

Nursing Approach According To Roy Adaptation Model For A Adolescent Diagnosed With Celiac Disease And Type 1 Diabetes Mellitus

Melike Baş, Birsal Molu, Ayşegül Bükülmez

Selcuk University Aksehir Kadir Yallagöz Health School, Konya, Turkey.

Selcuk University Aksehir Kadir Yallagöz Health School, Konya, Turkey.

Afyonkarahisar Health Sciences University, Department of Pediatrics, Afyonkarahisar, Turkey

Abstract

The aim of this study is to help nursing care and the importance of emotional support in coping process of a child with T1DM and CD. It is evaluated with nursing model based on Roy adaptation model. Seventeen years old female patient was admitted to a university hospital with the diagnosis of T1DM + CD. The patient also had anxiety. It was determined that the patient had eating disorder and did not use his insulin regularly. As seen in this case, it is important to provide emotional support in coping with anxiety and fear of unknownness in a new disease.

Key Words: *Type 1 Diabetes Mellitus, Celiac Disease, Roy Adaptation Model, Nursing, Adolescent*

Introduction

Diabetes Mellitus (DM) is a metabolic disease caused by chronic hyperglycemia caused by insulin deficiency in secretion, effect or both. Pathological events varying from autoimmune damage and insulin resistance in β cells cause the development of the disease (1,2). Celiac disease (CD) is an autoimmune enteropathy that usually occurs in childhood. The disease is a chronic disease that affects the small intestine by ingesting gluten-containing foods in predetermined individuals (3–5). Gluten causes mucosal damage in the small intestine (6). This causes malabsorption, one of the most common findings of celiac disease (7). Research published in the last few years has shown that CD prevalence rates have increased in individuals with T1DM (8,9). The incidence of T1DM is rapidly increasing in children and adolescents, with a 3% annual increase. CD is more common in women than in men with T1DM. The etiologic risk factors for developing antibodies against the small intestine are thought to be different from those in T1DM (10).

Nurses' care for patients using a model brings holistic care. One of the most widely used models in the profession is the Roy Adaptation Model (RAM). This article describes the application of the Roy Adaptation Model in the care management of a patient with T1DM and CD.

Case Report

D.A. is being followed up in a pediatric clinic of a university hospital. When the patient was interviewed, he had been diagnosed with CD for one month and T1DM for about 10 years. For individual disease education, the patient was interviewed once a week, four times in total. Our patient participated in peer meetings twice.

Nursing Care Plan by Roy Adaptation Model

Introductory Information

D.A. is a 17-year-old girl. She is a high school student. She is the eldest of three children in the family.

Physiological Field

D.A. was diagnosed with T1DM at the age of 7 years. CD was diagnosed when the patient was admitted to the clinic with complaints of abdominal pain and diarrhea. The patient had no chronic disease except T1DM and CD. Her body weight was 55 kg and her height was 165 cm. D.A. has been suffering from celiac disease for about a month. It was determined that the patient had eating disorder and did not use her insulin regularly. She stated that she had been diagnosed with CD just a month ago and that her eating patterns had changed considerably.

Nursing diagnoses in the physiological field: Pain (abdominal pain), less than necessary and irregular nutrition-related nutritional imbalance, diarrhea, risk of ineffective management of health due to lack of knowledge of diet management and restrictions.

Self / Ego Concept

It was found that D.A. Usually came alone when coming to the hospital. She stated that she expressed himself better when she was alone. She stated that her mother had no support after she was diagnosed with CD and did not accept the disease. She also stated that her mother did not pay attention to gluten contamination while preparing the meals they consumed at home. The patient who stated that making bread from wheat flour in the house she lives in is continuous and frequently says her discomfort from this situation. She expressed her happiness to discuss the problems related to CD with the health personnel and to overcome the lack of information.

Nursing diagnoses of Self / Ego Concept: Ineffective management of therapeutic regimen due to lack of family support for disease.

Role Function Area

She stated that she wanted to continue her university life in a different place from the province where his family lived. She wants to learn to cope with the disease by standing on her feet.

Nursing diagnoses related to role function: Anxiety, deterioration in continuity of family processes, risk of loneliness.

Area of Mutual Commitment

Although her father acknowledged her illness, D.A. wants to move away from her mother because she looks more negative. She especially enjoys spending more time with her peers, who call CD food allergies and are aware of it. Since their siblings are smaller than D.A., they are not aware of the diseases.

Nursing diagnoses related to interdependence: Being ready for strengthening in family processes.

Discussion

Nursing Care Process According to Roy Adaptation Model

A. Physiological Adaptation

Patient Statement: The patient, who had diarrhea and abdominal pain for the last month and type 1 diabetes for 10 years, stated that he did not comply with his diet. She also stated that she did not administer her insulin regularly.

Stimulus Diagnosis Focus Stimulants: Hyperglycemia, abdominal pain and diarrhea lasting for about a month

Contextual Stimulus: Not using your medication regularly and not following your diet

Possible Stimulus: Low social support from family, emotional stress

Possible Nursing Diagnosis: Pain (abdominal pain), less than necessary and irregular nutrition-related nutritional imbalance, diarrhea, dietary management, and the risk of ineffective management of health due to lack of knowledge of restrictions.

Nursing Attempts

- They were determined by attracting attention and were distracted.
- Stressed that abdominal pain would decrease when it was adapted to the gluten-free diet, and information was provided on diet compliance.
- Interview with other peers with CD via social media account.
- Nutritional information was provided for both celiac disease and T1DM.
- Informative brochures on CD and T1DM were given.
- Recommended to listen to calming music and read books.
- Meet their peers with the same disease (both T1DM and CD) at information meetings.

Evaluation: Blood glucose monitoring was observed to be within normal limits in the blood glucose registry. She stated that abdominal pain decreased and she felt better.

B. Self Concept Adaptation

Expression of the patient: She stated that she did not help her mother to cope with her illness, did not accept her illness and left her alone.

Focus Stimulus: Chronic disease

Possible Stimulus: Disease complaints affect daily life

Contextual Stimulus: inability to cope with stress

Possible Nursing Diagnosis: Ineffective management of the therapeutic regimen due to a lack of family support for the disease.

Nursing Attempts:

- Expressed her own feelings and thoughts.
- Informed about the complications of the disease.
- She was encouraged to ask questions about her health problem, treatment, prognosis, and care methods.
- Interviews with parents were planned on disease education.

Evaluation: The patient's parents did not participate in the planned interview. D.A's negative thoughts about her mother continue.

C. Role Function Adaptation Format

Primary Role: 17 years old woman

Secondary Role: Being a Student, Child

Statement of the patient: She stated that she felt lonely at home, that her mother did not support her and that she wanted to get away from her family in university life.

Contextual Stimulus: Living Anxiety

Possible Stimulus: Lack of support from mother

Focus Stimulus: Continuation of physical findings related to celiac disease, deterioration of blood sugar regulation related to T1DM.

Possible Nursing Diagnosis: Anxiety, deterioration in continuity of family processes, risk of loneliness.

Nursing Attempts:

- Encouraged to talk to her family about her current situation.
- Establishing a plan for nutrition with family members
- Support systems were evaluated and the most appropriate coping mechanisms were tried to be selected.

Evaluation: She stated that she would get support from her family about the changes caused by her illness.

D. Interdependence Adaptation Format

Patient's Expression: Impaired communication with family members, wanting to study university away from family

Focus Stimulus: Fatigue

Contextual Stimulus: Thinking that her mother did not understand her

Possible Stimulus: Anxiety

Possible Nursing Diagnosis: Being ready for strengthening in family processes.

Nursing Attempts:

- An environment was created in which she could express her feelings with her family, but her parents did not participate.
- Encouraged to develop appropriate coping methods in family process and social relationships and to communicate with peers
- Training was given on problem solving related to the disease.

Evaluation: She was able to identify situations that interfered with her mother's interaction and said that she listened to calming music and read books about her illness in order to cope with stress in her leisure activities.

Result

Roy's Adaptation Model was used to adapt the patient to a chronic disease if a second chronic disease was added. In this case, care and nursing interventions according to Roy's Adaptation Model of a patient with T1DM and CD were applied. Accordingly, it can be said that the Roy Adaptation Model is suitable for use in patients with T1DM and CD.

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