

## Nursing care to an ostomy patient: application of the Orem's theory\*

*Assistência de enfermagem a paciente com colostomia: aplicação da teoria de Orem*

*Asistencia de enfermería a paciente colostomizada: aplicación de la teoría de Orem*

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### ABSTRACT

**Objective:** To apply the “Orem’s Self-care Theory” in ostomy patient care. **Methods:** This is a clinical study with an intestinal ostomy patient, whose illness is a consequence of the “Chagas disease”. Data collection was performed during the home visits, using a form with questions referred to the Orem’s presuppositions. The data were analyzed and presented according to the determining factors in self-care development. **Results:** Some self-care requirements were modified, such as: “Balance between loneliness and social interaction” and “Self-care in health disorders”. The home care delivered based on the support–education system allowed for the promotion of health and the patient’s perception regarding the importance of self-care. **Conclusion:** The self-care theory allowed for appropriate care and therapeutic communication adjusted to the patient’s situation.

**Keywords:** Self-care/methods; Colostomy/nursing; Patient education

### RESUMO

**Objetivo:** Aplicar a Teoria do Autocuidado de Orem na assistência a paciente portadora de estomia. **Métodos:** Estudo clínico realizado com paciente portadora de estomia intestinal, secundária à doença de Chagas. A coleta de dados foi obtida mediante cuidado domiciliar, usando formulário com questões referentes aos pressupostos de Orem. Para análise do discurso os dados foram apresentados de acordo com os fatores determinantes no desenvolvimento do autocuidado. **Resultados:** Alguns requisitos de autocuidado estavam alterados, como “Equilíbrio entre solidão e interação social” e “Autocuidado no desvio de saúde”. O cuidado domiciliar baseado no sistema apoio-educação permitiu a promoção da saúde e a percepção da importância da paciente no cuidado. **Conclusão:** A Teoria do Autocuidado possibilitou o cuidado e a comunicação terapêutica adequando-se à situação da paciente.

**Descritores:** Autocuidado/métodos; Colostomia/enfermagem; Educação do paciente

### RESUMEN

**Objetivo:** Aplicar la teoría del autocuidado de Orem en la asistencia a paciente portadora de ostomía. **Métodos:** Se trata de un estudio clínico realizado con una paciente portadora de ostomía intestinal, secundaria a la enfermedad de Chagas. Los datos fueron recolectados a través del cuidado domiciliario y del uso de un formulario con preguntas referentes a las premisas de Orem. El análisis del discurso fue presentado de acuerdo con los factores determinantes en el desarrollo del autocuidado. **Resultados:** algunos requisitos del autocuidado estaban alterados tales como: “Equilibrio entre la soledad y la interacción social” y “Autocuidado en el desvío de la salud”. El cuidado domiciliario basado en el sistema del apoyo-educación permitió la promoción de la salud y la percepción de la importancia de la paciente en el cuidado. **Conclusión:** La teoría del Autocuidado posibilitó el cuidado y la comunicación terapéutica adecuándose a la situación de la paciente.

**Descriptores:** Autocuidado/métodos; Colostomía/enfermería; Educación del paciente

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## INTRODUCTION

Ostomy is an artificial communication between organs or viscera and the external environment for draining, evacuation or nutrition. The creation of an intestinal ostomy is considered a simple procedure in surgery. Digestive stomas are performed in intestinal loops, giving priority to the adequate mobility and length to the exteriorization of the abdominal wall<sup>(1-2)</sup>.

Depending on the origin of the disease, intestinal stomas can be temporary or definite. Temporary stomas have the objective to protect an anastomosis and can be reversed after a while. Definite stomas, generally recommended in cases involving cancer, are done when it is impossible to re-establish intestinal motility. Ostomy patients require continuous support, for their problems are long-lasting and cyclical<sup>(3)</sup>.

The epidemiological data regarding ostomy are scarce, due to the difficulties in systemizing data and health information. Besides, they are consequences of diseases or trauma and are not causes or diagnostics. However, when projecting estimates of the International Ostomy Association on the year 2000 Brazilian census, it is estimated there is 170 thousand ostomy patients in the county<sup>(4)</sup>.

In a broader health-disease concept, in which relations are not only cognitive or social, but also affective, the literature specialized in stomal therapy has shown that body image disturbance is a determinant of the quality of life in ostomy patients during their rehabilitation process<sup>(5)</sup>.

The holistic health view focuses on the ostomy patient's health care needs, regarding not only his or her new health condition, but also the subjective aspects related to the social representation of the new stoma in his or her body. As literature shows, the body image disturbances are determinants of the ostomy patient's quality of life in the several phases of rehabilitation<sup>(6)</sup>.

According to the International Declaration of Ostomy Patient Rights, the patient has the right to receive specialized nursing care in the pre and post surgical period, both at the hospital and in their own communities<sup>(7)</sup>.

Several factors influence the patient's self-care, as well as the compliance and motivation toward treatment and proposed interventions. Knowing them is essential in order to understand the challenges of the care process in stomal therapy<sup>(6)</sup>.

An effective way to promote nursing care is through applying the Self-Care Theory, respecting its essential aspects. By doing so, health care becomes directed to the patient's needs, and approaches the holistic aspects of care. In a simplified manner, self-care can be considered as the individual's capacity to perform all activities necessary to live and survive. Among these are the physical, psychological and spiritual needs<sup>(8)</sup>.

In our studies about nursing theories during the class *Critical Aspects of the Nursing Care Process*, we were motivated to apply the theoretical knowledge learned to the health care practice. Hence, we searched for the Orem's Theory, because it contains elements that are deemed essential for providing nursing care to the colostomy patient, and the home care strategy, because it represents a safe environment for the patient.

In this sense, the objective of the present study was to apply the Orem Self-Care Theory while delivering care to an ostomy patient.

## METHODOLOGICAL THEORETICAL FRAMEWORK

The Self-Care Theory is one of the three constructs or theories that form the framework of the Nursing Theory of the Self-Care Deficit proposed by Orem. Its presupposition is that all human beings have the potential to develop their intellectual and practical skills, besides the essential motivation for self-care<sup>(9)</sup>.

Orem believes that individuals can develop themselves, for self-care is something learned and not instinctive. Besides, as the author emphasizes, human functioning includes physical, psychological, interpersonal, and social aspects<sup>(10)</sup>.

Self-care implies that a partnership between the patient and the professional is established, in which problems are identified and determine the actions and the appropriate type of intervention. However, the patient's participation in the care plans is very important for the development of the plan itself, mainly for encouraging a reduction in the patient's dependence<sup>(11)</sup>.

The Self-Care Theory has as its main component the requisites of self-care, which can be universal, concern development, and refer to the health disorder. As shown in the literature, the universal requisites have a direct affect on human structure, its functions and life phases, which are inter-related and comprise common terms to designate the everyday life activities.

These include adequate air, water, and food supply; evacuation care; balance between activities and rest; loneliness and social interaction; life dangers; human functioning; potential well-being and development; and a desire for normality. Those concerning development represent the life cycle stages, including the factors and circumstances that influence providing full care and the adverse conditions and situations that affect human development; those regarding health disorders include alterations originated in the health problems that can create difficulties to an appropriate care maintenance<sup>(8,12)</sup>.

Orem<sup>(12)</sup> proposes three nursing praxis stages and rules: initial contact with the patient with health care needs;

continuous contact to develop the nursing actions; stages of patient preparation to develop health care actions independent of nursing supervision.

In order to implement patient care, Orem<sup>(12)</sup> proposes three moments. In the first, the initial contact with the patient, the nurse meets the individual with health care needs. This contact has to be established, legitimized, and adequate according to the evidence required by nursing. Patient interaction is the source to identify the requisites, systems and new self-care demands, as well as diagnosis and nursing prescriptions.

In the second step, the nurse creates a system that contemplates the therapeutic demands and ways to care for the patient. The continuation of care is sustained with the help of family members or those responsible for the care, who will act now and in the future. The patient's potential for self-care is, then, evaluated. It is the moment to acknowledge, organize, and document the effective value of nursing.

The third step is the preparation of the patient, family or person responsible for the self-care to become independent from the nurse's actions. This person acts as a guide for the nursing prescription. In this moment, an agreement is established with the patient about his needs and the factors that could possibly interfere in this new adjustment. Next, the actions established according to the care demand are documented.

## METHODS

This is a clinical study applied to an ostomy patient, carried out during house visits, thus facilitating nursing care. This type of study allows for a detailed investigation of a real situation involving the health care professional<sup>(13)</sup>.

The study subject was randomly selected from the files of an institution, which is a reference in the specialized care of colostomy patients in Fortaleza, Ceará. The following inclusion criteria were determined: being able to maintain effective communication, being able to perform self-care and presenting satisfactory maturity of the stoma, that is, with postoperative time of at least three months.

The steps followed for data collection planning and implementing care, as well as the effective care were based on the presuppositions of the Orem Theory. The form used for data collection presented the following sections: personal information, clinic and demographic data, basic conditioning factors, universal self-care requisites, development self-care requisites, and health disorder self-care requisites. The items related to the physical exam, still present in the instrument, were directed to the respiratory pattern, nutritional pattern, evacuations, and skin evaluation.

The item basic conditioning factors had the purpose to identify the intervenient factors in the individual's capacity to engage in self-care, either individual or environmental. The item universal self-care was divided into the following sub-categories, as Orem presents: maintenance of and adequate air, food, and water supply, care actions regarding the evacuation patterns, balance between activity and rest, balance between loneliness and social interaction, avoiding harms to one's life and body functioning, and promoting human functioning and development. The items regarding the self-care requisites for development had the purpose to find what actions the individual performs to promote self-care. The self-care requisites regarding health disorders explored the conditions related to the therapy, knowledge about specific ostomy care, control of complications, and access to health services.

Three weekly home visits were carried out in January 2007. The visits lasted one hour, in average. The meetings were scheduled by telephone, according to the patient's availability. In the first visit, we requested the consent to perform the study and used the instrument for data collection. In the other meetings, we referred to the previously recorded information, emphasizing the necessary care and evaluating the patient's self-care capacity.

Some steps were adopted during the visits, including:

1<sup>st</sup> visit: we evaluated the health situation of the patient by filling out the data collection form.

After the visit, we established the nursing diagnoses, according to the Taxonomy II of North American of Nursing Diagnosis Association<sup>(14)</sup>. For the diagnostic rationale, we used the steps recommended by López<sup>(15)</sup>. Next, we elaborated the possible care interventions, suitable with the first step of Orem's nursing process. This phase determines if nursing care is actually necessary. For each diagnosis, we established goals that served as a guide to evaluate the interventions delivered.

2<sup>nd</sup> visit: We discussed with the patient the intervention priorities regarding her health, and adapted a care plan, which she approved, and was adequate to meet her perceived needs. The goals were compatible with the diagnosis and had the objective to capacitate the patient to become a self-care agent.

3<sup>rd</sup> visit: We evaluated the efficacy of the implemented interventions, comparing how the nursing diagnoses were presented and identifying the need for further care actions. This referred to the third step of the Orem theory. We prepared the patient for the independence phase, in which she could perform the self-care activities.

The data from the patient's reports were analyzed according to the determining factors of self-care development, as proposed in the theory. The form

permitted open answers, which helped to identify the nursing diagnoses.

The study was approved by the Ceará Federal University Research Ethics Committee. According to the 196/96 Resolution of the National Health Council<sup>(16)</sup>, we considered the ethic principles of non beneficence, non maleficance, as well as the patient's right to anonymity and autonomy regarding the participation in the research without suffering any harms.

## RESULTS

The 21-year-old patient had temporary intestinal ostomy secondary to Chagas disease for twelve months. She had incomplete elementary education, lived with her parents most of the time and the rest of the time with her partner's family. Both houses presented satisfactory sanitary conditions and the family income was around two minimum wages. At the age of 14, she started presenting abdominal plenitude associated with constipation, characterized by the absence of evacuation for around six to seven days. She used laxatives without medical prescription, which brought about profuse diarrhea and caused school absence. Due to this situation, she abandoned her studies. At the age of 18, at the severe phase of the illness, she showed great decrease of peristalsis, which indicated colostomy. Nowadays, feeling physically incapable, she does not work. Her partner is in prison and she visits him regularly. Her parents show concern about her health status. Generally, her mother is the one who keeps her company in the medical visits. Regarding the physical changes, she presents low hearing accuracy in the left ear and low weight for her height. She does not show complications with the stoma function and performs efficient self-care measures. She has a monthly follow up with a specialist and goes to the appointments in an outpatient service of the association specialized in ostomy patients care, where she receives colostomy bags.

During her first hospitalization, she demonstrated to be very shy. She hardly answered to questions. She recognizes it is difficult for her to make friends and keep social relationships. She affirmed she feels different from others because she is an ostomy patient. She reported having low self-esteem and hiding the fact that she has a colostomy from people. She also complained of loneliness because of the absence of her partner and lack of friends. The relationship with her partner's family and his mother, despite being significant to her, was never mentioned. The same happened with her own family, always absent during the whole care process. Furthermore, the patient verbalized doubts about the opaque enema exam, to which she would be submitted.

In the second visit, as planned, we applied the etiology

of Chagas disease, its main aspects and clarifications about how the exam would occur. During this visit, the patient showed great interest throughout the explanation. She asked several questions and showed relief when she knew that after the surgery her complications could be diminished. She also felt satisfied in knowing that she could not transmit Chagas disease to other people. At this moment, we noticed motivation in the interaction with the care provider and verbalization about the positive contribution of the visit.

In the third visit, our objective was to instruct/teach about the possible surgical techniques of intestinal reconstruction, their risks, port-operative, and other aspects. The patient mentioned that the exam that had been performed indicated possibilities of removing the stoma with intestinal reconstruction, in fact, that the dates of the pre-operative exams had already been scheduled.

This time, she showed a very different interaction than the one observed in the first visit and took the initiative throughout the talk, emphasizing that her major wish was to have the stoma removed. She reported to be re-kindling relationships with childhood friends. We encouraged the patient's behavior and emphasized the importance of having relationships with friends and other people who are meaningful to her. In an understandable language, we explained to her how her surgery would be like. She, again, interacted with interest, invited one of the researchers, a specialist in stomal therapy, to accompany her in the surgery, and thanked us for the contribution of the visits.

The Chart 1 displays the nursing diagnoses identified with the data obtained from the first visit, inserted in their respective self-care requisites, the established goals, the type of system used, and the proposed interventions. The guiding system for the actions was one of support-education, which favored the performance of care. The interventions consisted primarily of measures aimed at improving her self-image, relationships, and knowledge acquisition.

In the first requisite that was altered, the main aspects that characterized the interaction were: loneliness complaints, absence of meaningful people, impaired communication and verbalization difficulties. In the second requisite the alterations were low self-esteem and feeling different from the others. The third requisite was justified in the same answers found on the first requisite. Finally, the fourth requisite presented as a disorder the lack of knowledge about the condition that preceded the ostomy, as well as possibilities of intestinal reconstruction. It should be emphasized that the last diagnostic presented, regarding the development of self-care, represents a situation of wellness, once we consider the patient capable of following the therapeutic actions related to her situation and her health-disease adequately.

**Chart 1** - Nursing Process adapted to the Orem Theory for the colostomy patient

Self-care requisites	Nursing diagnosis	Goals	Type of system	Nursing interventions
Changes in the balance between loneliness and social interaction	Social interaction impaired by the absence of meaningful people characterized by dysfunctional interaction	Encourage the patient to increase the support network, with which she can identify and establish connections	Support-education	Guide the search for a support group with people in the same age group
Alteration in the promotion of human/potential functioning and development and in the limitations and desire to be normal	Body-image disturbance due to treatment, characterized by negative feelings toward the body	Advise the patient on how to face situations involving changes to the life style	Support-education	Help the patient to find positive elements in herself and in her life situation and reinforce those aspects
Changes in self-care due to health disorder	Deficient knowledge related to the lack of familiarity with the information resources, characterized by problem verbalization	Help the patient to learn about her illness and its complications	Support-education	Demonstrating, through educational guides, the main aspects of the illness and its complications
Self-care development	Effective control of the therapeutic regimen characterized by changes in the illness within a normal range of expectations	Encourage the promotion of self-care measures in order to improve the health status	Support-education	Validating the knowledge about self-care and reinforcing positive actions

## DISCUSSION

The presuppositions of the analysis and interpretation of the collected data were related to the intellectual condition, isolation issues, the lack of family and social support, and the motivation to learn, all of which interfere in the adoption of care measures. The therapeutic demand of self-care proposes a description of the patient and her environment (aspects of the patient's life, health or wellness), recognizing the effective instruments and specific techniques, chosen by the patient, which can be used to change development factors<sup>(12)</sup>. In this sense, the patient's interaction with supporting social networks and the care provider could represent an obstacle to the self-care actions.

The ostomy-related aspects can be physical or social. Physical problems are related to the change in the form of feces elimination, which implies the mandatory use of a device adhered to the abdomen. In the social aspect, there can be discomfort and insecurity when dealing with the equipment, which leads to the isolation of family and social contact<sup>(3)</sup>.

The fact that the patient abandoned her studies after the beginning of the symptoms, besides reducing relationships with the groups, denotes the beginning of isolation, which can bring about psychosocial consequences. The absence of labor activity may lead ostomy patients to idleness and social isolation. These conditions impair their quality of life<sup>(17)</sup>.

According to literature, ostomy individuals face real and symbolic losses, which bring about negative feelings in their relationships. Particularly, the mutilation and social disrepute in make it difficult for patients to face this situation, which can affect lifestyle and quality of life<sup>(18)</sup>.

Taking care of these patients can represent a challenge for health professionals, for it demands preparing patients to live with the ostomy. The academic courses do not focus on the physical care of the stoma, and, thus, professionals are not prepared to deal with the changes they pose in one's life style<sup>(17)</sup>.

We choose to focus interventions on the diagnosis deficient knowledge. This decision was made with the patient, in the second visit. This topic was chosen because understanding the whole health-illness process would allow to overcome some of the fears or uncertainties that compromise a healthier interaction with her relatives, friends and, above all, with herself.

Researchers have proposed that self-care demands be solved by developing the patient's abilities<sup>5</sup>. However, in order for the patient to acquire potential to decide about his or her health status, it is necessary for nurses to contribute with this learning.

Previous studies state that support-education systems are based on the patient's needs. They refer to the guidance provided about certain themes and occur through the promotion of therapeutic self-care by the nurse, making it possible for the individual to execute

or learn to execute this measure<sup>19</sup>.

It is recommended for the family to participate as facilitator of the support-education system, once it reinforces the interventions implemented by the care provider. However, it is necessary to evaluate the family dynamics and the meaningful relationships among its members, to evaluate the impact of this influence. The theoretical, practical and investigative evidence of the meaning assigned to the family, both for the wellness and health of its members, and for the effect on the disease, implies that nurses consider family-centered care as part of the nursing care<sup>(20)</sup>.

Therefore, by means of nursing interventions based on the support-education system, we contributed with the development of the patient's self-care capacity. This was facilitated because the care prioritized a new view of the individual about her health status.

Some factors did not allow the execution of a more effective care with more consistent results. Among them, the time of nursing actions stands out, for it is limited to one month, and the experience of care was carried out during a graduate class. In addition, our care experience shows the reality of just one subject, which limits generalizations of the findings. The answer to the care depends on the adaptation to the ostomy, on the interest and capacity of the individual for his or her own care and the preparation of the care provider in the

actions offered.

## CONCLUSION

The Orem theory emphasizes the importance of the patient's engagement to self-care. For this, it is fundamental to understand the patient's reflection and development habits, his or her perceptions and attitudes toward others, feelings and emotions demonstrated in the most diverse situations.

The nursing process offers the adaptation of interventions to the patient's individual needs. Its use associated with a theory may result in a more effective assistance, with conditions for the patient to participate in the care planning.

In the study here performed, the transformations of the patient's interactions, as well as the changes in her behavior could be justified by the possibility of intestinal reconstruction, which was her great aspiration. However, the patient herself showed positive biofeedback during the whole care process.

In our opinion, the Self-care theory has shown to be the basis for the care, which made the therapeutic communication between the patient and the nurse possible in the patient's home, fitting her issue. Studies as these can encourage nurses to work with nursing theories.

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