Applying Orem’s Self-Care Deficit Nursing Theory to Promoting Diabetic Kidney Disease Outcomes in Interprofessional Collaboration

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Purpose:

The increased prevalence of long-term chronic conditions, in a context of limited healthcare resources and augmented costs, necessitated empowering individuals to manage their own care on daily basis. Individuals with diabetic kidney disease are expected to execute a wide range of daily self-care activities such as glucose monitoring and meal planning. Self-care is carried out in different settings such as work and household, and affects interactions with significant others, family members and friends. Interprofessional collaboration can influence self-care as part of available resources and it is one way to improve outcomes of individuals with chronic conditions. Theory based nursing research is essential for advancing nursing science and practice and for ensuring the unique contribution of the nursing profession to society. The effect of the integration of a theory-based nursing care program as part of an interprofessional collaboration for the management of diabetic kidney disease at home and in clinical settings has yet to be established. The aim of the study was to investigate the effect of a nurse-led theory-based Multidisciplinary Self-Care Management Program (MSMP) on quality of life (QoL), self-care, glycemic control, and renal function of adults with diabetic kidney disease.

Methods:

A uniform balanced crossover design was used enrolling 32 participants randomized into four study arms of different sequences, all comparing the MSMP to usual care. This design is used for recruiting fewer participants for the same level of statistical power when the treatment comparison aims at improving QoL and preventing complications. Orem’s Self-Care Deficit Nursing Theory (SCDNT) served as a framework for the research and for the nursing clinical intervention within the research. The MSMP comprised an individualized self-care intervention for individuals with diabetic kidney disease involving various healthcare professionals of different backgrounds. The MSMP was considered a conditioning factor, as per the SCDNT, that would influence the participants’ self-care because it actually increased the resource availability and adequacy for participants. The MSMP added to the usual medical management, a coordination of care by an Advanced Practice Nurse (APN) and frequent follow-up by a diabetes specialized nurse and a dietician. The nurses’ roles were developed based on SCDNT. The APN role was expanded from the theory to ensure evidenced-based nursing practice, coordination of participants’ care and prompt referral to specialized healthcare professionals when needed. Based on the participants’ specific needs, the APN included family physicians, pharmacists, ophthalmologists, physiotherapists, podiatrists, and social workers in the care. The diabetes specialized nurse conducted a thorough theory-based assessment including the evaluation of the person’s self-care abilities and deficits. These findings together with a comprehensive follow-up of the participants’ constituted an important contribution to the interprofessional team. Within the coordinated care ensured by the APN, the diabetes specialized nurse went to see participants in their homes and, when necessary, at their workplace. To provide sufficient teaching, guiding and psychological support to participants, the diabetes specialized nurse included information on ways of living and family interactions. However, different from the theory, she fostered the use of participants’ self-identified health-related goals, in a less directive way than the collaborative goal setting between the nurse and the patients centrally conceived by the SCDNT. In addition to developing nursing interventions to help participants attain their self-identified health-related goal, it was frequently necessary for the diabetes specialized nurse to attend to new upcoming complications, or changes in participants’ health state.
Results:

The present QoL measured using the Audit of Diabetes-Dependent QoL scale was improved by MSMP with a higher mean rank (55.95) as compared to usual care (42.19) (p< 0.05, Confidence Interval (CI) of 95%). MSMP also improved the self-care activities evaluated by the Revised Summary of Diabetes Self-Care Activities scale; the general diet habits, diabetes specific diet habits and blood sugar testing frequency demonstrated overall higher mean ranks as compared to usual care (respectively 59.56 vs. 39.44, 59.98 vs. 37.02 and 57.75 vs. 40.43, p< 0.01, 95% CI). Results of glycemic control and renal function did not show significant differences. The impact of the introduced MSMP on improving participants’ self-care activities has provided support for the theory assumptions. By focusing on self-care as part of an interprofessional program, this study acknowledged the interrelationship between different care settings, namely the clinical setting, the participants’ workplace and their home. Consideration of the home as a care setting, enhanced the interaction between the participants and the nurses and contributed to better outcomes.

Conclusion:

The implementation of a nurse-led interprofessional program using theory-based nursing practice improved QoL and self-care activities. The impact of behavioral changes on clinical variables such as kidney function and glycemic control might become more evident in the long-term. Results supported the importance of nursing theory-guided practice, and the significant role of specialized nurses as part of the interprofessional team. Academic Relevance: The SCDNT by Orem remains congruent with current nursing practice because it is based on an evaluation of patients’ needs and self-care capacities. However, further expansion is necessary in order to consider nursing interactions with other healthcare professionals within an interprofessional team. Interprofessional collaboration considers the patient and family as part of the team and establishes shared goals. The SCDNT needs to address the impact of patient empowerment on self-care, and to reevaluate the collaborative relationship between the nurse and the patient to foster self-identified health related goals. Clinical Relevance: Nurses must address the special needs of vulnerable patient populations. One of the best ways to integrate a needs-based approach is to adopt a nursing theory. Additionally, the incorporation of the SCDNT into clinical practice helped integrating lifestyle and dietary changes into family systems. Promoting self-care in chronic conditions should target the interaction of nurses with other healthcare professionals. Nurses need to consider the influences of self-care management recommendations provided by the whole healthcare team, ensure coordination of care, and build nursing interventions based on patients’ self-identified health related goals.

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References:

Abstract Summary:
Interprofessional collaboration can influence self-care and is one way to improve outcomes of individuals with chronic conditions. The integration of Orem’s theory in the nursing care as part of an interprofessional collaboration for the management of diabetic kidney disease has improved participants’ quality of life and self-care activities.

Content Outline:

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