

Educational intervention: Self-care in Ostomised patients

Intervención educativa: Autocuidado en pacientes Ostomizados

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Received: 02/26/2021 Accepted: 05/15/2022 Published: 06/25/2022 DOI: <http://doi.org/10.5281/zenodo.7226393>

Abstract

Objective: To determine the level of knowledge before and after educational intervention on self-care in ostomized patients attending the Ostomal and Wound Therapy Unit at the National Institute of Neoplastic Diseases. **Methodology:** Quantitative study, pre-experimental longitudinal design. Population: a sample of 122 patients. A questionnaire was used on self-care knowledge in patients with the following dimensions: ostomy knowledge, ostomy management, feeding, ostomy complications, and products used for ostomy care. The results obtained in the pretest, 61.5% of patients know the ostomy, 60.7% have ostomy care, 31.1% have fed, and after the educational intervention, they achieved 100% knowledge. In the case of knowledge of complications and materials 18% and 23.0% were found, respectively, after the nursing educational intervention they obtained 96.7% of cognitive ability. **Conclusions:** The educational intervention should be permanent to guarantee the importance of the care given by the nurse of the service, empowering the nurse as an educator.

Keywords: Self-care, Ostomy Patients, Ostomy Therapy Unit, Wounds and Training.

Resumen

Objetivo: Determinar el nivel conocimientos antes y después de la intervención educativa sobre autocuidado en pacientes ostomizados que acuden a la Unidad de Terapia Ostomal y Heridas en el Instituto Nacional de Enfermedades Neoplásicas. **Metodología:** Estudio cuantitativo, de diseño preexperimental de corte longitudinal. **Población:** conformada por una muestra de 122 pacientes. Se utilizó un cuestionario sobre conocimientos de autocuidado en pacientes con dimensiones: conocimientos de la ostomía, manejo de la ostomía, alimentación, complicaciones de las ostomías, y productos que son utilizados para el cuidado de la ostomía. Los **resultados** obtenidos en el pretest indican que los pacientes tienen conocimiento de la ostomía el 61,5%, cuidado de la ostomía el 60,7%, alimentación el 31,1% después de la intervención educativa lograron alcanzar un 100% de conocimientos. En el caso de los conocimientos de las complicaciones y de los materiales, se encontró un 18% y 23,0% respectivamente, posteriormente a la intervención educativa de enfermería obtuvieron el 96,7% de habilidad cognitiva. **Conclusiones:** La intervención educativa debe ser permanente para garantizar la importancia en los cuidados que otorga la enfermera del servicio, empoderando a la enfermera como educadora.

Palabras claves: Autocuidado, Pacientes Ostomizados, Unidad de Terapia Ostomal, Heridas y Capacitación.

Introduction

Colorectal cancer is the third most common cancer type among men and second most common among women. In 2017, its incidence was about 1.8 million cases with about 896,000 deaths worldwide and a higher mortality rate in developing countries. Each year there are about 246,000 new cases and approximately 112,000 deaths due to this disease¹. In recent years in patients with various pathologies was shown that require ostomy as a therapeutic alternative. Once discharged from hospital after the insertion of the intestinal ostomy, ostomates have to take care of their ostomy themselves or with help from their families. The World Health Organization (WHO) considers that self-care would enhance

the capacity of individuals, families, and communities to prevent chronic diseases, and maintain health and disability with or without the support of a health care provider².

The ostomy is an opening in the abdominal wall into which a segment of the ostoma is inserted through which excreta are evacuated³ from which colostomies, ileostomies, and urostomies are derived⁴. These may be permanent or time-limited⁵ the patient who undergoes this type of surgery should have knowledge of ostomy care such as removal, types of ostomy, characteristics of the ostomy and be prepared to cope psychologically with the disease and the altered body image. It is

important that the information provided to the patient during the process of the disease can include the demonstration of how to take care of the ostomy on an ongoing basis⁶.

In Spain, Fernández et al.³ refer that the self-care of the ostomized patient requires basic information on self-care to maintain good hygiene practices, nutrition, the correct use of ostomy materials and to prevent complications. Likewise, in Colombia, he argues that the "General theory of self-care deficit" proposed by Orem defines self-care as the activity learned in the individual directed towards himself and the environment to regulate the factors of his development. Thus, human beings generally have intellectual and practical skills that they develop throughout life to meet their health needs, they can find the necessary information on their own and when this is not the case, they seek help from family or health professionals⁴.

In Peru, 42 % of patients with ostomies are over 65 years of age, and 6% are children under 5 years of age; adults are increasingly predominant, with a major impact on their lifestyle⁸. It is estimated that there are 1,000 new patients with ostomies, with digestive and urinary ostomies, such as colostomy, ileostomy, and urostomy, standing out. Subsequently, 40% of the more than 18,000 ostomized Peruvian patients are replaced in less than a year⁶. In this regard, the National Institute of Neoplastic Diseases reports in its 2018 statistics that there were 129 new cases of bladder cancer, 334 colon cancer, and 272 rectal cancers. In 2019, 246 patients with colostomies, 69 patients with ileostomies, and 53 patients with urostomies were treated. These oncology patients underwent surgery and therefore end up with an elimination ostomy (colostomy, ileostomy, and urostomy), which means that the patients need specialized self-care and care to be able to face changes in body image, lifestyle, and social environment⁷.

It is important to note that the person with a colostomy has diverse health experiences, so self-care is a form of care that enhances the ability to be self-sufficient and maturity to carry out preventive activities that help to avoid complications⁶. Patients should be knowledgeable regarding nutrition, ostomy care, hygiene, how to prevent ostomy complications, as well as feeding, dressing, and use of ostomy supplies if necessary⁴. Likewise, it is necessary to continuously inform the patient about the risks of possible complications that may occur in the immediate postoperative period or at any time thereafter that may put the patient's life at risk⁹.

Finally, the nurse will provide knowledge so that the patient can perform self-care as well as guidance on the varieties of products or accessories for the ostomy approach with the aim of good management and avoiding complications. Patients should also be provided with the necessary ostomy cleaning kit to improve their quality of life. Therefore, the nurse must empower the patient in self-care to generate conditions of safety and quality of life¹⁰.

Thus, the present study aimed to determine the level of knowledge before and after educational intervention on self-care in ostomized patients attending the Ostomal and Wound Therapy Unit at the National Institute of Neoplastic Diseases.

Methodology

A quantitative, descriptive, pre-experimental, prospective longitudinal approach was conducted at the Instituto Nacional de Enfermedades Neoplásicas de la 2020 in Lima, Perú. The sample consisted of 122 patients, under informed consent for its application in outpatient clinics of the ostomy and wound therapy unit. They were patients of both sexes, over 30 years of age with elimination ostomies (colostomy, ileostomy, and urostomy).

An instrument from the educational guide for ostomates was used, which was developed by Fernández Gutiérrez and adapted by the researchers, a questionnaire called self-care of the patient with a colostomy, which is presented with general data and knowledge about self-care and consists of 18 items, with 5 dimensions: (knowledge of the ostomy with its items 1,2,3,4). The second-dimension knowledge of ostomy care with items 5,6,7,8. The third-dimension knowledge of feeding, items 9,10,11. The fourth-dimension knowledge of complications, its items are 12,13,14,15. Finally, the dimension knowledge of materials to be used in the ostomy, its items are 16,17,18). The scale is dichotomous (YES = 1 point - NO = 0 points). The instrument was evaluated and validated by 10 experts, and its reliability was assessed by the Kuder Richardson KR-20 test, 0.90.

Subsequently, the survey (pre-test) was administered in outpatient clinics before the nursing education intervention, and after 15 days the questionnaire was administered (post-test). During data collection, follow-up was carried out via telephone and/or video calls to observe the effectiveness of what was learned and to prevent complications. The information was processed using the statistical program IBMS SPSS version 25.0, and the statistical data were analyzed and presented in tables and graphs. Ethical considerations were applied during the research process.

Results

Table 1. Distribution according to the sex of patients admitted to the ostomy and wound therapy unit of INEN

Sex	N	%
Female	82	67.2
Male	40	32.8
Total	122	100.0

Source: Data obtained from the survey

Of the 122 patients, the female sex predominated with 67.78%. The age between 41 - 60 years was 46.7%, over 60 years 39.3%, and the age between 20 - 40 years was 13.9%. In terms of occupation, housework was 66.4%, merchants 9.8%, public employees 4.1%, and other types of activities 19.7%. Origin, coast 62.3%, highlands 27%, jungle 10.7%. In relation to the type of ostomy, the colostomy is 70.5%, ileostomy 22.1%, urostomy 6.6% and 1 patient presents colostomy and urostomy.

Table 2.

N	Dimensions	Pre-Test				Post-Test			
		Knows		Doesn't Know		Knows		Doesn't Know	
		n	%	n	%	n	%	n	%
1	Colostomy knowledge	75	61.5	47	38.5	122	100	0	0
2	Knowledge of colostomy care	74	60.7	48	39.3	122	100	0	0
3	Knowledge of feeding	38	31.1	84	122	122	100	0	0
4	Knowledge of complications	22	18,0	100	77.0	113	92.6	9	7.4
5	Knowledge of materials to be used in the ostectomy	28	23%	94	77%	118	96,7	4	3.3

Source: Self-care survey

It was found that ostomy patients know according to the dimension of ostomy knowledge 61.5% of patients have the knowledge and 38.5% do not know, after nursing educational intervention 100% of knowledge was acquired. In the second dimension, knowledge of ostomy care, 60.7% know, and 39.3% do not know, after nursing educational intervention, 100% of knowledge was acquired. In the third-dimension knowledge of feeding 68.9% have no knowledge and 31.1% know, after nursing educational intervention 100% of knowledge was acquired. Fourth dimension knowledge of complications 77% do not know and 18.0% know, after nursing educational intervention 92.6% was acquired. In the fifth-dimension knowledge of materials to be used in the ostomy 77% do not know and 23.0% know, after nursing educational intervention 96.7% of knowledge was acquired and 3.3% do not know (Table 2).

Discussion

Self-care is the ability to be self-sufficient in the performance of care by voluntarily performing activities preventing complications⁶. Dorothea Orem in her "General theory of self-care deficit" defines "self-care as the activity learned in the individual directed towards himself and the environment to regulate the factors of his development. Human beings generally have intellectual and practical skills that they develop throughout life to meet their health needs and can find the necessary information on their own, and when this is not the case, they seek help from family or health professionals¹¹.

The general objective of the study was to determine the knowledge of self-care before and after the training of ostomized patients attending the Ostomal and Wound Therapy Unit of the National Institute of Neoplastic Diseases. The results obtained in the pre-test were that 73% of the patients have no knowledge of self-care and 27% of the patients do know about self-care. After the training conducted by the nurse, the ostomized patients on self-care in a theoretical and practical way achieved 100% acquisition of knowledge on self-care. These findings are similar to those found in the study which showed that knowledge about self-care practices increased after the nurse performed the educational activity¹². On the other hand, the results of an investigation state that 100% of patients know about ostoma self-care because they participate in educational activities provided in the area by the nurse¹³.

The education provided by the nurse allows to increase the knowledge and empower the patient in self-care to promote good practices in the management of ostomy, as well as for the lifestyle of patients. It is important to emphasize that education on health issues allows the patient to take control of his or her self-care and to make the decision to change behavior or inadequate compartment patterns that limit the improvement of health conditions. The role of health professionals is to keep the patient informed so that he/she can continue the recovery process and reinforce self-care actions in his/her daily life. Educating ostomates about ostomy care and providing psychosocial support is one of the most important nursing roles for managing physiological and psychological health problems among ostomates. To carry out these important roles and responsibilities, nurses should have enough knowledge and competence in ostomy care and how to provide ostomates with health education and training about caring for their ostomies. Nurses who were exposed to education and specialized in ostomy care can effectively impact the prevention and management of ostomates' health problems and complications.

In relation to the evaluation of whether the ostomized patients attended knew about ostomy care before and after the training. The results obtained in the pre-test were 39.3% of patients who do not know about ostomy care and 60.7% of patients who do know, after the training, it was found that 100% of patients were able to acquire this knowledge. These findings are in accordance with those found by Gaona et al., who found that 100% of the patients know about ostomy care. On the other hand, it was determined that 96.1% know about ostomy care after the training offered by the nursing professionals¹². Thus, it is concluded that there is an association between training and knowledge of ostomy care. The education given by the nurse allows for increasing the knowledge of ostomy care to favor good practices in the management and improvement of self-care.

As for evaluating the ostomized patients, they know about their diet before and after the training. The results obtained in the pre-test were that 68.9% of these patients do not know the food to be consumed, and 31.1% do have knowledge. After the training, it was found that 100% of the patients were able to acquire this knowledge. These findings are similar to those found by¹³ Gaona et al., who mentioned that 100% of the patients know about adequate food intake when they complete the educational sessions given to them. In addition,

93.8% know about the need for food after the nurse intervened with the training¹².

Health education is the basis of the patient's self-care training process, which favors the fulfillment of the person's basic needs and compliance with the treatment indicated for the recovery process. In effect, ostomates with a higher level of knowledge and self-confidence about ostomy care had higher independent self-care abilities and skills to take care of their ostomy and better quality of life (including physical and psychological wellbeing). However, there are limiting situations to enhance this process, such as behavioral and cultural patterns.

On the other hand, when evaluating whether ostomized patients are aware of the ostomy complication before and after training. The results obtained in the pre-test were that 77.0% of these patients do not know ostomy complications, 18.0% do know, after the training, it was found that 92.6% of the patients were able to acquire this knowledge and 7.4% do not know. These findings differ from those found by ¹³Gaona et al., who mentioned that 58% did not present complications, with 33% presenting skin irritation. On the other hand, it was detected that 100% were aware of the complications¹⁴.

In the educational process, it is necessary to continuously evaluate significant knowledge, especially in avoiding risky situations to reduce or mitigate complications arising from self-care deficits.

Likewise, when evaluating whether the ostomized patients attended knew about the materials to be used in the ostomy before and after the training. The results obtained in the pre-test were that 77.0% of these patients do not know the materials to be used, and 23.0% do have knowledge. After the training, it was found that 96.7% of the patients were able to acquire this knowledge and 3.3% did not know. These findings are similar to those found by Zambrano¹⁴ who in his study showed that 92% of the patients organize the materials before starting the change and 8% do not do so.

The patient needs to be able to organize and plan for the materials to be used for the ostomy pouch change and hygiene. These educational activities provide the patient with the possibility of feeling safe and accompanied by the health team throughout the care process.

Finally, outpatient specialist nurses provide comprehensive care to the ostomized patient through educational topics on self-care, complications, adequate food consumption, ostomy care, materials to be used, and, above all, achieving adherence to self-care practices to promote well-being and ensure the quality of care.

Conclusions

In the present study, it was possible to evidence that the educational intervention provided by the nurse around the ostomal and wound therapy unit, manages to offer an educational intervention to raise knowledge, strengthen and favor good practices and management, as well prevent complications and the correct use of materials for healing, ensuring an adequate lifestyle for the patient and caregiver. On the other hand, this type of training activity should be permanent to ensure self-care through educational interventions provided in that area, empowering the patient to perform preventive health promotion actions for him and his family.

Source of funding

Universidad Peruana Unión

Conflict of interest

The authors have no conflicts of interest

Acknowledgments

The team would like to thank the authorities, who provided access to information sources through the virtual library. We would also like to thank the professionals who guided the development of this research.

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