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## The Use of Orlando's Interaction Theory in Nursing Care Practice: Celiac Disease

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### Summary

**Objective:** Nursing is a profession that aims to provide care practices for individuals in a good and bad state of health. Therefore, the use of nursing theories and models in nursing care practices has key importance. The nurse-patient relationship maintains therapeutically through the care practices that base on nursing theories and models and integrative care can be provided to the patient. One of the theories that enable the given situation is Orlando's Interaction Theory which creates an empathetic relationship between nurses and patients. The objective of this study is to provide an example of nursing care provided to a child diagnosed with Celiac Disease based on Orlando's Interaction Theory.

**Method:** The study was designed in the form of a case report and the study data was collected using interviews conducted with the patient and observations.

**Findings:** As a result of the interviews, it was determined that the patient experienced difficulties in complying with the diet, felt restricted by the family members and overcoming stressful situations. Nursing interventions were planned by evaluating the verbal and non-verbal behaviors of the patient. The study findings showed that the patient exhibited more positive behaviors when his/her needs were met and the family also contributed to the management of the illness and the self-management skills of the patient were improved.

**Result:** Orlando's Interaction Theory can be used for managing the illness of children who suffer from chronic illnesses. Our suggestion is to increase the proper and effective use of Orlando's Interaction Theory in the provision of care to patients with chronic illnesses.

Keywords: Nurse, Orlando, Interaction Theory, Celiac Disease, Child Patient.

## **INTRODUCTION**

Celiac Disease (gluten enteropathy) is an immune small intestine disease, characterized by a permanent sensitivity to gluten which is found in grains such as wheat and rye, which affects individuals with a genetic predisposition (1-3). The global prevalence of celiac disease is reported between %0.3-1.4 (4-6) and it ranges between %1 and %0.003 in our country (6). Although there are different clinical findings, it causes chronic diarrhea, stomachache, abdominal distension, nutrition disorder, discontinuity in development and malabsorption in children (7-10).

Following a proper diet is an integral part of celiac disease treatment (11). The nutrition of the patients should be based on a gluten-free diet prepared according to the size of the gastrointestinal system damage and malabsorption level. Patients who are diagnosed with Celiac Disease should be evaluated periodically and monitored for lifelong (12).

The patient with Celiac Disease should gain the self-management skill to transform the adaptation process and nutrition to a life-style. To enable patients to have this skill, the support of nurses, who are key members of the team of healthcare professionals, is required (13,14). Nursing care; when it practiced according to models or theories, provides integrative and

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effective care for the child and family. Nursing care, which is developed as a result of systemization, provides improved support for patients in terms of their physical, mental, spiritual and social well-being, and enhances life-quality (15,16).

Orlando's Interaction Theory, which is one of the theories frequently used in nursing, is an important guide for nursing care. According to Orlando, nursing care should be provided when individuals are not capable of meeting their own needs. This care is provided in three stages including patient behavior, nurse reaction, and nurse action. Patient behavior refers to the observations of a nurse regarding the patient; nurse reaction refers to thoughts and feelings of a nurse regarding the patient, and the nurse action refers to meeting the needs of the patient (17,18). The purpose of nursing is to provide care to individuals and positive communication plays a fundamental role in this process. Theory-based practices provide guidance for nurses and enable them to establish professional communication with patients and family members. The needs of patients from physical, mental and social aspects are determined through a professional relationship (19). The patient, who is not capable of meeting his or her own needs, can point out the behavior that requires help through verbal and/or non-verbal manners (20,21). For example, the patient may verbally express that he or she has pain, or refuse to establish communication when someone enters the room and may express himself or herself with body language. A nurse should be capable of understanding the underlying reason for such behaviors and plan the care (22,23). The nurse should assess whether the interventions applied during the entire process was helpful for the patient and restructure the intervention for the benefit of the patient (24,25). As a result, Orlando's Interaction Theory is an effective and systematic method to determine the needs of a patient, improved nurse-patient relationship and enable patients to gain self-management skills concerning their illnesses. This case study analyzed the behaviors of the patient who was diagnosed with Celiac Disease determined the causes of discomfort and needs of the patient according to Orlando's Interaction Theory and proper interventions were applied. Prior to the study, verbal and written permissions were received from the child and parents.

#### **Case Report**

13 years old girl diagnosed with Celiac Disease applied to the pediatric polyclinic with multiple complaints (stomachache, diarrhea, abdominal distension, vomiting and lack of appetite) and hospitalized in the department of pediatrics. The height of the patient was 128 cm (between 10 and 20 percentile) and the weight of the patients was 20 kg (below three percentile). The anemia of the child was measured as (hemoglobin: 10.7 g/dl) and the B12 level was found low (182 pg/ml)

Patient Behavior: Need for help

## Non-Verbal Behaviors

- The patient looked tired and upset
- The patient grabbed her stomach, suffered from diarrhea and vomiting
- Verbal Behaviors
- The patient refused to have communication in the initial meetings
- The expressions of the patient received at the end of the first day of hospitalization. For example: "I am annoyed by my parents warnings about what to eat and what not to eat", "I feel upset when I can't eat the foods I want to eat", "I feel uncomfortable with looking smaller than my friends", "I feel excluded when I can't eat like them when we go out together and I feel upset" and "I don't follow my gluten-free diet recently when I am with my friends".

#### Nurse Reaction: Perceptions, thoughts, and feelings of the nurse

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When the underlying cause of the patient's behavior was examined, it was thought that the patient was warned by her parents given that she was in the adolescence period, she perceived







this situation as an obstacle for her independence and experienced difficulties since she could not eat the same food with her friends. These opinions were shared with the patient and confirmed by her.

Nurse Action: Automatic and purposeful nursing process

- Automatic nursing process
- Oral and IV treatments required by the physician were provided.
- Purposeful Nursing Process

The patient was asked to share the triggers of her illness and hospitalization process and her opinions about her feelings in this process. After the interview, it was decided that together with the patient, we can share the thoughts and feelings with parents. As a result of the meetings conducted with the patient and parents, the following topics were addressed;

- Providing education on the issues of misconception by watching visuals on Celiac Disease with the patient and her parents
- Supportive treatment for vitamin deficiency and other nutritional elements (doctor requirement; iron, vitamin B12, zink)
- Cooperation with a dietician to consume foods that are rich in iron, vitamin B12, and zink and gluten-free
- Deciding on alternative ways to cope with stress together
- Provision of phone-counseling when the patient experience problems regarding her illness Improvements in Patients Behaviors after Her Needs Were Met
- Non-Verbal Behaviors
- The patient did not grab her stomach, did not suffer from diarrhea and vomiting
- The patient gained her appetite again
- The patient followed her gluten-free diet.
- Verbal Behaviors
- The patient said that she did not feel tired and upset,
- The patient expressed that sharing her opinions and feelings about her illness helped her to feel relaxed,
- The patient indicated that she comprehended the importance of nutrition and she will comply with her parents,
- The patient said that she would express herself better to her friends,

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- The patient expressed that she could spend time with her friends and family when she feels stressed.
- > Objectives Towards Illness
- The patient expressed her objective as "I have realized that my treatment is a life-long glutenfree diet. I will take more care about my nutrition"

# DISCUSSION

Nurses constitute an important part of the healthcare professionals are required to plan nursing care by establishing effective communication with children and parents (15, 16). Orlando's Interaction Theory, which is among the most frequently used theories, emphasizes the effective communication and individuality of the patient. According to this theory, nurses should evaluate the behaviors of patients carefully and initiate an individual and purposeful interaction (17,18).

In the study conducted by Uslu et al. (2016), Orlando's Interaction Theory was used in the nursing care of adolescents diagnosed with Type 1 Diabetes Mellitus and the study findings showed that positive changes occurred in patients' behaviors when the needs of the patient were met (26). Another research study also found that the patient's behaviors were positively changed with the use of Orlando's Interaction Theory in the nursing care of patients diagnosed







with Type 2 Diabetes Mellitus (27). However, prior studies in the literature have not been employed the use of Orlando's Interaction Theory in the nursing care of children diagnosed with Celiac Disease. Nevertheless, children diagnosed with Celiac Disease are under high-risk conditions in terms of physical, psychological and social aspects. Children who experience this situation may confront adaptation problems regarding the management of the illness (7,8).

Our case study showed that the patient could not manage the illness properly and had conflicts with her family. The underlying causes of the behaviors which were also indicators of stress were revealed and as the reaction of the nurse, this situation was shared with the patient and confirmed by her. Both the automatic and purposeful nursing processes were applied in line with Orlando's Interaction Theory. The changes in the patient's behaviors were evaluated after her needs were met, and an improvement in the patient's verbal and non-verbal behaviors was reached.

## CONCLUSION

The study identified that Orlando's Interaction Theory facilitated illness management in the case that was diagnosed with Celiac Disease and was effective in coping with stress. Our suggestion is to increase the number of research studies that use Orlando's Interaction Theory, provide training for nurses on this issue and increase the use of this theory in clinics.

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