

## The use of Educational Technologies in the Guidance of Self-Care of Stomized Patients

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Received: 06 Oct 2022,

Received in revised form: 28 Oct 2022,

Accepted: 03 Nov 2022,

Available online: 14 Nov 2022

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**Keywords—** Educational Technologies, Self care, Stomata.

**Abstract—**This is a descriptive study with a qualitative approach, carried out through a literature review. The aim of the study was to address the use of educational technologies in self-care guidance for ostomy patients. As a method, twelve scientific articles were used, published between 2016 and 2021 on scientific websites and platforms. The results showed that an educational technology aimed at guiding people with an ostomy is important due to the changes that occur after the ostomy and that the use of technologies during educational actions is seen as a tool that complements the process of knowledge construction for care and taking care of oneself, qualifying interventions in health practice with people with stoma and their families. Health professionals play the role of educators and must participate in the process of elaboration, development and evaluation of the need to implement educational technologies with ostomy patients and their families.

## I. INTRODUCTION

Technologies are processes implemented from the daily experience of health care and some serve to generate and apply knowledge, master processes and products and transform empirical use, in order to make it a scientific approach [1].

Health technologies present evident advances in terms of care, aiming at a direct improvement in the provision of care to patients and their families. In this context, the educational technologies that integrate the group of light technologies are considered important tools for carrying out the educational work and the performance of the care process [2,1].

When educational technology involves the health professional-patient relationship, especially in the health education process, it should aim to facilitate work and improve the quality of care provided by it. Thus, educational technologies can be useful, among other purposes, to facilitate the understanding of certain events and more quickly promote changes for patients [1,2].

Regarding the self-care of people with stomas Dalmolin *et al.* [3] emphasize that the use of technologies during educational activities is seen as a tool that complements the process of building knowledge for care and self-care, qualifying interventions in nursing practice with people with stoma and your family members.

Therefore, the guidance of the health professional is one of the strategies that can stimulate and develop the potential of patients and family members, being able to instrumentalize them as subjects for taking measures to face the problems caused by this treatment [4].

Carvalho *et al.* [1] add that an educational technology aimed at guiding people with an ostomy is important, given that this type of procedure generates concern, fear,

doubts and insecurity about the care given to it. It is necessary to consider that the changes that occur after the ostomy require educational interventions to ensure continuity of care, minimize possible complications and improve the patient's quality of life [5].

Ribeiro *et al.* [6] reinforce that the practice of educating the patient can be seen as an instrument that results in care. In this context, the role of the health professional is fundamental, to help in the adaptation of all physical and mental functions, among others, which is essential in the social adaptability of patients [4].

The orientation of the ostomy patient should start in the preoperative period, following in the postoperative period, in order to prepare the patient for hospital discharge. Guidelines about the stoma, care with the collection bag, early identification of complications and skin treatment, aim at a better quality of life, minimizing hospitalization time and reducing hospital costs [5].

Through health education, the health professional can act as a mediator of learning that leads the patient to develop skills and competences for self-care, which affects their independence and autonomy [6].

Based on what has been exposed, this study aims to discuss the use of educational technologies as an essential self-care tool for ostomy patients.

## II. METHODOLOGY

This is a descriptive study, with a qualitative approach, carried out through a literature review. For the development of the study, 12 articles published in Portuguese were used, between the years 2016 and 2021, whose subject was about the use of educational technologies and the self-care of people with stomas. Scientific platforms were used to search for articles, using

a combination of the following descriptors: stoma, health professional, educational technologies and self-care. Data evaluation consisted of reading the articles in full, followed by the creation of a table that considered the main information of the articles. Descriptive analysis was used for the analysis and interpretation of data, considering the views of the aforementioned authors.

### III. RESULTS AND DISCUSSION

The Ministry of Health, through Ordinance No. 400/2009, establishes national guidelines for the Health Care of Ostomized People, within the scope of the Unified Health System (SUS) in all federated units and in the three spheres of management. This considered the need to guarantee the person with a stoma comprehensive health care through specialized interventions of an interdisciplinary nature [7].

Ordinance No. 400 also determined that Health Care for Ostomized Persons be classified as: Care for Ostomized Persons I and II, where both provide specialized assistance including guidance for self-care, prevention, treatment of complications in ostomies, training and provision of collecting equipment and protection and safety adjuncts [7].

It is important to consider that the making of a stoma causes numerous changes in a patient's life, which can negatively affect their physical, psychological, social and sexual health. In addition, the negative feelings resulting from these changes can lead to a decrease in self-esteem and interfere with social life that leads to loneliness [4,8].

In view of this, the person who starts living with a stoma must have numerous measures of adaptation and adaptation to daily activities, as there are numerous factors that influence the self-care of the ostomate patient. Sadness, depression, fear of facing public places, fear of being stigmatized, among others, cause social isolation. These factors are related to adherence and motivation for the treatment and the proposed interventions. Knowing them is essential for understanding the challenges of the care process in stomatherapy [6,8].

It is essential that ostomized patients are instructed and sensitized to maintain a correct diet, satisfactory hygiene, as well as adequate exchange of the collection bag and care of the peristomal skin, since such practices significantly reduce the emergence of diseases and new interventions [8].

It is also reinforced that the ostomy and the collection equipment present specific changes in the life of the ostomy patient, who need time to receive and learn self-care. When the stoma is not properly cared for,

complications related to both the orifice and the peristomal skin can occur, such as: dermatitis, poor adaptation of colonic effluent collection devices, hernias, prolapses or retractions [4, 8, 6].

In view of this, the health professional must understand the changes that an ostomy brings to the lives of patients and lead them to their necessary understanding, solving their doubts and those of their families and caregivers. It should also provide the necessary knowledge to the ostomy patient, in order to provide him with dignified help and collaborate better in facing the established difficulties [8, 4].

The health professional, when offering guidance to patients with ostomy and their families through educational practices, can talk about issues such as sexuality, acceptance of the disease, overcoming discrimination, prevention of complications related to the stoma and insertion in social life. However, for this to occur, it is necessary, on the part of the professional, to have specific and specialized technical and scientific knowledge to provide care to people who will undergo an ostomy and, at the same time, guide them on self-care [9] , 10].

Dantas *et al.* [7] claim that the stomatherapy nursing consultation is not yet a reality in all Brazilian hospitals and, therefore, the health professional has to rethink their practice in order to meet the needs of people with stomas. In this context, the use of technologies during educational actions is seen as a tool that complements the process of building knowledge for care and self-care, qualifying interventions in nursing practice with people with stoma and their families [3].

Furthermore, technologies are processes implemented from the daily experience of health care and some are derived from research for the development of a set of activities produced and controlled by human beings. They serve to generate and apply knowledge, master processes and products, and transform empirical use into a scientific approach [1].

Thus, an educational technology aimed at guiding people with an ostomy is important, given that every year several people undergo surgical procedures that result in intestinal and/or urinary stoma. This procedure generates concern, fear, doubts and insecurity about the care given to the stoma and peristomal skin, as well as the exchange of collecting equipment [1].

The need for adequate guidance is increasingly evident in the care of patients with an ostomy, which highlights the importance of the health professional being always up to date with tools that contribute to health education, as they are primarily responsible for self-care guidelines [7]. That

said, the need for education in the environment of health workers is evident, as the accelerated growth of workspaces has demanded professional action based on knowledge and the development of skills and abilities for decision-making [10].

After a detailed analysis of the articles, the educational technologies used by the health professional to guide the self-care of the ostomy patient emerged.

*Table.1: Educational technologies and self-care of ostomy patients.*

Carvalho <i>et al.</i> [1]	The development of educational materials are strategies that facilitate guidance and information for people with stomas, family members/caregivers and health professionals.
Dalmolin <i>et al.</i> [2]	The use of educational videos is a health education resource for people with colostomy and family members, being able to instrumentalize the pedagogical practices of nursing, contributing to the construction of care and taking care of themselves.
Dalmolin <i>et al.</i> [3]	The implementation of an educational video for the health education of families and people with a stoma makes it possible to expand knowledge and skills for the care and self-care of the stoma and collection equipment.
Gomes & Martins [9]	The development of educational technologies for perioperative care such as booklets and manuals and systematization of care that addresses the ostomy patient in a holistic way strengthen the educational practice in nursing.
Monteiro <i>et al.</i> [10]	Continuing education can be considered an effective strategy for acquiring knowledge about intestinal elimination stomas in the hospital context.
Paczekr <i>et al.</i> [5]	A well-designed booklet, with correct information and in accessible language, helps to promote health and prevent complications in stomas, being an important self-care strategy for patients and a source of information for family members and caregivers.
Ribeiro <i>et al.</i> [6]	The use of educational technologies that promote access to scientifically validated self-care guidelines are of great relevance for ostomy patients who are in the process of adaptation, whether for temporary or permanent ostomy.

Silva <i>et al.</i> [8]	The application of an educational booklet on intestinal ostomy care contributes to the knowledge of ostomized patients and companions in the hospital environment, minimizing complications.
Silva <i>et al.</i> [4]	Care for patients with an ostomy should be guided mainly by educational interventions, which should consider psychological aspects and their beliefs, and guide the patient and their family about the home care they need to know and understand.
Souza <i>et al.</i> [11]	Education strategies with the use of educational technologies are more consistent in the messages transmitted, causing a rapid change in behavior to the ostomy patient.
Stragliotto <i>et al.</i> [12]	The intervention through the educational video has a positive impact on the families of people with a stoma, contributing to the learning of stoma care, emotional aspects and communication between family members.

Source: survey data, 2021.

#### IV. CONCLUSION

It was evidenced in this study that the use of educational technologies that promote access to self-care guidelines for ostomized patients is of great relevance in the care process.

As a component of the interdisciplinary team, the health professional plays the role of educator and must participate in the process of elaboration, development and evaluation of the need to implement educational technologies with ostomy patients and their families. The technologies implemented must address the patient and their family with clear and easy-to-understand language, in order to meet their expectations.

In short, it is recommended that health professionals deepen their knowledge about elimination stomas, especially in relation to the use of educational technologies, in order to improve self-care, acceptance and quality of life of the ostomy patient.

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