

Olgu sunumu

Case report

Nursing Care of an Elderly Woman with Type II Diabetes According to Orem's Self-Care Deficit Theory



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ABSTRACT

Orem's self-care deficit nursing theory (SCDNT) is well-known and applied in nursing practice worldwide. Many researchers have commended SCDNT for improving patients' health outcomes through nurses' contributions. This case study provides a chance to comprehend the practical implementation of theory-based nursing practice in a care setting. Information regarding the patient was gathered through Orem's conceptualization as a guide; Mrs. Y is 63, in late middle age, with type 2 diabetes. Three health deviations self-care requirements emerged as the main aim for the patient's family in seeking assistance. The highest blood glucose value during the study was 211 mg/dl, and the average following management was 118 mg/dl. She was on the partially compensatory nursing system, and after applying SCDNT, her intended nursing care outcomes were achieved. The family members were encouraged to support her in regaining more energy and blood sugar level control, which are vital for her future progress and lifestyle modifications for diabetes management. Nurses can apply SCDNT to implement, monitor, and evaluate nursing interventions in clinical practice. It offers a practice update that ensures accountability following practical interventions in managing chronic conditions like T2DM.

Keywords: Case study, older woman, Orem's theory, self-care, type II diabetes mellitus.

ÖZ

Orem'in Öz Bakım Eksikliği Kuramına Göre Tip II Diabete olan Yaşlı Bir Kadının Hemşirelik Bakımı

Orem'in öz bakım eksikliği teorisi, hemşirelik uygulamalarında çok uygulanan bir teoridir ve birçok araştırma, hemşirelik bakımında, Orem'in öz bakım eksikliği teorisinin hastalar üzerinde olumlu sonuç bıraktığını ortaya koymuştur. Bu vaka çalışması, teoriye dayalı hemşirelik uygulamalarının bir bakım ortamında pratik olarak uygulanmasını kavrama şansı sağlar. Hastaya ilişkin bilgiler Orem'in rehber niteliğindeki kavramı aracılığıyla toplanmıştır. Bayan Y, 63 yaşında ve tip 2 diyabet hastasıdır. Üç sağlık sapması için öz bakım gereksinimleri, hastanın ailesinin yardım aramasındaki ana amaç olarak ortaya çıkmıştır. Çalışma sırasında en yüksek kan glikoz düzeyi 211 mg/dl, yönetimden sonraki ortalama 118 mg/dl olarak belirlenmiştir. Kısmen telafi edici hemşirelik sisteminde olan hastada, Orem'in özbakım eksikliği teorisi uygulandıktan sonra amaçlanan hemşirelik bakım sonuçlarına ulaşılmıştır. Aile üyeleri, gelecekteki ilerlemesi ve diyabet yönetimine yönelik yaşam tarzı değişiklikleri için hayati önem taşıyan daha fazla enerji ve kan glikoz düzeyi kontrolünü yeniden kazanması konusunda onu desteklemeye teşvik edildi. Hemşireler, klinik uygulamada hemşirelik müdahalelerini uygulamak, izlemek ve değerlendirmek için Orem'in öz bakım eksikliği teorisini uygulayabilirler. Bu teori, Tip II diyabet gibi kronik hastalıkların yönetiminde pratik müdahalelerin ardından hesap verebilirliği garantileyen bir uygulama güncellemesi sunmaktadır.

Anahtar kelimeler: Orem teorisi, özbakım, tip II diyabet, vaka çalışması, yaşlı kadın.

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INTRODUCTION

The Dorothea E. Orem self-care deficit nursing theory (SCDNT) is well-known and applied in nursing practice across the globe¹; many researchers have commended SCDNT for improving patients' health outcomes through nurses' contributions². There is literature evidence that shows researchers applied the theory in conducting several studies related to chronic conditions using intervention designs with an emphasis on using the theory as a teaching strategy for self-care; this includes Migraine^{3,4}, hypertension⁵, myocardial infarction⁶, multiple sclerosis^{7,8}, osteoporosis⁹, and type II diabetes mellitus [T2DM]¹⁰⁻¹⁶. Others used non-experimental study designs, including correlational, descriptive, and predictive studies¹⁷⁻¹⁹. However, there is scarce literature, especially using a case study approach for chronic conditions; the literature search indicates a case study on Psychiatric²⁰, stroke²¹, and T2DM patients²², and the studies were conducted in Pakistan, the USA, and Hong Kong. Therefore, there is a need for more studies using a case study approach, especially in Northern Cyprus.

Aim

The study aimed to show how nurses can apply Orem's theory to manage T2DM. This helps us comprehend how theory-based nursing, specifically SCDNT, is used in real-world care settings.

CASE

Information regarding Mrs. Y is gathered through Orem's conceptualization as a guide. After consenting and agreeing to give the needed information, the Orem's three steps of nursing process was initiated.

Step 1: Diagnosis and Prescription

Basic Conditioning Factors

Mrs. Y is 63, female, in the late middle age stage; she is a widow with two children, both males, who are employed. Her husband died a few years ago. She is Turkish and Cypriot, and she practices the Islamic religion. Mrs. Y has T2DM, diagnosed more than 20 years ago. The highest blood glucose value during the study period was 211mg/dl, and the average reading following management was 118mg/dl. The patient has health insurance, which she uses to access medications. When asked about the children's perception of the current condition of their mother, they expressed concern for her fatigue and frequent elevation of her blood glucose level.

Calculating the Therapeutic Self-Care Demand

With the help of her children, the nurse lists numerous procedures that must be followed to fulfill Mrs. Y's universal developmental and health-related self-care requirements. The important drivers of the two core self-care requirements of maintaining a sufficient food intake and a balance between activity and relaxation are her health state and health system characteristics (including prior treatment modalities). Three health deviation self-care requirements emerged as the main focus for the patient's family in seeking assistance:

Persistent blood glucose elevation

Understanding the effects and outcomes of pathological conditions

Implementing the diagnostic and therapeutic procedures that have been medically prescribed

As an illustration, a particularized self-care requirement (PSCR) was given, along with the measures taken to enhance Mrs. Y's health and well-being:

PSCR: maintaining blood glucose levels within the normal range through increased blood glucose monitoring, making wise healthy eating decisions, and increasing activity. Mrs. Y's blood sugar level reduced due to achieving the PSCR, a linked goal that encouraged her to practice self-care. The strategies used to reach the PSCR include the specific steps listed below:

Blood glucose monitoring was increased to a 6-hour daily interval to maintain blood sugar levels at 140 mg/dl two hours after the main meal and 100 to 110 mg/dl when fasting; preparation portion sizes of meals were adjusted to suit the patient's condition.

Mrs. Y made healthy food selections with the help of the clinic's dietician's advice, including suggestions on arranging family meals with healthy food options.

Mrs. Y increased her exercise to 150 minutes per week of moderate-intensity activity. To ensure the patient reached the desired level of physical activity, she was educated on a step-walking program to improve her activity. Using a pedometer while walking and checking the results three times per week helped determine patient success.

Determining Self-Care Agency (SCA)

Monitoring blood glucose level: Mrs. Y does not possess the necessary capabilities of knowing, deciding, and performing blood glucose tests. During the early days of her diabetes diagnosis, she measured her blood glucose. Still, because of her advanced age, the children took over measuring and monitoring blood sugar levels. The children helped maintain PSCR levels at 140mg/dl following the main meal and at 100–110 mg/dl while fasting.

Dietary habits and practices: Details about Mrs. Y's awareness of healthy eating habits, including shopping habits and cultural customs that can influence her food choices, were requested. Based on her response, the patient knows her foods and resources for proper dietary practices.

Before the recent frequent elevation of blood glucose levels and fatigue, Mrs. Y liked to walk and felt secure in her surroundings. She is aware of proper foot care because both feet appear normal without signs of diabetic foot complications.

Self-Care Limitations

Regarding the knowledge and decision-making around managing fatigue and blood glucose monitoring, Mrs. Y has self-care limitations. The nurse and patient determine the existence of a self-care deficiency through a study of self-care agencies in the PSCR, which leads to establishing a legitimate nursing that needs a nursing system.

Step 2: Design and Plan of Nursing System

Based on the constraints of the patient's ability to care for herself, coaching and supporting techniques were developed by constructing a supportive educative nursing system. The design involves planning her activities to meet the PSCR with nurse guidance and monitoring to ensure nursing roles.

Step 3: Treatment, Regulation, Case Management, Control/Evaluation

Mrs. Y and the nurse began implementing their agreed-upon actions. The nurse maintains close supervision of Mrs. Y as she completes the actions as agreed. Interpersonal interactions are crucial as the nurse assesses Mrs. Y's progress through the steps; this continues with ongoing design and role prescription reviews until the patient's demand for therapeutic self-care decreases and a self-care agency is established. Tables 1 to 3 present the universal, the health-deviant, and the developmental self-care requisites with the corresponding self-care agency and the nursing actions.

Table 1. Universal Self-Care Requisites, Self-Care Agency, And Nursing Actions

Universal Self-care requisites	Self-care agency/actions	Nursing agency/actions
Need for air	Mrs. Y breath spontaneously, with no signs suggestive of respiratory compromise	She was encouraged to continue the normal breathing process.
Need for water	Mrs. Y has decreased water intake because of frequent urination	The patient is encouraged to take more fluid despite frequent urination to avoid dehydration.
Need for food	Mrs. Y's food intake decreased because of fear of increased blood glucose levels.	She was encouraged to take meals according to the dietician's plan and to monitor her blood sugar continuously.
Elimination	Mrs. Y needs assistance because of frequent voiding associated with her condition.	The patient was encouraged to continue taking antidiabetic drugs and was served as a bed urinal when necessary.
Activity/rest	Mrs. Y has fatigue that is restricting her participation in the activity	She was encouraged to do passive exercise in bed and later move out of bed for a short walk as her condition improved.
Social interaction	Mrs. Y has decreased social interaction	The patient is encouraged to allow family and friends to visit her.
Prevention of hazards	Mrs. Y's fatigue may predispose her to falls and risk of injury	She was encouraged to move after feeding and needs assistance during the walk.
Promotion of Normalcy	Unable to maintain some activities of daily living and social interaction	The patient is assisted and encouraged to maintain a dietary regimen and treatment plan that will help in overcoming fatigue, hence improving the patient's energy for participation in ADL and social interaction.

Table 2. Health Deviant Self-Care Requisites, Self-Care Agency, And Nursing Actions

Health deviant self-care requisites	Self-care agency/actions	Nursing agency/actions
Compliance with a medical plan	She believes that taking medication and controlling her diet would help.	The patient is encouraged to continue adhering to prescribed drugs and diet for proper blood glucose control.
Lifestyle modification to account for modifications in the patient's health and treatment plan.	Inability to handle a lifestyle change.	She was counselled, and family members are further encouraged to support her in regaining her abilities as soon as she follows the treatment instructions.
Self-image modification to accommodate changes in health status	The patient perceives that in her condition, only rest is beneficial. As such, she adapted to limited activity and mobility.	The patient is encouraged to perform minor movements and activities to the best of her ability to improve her health and help her regain everyday living skills.
Awareness of issues and potential problems related to the treatment regimen	Not fully aware of reconciling dietary regimen, drugs, and blood sugar monitoring.	Knowledge about reconciling her diet, drugs, and blood sugar monitoring was provided.

Table 3. Developmental Self-Care Requisites, Self-Care Agency And Nursing Actions

Developmental self-care requisites	Self-care agency/actions	Nursing agency/actions
Maintenance of the environment (developmental)	Unable to perform toileting, bathing, and dressing because of fatigue	The patient is encouraged and assisted in toileting, bathing, and dressing.
Prevention/managing the circumstances affecting the normal development	The patient fears that she may never be able to restore her abilities and enjoy life fully again.	Assist the patient to move out of bed and encourage social interaction with family and friends.

DISCUSSION

By strengthening the client's SCA within a care management plan, the SCDNT presents a comprehensive discipline-specific paradigm to support high-quality nursing practice²³; this happened in Mrs. Y's case using the critical nursing operations specified in Orem's theory (diagnosis,

prescription, treatment or regulation, and case management). This case study shows how the utilization of SCDNT enhanced the management of chronic disease, a growing concern^{5,24}, among which diabetes mellitus is one. The study also demonstrated how theory-based practice could make nurses more accountable and operate under the professional ideal of providing high-quality, compassionate, and efficient care. Chiu Yip's² asserts that no matter what direction social change may take nursing, the ideas advanced by Orem's nursing theory will always be valid and applicable. The application of the theory in managing a T2DM was practical. It helped achieve the management goal, which affirmed the assertion that SCDNT could be applied to manage chronic disease in various healthcare settings. It is ideal due to its ability to provide a sufficient reason, conciseness, and ease of application⁷. The theory provides an explicit plan for coordinating nurse-patient interactions. It outlines the steps that the nurse and the patient must follow to guarantee the goal of improving the patient's SCA. Orem asserts that patients want to take care of themselves by taking as much responsibility for their care as possible; if such occurs, they can heal more rapidly and completely. Her theory is highly relevant and applicable to various patients. It defines terms like self-care, self-care deficit, and nursing systems, all crucial for those who want to start working as nurses. The article focused on the application of SCDNT to a partially compensatory older woman with T2DM; the application of the theory enables the achievement of goals set for the patient, and it is concluded that nurses can apply SCDNT to nursing practice in different settings to implement, monitor, and evaluate nursing interventions. It will ultimately offer a practice update that ensures accountability following practical interventions by nurses in managing chronic conditions like T2DM.

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