Application of Nursing Theory “Orem’s Self-Care” Into Practice

Diabetes Mellitus cases

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Preface

First and foremost, all the devotion goes to merciful and almighty God, writer finished writing the paper entitle “Application of Nursing Theory “Orem’s Self-Care” Into Practice: Diabetes Mellitus Case” right in the calculated time.

In arranging this paper, the writer truly gets lots challenges and obstructions but with help of many individuals, those obstructions could pass. Writer also realized there are still many mistakes in process of writing this paper. The writer says thank you to all individuals who helps in the process of writing this paper. Hopefully, God replies all helps and bless you all. The writer realized that this paper still imperfect in arrangement and the content.

Then, the writer hope the criticism from the readers can help the writer in perfecting the next paper. Finally, this paper can helps the readers to gain more knowledge about Nursing Theory.

Denpasar, April 2017

Author
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Introduction

Diabetes type 2 is increasing at an epidemic rate in the world. World Health Organization (WHO) estimated that 347 million people worldwide have diabetes and More than 80% of people with diabetes live in low and middle-income countries (WHO, 2013). Diabetes is a chronic disease that occurs when the pancreas does not produce enough insulin, or when the body cannot effectively use the insulin it produces.

Uncontrolled blood glucose level and complications are the basic problem in individual with diabetic leads to cardiovascular disease, nephropathy, neuropathy, lower extremity diseases, amputation and visual impairment. In diabetes management, the aim is to ensure glycemic control and prevent complications (ADA, 2012). The treatment recommended in the 2012 clinical guide of American Diabetes Association to ensure glycemic control and prevent complications in diabetes patients includes medical nutrition treatment, physical activity, oral anti-diabetic/ insulin treatment, blood glucose self-monitoring and diabetes self-management education (ADA, 2012).

According to Orem’s self-care deficit nursing theory (Orem, 1995), the clinical guidance of ADA (2012) suggests attending to health deviation self-care requisites. So the person with diabetes needs to re-regulate medical nutrition treatment and physical activity, if necessary, using drug and blood-glucose monitoring to evaluate the outcome of self-care activities. The person with diabetes must learn how to evaluate themselves, decide what actions need to be taken to attend to their needs, and perform those actions.

Orem’s Theory of Self-Care Deficit holds that self-care is a learned activity that is natural to adults. The main premise of the theory states that promotion of self-care contributes to the individual’s self-maintenance and promotes health-care well-being (Orem 1983; 1985; 1991; 2001; 2003). Orem holds that the state of normalcy (the
promotion of human functioning and development within social groups in accord with human potential, known limitations, and the innate desire to be normal) is founded on a set of common human factors. Basic conditioning factors (age, gender, health care systems availability, education, family systems elements, and patterns of living) and universal self-care requisites (need for air, food, water, activity/rest, solitude/social interactions) influence an individual’s self-care practices.

**Biography of Dorothea Orem**

![Dorothea Orem](image)

**Figure 1. Dorothea Orem**

Dorothea E. Orem (1914-2007) was one of the leading nursing theories. She was born in Baltimore, Maryland in 1914. She was gentle, caring scholar whose life was dedicated to creation and development of a theoretical structure to improve nursing practice (Orem, 1991)
She graduated in 1934 and quickly moved into staff/supervisory position, including an operating room, and emergency room. After her BSN Ed (1939) from Catholic University of America, she held faculty position at that institution and later at provident Hospital School of Nursing, Detroit. With completion of MSN Ed at Catholic University (1946), Orem became Director of Nursing Service and Education at provident in Detroit (Taylor, 2007)

Orem’s early formulations on the nature of nursing occurred while working for Indiana State Board of Health (1949-1957). She became aware of nurses ability to do nursing but their inability to describe nursing colleagues as well as administration and physicians. Without this understanding, she knew that nurses could not improve practice. Using knowledge of science learned from Biology course in her bachelor and master program, she made an initial effort to define nursing in a 1959 report to Indianan Board. The art of nursing in hospital service: An analysis (Orem, 2003. P. )

From this clarity of focus, Orem’s solitary thinking and writing moved to more collaborative work, a model of intellectual teamwork necessary for a practical science to inform and change nursing administration, education, research, and practice. She received honorary Doctor of Science degree in 1976. In 1986 she retired and lived in Savannah, Georgia. She also published first formal articulation of her ideas in Nursing: Concepts of Practice in 197, second in 1980, and in 1995. In 2007 Orem passed at 92 years of age.

**Origin or development of Orem’s Theory**

Orem’s theory is based on the premise that the people have the innate ability, right and responsibility to care for themselves.
Orem believed a general model or theory created for a practical science such as nursing encompasses not only the what and why, but also the who and how (Orem 2006). This is an action theory with clear specifications for nurse and patient roles. The building blocks of these theories are six major concepts and one peripheral concept. Many of the principles such as foundation to learning any theory is exploration of underlying assumptions emerged from Orem’s independent work, as well as from discussions within the Nursing Development Conference Group. Five general assumptions or principles about humans provided guidance to Orem’s conceptualizations. (Parker, 2010, pg. 123)

Readings by Aristotle, Thomas Aquinas, Talcott Parsons, Pitirim Sorokin, and others influenced her thinking related to human acting, and social interaction (Orem, 2003). While thinking about the humans within the context of theory, Orem viewed two types: those who need nursing care and those who produce it. (Parker, 2010, pg. 123)

Orem has developed her Self-care deficit theory early in her career and refined it throughout her career and her retirement. While Orem worked for the Division of hospital and Institutional Services, she saw a need to upgrade the nursing quality in this state’s general hospital. This has led her to develop her definition of nursing practice. Her first ideas were formulated in 1956.

Dorthea Orem believed that people have a natural ability for self-care and that nursing should focus on affecting that ability (Orem, 1995).

Every theory has its beginnings in the concrete world of persons and events, in the world of ideas, and in the world of the theorist. The historical development of the self-care deficit theory of nursing is expressed in terms of its beginnings,
subsequent development of a concept of nursing system and a conceptual framework for nursing, and finally in expression of a general theory of nursing. (Orem, 1991, pg. 59)

Orem’s Theory concept

I. Self-Care Theory

![Conceptual Framework of Orem’s theory](image)

**Figure 2. Conceptual Framework**

Self-care for one’s care self or for dependent care (that is, care performed by another such as a family member) must be learned and must be deliberately performed for life, human functioning, and wellbeing. There are situational variations that affect self-care such as culture. A person performing self-care or dependent care has to estimate or investigate what can and should be done. This is a complex action of knowing and seeking information on specific care measures. The self-care sequence continues by deciding what can be done, and finally producing the care (Orem 2001, pp.143-145). Key of understanding self-
care and dependent care is the concept of deliberate action, a voluntary behavior to achieve a goal.

**Self-Care Agency**

Self-care agency is a human ability which is "the ability for engaging in self-care" conditioned by age developmental state, life experience sociocultural orientation health and available resources. Dependent care agency is the capability or power to know and meet a socially dependent person’s self-care demands or limitation of self-care agency (Taylor, 2001). Fundamental Capability

Fundamental is the most basic level. These are capabilities for all type of deliberate action, not just self-care. Included are abilities related to perception, memory, and orientation.

Self-care needs 10 power or types of abilities. The power components for general level related to knowledge, motivation, and skill to produce self-care. And for the high level are abilities to maintain attention, to reason, to make decisions, to physically carry out the action are not functioning.

The most concrete level of self-care agency is one specific to the individual detailed components of self-care demand or requirements. Capabilities related to estimative operation are those necessary to determine what Self-care action are needed in specific nursing situation at one point in time, that is capabilities of investigating ad estimating what needs to be done. This includes capability of learning in situation related to health and well-being. The action sequence is important in the self-care concept; these type of
capabilities the complexity of human capability. At the concrete practice level, self-care agency also varies by development and operability.

**Therapeutic Self-care Demand**

Therapeutic self-care demand (TSCD) is a complex theoretical concept that summarizes all action that should be performed over time for live, health, and well-being. When first developed, the concept was referred to as action demand or self-care demand (Orem 2001). Constructing or calculating a TSCD requires extensive nursing knowledge of evidence based practice, communication, and interpersonal skills. This process includes adjusting values by conditioning factors.

**Self-Care Requisites**

To provide the framework to determining the TSCD, these type of self-care requisites (or requirements) for action were developed: universal, developmental, and health deviation. These are the purposes or goals for which action are performed for life, health, and well-being.

1. Universal self-care requisites

   The eight universal self-care requisites (USCR) are necessary for all human beings of all ages and all conditions, such as air, food, activity, and rest solitude, and social interaction. Action to be performed overtime that meet the requisite, prevention of hazard to human life, human functioning, and human well-being (the purpose), will vary for an infant (e.g., keeping crib rails up) versus an adult (e.g., ambulation safety).
(2) Developmental self-care requisites

Orem (2001) identified three types of developmental self-care requisites (DSCRs). The first refer to action necessary for general human developmental processes throughout the lifespan. These requisites are often met by dependent care agents when caring for developing infants and children or when disaster and serious physical or mental illness affect adults.

(3) Health deviation self-care requisite

Health deviations Self-care requisite are situation specific requisites or goals when people have disease, injuries or are under professional medical care. Each TSCD, through the three types of Self-care requisites, is individualized and adjusted by the basic conditioning factors (BCFs) such as age, health state, and sociocultural orientation

II. The Self-Care Deficit Theory.

Orem developed the Self-Care Deficit Theory of Nursing, which is composed of three interrelated theories:

(1) The theory of self-care,

(2) The self-care deficit theory, and

(3) The theory of nursing systems. (Theoretical Foundations of Nursing, 1991)

The self-care deficit theory is synthesis of knowledge about the theoretical entities self-care (and dependent care), self-care agency (and dependent care agency), theurapeutic Self-care demand, the relational entity
self-care deficit and nursing agency. The Central ideas of the theory, requirement for nursing are health related limitations for knowing, deciding, and producing care to self or a dependent. rem presents two sets of presuppositions that articulate this theory of self-care (dependent care) and what she calls the idea of social dependency. To engage in self-care person must have value and capabilities to learn (to know), to decide, and to manage self (Orem, 1991, p. 67).

The theory of self-care deficit includes (Orem, 1991, p. 70) two sets of presuppositions link the central idea of the theory of self-care deficit to the theory of self-care and the idea of social dependency

Set one

• Engagement in self-care requires ability to manage self within a stable or changing environment

• Engagement in self-care or dependent-care is affected by person’s valuation of care measures with respect to life, development, health and well-being.

• The quality and completeness of self-care and dependent care in families and communities rests on the culture, including scientific of social groups and educability of group members

• Engagement in self-care and dependent care are affected, as is engagement in all forms of practical endeavors, by persons limitation in knowing what to do under existent conditions and circumstances.
Set two

- Societies provide for human state of social dependency by instituting ways and means to aid persons according to the nature of and the reasons for their dependency
- When they are institutionalized, direct helping operations of members of social group becomes the means for aiding persons in state of social dependency
- The direct helping operations of members of social groups may be classified into those associated with state of age-related dependency and those not so associated
- Direct helping service instituted in social group to provide assistance to persons irrespective of age include the health service (Orem, 1991, P. 70)

Propositions

The following proposition serve as principles and guides for the further development of the theory of self-care deficit

- Person who take action to provide their own self-care or care for dependents have specialized capabilities for action
- Individuals abilities to engage in Self-care or dependent care are conditioned by age, development state, life experience, sociocultural orientation, health and available resources
- Relationship of individual abilities for self-care or dependent care to the qualitative and quantitative self-care or dependent care demand be determined when the value of each is known
- The relationship between care abilities and care demand
• Nursing is a legitimate service when (1) care abilities are less those required for meeting a known self-care demand (deficit relationship); and (2) self-care or dependent care abilities exceed or are equal to those required for meeting the current self-care demand

• Persons with existing or projected care deficits are in, or can expect to be in sate of social dependency that legitimate a nursing relationship. (Orem, 1991, p. 71)

III. The Theory of Nursing Systems

Orem describes a nursing system as an action system or action and sequence of actions performed for purpose. This is composite to all the nurses concrete actions completed for or with a Self-care agent to promote life, health, and well being. The composite of actions and their sequence produced by the dependent care agent to meet the therapeutetic dependent Self-care demand is termed a dependent care system (Parker, M.E., 2010, p. 126)

These action related to three types of subsystems;

1. Interpersonal
   
   The interpersonal sub system include all necessary actions or operations such as entering into and maintainning effective relationship with the patient and/or family or other involved in care

2. Social/contractual
   
   The social/contractual sub system relates to all nursing actions/operations to reach agreement with the patient and other related to information necessary
to determine the therapeutical Self-care demand and Self-care agency of an individual and caregivers.

3. Professional technology.

The professional – technology subsystem comprises actions/operations that are diagnostic, prescriptive, regulatory, evaluate, and case management. (Parker, M.E., 2010, p. 130)

With determination of real or potential Self-care deficit or dependent care deficit, the nurse develops one of three types of nursing system:

1. Wholly compensatory


2. Partly compensatory

   The partly compensatory nursing system is represented by a situation in which “both nurse and perform care measures or other actions involving manipulative tasks or ambulation. the patient or the nurse may have the major role in the performance of care measures. (Orem, 1991)

   Nurse action: performs some Self-care measures for patient, compensates for Self-care limitation of patient, assists patient as required

(3) supportive educative

In the supportive-educative system also known as supportive-developmental system, the person “is able to perform or can and should learn to perform required measures of externally or internally oriented therapeutic self-care but cannot do so without assistance. (Orem, 1991)

nurse action : accomplishes Self-care
patient action : accomplishes Self-care, regulates the exercise and development of Self-care agency (Parker, M.E., 2010, p. 134)

Metaparadigm Concepts of Nursing

The most abstract and general component of the structural hierarchy of nursing knowledge is what Kuhn (1977) called the metaparadigm (McEwen & Willis, 2011). A metaparadigm is the global perspective of a discipline that identifies the primary phenomena of interest to that discipline and explains how the discipline deals with those phenomena in a unique manner (McEwen & Willis, 2011). The purpose or function of the metaparadigm is to summarize the intellectual and social missions of the discipline and place boundaries on the subject matter of that discipline (McEwen & Willis, 2011).

Wagner (1986) examined the nursing metaparadigm in depth (McEwen & Willis, 2011). She concluded that these findings indicated a consensus within the discipline of nursing that these are the dominant phenomena within the science. Dorothea Orem defined the nursing metaparadigm concepts similar to Wagner’s original dissertation on nursing metaparadigm.
1. Person

Wagner - Person refers to a being composed of physical, intellectual, biochemical, and psychosocial needs; a human energy field; a holistic being in the world; an open system; an integrated whole; an adaptive system; and a being who is greater than the sum of his parts (Wagner, 1986).

Orem - Person is a self-care agent and 'self-care is the practice of activities that individuals initiate and perform on their own behalf in maintaining life and well-being' (Hanucharurnkul, 1989). However there is some inconsistency in Orem's (1985) viewing of man when she describes people in reference to specific developmental stages (Hanucharurnkul, 1989). It seems that only adults are described as active persons, in other stages, such as aged, infant or children, they are labeled as dependent (Hanucharurnkul, 1989). Orem sees a person as an open system (Hanucharurnkul, 1989). According to Orem, a person exchanges energy with the environment in the form of deliberate action to meet self-care demand (Hanucharurnkul, 1989). Orem views man as a biopsychosocial being, an integrated whole not the sum of its parts (Hanucharurnkul, 1989). Person is viewed as having the capacity for self-knowledge and for engagement in deliberate action (Hanucharurnkul, 1989).

2. Health

Wagner - Health is the ability to function independently; successful adaptation to life's stressors; achievement of one's full life potential; and unity of mind, body, and soul (Wagner, 1986).
Orem - Defines health as a state of wholeness or integrity of human beings (Hanucharurnkul, 1989). Persons are said to be healthy when they are structurally and functionally sound or whole (Hanucharurnkul, 1989). The term sound means possession of full vigor and strength and the absence of signs of disease and morbidity (Hanucharurnkul, 1989). The term whole means that nothing has been omitted ignored or lessened (Hanucharurnkul, 1989). These terms when used together in regard to health, signify human functional and structural integrity, absence of genetic defects, and progressive integrated development of a human being as an individual unity moving toward higher and higher levels of integration (Hanucharurnkul, 1989).

Orem speaks of physical, psychological, interpersonal and social aspects of health and noted that they are inseparable (Orem, 1985). Provision of self-care at a therapeutic level and on a continuous basis is viewed as essential to the health of individuals (Orem, 1985). Orem addresses the responsibility of society in promotion of health for its members (Hanucharurnkul, 1989). The nursing domain involves the promotion and maintenance of health and protection against specific disease and injuries (Hanucharurnkul, 1989).

3. Environment

Wagner - Environment typically refers to the external conditions that influence the organism; significant others with whom the person interacts; and an open system with boundaries that permit the exchange of matter, energy, and information with human beings (Wagner, 1986).

Orem- Defined environment as having components which are enthronement factors and elements, condition and development environment (Nursing
Theories, 2011). Orem further categorized environmental features into two groups: a). the physical, chemical, biologic and social and b). the socio-economic cultural features; both are relevant to the person's self-care and the nurse's nursing agency (Banfield, 2011, p. 98). Orem’s has a very broad and complex scope of the word, environment

4. Nursing

Defined nursing as human service required for maintenance of continuous self-care. Nursing requires special technique and application of scientific knowledge (McEwen & Wills, 2011, p.41). Orem (1988, 2001), described nursing as a practical science, meaning that knowledge is developed and structured for the sake of work to be done (Banfield, 2011, p. 98).

Orem's nursing focus is on Self-Care and human service. Orem viewed nursing as an art. Taylor (2011, p.5), in a personal conversation with Orem (1956), wrote that Orem defined the art of nursing in hospital nursing service as” providing the services necessary to meet daily needs of self-care.” Initially, Orem’s idea that nursing was about facilitating self-care, which were created and developed during the 1960s, 1970s and 1980s, portrayed the period, characterized by the growth of consumer awareness and the celebration of the individual, Pearson (2008, p. 1).

Self-care deficit theory was first seen as simplistic, but later emerged a complex theory, with social, economic, moral and political ramifications. SCDNT was a radical shift from the prevailing notion of nursing of the times, when nursing care involved the “care for” the patient, and professional nurses and patients rarely made decisions regarding nursing practice Pearson (2008, p.
2) further wrote. In the creation of her seminal work, “Nursing: Concepts of Practice”, Orem utilized the work of Levin, Katz and Holst (1976), and others to define the concept and construct a self-care model of nursing Pearson (2008, p. 1).

**THEORY APPLY IN A CASE OF DIABETES MELLITUS**

Adults with Diabetes Mellitus clients can achieve optimal health by knowing the appropriate treatment for her/his condition. According to self-care theory, nurses has role as advocates / educators for clients to control his/her Diabetes Mellitus. The Conditions that may affect the client's self-care can be derived from the internal and external factors, internal factors include age, height, weight, culture / ethnicity, marital status, religion, education, and employment. The external factors include family support and cultural communities where clients live.

Clients with these conditions require self-care continuum or continuous nature. The existence of good self-care will achieve a prosperous condition; the client requires 3 self-care needs based on Orem's theory.

<table>
<thead>
<tr>
<th>Self-Care Need</th>
<th>Detail</th>
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<tr>
<td>Universal self-care</td>
<td>Which generally needs required by the client during its life cycle to maintain a balanced condition / homeostasis that includes the need for air, water, food, elimination, rest, and social interaction and face life-threatening risks. In the DM client, the requirement that changes can be minimized by performing self-care such as exercise / exercise, appropriate diet, and monitoring blood glucose levels</td>
</tr>
</tbody>
</table>
Developments of self-care requisites

The client with DM have problem especially in role function in their life. Physical problem in clients with diabetes such as; increase in urination (polyuria), polyphagia, polydipsia, fatigue, weakness, skin wounds, vaginal infections, or blurred vision (if high glucose levels).

Health deviation self-care requisites

Needs related to health deviation such as hyperglycemic syndrome which can lead to loss of fluid and electrolytes (dehydration), hypotension, sensory changes, seizures, tachycardia, and hemiparesis. On the client with diabetes there is an imbalance between the needs to be met with capabilities. Client with DM will decline and get many complications that can reduce their quality of life. According to Orem nurse's role in this case is to assess the ability of self-care and classify them according to the client's ability. After reviewing and get complete information then nurses began work to restore the ability of self-care clients to actual condition.

Assessment:

The first phase of the process begin with establishment of the nurse Orem stated that it is necessary to identify the basic conditioning factors (BCFs) of the individual and the relationship between the status of meeting the therapeutic self-care requisites and self-care agency for a nursing diagnosis (Orem, 1995). The purpose of diagnosis is to determine self-care deficits and the reasons for them. To this end, the patient’s BCFs were identified and then the status of meeting therapeutic self-care demands. The
patient’s self-care agency was determined by assessing the power components of self-care agency, and it was concluded that there was a knowledge deficit concerning diabetes management; patients did not believe their health status could be improved and some disorders were ignored. Assessment of conditioning factors such as age, gender, developmental state, health state, pattern of living, health care system factors, family system factors, socio cultural factors, External environmental and factors availability of resources.

Orem’s concept of self-care, or the practice of activities that adults initiate to maintain health, life, and well-being, is usually initiated voluntarily (2001). Family-centered care is based on the assumptions that professionals alone cannot and do not know what is best for clients, that the family has significant influence on the therapeutic regimens of individual clients (Rutledge et al., 1999), and that placement in the family constellation affects the individuals’ ability for self-care (Orem).
EXAMPLE CASE

Mrs. X, 66 years old was brought to the infirmary after passing out during do small exercise. She has history of type 2 DM for the past 17 years. She has other disease such as Hypothyroidism, hypertension, hyperlipidemia. She is aware of the higher incidence of type 2 DM in people of his race and is open to anything he can learn about it but she had difficulty in getting appointments for routine control. She could receive advice from nurses when it was required/needed.

Her blood glucose levels are Fasting blood sugar (FBS): 239 mg/dl,
Postprandial glucose (PBG): 297 mg/dl, She did not use cigarettes and alcohol.
She attended a needlecraft course as a hobby and states that she did no physical activity except for shopping and housework.

Table 1: Assessment Basic Conditioning Factor of the Patient

<table>
<thead>
<tr>
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<th>Age</th>
<th>66</th>
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<tbody>
<tr>
<td>2</td>
<td>Gender</td>
<td>Woman</td>
</tr>
<tr>
<td>3</td>
<td>Developmental State</td>
<td>Older</td>
</tr>
<tr>
<td>4</td>
<td>Health State</td>
<td>Type II diabetes for 17 years,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Laboratory values (22 February 2011):</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Glycosylated hemoglobin (HbA1c): 10,2,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fasting blood sugar (FBS): 239 mg/dl,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Postprandial glucose (PBG): 297 mg/dl,</td>
</tr>
</tbody>
</table>
|   | High-density lipoprotein (HDL): 39 mg/dl,  
|   | Low-density lipoprotein (LDL): 181 mg/dl,  
|   | Total cholesterol: 244 mg/dl,  
|   | Triglyceride: 122 mg/dl,  
|   | Blood pressure (BP): 160/80 mmHg,  
|   | **Complications**: No retinopathy, nephropathy and neuropathy but uses glasses due to astigmatism,  
|   | **Other disease**: Hypothyroidism, hypertension, hyperlipidemia.  
|   | **Medicines**: Insulin aspart 16 units, insulin detemir 46 units, incuria, Levothyroxine sodium and losartan potassium 100 mg, hydrochlorothiazide 25 mg.  
|   | **Health perception**: Health state was described as mediocre.  
| 5. | **Sociocultural Orientation**: High school graduate, retired from topography 29 years ago, not working in any job now. In addition to the medicines prescribed by the doctor, she consumed herbal teas (lime, cinnamon, carnation, sage tea, ginger, menthol).  
| 6. | **Health Care System Factors**: Affiliated to the social security institution. She stated that she used the university hospitals, family health centers and state hospitals for health checks.  
| 7. | **Family System**: Widow and had one child. She lived alone.  

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### Factors

<table>
<thead>
<tr>
<th>Factors</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>8. Pattern of Living</td>
<td>She did not use cigarettes and alcohol. She attended a needlecraft course as a hobby and states that she did no physical activity except for shopping and housework.</td>
</tr>
<tr>
<td>9. Environmental Factors</td>
<td>She lived on the sixth floor of an apartment building with an elevator. Building had a green space and a walkway around it for physical activity.</td>
</tr>
<tr>
<td>10. Resource Availability and Adequacy</td>
<td>She stated that she could find the medicines and materials necessary for her treatment easily (insulin, needle etc.) but had difficulty in getting appointments for routine controls, She could receive advice from nurses when it was required/needed.</td>
</tr>
</tbody>
</table>

### Assessment Therapeutic Self-care Demands and Self-care deficit

1. **Air**  
   No problem

2. **Water**  
   No problem

3. **Food**  
   No problem

4. **Excretion processes**  
   No problem

5. **Activity- Rest**  
   No problem

6. **Social Interaction** Lives alone and thinks that her sister could help when she needed. She attended the needlecraft course as a hobby.
7. Prevention of Hazards No visual, hearing or physical impairment that will cause danger. Uses glasses due to astigmatism.

8. Promotion of normalcy States that there was not a situation where she could not do something due to the disease even though she wanted to.

Developmental Self-Care Requisites and Self-Care Deficit

1. Protecting and maintaining the developmental environment she presented for mammography once every two years. She is a wise woman. Health Deviation

   Self-Care

Requisites and Self-Care Deficit

1. Seeking and securing appropriate medical assistance

   When she got ill, she resorted to institutions where internal-diseases or endocrine experts work for treatment and checks. No problem.

2. Being aware of and prepared for effects and results of pathological conditions

   She knew neither HbA1c and lipid profile nor the complications to be caused by high HbA1c, changes in the lipid profile (triglyceride, LDL and reduction in the total cholesterol level and increase in HDL cholesterol) and overweight.

   **Self-care deficit:**

   *Insufficient awareness of effects and results of pathological condition due to lack of knowledge.*

3. Effective implementation of medically prescribed diagnostic, therapeutic, and rehabilitative measures
• Did not perform physical activities regularly. She sometimes walked in the morning when she was hungry. She did not apply the diabetic diet plan and did not eat snacks.

• She did not conduct the injection site control, did not pay importance to the insulin dose and distance between two injections, used only the umbilicus and around it as insulin injection site, performed injection with an injector of 8 mm without grabbing the skin at 90 C (Body Mass Index (BMI): 41.4).

• She did not perform the daily foot examination, did not cut her nails properly, did not wear orthopedic shoes and cotton socks but wore flip-flops.

• She performed the self blood-glucose measurement at random. She stated that she slept when her blood glucose was below 70 mg/dl after eating a piece of bread and did not measure her blood glucose for control, and ate something when her postprandial blood glucose was above 200.

• She had never taken the foot examination, took the eye examination and kidney function tests at random and took the lipid control and HbA1c follow-up once every six months. She measured her blood pressure when she felt unwell in herself.

**Self-care deficit:**

*Insufficiently effective handling of medical treatments and rehabilitative interventions due to lack of knowledge, disbelief that her health could improve, ignoring some disorders and the belief that these disorders will fade away on their own.*

4. Being aware of and prepared for effects of medical care
She did not know the risks of developing hypoglycemia, hyperglycemia and lip hypertrophy depending on insulin treatment mistakes.

**Self-care deficit:**

*Insufficient awareness of the effects of medical care due to lack of knowledge.*

5. Modifying the self-concept and self-image in a particular state of health

   No problem.

6. Learning to live with effects of pathological conditions

   She was not problematic with her diabetes and overweight and tried to manipulate her diabetes. No problem
APPLYING OF THEORY

1. Analysis of health situation and problem of diabetic mellitus patient

2. Identification and analysis of concepts in diabetic mellitus patient

<table>
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<tr>
<th>Orem Theory</th>
<th>Nursing diagnosis</th>
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</thead>
</table>
| Particularized Self-care requisites: Maintain sufficient intake of water and elimination | Risk for dehydration related to increased urination | The dehydration will be prevented | Support-education | ✓ -Explain significant of fluid intake  
✓ Discuss cup and glass measurement | - Skin turgor elastic  
- Mucosa moist |
| Maintain sufficient intake of food | Deficit knowledge regarding the type of diet intake related to lack of information resources. | Patient will be imparted knowledge regarding the diabetic diet | Supportive-education | ✓ explain the type of food he/ she can eat and what he/ she cannot.  
✓ prepare the daily dietary routine for them and | - the patient follow diabetic diet plan  
- maintained body weight |
| activity and rest | Deficit knowledge regarding adjustment of activity and rest as per meal pattern | Maintain balance between activity and rest | Supportive education | - Provide knowledge regarding step program activity. | - The patient increase physical activity to 150 minute per weeks |
| Being aware of and prepared for effects and results of pathological conditions | Deficit knowledge regarding maintenance of blood glucose level and glucose monitoring | Reduce and maintaining blood glucose level within normal parameter | Wholly compensatory and supportive- | - Monitor glucose level through testing two times per day, with one test before breakfast and | - Blood glucose level in normal range |

- Blood glucose level in normal range
- No acute and chronic complication like
and increase blood glucose monitoring to twice per day (Donna L) | educative education | one test 2 hours after meal (ADA, 2009)
- Explain the patient to seek assistance when the levels are below 60 mg/dL and above 300 mg/dL with feelings of fatigue, thirst and visual disturbances.
- Explain the need for adjusting activity and meal planning when levels are not within parameters.
- Explain through health diabetic foot, ketoacidosis, visual impairment, ect.
- Patient know and understand about the sign and symptoms of diabetes mellitus
| | | | education about the main aspects of the Diabetes mellitus and its complications |
REFERENCES

Parker, ME., & Smith, MC. (2010). Nursing Theories and Nursing Practice. 3rd ed. USA, F.A davis Company


