Scientific evidence for the self-care of people with intestinal stomas

Evidências científicas para o autocuidado de pessoas com estomias intestinais
Evidencia científica para el autocuidado de personas con ostomías intestinales

RESUMO
Objetivo: analisar as evidências sobre a assistência de enfermagem para o autocuidado de pacientes com estomias intestinais. Metodologia: Trata-se de uma revisão integrativa de artigos disponíveis nas bases de dados PUBMED®, Literatura Latino-Americana e do Caribe em Ciências da Saúde (LILACS), Literatura Internacional em Ciências da Saúde (MEDLINE), Bases de Dados de Enfermagem (BDENF), Scientific Electronic Library Online (SciELO), publicados entre 2016 a 2021, a partir dos descritores: “estomia” (ostomy) and “assistência de enfermagem” (nursing care) and “autocuidado” (self care), no meses de janeiro e fevereiro de 2022. Resultados: Foram identificados 12 artigos que apresentaram as orientações a serem transmitidas pelo enfermeiro aos pacientes estomizados para a promoção do autocuidado, de acordo com a Teoria de Orem, especificamente a Teoria do Déficit de Autocuidado. Conclusão: O paciente com estomia intestinal enquadrá- se na categoria autocuidado por desvio a saúde e demanda uma assistência apropriada e tem que se conscientizar dos efeitos e dos resultados de estados patológicos.

DESCRITORES: Estomia Intestinal; Assistência de Enfermagem; Autocuidado.

ABSTRACT
Objective: to analyze the evidence on nursing care for the self-care of patients with intestinal ostomies. Methodology: This is an integrative review of articles available in the PUBMED® databases, Latin American and Caribbean Literature on Health Sciences (LILACS), International Literature on Health Sciences (MEDLINE), Nursing Databases (BDENF), Scientific Electronic Library Online (SciELO), published between 2016 and 2021, based on the descriptors: “ostomy” (ostomy) and “nursing care” (nursing care) and “self care” (self care), in the months of January and February 2022. Results: Twelve articles were identified that presented the guidelines to be transmitted by nurses to ostomy patients for the promotion of self-care, according to Orem’s Theory, specifically the Self-Care Deficit Theory. Conclusion: The patient with an intestinal ostomy fits into the self-care category due to health deviation and demands appropriate assistance and has to be aware of the effects and results of pathological states.

DESCRIPTORS: Bowel Ostomy; Nursing Assistance; Personal care.

RESUMEN
Objetivo: analizar las evidencias sobre los cuidados de enfermería para el autocuidado de pacientes con ostomías intestinales. Metodología: Se trata de una revisión integradora de artículos disponibles en las bases de datos PUBMED®, Literatura Latinoamericana y del Caribe en Ciencias de la Salud (LILACS), Literatura Internacional en Ciencias de la Salud (MEDLINE), Bases de Datos de Enfermería (BDENF), Scientific Electronic Library Online (SciELO), publicado entre 2016 y 2021, a partir de los descritores: “ostomía” (ostomía) y “cuidado de enfermería” (cuidado de enfermería) y “self care” (autocuidado), en los meses de enero y febrero de 2022. Resultados: Doce artículos se identificaron que presentaron las orientaciones a ser transmitidas por los enfermeros a los ostomizados para la promoción del autocuidado, según la Teoría de Orem, específicamente la Teoría del Déficit de Autocuidado. Conclusión: El paciente con estomía intestinal se encuadra en la categoría de autocuidado por desviación de la salud y demanda asistencia adecuada y tiene que ser consciente de los efectos y resultados de los estados patológicos.

DESCRITORES: Ostomía Intestinal; Asistencia de Enfermería; Cuidados personales.

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Wanderson Alves Ribeiro
Nurse. Master and Doctoral Student at the Academic Program in Health Care Sciences at the Aurora de Afonso Costa Nursing School of the Fluminense Federal University UFF – Brazil; Postgraduate in Stomatherapy Nursing at the State University of Rio de Janeiro, RJ - Brazil; Professor of the Undergraduate and Postgraduate Nursing Course at the Iguaçu University. Nova Iguaçu, RJ – Brazil.
ORCID: 0000-0001-8655-3789
Fátima Helena do Espírito Santo
Nurse. PhD in Nursing; Associate Professor at the Medical-Surgical Nursing Department at the Aurora de Afonso Costa Nursing School of the Fluminense Federal University. Niterói, RJ – Brazil.
ORCID: 0000-0003-6611-5586

Norma Valéria Dantas de Oliveira Souza
Nurse. PhD in Nursing; Full Professor at the Department of Medical-Surgical Nursing at the Faculty of Nursing at the State University of Rio de Janeiro – ENF/UERJ. Coordinator of the Postgraduate Course in Stomatherapy Nursing at the State University of Rio de Janeiro – UERJ.
ORCID: 0000-0002-2936-3468

Hosana Pereira Cirino
Nurse. Master by the Academic Program in Philosophical, Theoretical and Technological Foundations of Health Care and Nursing at the State University of Rio de Janeiro. Postgraduate in Nursing in an Intensive Care Unit and Stomatology at the University of the State of Rio de Janeiro.
ORCID: 0000-0001-9685-4841

Luiz dos Santos
Nurse. Doctor by the Academic Program in Health Care Sciences at the Aurora de Afonso Costa Nursing School of the Fluminense Federal University UFF – Brazil. Adjunct Professor at the Medical-Surgical Nursing Department at the Fluminense Federal University (UFF), Technical Chamber / Elderly; Member of the Interdisciplinary Group for Research, Teaching, Technology and Innovation in Health (GIPETIS); Professor at the Multiprofessional Residency Program at the Antônio Pedro University Hospital (HUAP/UFF); Specialist in Gerontological Nursing from the Fluminense Federal University – UFF.
ORCID: 0000-0002-9114-4354

Maria de Nazaré de Souza Ribeiro
Nurse. Doctor of Science. Adjunct Professor at the Higher School of Health Sciences at the State University of Amazonas.
ORCID: 0000-0002-7641-1004

INTRODUÇÃO

The intestinal stoma consists of a surgically constructed orifice to allow the viscera to communicate with the external environment, with the objective of diverting the intestinal contents to the exit of feces and flatus. It can be permanent or temporary, according to the underlying disease and purpose. When performed in the large intestinal segment, it is called colostomy and in the small intestine, ileostomy.\(^{1,2}\)

Temporary stomas are created for the prevention and protection of intestinal transit, preventing complications such as dehiscence and infection in the area of anastomosis, allowing the reconstructed intestinal transit to heal. Permanent stomas are necessary when there is total resection of the colon, rectum or anus, making it impossible to reconstruct the intestinal transit, as in the case of patients with colorectal neoplasms.\(^{2,5}\)

Making a stoma in the abdominal wall is not a risk-free procedure, given that its success is directly related to factors such as preoperative evaluation, the demarcation of the stoma site in the abdomen, the surgical technique used and the proper handling of special equipment and materials.\(^{6}\)

Inadequate care can cause immediate complications in the stoma, occurring in the first twenty-four hours, such as necrosis, ischemia, edema, hemorrhage and bleeding. Such intercurrences usually occur between the first and seventh postoperative days and present as fistula and peristomal abscess, stoma retraction and cutaneous-mucosal separation.\(^{7}\) Late complications refer to intestinal loop prolapse, stenosis or retraction of the stoma, and parastomal or paracolostomic hernia, in addition to peristomal dermatitis triggered by improper use of the collection bag, due to improperly cutting the orifice of the bag.\(^{3,6}\)

There is strong evidence proving that the occurrence of complications has a negative impact on the lives of patients with ostomies, especially with regard to self-care and well-being.\(^{5,7,8}\)

It is estimated that between 21% and 70% of patients with a stoma have some type of complication, although, of the total of these, there is a significant percentage that could live with the stoma without any complications. Among these complications are those related to the peristomal skin.\(^{4}\)

Thus, patients demand special attention from nurses, in relation to peristomal skin and the proper use of collecting equipment and adjuvants, in order to help them in the initial transition to the ostomy condition, given that many go through a process of not accepting the change in body.
image, presenting difficulties to the adjustments imposed by the collection bag, and thus facing challenges that generate insecurity and fear. (9)

For this reason, the nurse accompanies the patient with an ostomy, supporting him in self-care based on guidelines aimed at both the patient and his family members, in order to guarantee quality of life and harmony with the new condition. Therefore, the implementation of therapeutic measures based on a care plan that seeks to inhibit the appearance of complications and lead the patient to seek independence in ostomy care is one of the main challenges for nurses facing the ostomy patient. In view of the above, the objective of this study was to analyze the evidence on nursing care for the self-care of patients with intestinal stomas.

METHODS

It is an integrative review, formatted in six stages: 1) formulation of the research question; 2) selection of inclusion and exclusion criteria; 3) categorization of studies; 4) evaluation of included studies 5) interpretation of results; and 6) presentation of the review. (10)

The PICO strategy was used, which is an acronym for Patient/problem, Intervention, Comparison and Outcomes, as shown in Chart 1, for the formulation of the research question and choice of descriptors in the search for evidence on the subject.

In this way, we intend to answer: what is the scientific evidence, published in the national and international literature, on nursing care for the self-care of patients with intestinal stomas?

Subsequently, the inclusion and exclusion criteria of the studies were established. The following were included: original and review studies written in Portuguese, English and Spanish; indexed from January 2016 to May 2021; articles available in full, which allowed the investigation of the subject in question.

Exclusion criteria were: repeated studies in more than one data source, selecting only one; published in the form of a dissertation, thesis, book chapter, book, editorial, review, comment or critique; free abstracts and investigations whose results do not answer the guiding question.

Based on the inclusion and exclusion criteria, evidence searches were carried out in the following electronic databases: Latin American and Caribbean Literature on Health Sciences (LILACS), International Literature in Health Sciences (MEDLINE), Nursing Databases (BDENF), Scientific Electronic Library Online (SciELO) and PUBMED®, through the PICO strategy.

The Descriptors in Health Sciences (DeCS) used in the databases using the PICO strategy and the Boolean AND operator were the following: ostomy and nursing care and self-care.

All titles and abstracts of works identified in the databases, using the descriptors and evaluated as eligible
were separated and analyzed in full. The details of the selection of studies for the integrative review are shown in Figure 1, prepared in accordance with the guidelines of the Preferred Reporting Items for Systematic Review and Meta-Analysis (PRISMA). The Level of Evidence followed the classification proposed by Melnyk and Fineout-Overholt. (10)

RESULTS

A total of 75 publications were identified, of which 41 were excluded after applying the filters and inclusion and exclusion criteria, leaving 34 articles. Subsequently, the selection was carried out by reading full the articles considered potentially eligible, whose titles and abstracts provided evidence on nursing care for ostomy patients for the promotion of self-care, totaling 12 articles. (14–20) It is worth noting that 07 articles from the SCIELO and LILACS databases were duplicated with those from the BDENF and, therefore, were excluded (Figure 1).

The articles were published predominantly in the years 2019 and 2020 with 6 (50%) (9, 10, 12, 13, 15, 16) and 3 (25%) (9, 11, 17) studies, respectively, with most publications in Portuguese. Of the 12 studies, 8 (67%) (2, 4, 9, 12, 14) were carried out in Latin America (Brazil). The journals that contributed the most were those in the nursing area (58%) (9, 10, 12), followed by the medical area (42%) (Table 2).

It was found that the 12 studies expressed Evidence Level 4 and described results that point to the guidelines to be transmitted by nurses to ostomy patients for the promotion of self-care, according to Orem’s Theory, specifically the Self-Care Deficit Theory (Chart 3).

DISCUSSION

The analyzed studies indicated that

<table>
<thead>
<tr>
<th>Year</th>
<th>Title of the study</th>
<th>Journal</th>
<th>Country</th>
<th>Authors</th>
<th>Database</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>A2: Nursing care for the ostomy patient based on Dorothea Orem’s Theory</td>
<td>Brazilian Journal Surgery Clinical Research</td>
<td>Brasil</td>
<td>Couto D, Vargas RZ, Silva CF, Castro JM.</td>
<td>SCIELO</td>
</tr>
<tr>
<td>2019</td>
<td>A3: Construction of educational technology for ostomy patients: focus on peristomal skin care</td>
<td>Rev. Brasileira de Enfermagem</td>
<td>Brasil</td>
<td>Carvalho DS, Silva AGL, Ferreira SRM, Braga LC.</td>
<td>BDENF</td>
</tr>
<tr>
<td>2019</td>
<td>A4: The nurse as a health educator of the person with an ostomy with colorectal cancer</td>
<td>Enfermagem em Foco</td>
<td>Brasil</td>
<td>Farias DLS, Nery RNB, Santana ME.</td>
<td>BDENF</td>
</tr>
<tr>
<td>2019</td>
<td>A5: Real need of the patient; perception of people with intestinal stomas about the factors associated with complications</td>
<td>Revista de Enfermagem Referência</td>
<td>Portugal</td>
<td>Feitosa YS, Sampalo LRL, Moreira DAA, Mendonça FAC, Carvalho TB, Moreira TMM et al.</td>
<td>BDENF</td>
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</table>
the construction of the ostomy, although it provides benefits, generates significant changes in the patients’ experience, thus requiring adjustments and challenges to the new and unknown daily life. As a result, the individual often manifests insecurity in social life, in returning to work activities, in adjusting eating habits and self-care, which involves hygiene and the use of collecting equipment. In this way, the support of the nurse to the person with an ostomy becomes essential to facilitate their readaptation and acceptance of the new way of life.⁴⁻⁵

In a study, it was found that 63% of ostomy patients, for more than five years, reported facing at least one ostomy self-care challenge. The most common challenges seen in the sample were leakage or skin problems around the ostomy and the need to change the bag system too often. In addition, most survivors reported significant physical challenges that can lead to stoma-related disability.⁶

There is, therefore, the recognition of the need to adapt to the new condition of having an intestinal ostomy of involuntary eliminations that result in imbalances and health problems, the individual, according to Orem’s Theory, has a self-care deficit related to changing, cleaning, emptying the collection equipment, cleaning the peristomal skin, the base clipping, the use of adjuvants, the removal and fixation of the collecting equipment that can cause complications both in the ostomy and in the peristomal skin. However, in this experience, self-care involves, in addition to the physical dimension, the psychic, social and affective dimensions of the human being.⁷⁻⁸

The ostomy patient feels stigmatized, with a physical disability, due to the decrease in self-esteem that leads to tendencies towards social isolation, not only to avoid embarrassing situations for oneself regarding the leakage of effluents and gases in public places, but also to avoid possible embarrassment to friends and family.⁹⁻¹³

Therefore, the support offered by nurses to ostomy patients seeks, in their universe, to know and understand the meaning of their experiences

<table>
<thead>
<tr>
<th>Year</th>
<th>Title</th>
<th>Journal/Conference</th>
<th>Country</th>
<th>Authors</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>A8: Self-care of elderly people with colorectal cancer ostomy (Auto cuidado de pessoas idosas com estomia por câncer colorectal)</td>
<td>Jornal coloproctologia</td>
<td>Brasil</td>
<td>Santos RP, Fava SMCL, Dázio EMR.</td>
<td>LILACS</td>
</tr>
<tr>
<td>2020</td>
<td>A11: Validation of educational material for the care of people with intestinal ostomy (Validação de material educativo para o cuidado da pessoa com estomia intestinal)</td>
<td>Rev. Latino-Americana de Enfermagem</td>
<td>Brasil</td>
<td>Sena JF, Silva IP, Lucena SKP, Oliveira ACS, Costa IKF.</td>
<td>BDENF</td>
</tr>
<tr>
<td>2021</td>
<td>A12: Self-care of the person with intestinal ostomy: beyond the procedural towards rehabilitation (Auto cuidado da pessoa com estomia intestinal: além do procedimental rumo à reabilitação)</td>
<td>Revista Brasileira de Enfermagem</td>
<td>Brasil</td>
<td>Sasaki VDM, Teles AAS, Silva NM, Russo TMS, Pantoani LA, Aguiar JC et al.</td>
<td>SCIeLO</td>
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</table>
related to family and social aspects, in order to provide moments of manifesta
tion of their feelings, in order to stimulate physical and emotional rea-
daptation in the face of daily handling of feces. It should, therefore, consider individual and family needs, due to expectations related mainly to receiving guidelines appropriate to reality, which allow preparing the subjects involved for the challenges and complications of everyday life, being helped to improve self-care. \(^{(18,30,23)}\)

In this context, it is believed that the Nursing Process based on Orem’s Self-Care Deficit Theory has the potential to provide more effective care, with interventions aimed at the real needs of the person in their singularity, considering the psycho-emotional, social and physical changes resulting from the construction of the ostomy that imposes a sudden on the body image. In addition, including the person in the planning of their care enables adherence to treatment and minimizes their self-care deficits, strengthening their autonomy. \(^{(15,22)}\)

In Orem’s Theory, three moments for the nurse’s performance are proposed: initial contact with the patient, which translates into the meeting where the patient’s experience will be revealed and the needs raised; secondly, a system is developed based on the therapeutic requirements and the necessary means to help the patient; and in the third moment, the preparation of the patient and the family to perform self-care takes place, thus making them independent. \(^{(16)}\)

From the understanding of the needs of the ostomy patient, it becomes possible to establish a comprehensive care plan for the maintenance of physical and psychological health and quality of life. Through educational actions, it is recommended to offer coherent and real guidance to the patient and their families, improving the understanding of the subject, in relation to the following topics:

<table>
<thead>
<tr>
<th>Study</th>
<th>Study outline/LE</th>
<th>Objective</th>
<th>Results and conclusions/outcome</th>
</tr>
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<tbody>
<tr>
<td>A1(^{14})</td>
<td>Clinical trial (LE4)</td>
<td>To analyze the prevalence of self-reported challenges for ostomy self-care and the physical and environmental factors that can support or impair ostomy self-care.</td>
<td>The most common challenges were leakage or skin problems around the ostomy and the need to change the bag system too often; physical challenges were mentioned as disabling, but several life domains were affected with the ostomy.</td>
</tr>
<tr>
<td>A2(^{15})</td>
<td>Descriptive, observational, case study type clinical study (LE4)</td>
<td>Apply Dorothea Orem’s nursing theory of Self-care in order to provide an improvement in the quality of life of an ostomy patient.</td>
<td>Guidelines on basic care for performing hygiene and changing intestinal devices.</td>
</tr>
<tr>
<td>A3(^{10})</td>
<td>Qualitative, action-research type study (LE4)</td>
<td>To describe the development of an educational technology to support guidelines on care for the peristomal skin of the ostomy patient.</td>
<td>Guidance on the necessary care for the stoma and peristomal skin, exchange of the collection device.</td>
</tr>
<tr>
<td>A4(^{17})</td>
<td>Descriptive study with a qualitative approach (LE4)</td>
<td>To know the experience of a group of nurses in the health education process as a teaching strategy of self-care for people with intestinal ostomy.</td>
<td>Guidance on the technique of cleaning and changing the collecting equipment and others such as sexuality, nutrition, interpersonal relationships, clothing, biopsychosocial aspect.</td>
</tr>
<tr>
<td>A5(^{18})</td>
<td>Descriptive, qualitative study (LE4)</td>
<td>To highlight the perceptions of people with ostomies, accompanied by a Health Care Service for the Ostomized Person, about factors associated with complications in intestinal ostomies.</td>
<td>Guidance on hygiene care for the ostomy and/or perostomy skin, predisposing factors for complications with the stoma, elimination of effluents and signs of complications.</td>
</tr>
<tr>
<td>A6(^{19})</td>
<td>Observational study (LE4)</td>
<td>Assess the impact of having specialist nurses to stoma patients in hospitals.</td>
<td>Guidance on hygiene care for the peristomal skin, emptying and changing the device, selection of food for gas and odor control and psychosocial support.</td>
</tr>
<tr>
<td>A7(^{20})</td>
<td>Descriptive survey-type study (LE4)</td>
<td>Test which factors influence and help in the psychosocial adjustment of patients with ostomy.</td>
<td>Psychosocial support for ostomy patients to feel self-efficient in their ability to integrate the new post-ostomy physical changes into their healthy body and competently maintain good care of their stoma to ensure effective and successful self-care and adjustment.</td>
</tr>
<tr>
<td>A8(^{21})</td>
<td>Integrative literature review (LE4)</td>
<td>To identify in the literature the scientific production on self-care in the elderly with colorectal cancer ostomy.</td>
<td>Guidelines on peristome skin care, emptying and changing the device, inclusion and avoidance of food, gas and odor control, and the purchase of supplements.</td>
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</tbody>
</table>
— Ostomy hygiene care, observation of the ostomy and the peristomal skin

— Cutting the adhesive base according to the ostomy diameter and use of adjuvants

— Emptying and replacing the device: the correct way and time to empty or replace the collecting device

— Strict selection and exclusion of foods and liquids to control stool odor, flatulence, diarrhea and/or obstruction, in order to prevent unpleasant circumstances related to the ostomy

— Understanding bowel function.

— Appropriate choice of clothing to ensure well-being and comfort

— How and where to get the necessary supplements

— Educate the patient about the factors associated with complications in intestinal ostomies

— Offering educational materials such as booklets or access to applications with the aim of complementing health education

— Help the patient to perceive barriers and identify possible resources to face them, in order to increase the impact of educational programs

— Promote the patient’s knowledge and understanding of the feelings that may arise during the ostomy adaptation process, such as anxiety, frustration, non-acceptance or adaptation to self-care, due to a possible feeling of loss

— Demands regarding interpersonal relationships and sexuality

— Help the patient to identify the complications that require looking for the health professional to help with any problem with the ostomy.

The findings in the literature show procedural self-care as the beginning of the rehabilitation process, but the challenges, particularly the social stigma about the perception of physical disability arising from the stoma, arise during the survival of stomatized patients, that demand the provision of a support system and assistance for their families and specialized professional support, in view of the need for new rearrangements to maintain health and prevent complications with the stoma.

CONCLUSION

The results of the analyzed studies show, in the experience of the ostomy patient, the difficulty of taking care of the stoma, which compromises their self-image, is reflected in the return to work and social life, due to the leakage of feces that ends up generating insecurity and discomfort with the devices.

Because of this reality, nurses are assigned, in their care practice, to the transmission of guidelines to the person with an intestinal ostomy, about the necessary information for their self-care, in order to keep them active and promote their autonomy and independence, with a view to developing skills for their physical and psychosocial well-being process. Therefore, it must base its care practice on Dorothea Orem's Theory, specifically the Self-Care Deficit Theory, demonstrably viable for the transmission of knowledge about stoma care, in addition to facilitating the implementation of strategies that work with the acceptance of treatment and enable the prevention of common complications at the stoma insertion site.

The patient with an intestinal ostomy falls into the self-care category due to health deviation and demands appropriate assistance and has to be aware of the effects and results of pathological states, perform therapeutic measures and seek acceptance of themselves as being in a special state of health and thus promote their development.
REFERENCES


