

APPLICATION OF DOROTHEA OREM'S SELF-CARE DEFICIT NURSING THEORY IN THE COMPREHENSIVE NURSING MANAGEMENT OF A CRITICALLY ILL PATIENT WITH ACUTE RESPIRATORY DISTRESS SYNDROME (ARDS)

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Keywords

Dorothea Orem, Self-Care Deficit Theory, ARDS, ICU Nursing, Pressure Injury Prevention.

The Purpose of this paper is to highlight a case study with a application of Nursing theory to practice

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Abstract

Background: Integrating nursing theories into critical care practice is essential for organizing structured, empathetic, and evidence-based clinical management. **Purpose:** This case study examines the practical implementation of Dorothea Orem's Self-Care Deficit Nursing Theory in caring for a sedated, mechanically ventilated patient diagnosed with Acute Respiratory Distress Syndrome (ARDS) in an Intensive Care Unit (ICU). **Methods:** Orem's conceptual framework—specifically the notions of Self-Care Agency, Therapeutic Self-Care Demand, Self-Care Deficit, and the Wholly Compensatory Nursing System—was used to structure bedside assessment, nursing interventions, and outcome evaluation. **Results:** Due to critical illness and therapeutic sedation, the patient experienced total self-care deficits along with early Stage 1 pressure injuries over vulnerable bony prominences. Applying a Wholly Compensatory System—incorporating planned two-hourly repositioning, dynamic air mattress therapy, enteral feeding, invasive catheter maintenance, and close monitoring—halted skin breakdown and preserved physiological stability. **Conclusion:** Orem's nursing model offers an effective clinical pathway for addressing absolute patient dependency in ARDS, supporting holistic recovery while minimizing secondary hospital-acquired complications.

INTRODUCTION

Acute Respiratory Distress Syndrome (ARDS) represents a severe medical crisis that places immense physical stress on the body, frequently requiring immediate mechanical ventilation, continuous sedation, and intensive monitoring. Patients navigating this critical phase are completely unable to perform even the most basic daily functions for themselves. This acute loss of independence not only leaves them entirely reliant on the clinical team but also opens the door to secondary complications like

tissue breakdown, pressure ulcers, and hospital-acquired infections if specialized nursing care is not maintained.

Dorothea Orem's Self-Care Deficit Theory offers a deeply human yet structured way to approach these vulnerable clinical situations. Orem explains that nursing becomes necessary whenever a patient's health needs exceed their personal ability to care for themselves. In an ICU setting where patients cannot speak or move on their own, nurses step in through what Orem calls a *Wholly Compensatory Nursing*

System, taking on complete responsibility for protecting, comforting, and sustaining the patient until recovery begins.

This case study focuses on Mr. Abdul Ghafoor, a 55-year-old patient admitted with ARDS who required mechanical ventilation and hemodynamic support. Grounded in Orem's theoretical perspective, this paper illustrates how structured compensatory care meets the complex needs of a critically ill individual, prevents tissue injury from worsening, and brings meaningful theoretical principles directly to the bedside.

Clinical Scenario

Mr Abdul Ghafoor (55) was admitted to the Intensive Care Unit (ICU) wherein he was diagnosed 20 days ago as Acute Respiratory Distress Syndrome (ARDS). His condition was conscious and he was on mechanical ventilation and sedated. He was showing signs of respiratory distress and hypoxemia. They got an NG tube and a Foley catheter inserted. He was conscious with the following vital signs; RR 36, BP 90/60 mmHg, Temperature 98.6 °F, and the Pulse and oxygen saturation was at 86 percent. By the time he was admitted in the hospital he was on inotropic support due to his hemodynamic instability. Patient was totally dependent for nursing care and lay entirely prostrate. A redness, warmth and non-blanchable erythema were noted over the coccyx and both heels as a stage 1 pressure injury was formed during the physical assessment stage. He was also unable to do self-care tasks as he was unconscious, sedated and critically ill. So under the supervision of his attendant (his son), I helped him to turn once every two hours, kept him perfectly clean, performed physiotherapy and applied gel pads and an air mattress. This put him in a disabling reliance on extensive nursing treatment for all his day to day needs. This entailed frequent repositioning to avoid pressure sores, support with personal hygiene, provision of appropriate food and fluid intake and keeping regular monitoring of patient's overall health, vital signs and any alterations of their status to allow timely intervention and optimum patient care.

ANALYSIS

During the analysis of this scenario and the following questions arose,

1. Why was Abdul Ghafoor not able to engage in self-care?
2. Which one system of nursing is the most appropriate for the treatment of this patient?
3. What factors raise the patient's risk for a pressure injury?

The patient was totally bed bound and unable to carry out any of his activities of daily living due to his critical condition. He relied on nursing for all of these functions: breathing, nutrition, hygiene, mobility, elimination, comfort and monitoring.

The Self-Care Deficit Nursing Theory was proposed by Dorothea Orem believes that nursing is needed when a person is unable to carry out what is required for self-care to preserve life, health and well-being. This patient was totally dependent on other people as she was unconscious, sedated and receiving ventilatory support. As a result, he became totally incapable of nursing himself and needed full care.

Explain the basic principles of Orem's SCLN theory.

Dorothea Orem's Self-care Deficit Nursing Theory: She was born in 1914, Baltimore, U.S. She served as a staff nurse, nurse educator, hospital administrator, consultant and Assistant professor of nursing education at Catholic University of America. In self-care deficit nursing theory it is said that "Nursing care becomes necessary when individuals are unable to perform self-care activities which they require to maintain their life, health and well-being"

Assumptions of the theory

The Orem's theory has the following assumptions:

1. Individuals can care and are responsible for their own care.
2. Self-care fosters health and well-being.
3. Individual cannot meet own personal self-care needs: required to be nursed.
4. Patients who cannot provide for themselves are supported, guided or fully supported by the nurse.

5. Nursing's role is to help patients to restore or maintain their capacity for self-care.

Main concepts and Sub-Concepts of Orem's theory:

The concepts of Orem's theory are Activities that people do on their own to keep them healthy.

Self-care Agency: The patient's ability to take care of self without the help of others.

Therapeutic Self-care Demand: Aggregate of the therapeutic self-care actions required because of needs for health.

Self-care Deficit: When the patient cannot do his work, it is considered as self-care Deficit, as per Orem's theory. Therefore, at the time, it is absolutely necessary to have nursing care.

Nursing Agency: The process of the nurse evaluating, planning, carrying out and assessing nursing care.

Orem (1995) identified three types of nursing systems: Wholly Compensatory System, Partially Compensatory System and Supportive Educative System.

Here, the patient is completely incapable of self-care and the wholly compensatory nursing system is being used. Completely dependent on nursing care, and has to educate the attendant workers and family.

Hypothesis

The application of Dorothea Orem's Self-care Deficit Nursing Theory has a significant impact on improving the quality of patient care, which in turn will help to prevent the onset of complications in critically sick patients who are not able to institute self-care in the Intensive Care Unit (ICU).

Proposed Nursing Intervention

Mr. Abdul Ghafoor was rendered unconscious, sedated, intubated and ventilated and had no communication or movement ability. However in Orem's theory he was deficient in self-care agency, and had a high self-care demand. Hence the complete inability to provide self-care on this patient is being put in place. The patient was unable to perform his personal hygiene, repositioning, NG feeding and urination. So, the patient was completely relying on nursing care.

In Orem's self-care deficit nursing theory when the patient cannot perform the self-care functions, the nurse assumes all the self-care functions as a Wholly Compensatory Nursing System. Under this system it is the nurse or the nurse who does everything a patient needs to do. These tasks involve ensuring airway and breathing, as well as nutrition and hygiene, not to mention pressure prevention, infection control, and physiological monitoring and overall comfort and safety. With the improvement of the patient's condition, the nursing care can gradually move to Partially Compensatory System and even to Supportive-Educative System, in which the patient becomes independent and involved in his own care. This step-by-step approach to care ensures whole-person, patient-centered care and mitigates the risk for complications and hinders recovery.

Personal Reflection

This clinical experience was a sense-making experience for me in my nursing practice. During my time in the unit, taking care of a 55-year-old patient with Acute Respiratory Distress Syndrome (ARDS), I understood the importance of giving them a comprehensive and evidence-based nursing care for the critically ill patient. The patient was presently unconscious and had to have a nasogastric tube to assist him to swallow food and had to be on a ventilator. The patient was completely intubated, on a ventilator and totally dependent on the care of a nurse for all his activities of day to day living. This situation was helpful to me in grasping the real-world application of the Orem's Self-Care Deficit Nursing Theory.

Orem's theory states that the function of nursing is to assist the patient in meeting their own self-care needs if they are unable to do so. In this instance the patient could not continue with any self-care activities, as they were unconscious, on medication for sedation and serious illness. Thus, the Wholly Compensatory Nursing System was the most appropriate system, as the nurse assumes responsibility for the entire care and all physical and emotional care demands of the patient. I was able to help his aides with repositioning every two hours to

decrease the pressure on the coccyx and heal area that had some early stages of pressure injury. In addition, I assisted at maintaining maintenance of the patient's personal hygiene, keeping up vital signs, an adequate diet through nasogastric tube and helped to facilitate, physiotherapy as ordered. Such interventions not only prevented additional complications, but also enhanced the patient's comfort and recuperation.

This clinical experience had shaped and molded me to realize that nursing is not just about applying technical procedures. Assessment, planning, critical thinking, compassion and ongoing monitoring also are key factors involved. I found out that patients can't express themselves verbally, but they still need to be treated with respect, safety and individual care. All nursing care activities provided help to maintain his health and avert complications.

The scenario also kind of reinforced it for me to learn about how important teamwork is. Contributed to the holistic care provided through close collaboration with clinical instructor, staff nurses, physiotherapists and family member of the patient. I came to recognise that to realize positive patient outcomes, communication and team working was very important particularly in the intensive care unit setting.

This experience did lead me to identify some of my elements of practice which I feel need to be developed further. I hope to improve my understanding of critical care nursing, mechanical ventilation, PIE and evidence-informed nursing practices. In addition, I also wish to develop my confidence in clinical decision making and assess patients to safe, effective and better nursing care in the future.

Summary

He was a critical condition patient with ARDS, totally reliant on nursing care being in a state of unconsciousness and being mechanically ventilated. Assessment identified early signs of pressure injury - coccyx and heels. The Self-Care Deficit Nursing Theory proposed by Dorothea Orem deemed that the patient's self-care was deficient and would need a compensatory nursing system. Nursing

measures that included frequent repositioning, skin assessment, nutritional support and pressure relief were all important in avoiding progression of pressure injury. The theory offered what amounts to a framework to help identify the patient's self-care deficits and direct evidenced based nursing care. This application of Orem's Theory helped nurses to appreciate that patients were totally dependent and provide nursing care that was comprehensive. Regular skin assessment, turn every 2 hours, giving oral fluid and food as tolerated, and the use of pressure relieving devices minimised the risk of progression of skin breakdown. The theory also advocated for a systematic evaluation of patients and a nursing approach focused on the individual patient's needs. All the patient's deficits during the acute stage were replaced by nursing care, which helped maintain the skin's integrity.

Conclusion

As it can be seen this clinical situation clearly follows the steps of Orem's Self-care Deficit Nursing theory. Due to unconsciousness, sedation, mechanical ventilation and critical illness, the patient has a complete lack of self-care skills. Thus, Wholly Compensatory Nursing System is the most suitable nursing way. The nurse assumes full responsibility for the care of all aspects of the client's self-care such as airway management, nutrition, hygiene, mobility, skin care, infection control and constant monitoring. Using this theory, a holistic, organized and nurse care-oriented approach is developed which ensures prevention of complications, maintenance of physiological stability and recovery from the ailment.

Recommendations

To enhance critical care delivery, healthcare institutions should actively embed Orem's Self-Care Deficit Theory into routine ICU documentation and admission assessments. Designing intake forms around self-care agency allows clinical teams to immediately identify patient deficits upon admission, paving the way for individualized, proactive care plans rather than reactive interventions.

In addition, standardizing pressure injury prevention protocols is crucial for totally dependent ICU patients. Clinical workflows should enforce structured 2-hour turning routines, mandatory deployment of pressure-relieving air mattresses, gel padding for heels, and daily objective risk evaluations using validated instruments like the Braden Scale. As the patient's condition stabilizes, care planning should dynamically shift from a Wholly Compensatory System toward a Partially Compensatory System, gradually involving bedside family members in basic comfort measures to prepare them for subsequent step-down care.

Finally, continuous professional development and formal caregiver orientation play a key role in sustained patient safety. Bedside attendants should receive practical guidance on hygienic care, gentle repositioning, and recognizing early signs of skin irritation prior to discharge. Concurrently, regular unit-based workshops focusing on critical care theoretical models, mechanical ventilation hygiene, and invasive line safety will ensure that nursing staff remain confident and clinically proficient in delivering high-quality patient care.

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