safiyah Hassan Ibrahim Jari⁷, Adel Saleh Ahmed Al-Zahrani⁸, Khaled Saleh Yahya Al-Zahrani⁸, Badr Mohammed I HOWAIMIL⁹, Iftikar Musafiq Ali Alruwaili¹⁰, Amal Habhab¹¹

¹Senior Social Worker, King Fahd Hospital in Al-Baha, Saudi Arabia.

²Senior Social Worker, Al Yamamah Hospital, Saudi Arabia.

³Social Specialist (M) (Non-Physician), Maternity&Children's Hospital Dammam, Saudi Arabia.

⁴Social worker, Afif general hospital, Saudi Arabia.

⁵Social worker, Public Health Department, Ministry of Health, Saudi Arabia.

⁶Social specialist, Alyamamahhospital, Saudi Arabia.

⁷Psychology Specialist, Ministry of Health – King Fahad Central Hospital, Jazan, Saudi Arabia.

⁸Social Worker, King Fahd Hospital in Al-Baha, Saudi Arabia.

⁹Nursing Specialist, Al-Quway'iyah Hospital, Saudi Arabia.

¹⁰Nursing Technician, King Saud Medical City, first health cluster, Saudi Arabia.

¹¹Nursing Technician, Ministry of Health, Saudi Arabia.

Abstract:

Background

Diabetic foot ulcers (DFUs) are a major health issue in Saudi Arabia, leading to significant, psychological, and physical burdens, often resulting in amputation, highlighting poor patient knowledge and gaps in healthcare professional practices. Healthcare Social Workers (HCSWs) play a crucial role by addressing these social determinants, bridging the gap in patient education, providing psychosocial support (especially post-amputation), connecting families to resources, advocating for systemic improvements, and improving the overall Quality of Life (QoL) for DFU patients, tackling issues from lack of awareness to financial strain and lack of proper footwear. Also role of Healthcare Social Work (HCSW) in DFU Management HCSWs address the holistic needs of patients, focusing on: Psycho-Social Support, education & empowerment, resource navigation, advocacy, quality of life improvement. Diabetic foot ulceration is an increasing problem worldwide with over 80% of amputations preceded by foot ulcers and little evidence of reduction in amputation rates in people with diabetes. Diabetic foot ulcers (DFUs) are common problems in diabetes.

Aim of the study: To determining the challenges of Type diabetic foot ulceration and Role of Health Care Social Work in Saudi Arabia 2024.

Method: A cross-sectional, was conducted in hospitals, in Saudi Arabia, within Multidisciplinary Diabetic Foot Clinics and/or Vascular Surgery Departments. to determining the challenges of type diabetic foot ulceration and role of Health Care Social Work in Saudi Arabia, also a self-administered questionnaire was designed and has been send to the study participants, was performed between March 2024 and August 2024. Our total participants were (300).

Results: shows that most of the participants were (30.0%) in the age group 30-40 years, gender the majority of them were male (62.0%), education the majority of participant are University degree were (43.0%), number of children the majority of participant more than five were (39.0%), marital stats most of participants single were (45.0%).

Conclusion: The burden of DFUs in LMICs requires comprehensive strategies. This shows that people's daily, social, and personal lives, as well as their participation in several activities, were affected when diabetic patients presented with DFU. DFU can affect QoL, Moreover, this study deeply and social aspects but also the main roles of health care social work.

Keywords: Challenges, diabetic foot, ulceration, role , Health Care Social Work, in Saudi Arabia

Introduction

Diabetic foot is a dangerous complication of diabetes and can lead to high morbidity and mortality. As essential team members of the healthcare system, Health Care Social Work play an important role in diabetic foot management and are indispensable in patients' education to prevent diabetic foot [1]. To the circumstances of living in this population, they are impacted by health conditions, such as diabetes mellitus (DM) and are susceptible to developing a diabetic foot ulcer (DFU). However, there is still a lack of information about DFU in the literature [2]

Diabetes-informed social workers are an asset to diabetes educators and programs, serving as the resident behavioral science experts [3]. Social workers can interject, affirm, and interpret relevant psychosocial factors during initial assessments and progress evaluations—highlighting strengths, needs, family involvement and functioning, and the effects of patient, family, and group cultures on outcomes [4]

Study about homelessness (PEH) reported that characteristics of this population, such as unstable housing and low income, people experiencing homelessness (PEH) are exposed to many conditions that can impact their health. According to a study conducted in England, PEH are three times more likely to report having a chronic disease than people who have stable housing . [6]] However, even though the prevalence of DM is statistically similar between PEH and housed people , PEH are susceptible to inadequate management of the disease compared to patients with stable and secure housing in the general population [7]. Social workers also can serve as resources to those lacking access to traditional diabetes programs, such as rural, homebound, uninsured, or underinsured populations or in medical settings with limited diabetes education resources. [8]

The social worker a counseling role, a social worker role is invaluable in aiding patients about physical, psycho-social, and financial impacts of diabetic foot ulceration and amputation, assessing the patient and diabetic foot ulceration and amputation and previous coping patterns related to diabetic foot [9]. A social worker also may educate patients and families about these challenges within a psychosocial module during a diabetes self-care or through individual or family counseling sessions normalizing responses, identifying resources and enabling coping mechanisms [10]. They are invaluable as consultants or instructors to diabetic clients also dealing with cognitive deficits, learning disabilities, or chronic mental illnesses. Likewise, social workers are indispensable in designing and implementing education programs and materials tailored to meet the information and skill needs of people with learning challenges or educational deficits and especially young or elderly patients.[11] In particular, social work practitioners are ideally suited to develop and teach the psychosocial component of a diabetes program that may include presentations on behavior modification, emotions, depression, stress and time management, and community resources . [12]

Literature review:

Overview of the earlier educational and behavioral studies in this area , highlighting the limitations of previous research, which include poor methodological quality and the lack of a theory-driven, patient-centered approach in studying adherence to foot self-care. Subsequently role of Health Care Social Work it introduces a novel approach to the study of psychological factors influencing adherence behaviors and role of Health Care Social Work demonstrates how patients' lay beliefs about foot complications combine with medical information and foot ulcer experience in shaping adherence to foot self-care. Next, studies linking diabetic foot ulceration to depressive symptoms are reviewed. Finally, by comparing and contrasting the generic (nonspecific to foot ulceration) approach to QoL assessment with patient-centered, foot problem-focused investigations.[13]

Study did by multidisciplinary team found that can reduce amputation rates, prevent diabetes' complications and save costs [14]. The result of study was shown by multidisciplinary team approach the two-year incidence of diabetic foot ulcers was 30% and 58%, respectively in high risk patients and in group under treatment with standard therapy [15]. The members of team for diabetic foot care usually consists of general practitioner, nurse, educator, Social service team, orthotic, and podiatrists and some consultants; vascular surgeon, infection disease specialist, dermatologist, endocrinologist, dietitian, orthopedic and also it is necessary the access to centers and home care services [16]

Although all team members have influence on reduction the incidence of foot ulcer and amputation [17], however, the role of nurse and Social service are essential [18]. Study investigated the assessment role of the Social service team as a member of team of diabetes care, for prevention and control of diabetic foot in the three areas; education, care and rehabilitation.[19]

Three systematic reviews of educational and behavioral studies have been conducted to evaluate the role of patients' foot care education in the prevention of foot ulceration.^{3–5} The reviewers were unanimous in their main conclusion, that is, owing to the poor methodological quality of the studies, the available evidence is “generally unsatisfactory,” is “inconclusive,” or “needs confirmation”.[20] While one study found that the developing countries not only diabetic foot and its complications are more common, but also even sometimes up to 40% of health care resources are unique to this disease [21]. Besides, the burden of this disease is high. The study was conducted in 2001 for estimation burden of diabetes in Iran; the burden of diabetic foot was estimated at 5848 and by adding the burden of neuropathic diabetic foot was received up to 40,000 [22]

Study found the most important point is that 85% of diabetic foot amputations are preventable with appropriate care and education [23]. Ideal management for prevention and treatment of diabetic foot is as follow: regular perception of foot, determine at risk foot, education to patient, social service team and health staff must be available to carry out, appropriate foot coverage, and early treatment of foot problems [24]. According to the protocol recommended by the American Diabetes Association (ADA), one of preventive tactic in diabetes care is multidisciplinary team approach that its advantages are shown in several studies [25]

Rationale

Based on current estimates, DFD contributes around 2% of the global disease burden, making it the 13th leading cause of disease burden from more than 350 conditions. Foot ulcers associated with diabetes are among the most serious diabetic complications, placing a substantial burden on the person's family, healthcare professionals and society at large and social work. Several factors increase the risk of complications, such as poor glycaemic control, smoking, foot deformities, peripheral neuropathy, visual loss and chronic kidney disease. With effective screening, risk assessment and meticulous foot care, these complications can be proactively delayed or prevented. This highlights the significance of early intervention and comprehensive foot care practices in mitigating the progression of DFD among diabetic individuals. There has now been some progress in role of the Social worker team, as evidenced by the emergence of patient-centered and theory-based methods to identify psychological factors that influence adherence to foot self-care, emotional status, and QoL of patients suffering from diabetic foot complications.

Aim of the Study

To determining the challenges of Type diabetic foot ulceration and Role of Health Care Social Work in Saudi Arabia 2024 .

Objectives:

To determining the challenges of Type diabetic foot ulceration and Role of Health Care Social Work in Saudi Arabia 2024

Subjects And Methods:

Study design:

This cross-sectional survey has been conducted among diabetic foot ulceration patient in the Saudi Arabia. The study carried for 3 month was performed between March 2024 and May 2024, among diabetic foot ulceration patient attend

Study setting / study area:

Patients were selected from a tertiary referral center that treats foot problems in persons with diabetes (Diabetic Foot Clinics Center and/or Vascular Surgery Departments in 3 hospitals Saudi Arabia .(There is in them multidisciplinary limb salvage team and Health Care Social Work. Patients with a history of DFU(s) and/or minor amputation (toe, toes, or part of the foot) and/or major amputation (ankle or above)

were identified and approached for participation during regularly scheduled clinic appointment or by phone calls. To determining the challenges of Type diabetic foot ulceration and Role of Health Care Social Work of diabetic foot ulceration and amputation, also a self-administered questionnaire was designed and has been send to the study participants, was performed between March 2024 and May 2024. Our total participants were (300). The study under supervision of Directorate of Health Affairs of in Saudi Arabia . The study has been carried in Saudi Arabia.

Study population:

The study has been conducted among diabetic foot ulceration patient attend the (Diabetic Foot Clinics Center and/or Vascular Surgery Departments in 3 hospitals at Saudi Arabia).

Selection criteria:**Inclusion Criteria:**

- All Saudi patient diabetic foot ulceration visits a tertiary referral center that treats foot problems in persons with diabetes.
- patient who are more than 20 years of age
- Patients with a history of DFU(s)

Exclusion criteria:

- Saudi younger than 20 years
- Participants who did not consent to participate in the study, and/or did not answer the questions of the study.
- Patients with language barriers .

Study Sample:

The sample size has been calculated by applying Raosoft sample size calculator based on (The margin of error: 5%, Confidence level: 95%, and the response distribution was considered to be 20%) accordingly the Sample size is 300 of diabetic foot ulceration and amputation Saudi patient attending in tertiary referral center and adding 10 more to decrease margin of error. After adding 5% oversampling, the minimum calculated sample has been 200. Computer generated simple random sampling technique was used to select the study participants.

Sampling technique:

Systematic random sampling technique is adopted. By using systematic sampling random as dividing the total diabetic foot ulceration and amputation Saudi patient attending in tertiary referral center by the required sample size; (300)

Data collection methods:

The self-administered questionnaire is designed based on previous studies and frameworks to etmerining the challenges of Type diabetic foot ulceration and Role of Health Care Social Work in Saudi Arabia 2024. The questionnaire was developed in English and was then translated into Arabic. The questions were first pre-tested and were revised and finalized after it was pilot tested. Before completing the survey, participants were required to indicate their consent using a forced response question followed by the survey questionnaires. The survey is estimated to take 10 min to complete . To collect the information, a set of questions were constructed and developed .

The questionnaire consisted of two main sections; the first section focuses on Socio demographic and background information such as age, education level, outcome and gender of the participant's impact of the Social and psychological service patient attend the (Diabetic Foot Clinics Center and/or Vascular Surgery Departments in 3 hospitals), Second section focuses on questions of role of Health Care Social Work in Saudi Arabia

A Pilot study

Was carried out at the questions were first pre-tested and were revised and finalized after it was pilot tested. Before completing the survey, participants were required to indicate their consent using a forced

response question followed by the survey questionnaires. This study has been conducted and all suggestions taken into consideration.

Data analysis

The Statistical Package for Social Sciences (SPSS) software version 24.0 has been used for data entry and analysis. Descriptive statistics (e.g., number, percentage) and analytic statistics using test for the association and the difference between two categorical variables were applied. A p-value ≤ 0.05 has been considered statistically significant.

Ethical consideration :

- Permission from family medicine program was obtained .
- Permission from the regional Research and Ethical Committee was being given to conduct our study.
- All the subjects have been participating voluntarily in the study .
- Privacy of information and confidentiality has been maintained .
- Full explanation about the study and its purpose was carried out to obtain their participation.

Budget: Self-funded

Results :

Table 1. Distribution of the demographic characteristics of the participants (n=300)

	N	%
Age		
20-30	57	19
30-40	90	30
40-50	66	22
>50	87	29
Sex		
Male	186	62
Female	114	38
Education		
Secondary school	54	18
Diploma	60	20
Bachelor's degree	57	19
University	129	43
Number of children		
One child	75	25
Two children	63	21
Three to five children	45	15
More than five	117	39
Nationality		
Saudi	246	82
Non-Saudi	54	18
Marital status		
Single	135	45
Married	69	23
Divorced	51	17
Widow	45	15

Family income		
Low	96	32
Middle	87	29
High	117	39
Type of work		
Civil servant	60	20
Self-employed/business	72	24
House wife	90	30
Student	60	20
Farmer	18	6

Table 1 shows that most of the participants were (30.0%) in the age group 30-40 years, followed by age >50 years were (29.0%) followed by age group 40-40 years were (22.0%), regarding gender the majority of them were male (62.0%) while female (38.0%), regarding level of education the majority of participant are University degree were (43.0%), followed by diploma degree were (20.0%) , regarding the Number of children the majority of participant more than five were (39.0%) while one child were(25.0%), also regarding the nationality most of participants Saudi were(85.0%) while non-Saudi were (18.0%), regarding the marital stats most of participants single were(45.0%)while married were(23.0%), regarding Family income the majority of participant are high were(39.0%) followed by low were (32.0%), regarding Type of work the majority of participant are house wife were(30.0%) followed by Self-employed/business were (24.0%).

Table 2. Distribution of Participant Clinical characteristics by diabetic foot ulceration

	N	%
Duration of diabetes (yrs.)		
< 10	108	36
> =10	192	64
Diabetic foot ulcer		
Yes	60	20
No	240	80
History of amputation		
Yes	135	45
No	165	55
History of hospitalization		
Yes	90	30
No	210	70
Body mass index (kg/m2)		
Underweight	81	27
Healthy weight	87	29
Overweight	66	22
Obesity	66	22
Complications (> = 2)		
Yes	195	65
No	105	35
Family history of diabetes		
Yes	237	79
No	63	21
Current smoker		

Yes	165	55
No	135	45
Other chronic disease:		
Neuroischemic	117	39
Retinopathy	63	21
Nephropathy	87	29
No	33	11
Insulin therapy:		
yes	225	75
No	75	25
Pain:		
Yes	183	61
No	117	39

Table 2 shows regarding the duration of diabetes (yrs.) most of the participants ≥ 10 were (64.0%) followed by < 10 were (36.0%), regarding diabetic foot ulcer the majority of them answer No were (80.0%) while Yes were (20.0%), regarding history of amputation the majority of participant answer No were (55.0%) while Yes were (45.0%), regarding the history of hospitalization the majority of participant answer No were (70.0%) followed by Yes were (30.0%), regarding the body mass index (kg/m²) the majority of participant healthy weight were (29.0%) but the underweight were (27.0%) while obesity were (22.0%), also regarding complications (≥ 2) most of participants answer Yes were (65.0%) while No were (35.0%), regarding the Family history of diabetes most of participants answer Yes were (79.0%) No were (21.0%), regarding current smoker the majority of participant answer Yes were (55.0%) followed by No were (45.0%), regarding other chronic disease most of participants Neuroischemic were (39.0%) while No were (11.0%) followed by Nephropathy were (29.0%), regarding the insulin therapy most of participants answer Yes were (75.0%) while No were (25.0%), regarding pain the majority of participant answer Yes were (61.0%) followed by No were (39.0%).

Table 3. Distribution of the Health Care Social Work how Support and Activity service diabetic foot ulceration participants' patient .

Social Support and Activity service	Yes		No		Chi-square	
	No	%	No	%	X ²	P-value
To Examine feet daily for discoloration, swelling, skin cracks, pain or numbness	225	75	75	25	75.000	<0.001*
Use the self-help methods to help foot examination such as using mirrors	204	68	96	32	38.880	<0.001*
Foot hygiene (daily washing, followed by drying feet carefully, especially between the fingers)	183	61	117	39	14.520	<0.001*
Controlling water temperature before washing foot	237	79	63	21	100.920	<0.001*
To avoid going barefoot or wearing shoes without socks	225	75	75	25	75.000	<0.001*
To choose shoes that is precisely in size. (The best time for buying shoes is in the afternoon.)	198	66	102	34	30.720	<0.001*
Cutting the fingernails directly	225	75	75	25	75.000	<0.001*

To keep wet the dry surfaces of foot by moisturizing creams except	216	72	84	28	58.080	<0.001*
--	-----	----	----	----	--------	---------

Table 3 shows distribution of the Social Support and Activity service on diabetic foot ulceration and amputation participants' patient, regarding to examine feet daily for discoloration, swelling, skin cracks, pain or numbness most of participants answer Yes were (75.0%), followed by No were (25.0%) while a significant correlation were p-value =0.001 and X^2 75.000. Regarding use the self-help methods to help foot examination such as using mirrors most of the participants answer Yes were (68.0%) while No were (32.0%), while a significant correlation were p-value =0.001 and X^2 38.880. Regarding Foot hygiene (daily washing, followed by drying feet carefully, especially between the fingers) most of the participants answer Yes were (61.0%) while No were (39.0%), while a significant correlation were p-value =0.001 and X^2 14.520. Regarding controlling water temperature before washing foot most of the participants answer Yes were (79.0%) while No were (21.0%), while a significant correlation were p-value =0.001 and X^2 100.920. Regarding To avoid going barefoot or wearing shoes without socks most of the participants answer Yes were (75.0%) while No were (25.0%), while a significant correlation were p-value =0.001 and X^2 75.000. Regarding to choose a shoe that is precisely in size . (The best time for buying shoes is in the afternoon) most of the participants answer Yes were (66.0%) while No were (34.0%), while a significant correlation were p-value =0.001 and X^2 30.720. Regarding cutting the fingernails directly most of the participants answer Yes were (75.0%) while No were (25.0%), while a significant correlation were p-value =0.001 and X^2 75.000. Regarding to keep wet the dry surfaces of foot by moisturizing creams except most of the participants answer Yes were (72.0%) while No were (28.0%), while a significant correlation were p-value =0.001 and X^2 58.080.

Figure 1 Distribution of the Health Care Social Work how Support and Activity service diabetic foot ulceration participants' patient

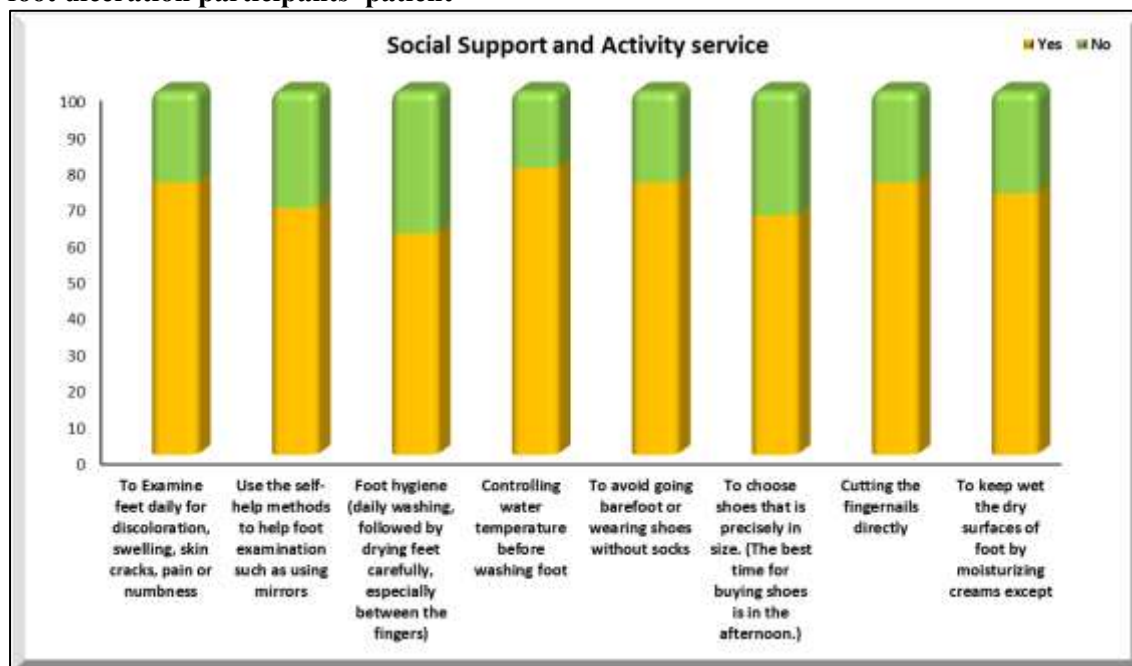


Table 4 . Distribution of the role of social worker diabetic foot ulceration and participants' patient

Role of social worker	Yes		No		Chi-square	
	No	%	No	%	X ²	P-value
Do you visit to social worker	204	68	96	32	38.880	<0.001*
Social Support to avoid self-care impairment	162	54	138	46	1.920	0.166
Do you heave social worker /behavioral therapy	204	68	96	32	38.880	<0.001*

social worker support to diabetic foot ulceration and amputation very important	255	85	45	15	147.000	<0.001*
Psychological deterioration after diagnosis of diabetic foot amputation need to social worker to support the patient	270	90	30	10	192.000	<0.001*
Social worker helps in social support from family or friends	228	76	72	24	81.120	<0.001*
Need the social worker in accompany patient to appointments in the community	243	81	57	19	115.320	<0.001*
Social worker helps to confer with the patient other providers	201	67	99	33	34.680	<0.001*
Social worker speaks with on patient family or support system (with the patient consent)	207	69	93	31	43.320	<0.001*
Social worker does by ongoing monitoring of care plan improve the self-efficacy	216	72	84	28	58.080	<0.001*
Social worker does by visit the patient in treatment facilities/hospitals	228	76	72	24	81.120	<0.001*
Social worker monitor status of on patient case Visit on patient	237	79	63	21	100.920	<0.001*
Social worker provides prevention education session on patient	210	70	90	30	48.000	<0.001*
Social worker meets the patient upon when need	219	73	81	27	63.480	<0.001*
Need social worker to ask for help if reduction of the visual acuity.	198	66	102	34	30.720	<0.001*

Table 4 shows the role of social worker diabetic foot ulceration and amputation participants' patient, regarding you visit to social worker most of participants answer Yes were (68.0%), followed by No were (32.0%) while a significant correlation were p-value =0.001 and X^2 38.880. Regarding Social Support to avoid self-care impairment most of the participants answer Yes were (54.0%) while No were (46.0%), while no significant correlation were p-value =0.166 and X^2 1.920. Regarding you have social worker /behavioral therapy most of the participants answer Yes were (68.0%) while No were (32.0%), while a significant correlation were p-value =0.001 and X^2 38.880. Regarding social worker support to diabetic foot ulceration and amputation very important most of the participants answer Yes were (85.0%) while No were (15.0%), while a significant correlation were p-value =0.001 and X^2 147.000. Regarding Psychological deterioration after diagnosis of diabetic foot amputation need to social worker to support the patient most of the participants answer Yes were (90.0%) while No were (10.0%), while a significant correlation were p-value =0.001 and X^2 192.000. Regarding Social worker helps in social support from family or friends most of the participants answer Yes were (76.0%) while No were (24.0%), while a significant correlation were p-value =0.001 and X^2 81.120. Regarding need the social worker in accompany patient to appointments in the community most of the participants answer Yes were (81.0%) while No were (19.0%), while a significant correlation were p-value =0.001 and X^2 115.320. Regarding Social worker helps to confer with the patient other providers most of the participants answer Yes were (67.0%) while No were (33.0%), while a significant correlation were p-value =0.001 and X^2 34.680. Regarding Social worker speaks with on patient family or support system

(with the patient consent) most of the participants answer Yes were (69.0%) while No were (31.0%), while a significant correlation were $p\text{-value} = 0.001$ and $X^2 43.320$. Regarding Social worker does by ongoing monitoring of care plan improve the self-efficacy most of the participants answer Yes were (72.0%) while No were (28.0%), while a significant correlation were $p\text{-value} = 0.001$ and $X^2 58.080$. Regarding Social worker does by visit the patient in treatment facilities/hospitals most of the participants answer Yes were (76.0%) while No were (24.0%), while a significant correlation were $p\text{-value} = 0.001$ and $X^2 81.120$. Regarding Social worker monitor status of on patient case Visit on patient most of the participants answer Yes were (79.0%) while No were (21.0%), while a significant correlation were $p\text{-value} = 0.001$ and $X^2 100.920$. Regarding Social worker provides prevention education session on patient most of the participants answer Yes were (70.0%) while No were (30.0%), while a significant correlation were $p\text{-value} = 0.001$ and $X^2 48.000$. Regarding Social worker meets the patient upon when need most of the participants answer Yes were (73.0%) while No were (27%), while a significant correlation were $p\text{-value} = 0.001$ and $X^2 63.480$. Regarding need social worker to ask for help if reduction of the visual acuity most of the participants answer No were (34.0%) while Yes were (66.0%), while a significant correlation were $p\text{-value} = 0.001$ and $X^2 30.720$.

Discussion

The purpose of this study was to determining the challenges of Type diabetic foot ulceration and Role of Health Care Social Work in Saudi Arabia 2024. In Saudi Arabia there are specialized foot care facilities where the same type of test is performed. The number of patients continues to rise, putting a strain on health staff. When an operation to amputate a foot or toe is scheduled, patient waiting times increase, forcing the facility to limit the number of new patients enrolled. [26] Until recently, psychosocial research in diabetes focused almost exclusively on self-care behaviors and the burdens associated with management of glycaemia, to the near total neglect of the effects of chronic complications such as diabetic neuropathy and foot ulceration. Diabetic foot as the most common cause of hospitalization in diabetic patients is one of health system concerns. Most of the time of diabetes healthcare providers is allocated to the prevention and diagnosis of diabetic foot complications. [27] In this regard, multidisciplinary team found that can reduce amputation rates, prevent diabetes' complications and save costs social worker as members of the diabetes care team not only need to be play their role in health care, public education, health system management, patient care and improving the quality of life, but also must attend in special training to use the latest instructions of diabetic foot care in order that provides the effective services to the physical, psycho-social, and financial impacts of diabetic foot ulceration and amputation facilitate promote diabetic patients health [24] In our study shows that most of the participants were (30.0%) in the age group 30-40 years, gender the majority of them were male (62.0%), education the majority of participant are University degree were (43.0%), number of children the majority of participant more than five were (39.0%), marital stats most of participants single were (45.0%), type of work the majority of participant are house wife were (30.0%). (See table 1)

The Health Care Social Work how Support and Activity service diabetic foot ulceration participants' patient. Health Care Social Work have a much higher risk of psychological problems (eg, anxiety, depression and insomnia).[28] This may be related to the higher risk of infection on account of being exposed to patients with diabetic foot ulceration patient and tedious work involved in caring for them and reminds us of the importance of providing psychological support to Social Work . The psychological burden of living with diabetes and DFUs cannot be underestimated. Patients often experience feelings of anxiety, depression, and social isolation due to their condition. Psychologists and social workers can provide valuable support to patients, helping them cope with their feelings and navigate the emotional landscape that accompanies chronic illness. An interdisciplinary approach ensures that patients receive holistic care that attends not only to their physical needs but also to their emotional well-being [21] In our study shows distribution of the Social Support and Activity service on diabetic foot ulceration and amputation participants' patient, regarding to examine feet daily for discoloration, swelling, skin cracks, pain or numbness most of participants answer Yes were (75.0%), a significant correlation were $p\text{-value} = 0.001$ and $X^2 75.000$, the self-help methods to help foot examination such as using mirrors most of the participants answer Yes were (68.0%), foot hygiene (daily washing, followed by drying feet carefully, especially between the fingers) most of the participants answer Yes were (61.0%) , choose a shoe that is precisely in size . (The best time for

buying shoes is in the afternoon) most of the participants answer Yes were (66.0%) a significant correlation were $p\text{-value} = 0.001$ and $X^2 75.000$, keep wet the dry surfaces of foot by moisturizing creams except most of the participants answer Yes were (72.0%) (See Table3)

The high prevalence of Social and psychological service problems that was found in this study is consistent with recent findings from two other Chinese research studies with relatively. Moreover, differences in professional jargon and approaches to patient care can create misunderstandings among team members. [29] Clinicians and Health Care Social Work must work diligently to promote mutual respect, understanding, and a shared vision for patient-centered care. Training programs that emphasize teamwork and communication skills can help mitigate these barriers, fostering a culture of collaboration within healthcare settings [30]

In our study shows the role of social worker diabetic foot ulceration and amputation participants' patient, regarding you visit to social worker most of participants answer Yes were (68.0%), were $p\text{-value} = 0.001$ and $X^2 38.880$. Psychological deterioration after diagnosis of diabetic foot amputation need to social worker to support the patient most of the participants answer Yes were (90.0%) a significant correlation were $p\text{-value} = 0.001$ and $X^2 192.000$. Social worker meets the patient upon when need most of the participants answer Yes were (73.0%) a significant correlation were $p\text{-value} = 0.001$ and $X^2 63.480$. (See table 4)

Conclusion

Diabetes and its complications negatively influence the bio-psycho-social functioning of patients. Patients with diabetic foot ulcers, a frequent cause of lower limb amputations and disability, constitute a group with a particularly severe burden. When caring for such a patient, there is a necessity for monitoring of particular support from a therapeutic care team and Social workers during therapy. The patient's psychological state with particular emphasis on presence and severity of anxiety and depressive symptoms is an important element of such support from a therapeutic care team and Social workers. Care life of patients with diabetic foot amputations and the need for psychological support requires social workers to reintegrate them into society, support of the entire therapeutic care team, social workers including emotional and educational support. An improved patient with diabetic foot amputations is essential to motivation for treatment and rehabilitation.

References

1. Moteri, N. A. A., ALRUWAILI, N. H. H., ALSHAMMARI, N. A. S., BANAQY, E. A., Al-Abdali, A. M. M., Al-Anzi, A. S., ... & ALRUWAILI, S. M. (2024). The Role of Nurses in Diabetic Foot Prevention and Care: A Comprehensive Review. *Journal of International Crisis and Risk Communication Research*, 7(S8), 2501.
2. Turns, M. (2015). Prevention and management of diabetic foot ulcers. *British journal of community nursing*, 20(Sup3), S30-S37.
3. Makiling, M., & Smart, H. (2020). Patient-centered health education intervention to empower preventive diabetic foot self-care. *Advances in skin & wound care*, 33(7), 360-365.
4. Ali, M. M., & Ghonem, S. E. (2019). Effectiveness of health education program regarding foot self-care on risk for developing foot ulcer among patients with diabetes. *American Journal of Nursing*, 8(5), 280-93.
5. Schaper, N. C., Van Netten, J. J., Apelqvist, J., Lipsky, B. A., Bakker, K., & International Working Group on the Diabetic Foot (IWGDF). (2016). Prevention and management of foot problems in diabetes: a Summary Guidance for Daily Practice 2015, based on the IWGDF Guidance Documents. *Diabetes/metabolism research and reviews*, 32, 7-15.
6. Adiewere, P., Gillis, R. B., Jiwani, S. I., Meal, A., Shaw, I., & Adams, G. G. (2018). A systematic review and meta-analysis of patient education in preventing and reducing the incidence or recurrence of adult diabetes foot ulcers (DFU). *Heliyon*, 4(5).
7. Ahmad Sharoni, S. K., Minhat, H. S., Mohd Zulkefli, N. A., & Baharom, A. (2016). Health education programmes to improve foot self-care practices and foot problems among older people with diabetes: a systematic review. *International journal of older people nursing*, 11(3), 214-239.

8. Foong, H. F., Kyaw, B. M., Upton, Z., & Tudor Car, L. (2020). Facilitators and barriers of using digital technology for the management of diabetic foot ulcers: a qualitative systematic review. *International wound journal*, 17(5), 1266-1281.
9. Jalilian, M., Ahmadi Sarbarzeh, P., & Oubari, S. (2020). Factors related to severity of diabetic foot ulcer: a systematic review. *Diabetes, Metabolic Syndrome and Obesity*, 1835-1842.
10. Mairghani, M., Jassim, G., Elmusharaf, K., Patton, D., Eltahir, O., Moore, Z., & Sorensen, J. (2019). Methodological approaches for assessing the cost of diabetic foot ulcers: a systematic literature review. *Journal of wound care*, 28(5), 261-266.
11. Nickinson, A. T., Bridgwood, B., Houghton, J. S., Nduwayo, S., Pepper, C., Payne, T., ... & Sayers, R. D. (2020). A systematic review investigating the identification, causes, and outcomes of delays in the management of chronic limb-threatening ischemia and diabetic foot ulceration. *Journal of vascular surgery*, 71(2), 669-681.
12. Schmidt, B. M., Holmes, C. M., Najarian, K., Gallagher, K., Haus, J. M., Shadiow, J., ... & Pop-Busui, R. (2022). On diabetic foot ulcer knowledge gaps, innovation, evaluation, prediction markers, and clinical needs. *Journal of Diabetes and its Complications*, 36(11), 108317.
13. Wang, Q., Mousavi, A., & Lu, C. (2022). A scoping review of empirical studies on theory-driven learning analytics. *Distance Education*, 43(1), 6-29.
14. Albright, R. H., Manohar, N. B., Murillo, J. F., Kengne, L. A. M., Delgado-Hurtado, J. J., Diamond, M. L., ... & Fleischer, A. E. (2020). Effectiveness of multidisciplinary care teams in reducing major amputation rate in adults with diabetes: a systematic review & meta-analysis. *Diabetes Research and Clinical Practice*, 161, 107996.
15. Meza-Torres, B., Carinci, F., Heiss, C., Joy, M., & de Lusignan, S. (2021). Health service organisation impact on lower extremity amputations in people with type 2 diabetes with foot ulcers: systematic review and meta-analysis. *Acta Diabetologica*, 58(6), 735-747.
16. Osher, E., Zohar, N. E., Yacobi-Bach, M., Cantrell, D., Serebro, M., Sofer, Y., ... & Stern, N. (2023). Endocrinology specialty service for inpatients: an unmet growing need. *BMC Health Services Research*, 23(1), 142.
17. Blanchette, V., Brousseau-Foley, M., & Cloutier, L. (2020). Effect of contact with podiatry in a team approach context on diabetic foot ulcer and lower extremity amputation: systematic review and meta-analysis. *Journal of foot and ankle research*, 13(1), 15.
18. Donelan, K., Chang, Y., Berrett-Abebe, J., Spetz, J., Auerbach, D. I., Norman, L., & Buerhaus, P. I. (2019). Care management for older adults: The roles of nurses, social workers, and physicians. *Health Affairs*, 38(6), 941-949.
19. Silva-Tinoco, R., Cuatecontzi-Xochitiotzi, T., Reyes-Paz, Y., Vidal-Santos, B., Galíndez-Fuentes, A., & Castillo-Martínez, L. (2024). Improving foot ulcer risk assessment and identifying associated factors: results of an initiative enhancing diabetes care in primary settings. *Diabetes Epidemiology and Management*, 14, 100195.
20. Yıldırım Ayaz, E., Dincer, B., & Oğuz, A. (2022). The effect of foot care education for patients with diabetes on knowledge, self-efficacy and behavior: systematic review and meta-analysis. *The International Journal of Lower Extremity Wounds*, 21(3), 234-253.
21. Stranneheim, H., Lagerstedt-Robinson, K., Magnusson, M., Kvarnung, M., Nilsson, D., Lesko, N., ... & Wedell, A. (2021). Integration of whole genome sequencing into a healthcare setting: high diagnostic rates across multiple clinical entities in 3219 rare disease patients. *Genome Medicine*, 13(1), 40.
22. Peimani, M., Esfahani, Z., Bandarian, F., Esmaeili, S., Moghaddam, S. S., Namazi, N., ... & Larijani, B. (2024). The Burden of Type 2 Diabetes Mellitus and Attributable Risk Factors in Iran, 1990–2019: Results from the Global Burden of Disease Study 2019. *Iranian Journal of Public Health*, 53(4), 913.
23. Adiewere, P., Gillis, R. B., Jiwani, S. I., Meal, A., Shaw, I., & Adams, G. G. (2018). A systematic review and meta-analysis of patient education in preventing and reducing the incidence or recurrence of adult diabetes foot ulcers (DFU). *Heliyon*, 4(5).
24. Kaminski, M. R., Golledge, J., Lasschuit, J. W., Schott, K. H., Charles, J., Cheney, J., ... & Australian Diabetes-related Foot Disease Guidelines & Pathways Project. (2022). Australian guideline on prevention of foot ulceration: part of the 2021 Australian evidence-based guidelines for diabetes-related foot disease. *Journal of foot and ankle research*, 15(1), 53.

- 25.Narayanan, S. (2022). Descriptive analysis of the most widely viewed YouTube™ videos related to diabetes self-management. Teachers College, Columbia University.
- 26.Lin, I., Goucke, R., Bullen, J., Sharma, S., & Barnabe, C. (2022). Inequities in pain: pain in low-and middle-income countries and among Indigenous peoples. *Pain-E-Book: Pain-E-Book*, 353.
- 27.Bagnell, K. B., & Moberg-Wolff, E. (2023). Pediatric Care Management in Life Care Planning 1. In *Life Care Planning and Case Management Across the Lifespan* (pp. 171-207). Routledge.
- 28.Chapman, L. S., Cochrane, S., Sykes, G., Gill, J., Nixon, J., & Jayagopal, V. (2024). Exploring the psychosocial burden of foot complications in diabetes: A cross-sectional survey and qualitative interview study in a United Kingdom coastal community. *Journal of Foot and Ankle Research*, 17(3), e12038.
- 29.Vas, P., & Chockalingam, N. (2023). Improving physical, physiological, and psychological health outcomes in patients with diabetic foot ulcers—state of the art. *Clinical, Cosmetic and Investigational Dermatology*, 3547-3560.
- 30.Xu, H., Wu, C., Xiang, S., Qiu, S., Chen, Y., Takashi, E., ... & Xie, P. (2024). Psychosocial markers of pre-hospital delay in patients with diabetic foot: A cross-sectional survey. *Nursing Open*, 11(1), e2088.