Promoting Sufficient Self-Management for Diabetic Foot Ulcers: Literature Review

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A literature review thoroughly examines all known and unknown information on a topic covered by a body of scholarly work, including how the current study fits into the body of knowledge (Maggio et al., 2019). Literature reviews aid in the delivery of high-quality education and research. A literature review can assist any researcher seeking to broaden nursing practice by providing context, identifying innovation, and connecting evidence-based practice variables within the same conceptual framework (Maggio et al., 2019). Quantitative studies apply a method in which researchers collect and identify consistently and legibly measured variables utilizing numerical data (Houser, 2020). Furthermore, good research necessitates in-depth investigation, definable variables, and research questions, strengthening the current methodologically weak medical education studies (Maggio et al., 2019). This literature review examines empirical studies investigating the validity and inefficacy of diabetic foot ulcer treatment and self-management. Nurses are healthcare professionals that serve as educators in actively teaching prevention methods and involving diabetic clients to recognize early detection signs of diabetic holistic deterioration and its complications. Consequently, nurses are responsible for supplying appropriate foot care methods before and during complications, dressing assessments, and applying novel technology to promote diabetic patients' health.

Prioritization of Diabetes-Related Footcare Amongst Primary Care Healthcare Professionals

This article aims to assess primary healthcare professionals' priority for managing diabetic foot disease over the progressive course of the condition compared to other factors of

diabetic care (Mullan et al., 2020). The authors recognized that the predominant cause of diabetic-related amputations and hospitalizations comes from diabetic foot disease. With that knowledge, Mullan et al. (2020) designed a cross-sectional quantitative study to bring awareness to the inadequacy in prioritization of preventative foot care actions. Clinicians would be encouraged to be increasingly attentive to diabetes-related foot care and "motivate healthcare policy decision-makers, funders, and practice managers to join forces to promote prioritization of foot care to people with diabetes within primary care" (Mullan et al., 2020, p. 4655). The healthcare system and the economy support the need to ensure preventative foot care actions are a priority; however, this article highlights how well preventive foot care actions are made a priority compared to other diabetic-related nursing and medical interventions.

Key Points

Mullan et al. (2020) outline the goals for managing diabetic foot disease in correlation to other nursing and medical interventions necessary during a diabetes consultation as the disease advances. The researchers conducted a cross-sectional study utilizing convenience sampling of general practitioners and credentialled diabetes educators as participants. To become a credentialled diabetes educator, “an individual needs to be a registered medical practitioner, nurse, midwife, pharmacist, podiatrist, physiotherapist, accredited dietitian or exercise physiologist” (Mullan et al., 2020, p. 4656). In Australia, just over 80% of registered nurses have credentialled diabetes educator certifications (Mullan et al., 2020). An online survey hosted on Qualtrics collected the data, which implied consent from participants and notified them that the study was voluntary and anonymous. The survey also gathered demographic information to enable the sample group to be described and ensure the eligibility of the participants.

Researchers sent the invitation through a diabetes healthcare professional organization's email subscriber lists to approximately 6,897 email addresses (Mullan et al., 2020). The survey presented multiple clinical scenarios that asked participants "to identify and rank their top three priorities of care, by placing the number 1 next to their highest priority, the number 2 next to their second highest priority and the number 3 next to their third highest priority" (Mullan et al., 2020, p. 4656). Mullan et al. (2020) directed the following scenarios:

> (S1) consulting with a person at initial diagnosis of type 2 diabetes, (S2) consulting with a person with a 20-year history of diabetes, (S3) consulting with a person with diabetes who reported "tingling" in their feet, (S4) consulting with a person with diabetes who wrote a "small cut" on their foot, and (S5) on conducting a full foot assessment on a person with diabetes, evidence of peripheral neuropathy, absent pedal pulses and an ulcer 1cm in diameter is found. (p. 4656)

With ninety-four eligible participants completing the study, the results found that: 86% of the participants listed lifestyle education as a priority for S1 and decreased across the remaining four scenarios; 23% of the participants listed emotional and psychological health assessments as a priority for S1 and dropped across the remaining four; 61% of participants listed HbA1c review as a priority for S1, which increased to 78% in S2 and decreased in the remaining three scenarios (Mullan et al., 2020, Table 2). The data expressed that before reported foot complications, as in S1 and S2, only 17 participants indicated foot assessments as a priority. With a minimum predetermined statistically significant level of $p < .050$, the study found a statistically significant increase in the primacy of foot assessments, private podiatry referrals, and specialist tertiary diabetic foot clinic referrals in consultation with a person reporting "tingling in feet," compared

to consulting with a person with a 20-year history of diabetes with p-values of $p < .001$ and $p = .026$, respectively (Mullan et al., 2020). Consulting with a person personifying diabetes-related foot complications, such as S3 and S4, the priority of a full foot assessment increased to up to 78% of participants (Mullan et al., 2020, Table 2). When consulting with a person with significant diabetes-related foot complications, as in S5, 49% of the participants chose a podiatrist recommendation as one of their top three, and 39% indicated podiatry care as their number one priority. The study uncovered a statistically significant increase in the importance of referrals to a podiatrist and specialist tertiary diabetic foot clinics from S4-S5 with a p-value of $p < .001$ for them both (Mullan et al., 2020). The authors concluded that in the presence of a foot complication, as opposed to prior complications, diabetes-related foot care, such as foot evaluations and recommendations to podiatry, becomes a priority of care (Mullan et al., 2020). The emphasis on glycemic control, lifestyle intervention, and self-management assessments overwhelm preventative foot care actions that should ignite rapid responses among primary care healthcare providers early in the diabetic progression.

Assumptions

Mullen et al. (2020) clarify that diabetes-related foot care amongst primary healthcare professionals is less of a priority than other factors for diabetes care. Prioritization shortcomings warrant risks of acute diabetes-related foot issues (Mullan et al., 2020). The authors do not aim to undermine the importance of other diabetes health preservation factors. However, there is an identifiable essential education that healthcare professionals must further equip as an element of foot ulcer prevention concerning diabetic health maintenance. As seen in the study, the profound focus on glycemic control conceals preventative footcare actions and serves as a possible

barricade to footcare provision. Therefore, "even amongst healthcare professionals with extensive experience in diabetes care, delivery of best practice diabetes-related foot care in primary care is inconsistent" (Mullan et al., 2020, p. 4661). Mullen et al. (2020) emphasize the need to support sufficient preventative foot care delivery and solutions by advocating the priority of foot care in diabetes and confronting the barriers.

Deficit/Conclusion

Mullen et al. (2020) provide sufficient data and rationale for the demand for proper strategies to prioritize the foot care of diabetic patients that nursing students and professional healthcare individuals should adopt in their primary care and practices. Nurses and healthcare professionals must encourage adequate self-management of diabetic foot ulcers by considering foot assessments and education as priority diabetic care to reduce the occurrence of diabetic foot disease and potentially traumatizing consequences. Healthcare professionals that fail to embrace the researcher's judgment will potentially subject diabetic patients to a prolonged and exponential increase in the risk of foot ulcers, further damage to blood vessels and necrosis leading to amputations, and an overall decreased quality of living for these patients.

References

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