

Challenges of Type diabetic foot ulceration and Role of Health Care Social Work: literature review 2024

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Abstract:

Background

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. There is therefore a need to better understand the psychosocial factors and Role of Health Care Social Work involved in the development of diabetic foot ulcers and the ways in which foot ulceration influences an individual's functioning and quality of life (QoL). Three systematic reviews of educational and behavioral studies have been conducted to evaluate the role of health care social work role of patients' foot care education in the prevention of foot ulceration. (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". Nowadays, diabetes constitutes a significant medical, social and economic problem.

Aim of this systematically review: To study the Role of Health Care Social Work of diabetic foot. Ulceration, Saudi Arabia 2024 .

Method: the review was conducted in two databases (Scopus and Pubmed) with the use of the following keywords: "Role of Health Care Social Work and diabetic foot", "diabetic foot ulceration", "social issues," demographic profiles and diabetic foot", "social determinants", "social capital and diabetic foot", "social characteristics and gender and diabetic foot", "social profiles and diabetic foot", "social relationships and diabetic foot" and "social risk and diabetic foot", from July to August 2024.

Results: outcome of Challenges of Type diabetic foot ulceration and Role of Health Care Social Work . 6 articles were selected that compliant with the theme of this present systematic review (Table 1). Among the 7 reviewed articles, articles have explained the Challenges of Type diabetic foot ulceration in Role of Health Care Social Work in Saudi Arabia.

Conclusion: This review 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 review deeply and systematically analyzed not only social aspects but also the main role of health care social work , which may be effectively used in research practice and sociological management

of DFU. Therefore, it is pivotal that healthcare professionals realize that a holistic approach is required to assess the overall impact of DFU and important role of health care social work to deliver effective treatment and care

Keywords: Challenges, diabetic, foot ulceration, Role, Health Care Social Work, Saudi Arabia.

Introduction

Diabetic Foot Ulcers (DFUs) are chronic cutaneous lesions that develop on the feet of individuals afflicted with diabetes mellitus.(1) Early-stage DFUs signify the initial phases of ulcer formation and represent significant complications associated with diabetes, giving rise to considerable morbidity, disability, and mortality.(2) The a etiology of DFUs stems from a multifactorial interplay involving peripheral neuropathy, peripheral arterial disease, foot deformities, and traumatic events.(3) These ulcers predominantly manifest in weight-bearing regions of the foot and are susceptible to infection, exacerbating wound healing.(4,5) In Low and Middle-income Countries (LMICs), managing DFUs presents unique challenges due to resource constraints, inadequate health care infrastructure, and a higher prevalence of risk factors associated with foot ulcer development.(6,7) LMICs often face a scarcity of health care professionals trained in diabetic foot care, role of health care social work limited availability of specialized wound care products, and financial constraints that limit access to comprehensive treatment.(8) Consequently, DFUs in LMICs are often diagnosed at advanced stages, leading to more complex wounds and an elevated risk of amputation and mortality.(9) A DFU is a complex and lifelong problem for patients with diabetes. Two-thirds of DFUs take more than 12 months to heal, and the recurrence rate is estimated to be 65% at 5 years after healing.(10) Infection and gangrene resulting from DFUs are the leading causes of amputation,(11) and taken together, DFUs and amputation dramatically increase mortality rates for patients with diabetes.(12) Moreover, ulcers and amputations have diverse impacts for patients, including impaired physical function, reduced quality of life,(13), loss of employment and economic stress, depression and emotional suffering,(14) and social isolation. The management of early DFUs is crucial to preventing complications and improving patient outcomes. Early detection and intervention can significantly improve wound healing, reduce the need for amputation, and improve the quality of life for individuals with DFUs.(15) However, the management strategies employed in LMICs for early DFUs may differ from those in high-income countries (HICs) due to resource constraints and other contextual factors.(17) Moreover, the evaluation of early DFU management outcomes in LMICs holds paramount importance in appraising the efficacy of existing strategies and pinpointing areas necessitating enhancement. Patient-centric outcomes, encompassing wound healing rates, amputation incidence, and quality of life, and health care resource utilization, offer invaluable insights into the effectiveness of Role of Health Care Social Work .(18)

Foot ulceration, which precedes 80% of leg amputations in people with diabetes, is a significant and costly public health problem, accounting for over 20% of the total diabetes related costs in the US.(4) It is estimated that one-quarter of the 30 million people with diabetes mellitus in the United States will develop a diabetic foot ulcer (DFU) in their lifetime and people with diabetes are 10 times more likely to undergo amputations than the general public.(19) Of public health concern, the incidence of DFUs is disproportionately higher in ethnic minorities and in those from disadvantaged socioeconomic backgrounds.(10) Patients with suboptimal health insurance and low income have several times higher risk of amputation than their counterparts.(12) A DFU is a complex and lifelong problem for patients with diabetes. Two-thirds of DFUs take more than 12 months to heal, and the recurrence rate is estimated to be 65% at 5 years after healing.(20) Infection and gangrene resulting from DFUs are the leading causes of amputation, and taken together, DFUs and amputation dramatically increase mortality rates for patients with diabetes.(12)

Moreover, ulcers and amputations have diverse impacts for patients, including impaired physical function, reduced quality of life (21) loss of employment and economic stress, depression and emotional suffering, and social isolation.(22)

Methodology

Aim of the Study

To study the Role of Health Care Social Work of diabetic foot. Ulceration, Saudi Arabia 2024 .

Study design:

This Systematic review endeavors the role of health care social work establish a comprehensive framework for early intervention and care of DFUs in LMICs as categorized by the World Bank Income Groups. LMIC classification is based on Gross National Income (GNI) calculated using conversion factors derived from the Atlas method. The countries falling within these income groups are subject to annual updates. To ensure a rigorous and all-encompassing approach and role of health care social work specific inclusion and exclusion criteria were meticulously applied.

Search strategy:

the review was conducted in two databases (Scopus and Pubmed) with the use of the following keywords: “Role of Health Care Social Work and diabetic foot”, “diabetic foot ulceration ”, “social issues ", demographic profiles and diabetic foot”, “social determinants ,“social capital and diabetic foot”, “social characteristics and gender and diabetic foot”, “social profiles and diabetic foot”, “social relationships and diabetic foot” and “social risk and diabetic foot”, from July to August 2024. Predetermined exclusion and inclusion criteria were selected. Forty-five studies (quantitative and qualitative) were eligible for inclusion in this review. Role of Health Care Social Work , gender problems, socioeconomic status, social capital, and medical problems were the most important negative variables for diabetic foot. All the included variables reveal that the social impact of diabetic foot is the most important factor for management and prevention, in terms of aggravation and more, of the diabetic foot.

Searches and Data Sources:

We searched for all studies published from 2020 to 2024 using two databases, Scopus and PubMed. These databases were preferred because they contain significant elements from the biomedical sciences, psychology, and sociology literature. The following keywords Soc. Sci. 2024, 449 were applied in the databases during the literature search: “social aspects and diabetic foot” or “Role of Health Care Social Work " and diabetic foot ulceration” or “social issues and“ demographic profiles and diabetic foot” and gender The research was restricted to human studies published in the English language.

Selection criteria:

Inclusion criteria and Exclusion Criteria

This approach ensured that relevant articles addressing early intervention, care, and future strategies for DFUs in were included in the review. Consequently, the review incorporated descriptive studies, intervention studies, cohort studies, and observational studies, providing a holistic perspective on early intervention and care for DFUs. The inclusion of investigations conducted in both clinical and community health care settings further contributed to the breadth of knowledge covered in this review. Standalone abstracts, case reports, posters, and unpublished were excluded. By adopting these criteria, the review aimed to prioritize the of Role of Health Care Social Work

Data Extraction

The screening of articles was carried out in two phases. In the first phase, articles were screened on the basis of title and abstract. The abstracts of all the selected titles were sorted for more detailed information. Two independent reviewers read the abstracts and categorized them as relevant, not relevant, or possibly relevant. In the second phase, the full-text articles were assessed for eligibility. Two reviewers independently applied inclusion and exclusion criteria to potentially eligible papers and both reviewers then independently extracted data from the original articles. Any disagreements were independently checked by the second reviewer and a consensus was reached.:

The process of selecting the articles, which are contained in this review.

Presents method used for selecting eligible studies for this review. In the first stage, Pro Quest and Scopus returned 240 articles. After duplicate articles and those published before 2020 were removed, 94 remained. Non-peer-reviewed articles (75) and articles not mainly about health insurance Saudi Arabia, (22) were then excluded. After excluding studies with sample sizes under 80 and response rates under 60%, 7 articles were included in this review

Table1: Summary of Findings of the Type diabetic foot ulceration and Role of Health Care Social Work.

Author, Date, Country	Region	Study design	Study aim	Results
Alanazi et al (2024)(23)	Kingdom of Saudi Arabia	Comprehensive approach that addresses the multifaceted challenges presented. cross-sectional descriptive design.	To emphasizes a comprehensive assessment and individualized care plan, incorporating wound care, glycemic control, and patient education	Role of Health Care Social Work diabetic foot ulceration and follow-up Care for Diabetic Foot Ulcers. Optimal follow-up care is imperative for the effective management of DFUs. A comprehensive approach to follow-up care that encompasses patient education, psychosocial support, systematic assessments. [57].1.Patient Education: Empowering patients through education is vital in preventing the recurrence of DFUs. Patients should receive thorough instructions on foot care, including daily inspections, proper hygiene, appropriate footwear choices, and monitoring of blood sugar levels. Educational sessions and psychosocial support that focus on lifestyle modifications [58] 2 .Regular Monitoring: Consistent follow-up appointments and Role of the Health Care Social Work of psychosocial support are crucial for monitoring the progress of DFU healing and implementing timely interventions if complications arise. [59] 3. Interdisciplinary Collaboration: Effective DFU management necessitates a team approach involving podiatrists, endocrinologists, dermatologists, and health care social work nursing and nursing staff. Each discipline

				<p>contributes unique expertise, facilitating comprehensive care plans tailored to individual patient needs.</p> <p>Conclusions In conclusion, the management of diabetic foot ulcers requires a comprehensive Health Care Social Work diabetic approach that addresses the multifaceted challenges presented by this complex condition. By conducting thorough assessments, implementing evidence- based wound care practices, and fostering interdisciplinary collaboration, nurses play a critical role in promoting optimal healing and preventing complications. Education is equally vital, as empowering patients with knowledge about foot care, glycemic control, and self-management strategies can significantly reduce the incidence of ulcers and enhance overall health outcomes.</p>
<p>Alkalash et al (2024) (24)</p>	<p>Kingdom of Saudi Arabia</p>	<p>A cross-sectional research design</p>	<p>To evaluate knowledge and attitude toward DFUs and the practice of foot care among adult diabetic patients attending Diabetes Center, Saudi Arabia .</p>	<p>The data from this study identified that diabetic patients with a shorter duration of DM exhibited better practices of foot care, which is consistent with previous research after a lot of psychological and social support, he came back to me role of health care social work diabetic foot ulceration. This may be due to the concerns of newly diagnosed diabetic patients about the complications of DM, which makes them worry about it and adhere to its preventive measures. In addition, patients with DM who have higher educational attainment tend to maintain better care of their feet than those with lower education levels, and they may even postpone the development or recurrence of foot ulcers. These findings are consistent with previous research . This underscores the role of education in empowering patients to adopt effective foot care practices, while patients with longer DM durations may benefit from continuous reinforcement and support to maintain good practices.</p> <p>Conclusions Patients with DM had inadequate foot care practices and inadequate knowledge and negative attitudes concerning DFUs. All diabetic patients need specific training programs to increase their understanding of diabetic</p>

				<p>foot care and role of health care social work diabetic foot ulceration to inspire them to take adequate care of their feet to avoid the occurrence of DFUs; the elderly, female patients, and diabetic patients who are not employed should receive particular attention. Personalized diabetes treatment plans have to be created in order to enhance foot care behaviors and a lot of psychological and social support, he came back to me especially for those with DM who are illiterate and have had DM disease for a longer duration. Providing diabetic patients with simple educational materials to help them and their caregivers follow instructions for a DM management plan and procedures for foot care at home and warning signs of diabetic foot. Further qualitative investigation is needed for an accurate understanding of the reasons behind patients' unfavorable opinions of diabetic foot.</p>
<p>Barnawi, et al (2024) (25)</p>	<p>Saudi Arabia</p>	<p>A descriptive research design.</p>	<p>To assess self-care practices of Saudi diabetic foot patients</p>	<p>In our study (45.5%) of participants reported that they lack family support and motivation. and lose of psychological and social support, he came , these results are in line with the findings of Nguyen's study, as family and health care social work involvement in healthcare decisions extends beyond just making decisions about food and financial support for medical expenses, which may create barriers to patients' participation in health education programs. As a result, patients need ongoing support from health care social work and family members and the community in order to change their lifestyles and behaviors and achieve effective continuous changes in or additionally, in order to effectively control diabetes mellitus at the community level, information regarding the disease and its risk factors should be distributed through the media .</p> <p>Conclusions</p> <p>This study has brought attention to the knowledge, role of health care social work and practice gaps in DM patients' foot care, underscoring the need for an educational program to prevent diabetic foot complications, which were linked to poor socioeconomic status and illiteracy. Along with ongoing assistance and reinforcement from doctors. Develop health educational</p>

				program for diabetic foot patients to increase their knowledge and self-care practices regarding diabetic foot.
Aljamili et al. (2022) (26)	Saudi Arabia	A self-reported questionnaire	To determine the prevalence of depression and the associated risk factors among patients with DFU	<p>Found that men and people with lower levels of education had a higher prevalence of moderate to severe depression. However, we found no discernible correlation between gender, education level, and the prevalence of depression. This is most likely a result of the study's limited sample size. We anticipated that a bigger sample size would make the link more pronounced. The strong correlation between the length of DFU and depression is the study's main finding. We discovered that among patients with DFU for a longer period of time, there was a 34.8% frequency of suicidal ideation or self-harm. This is further supported by the fact that patients with DFU who had it for a longer time than those who only recently received a diagnosis had a 3 times higher risk of depression. In numerous earlier investigations, independent of age or gender, it was discovered that macro vascular complications of diabetes, including DFU, were substantially related with depression, suicidal thoughts, and all-cause mortality, including death. Therefore, regular psychological evaluations for diabetic patients are absolutely crucial. Early detection of depression may enable the patient to manage their mental illness better, reducing the likelihood of suicidal thoughts and other negative effects.</p> <p>Conclusions Regardless of age, gender, or other socio demographic factors, patients with DFU have a high incidence of moderate to severe depression, with patients with long-standing DFU having triple the risk of depression as those with recently diagnosed DFU. To lessen this diabetes consequence, diabetic individuals should be rigorously examined, and prophylactic measures and</p>

				patient education regarding DFU are essential. Due to their increased likelihood of developing the disease, patients who have had DFU should also undergo thorough screening and psychological evaluation for depression.
Al-Quwaidhi, et al (2023) (27)	Saudi Arabia	A simulation epidemiological model was designed and validated.	To estimate future forecasts in the burden of DRA (number of cases and mortalities) among adult diabetics (aged ≥ 20 years).	It is difficult to validate the number of mortalities predicted by the model because, obviously, there is a lack of reliable data on specific causes of death reported in death certificates in most countries globally. However, all-cause mortalities in this study provide a useful primary measure of the burden of DRA and were estimated by applying national rates obtained from a relatively recent study using a nationwide sample of diabetics in KSA. To set proper preventive services and allocation of resources, this study offers the policymakers a new useful resource for forecasting the future burden of DRA in Al-Ahsa. However, some limitations should be noted. Conclusions DRA impose a considerable burden on patients and the healthcare system, even with the possibility of a potential decrease in incidence rates. Multi-sectorial efforts toward preventive and curative healthcare services offered to individuals with diabetes in Saudi Arabia should be intensified in order to minimize the burden of diabetes and its complications including DRA.
Bonnet et al (2022) (28)	France	A cross-sectional observational design	To provide an overview of the literature on the relationship between social deprivation and DFU (both risk and prognosis)	Care for diabetic foot is difficult, failure is common, and management strategies likely play a role. The access to trained, experienced and competent teams may also have a significant impact, with access to revascularization techniques being of prime importance. Since the access to centers of excellence in revascularization is often limited to major urban centers, it would likely be more informative to distinguish between urban and rural populations than between favored and precarious populations in comparisons of the performance of DFU revascularization management. Moreover, do the most socially deprived people have the same needs in terms of healthcare density? also showed that people living with diabetes in the United States visited their diabetes specialist at least once a year whether or not they had health insurance but that those without insurance had fewer

				<p>inspections of their feet . This can probably be explained by a consultation directed toward other health problems, leaving no time for the control of the foot complications of diabetes in these people. Similarly, a British study showed that general practitioners had fewer chiropodists in their care center or network when they were located in disadvantaged areas .</p> <p>Conclusions We strongly encourage evaluation of public health policies in terms of the impact of the person’s social category on the risk and prognosis of DFU. The most socially deprived populations may warrant specific care programs that will need to be evaluated. Furthermore, it will be important to include subgroup analysis of social deprivation in studies that assess DFU risk and prognosis. Finally, whatever the relationship between social deprivation and the diabetic foot, practitioners need to take into account each patient’s individuality, whether the patient is seen in consultation or is hospitalized. It is important always to keep in mind that individual characteristics and comorbidities still have the greatest impact on the prognosis and will determine treatment decisions.</p>
Nourah. et al (2023), (29)	Saudi Arabia	A cross-sectional study	To assess the awareness, attitudes, practices and risk factors influencing diabetic foot ulcers among diabetes patients in the eastern province of Saudi Arabia	<p>It is a good result which mean the participant can examine and take care of their foot by themselves. Most of participants can cut their own toenails by themselves. Their toenails should be trimmed using the correct technique, which is straight across. Unfortunately, most of participants examine their foot. when they have a problem only. The diabetic patients should examine their foot daily to avoid any injuries or change that can lead to complications. Daily foot inspection by patients can prevent DFD and its fatal complications. Half of the patients (50%) washing their feet every day which may because of participants Muslims and wash their foot for prayer every day. Keeping the interdigital space dry is important to prevent fungal infections as part of foot care hygiene but unfortunately many participants don’t dry well between the toes.</p> <p>Conclusion</p>

				Foot care is crucial to prevent serious complications in diabetic patients. Pharmacological and non-pharmacological measures should be followed to ensure adequate and proper foot care. The participants in this study had inadequate awareness and poor practice toward the appropriate foot care. One reason for that could be attributed to the lack of educational programs regarding foot care and absent of role of health care social work.
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Results and discussion

The usability and outcome of Challenges of Type diabetic foot ulceration and Role of Health Care Social Work . 6 articles were selected that compliant with the theme of this present systematic review (Table 1). Among the 7 reviewed articles, articles have explained the Challenges of Type diabetic foot ulceration in Role of Health Care Social Work in Saudi Arabia; articles assess the prospective role of Health Care Social Workers goals in the healthcare system.

The purpose of this study was to assessment Role of Health Care Social Work diabetic foot ulceration of diabetic foot ulceration and amputation in Saudi Arabia2024. 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. 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 (10)

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 (22)

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. (8) 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 .

Diabetes mellitus, a chronic condition marked by elevated blood glucose levels, presents numerous health challenges that can significantly impair the quality of life. Among these challenges, diabetic foot ulcers (DFUs) represent a serious complication, often leading to severe

consequences such as infections, amputations, and even mortality if not managed effectively. (28) Understanding diabetic foot ulcers' etiology, prevention strategies, and self-management techniques is crucial for patients living with diabetes .

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.

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