

Effects of Socio-educational Interventions on the Quality of Life of People with a Digestive Ostomy

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Abstract

Introduction: The creation of digestive stomata is associated with a change in people's lives. Causing a strong impact that influences all dimensions of life. This paper reports on the effects of socio-educational interventions on the quality of life (QOL) of people with a digestive ostomy.

Objective: To describe the effect of a nursing intervention on the QOL of people with a digestive ostomy.

Methods: A quasiexperimental study was conducted whose sample consisted of 12 people who were ostomized in a public hospital in Colombia. Participants were selected through convenience sampling and randomly assigned to the intervention group and the control group. For the control group, an educational process was carried out through a theoretical session with virtual mediation (educational video). The QOL was evaluated before and after the interventions through the Montreux questionnaire.

Results: The average age was 57(+7) years. No statistical differences were found between the groups in the QOL index or for any of the dimensions that make up QOL. Pretest and post-test analysis for each intervention separately showed improvement in two dimensions of QOL for each group; in the intervention group body image dimension ($p = .017$) and the positive coping dimension ($p = .027$). In the control group, the physical well-being dimension ($p = .037$) and social concerns dimension ($p = .034$).

Conclusions: The personalized educational intervention or carried out through virtual pedagogical mediation, generated a clinically significant increase in the dimensions of QOL, without statistical differences. The study adds knowledge about the impact that digestive stomata have on the QOL, which is why it is necessary to establish specialized interdisciplinary teams to care for the person's new condition at home during the following months.

Keywords

quality of life, ostomy, nursing care, patient education as a subject

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Introduction

An ostomy is an opening made from a hollow viscus to the abdominal wall, through a therapeutic technique used to treat different colorectal diseases (Alenezi et al., 2021); the purpose of the digestive stoma is to divert the intestinal content to the outside through a device attached to the abdomen and a collection bag for the disposal of stool, the most frequent cause for which a person requires this procedure is colorectal cancer, followed by inflammatory bowel diseases and surgical complications (Krishnamurty et al., 2017). Ostomies can be temporary or permanent and are

associated with complications that affect the quality of life (QOL), which has a great impact on the dimensions of the person (Ruiz et al., 2019).

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In this context, health workers and especially nursing professionals play a fundamental role in the comprehensive care of the person, since the digestive ostomy involves a change that goes beyond the physiological function of stool evacuation, to which the person has to adapt, supposes alterations of the body and of the corporality, two concepts that seem to be the same, but that they are not; body means an objective reality with a defined form, it corresponds to an instrument of the Being, it is perceived with greater physical awareness in conditions of disease and the concept of corporeality refers to the subjective realities that are experienced from the physical, intellectual, social, and affective.

Therefore, people with ostomies experience changes at a physical, psychological, social, and spiritual level caused by modifications in the body image, loss of anal sphincter function, and permanent fecal incontinence added to involuntary intestinal gas leaks that cause noise, as well as a bad smell when the stool collection bag is out of adjustment. These alterations trigger feelings of insecurity and shame, owing to the concern of suffering accidents in public, generating a loss of self-esteem and consequent social isolation due to fear of rejection, sadness, and depression, which cause the person's QOL to be altered (Hueso-Montoro et al., 2016; Ponce et al., 2020).

Review of Literature

The scientific literature has evidenced that, the most frequent indications for a digestive ostomy are related in a higher proportion to colon and rectal cancer, followed by surgical complications, trauma, and wounds. Cancer in 2015 caused 8.8 million deaths worldwide. About 70% of cancer deaths occurred in low- and middle-income countries, and among them, colorectal cancer was one of the five cancers that caused the highest number of deaths worldwide, 774,000 deaths. According to the World Health Organization, (2020) and the International Agency for Research on Cancer (2018), the burden of cancer amounted to 18 million new cases in the world. In Colombia, according to the Ministry of Health (2021), colon and rectal cancer represents the fourth cause of death from cancer and the third most frequent type of cancer, which suggests a higher rate of people with digestive ostomies. Only in 2019, three thousand new cases were reported, for a global balance of 19,200 cases and 2,017 deaths.

The ostomy is the treatment of choice for different disorders that appear in the colon and/or rectum, not only cancer, this treatment generates important changes in people's living conditions, which they will have to adapt to and are keys to the recognition of a care plan from the individualized assessment of the multidimensional. Recognizing the QOL is the perception that an individual has of their place, with the existence in the cultural and family context, according to the life value system and in relation to their objectives, their expectations, their norms, and their concerns, such a concept was issued by the World Health Organization (1995), who evidenced

the influence regarding the physical health of the subject, the psychological state, the level of independence and social relationships, as well as the relationship with other essential elements of their environment; dimensions that are modified in the life of the ostomized person due to the impact on the perception of well-being. Vonk-Klaassen et al. (2016) stated that QOL is the subjective assessment of one's own personal satisfaction with health and general well-being.

Different studies have described a negative impact on the QOL of people with digestive stomata after surgical interventions (Karaveli & Ozbayir, 2018; Maciel et al., 2019). A systematic review by Vonk-Klaassen et al. (2016), about the impact on QOL in ostomized patients, showed that living with a colostomy negatively influences overall QOL. Ostomy-related problems described included sexual problems, depressive feelings, gas, constipation, dissatisfaction with appearance, change in clothes, travel difficulties, and feeling tired y worried.

The aforementioned demonstrates, the importance of the application of intervention models or nursing intervention plans, such as the socio-educational model which is developed from the social reality, its main objective is to build a response to the existing and identified needs in the different areas of society. It is a didactic strategy in which the person can be given the resources (knowledge) and strategies (practices) that allow a balance between individual and social development as a member of a community. This type of intervention is for people or groups where there is a disadvantaged situation that needs to be improved. In this sense, the socio-educational intervention can be approached from the individual level, to provide a solution to a specific problem, or it can be implemented at the collective level to attend to a common problem that affects a group of people (Castillo & Cabrerizo, 2011). For these reasons, health professionals who care for people with an ostomy condition must have socio-educational understanding, specific knowledge, communication with the patient, and understanding of the alterations that occur with being a carrier of a digestive stoma and the impact on the QOL of people, with the purpose of teaching and accompany in an objective way toward adequate coping, aimed at the prevention of depressive states and anxiety, as well as favoring the acceptance of the stoma and allowing the activation of adaptation mechanisms, towards the maintenance of the QOL, this was described in a study of 1,053 patients with enterostomy by Zhang et al. (2019). For all the aforementioned, the objective of this study was to describe the effect of a nursing intervention on the QOL of people with a digestive ostomy.

Methods

Design

Study with a quantitative approach, of a quasiexperimental type, to determine the effect of a socio-educational

intervention, led by nursing for people who underwent surgery and remained carriers of digestive ostomies in a public hospital in a city, in Colombia.

Research Question

What is the effect of a socio-educational nursing intervention on the QOL of people with a digestive ostomy?

Sample

The sample was conveniently selected and randomly assigned to the intervention and control groups. The recruitment was derived from a list issued by the nursing coordination of the hospital where the study patients were operated on; the list contained information on 20 people that corresponded to the total population of patients who underwent surgery in a period of one year and were left with a digestive ostomy. Work was carried out with the entire population, managing to recruit a sample of 12 people who inclusion criteria.

Inclusion/Exclusion Criteria

The participants involved in this research have to attain the legal age it means to be 18 years or older, have a digestive ostomy for any reason and have an educational level that allows them to read and write. People with altered states of consciousness and/or cognitive impairment and those who were at the end of life were excluded.

Institutional Review Board Approvals

Ethical approvals to conduct this study were received from the Human Ethics Committee of institutions. The study followed resolution 8430 of 1993, (scientific, technical, and administrative regulation for health research in Colombia). Bioethical principles were safeguarded by carrying out the informed consent process; in this sense, autonomy was guaranteed to allow free and deliberate participation; beneficence and nonmaleficence were made effective through the fulfillment of the benefits of the study and the control of possible risks during the intervention; likewise, the principle of justice was guaranteed by inviting all possible candidates to participate and by randomizing the groups.

Statistical Analysis

Sociodemographic and clinical data: Age, sex, marital status, education level, origin, comorbidities, the reason for ostomy, type of ostomy, stoma temporality, and health professionals who attended the person during the ostomy process.

QOL: Assessed through the Montreux questionnaire. Instrument validated in France and England, and translated into several languages. It has been used in 16 European countries including Spain, in more than 4000 ostomized patients

who showed a Cronbach's alpha ranging from 0.57 to 0.92 in their study (Marquis et al., 2003). For the present investigation, the Spanish version was used, yielding a Cronbach's alpha of 0.91 in the initial evaluation and a value of 0.95 in the final evaluation.

The questionnaire is based on a 5-point Likert scale (1–5) and consists of 41 questions grouped into three sections covering various areas, directly related to the QOL of people with ostomies. The sections cover the following aspects:

Section 1: QOL, physical well-being, psychological well-being, body image, pain, sexual activity, nutrition, social concerns, and device management.

Section 2: Self-sufficiency, related to ostomy hygiene care.

Section 3: General issues, relates to stoma acceptance and family ties.

The result on the QOL, in each of the dimensions, is obtained by adding the score obtained in the items that make up each session and multiplying by the corresponding factor, given to each item; in this way, the QOL index is expressed as a percentage (0%–100%) is obtained. The averages found can be analyzed for each dimension (Barbero et al., 2004; Charúa et al., 2011).

The data were processed and analyzed in IBM-SPSS version 22 software. Descriptive statistics (frequencies, percentages, and measures of central tendency), were used to explain the sociodemographic and clinical characteristics of the participants. A normality test (Shapiro–Wilk) was used, to obtain normal distribution for the QOL index scores (global score). The dimensions of QOL did not meet the normal distribution in their entirety. The *t*-test for independent samples and the Mann–Whitney test (according to the data distribution), were used to determine the changes in the mean difference ($p < .05$). The intervention was considered adequate when 5 points (5%) more than the baseline were obtained. Subsequently, the related *t*-test and Wilcoxon test (according to the data distribution) were used to compare the change in the QOL before and after in each group separately.

Results

Sample Characteristics

The people recruited were randomly assigned to the intervention group ($n = 6$) and control group ($n = 6$). This procedure was carried out by assigning a random number in Excel format to the list of 12 participants and in this way, the groups were obtained. The distribution of the sample, in the stages of the study is presented in Figure 1.

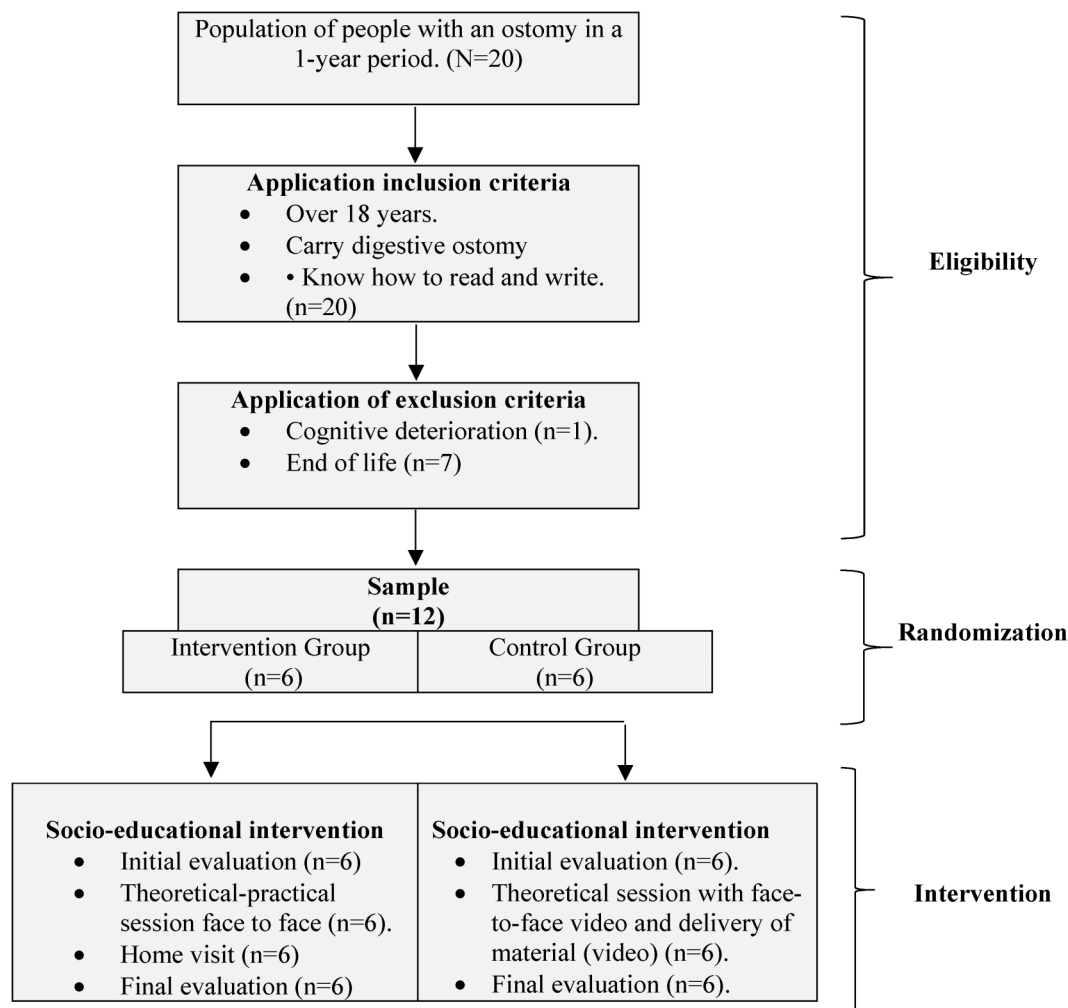


Figure 1. Stages of the Study.

Intervention

- Initial evaluation

The participants of both groups were summoned to the hospital to explain the study and fill out the informed consent individually. In this same session, the survey of sociodemographic data, clinical conditions, and evaluation of the QOL was completed.

- Intervention Group

The protocol for the intervention group was based on a socio-educational plan directed by a nurse through two sessions: (1) personalized and face-to-face theoretical-practical session for ostomy management. Figure 2, illustrates the contents discussed in this session. (2) home visits to reinforce the contents and counseling around alterations reported by people at a physical, emotional, couple relationship, family relationship, socio-labour level; as aspects that are

considered as the main factors related to the QOL of people with an ostomy.

- Control Group

The protocol for the control group was based on a socio-educational plan directed by a nurse through a single theoretical session carried out in a personalized way with the help of a video that included the same topics addressed in the intervention group, but without a home visit, Figure 2.

- Final evaluation

The QOL was evaluated again, 30 days after the intervention was implemented in both groups, who were summoned again to the hospital facilities.

Socio-educational intervention protocol	
Intervention Group	Control Group
<p>Initial assessment Group was summoned to the facilities of the hospital under study. Application of informed consent. Completion of sociodemographic and clinical data survey. Assessment of quality of life with the Montreux questionnaire (self-administered).</p> <p>Personalized face-to-face theoretical and practical education for ostomy management. Single session with following topics:</p> <ul style="list-style-type: none"> - General aspects of ostomy (illustrated with slides). - Fluid characteristics (illustrated with slides). - Barrier devices and irrigations (practical demonstration). - Ostomy and peristomal skin care (practical demonstration). - Biosecurity measures (practical demonstration). <p>Home visit Reinforcement of the contents seen in the classroom session. Nursing assessment for individualized identification of the following alterations: alterations referred by people at physical, emotional, couple, relationship, family relationship, socio-labour. Counselling related to the alteration identified in each person.</p> <p>Final appraisal Application of the Montreux questionnaire 30 days after the intervention.</p>	<p>Initial assessment Group was summoned to the facilities of the hospital under study. Application of informed consent. Completion of sociodemographic and clinical data survey. Assessment of quality of life with the Montreux questionnaire (self-administered).</p> <p>Personalized theoretical education with the help of virtual didactic mediation (video). Single session with the following topics:</p> <ul style="list-style-type: none"> - General aspects of ostomy. - Fluid characteristics. - Barrier devices and irrigations. - Ostomy and peristomal skin care. - Biosecurity measures. <p>Final appraisal Application of the Montreux questionnaire 30 days after the intervention.</p>

Figure 2. Intervention protocol.

Research Question Results

Of the 12 participants, the minimum age was 45 years, the maximum was 70 years with an average of 57 + 7 years and a median of 59 years. The sociodemographic and clinical characterization of the participants for each group is illustrated in Table 1.

Regarding the interdisciplinary care that the participants received during the ostomy process, 100% of them were cared for by an anesthesiologist and a surgeon, 58% received care and a nutrition professional, and 41.7% were evaluated by a psychologist. In total, 33.3% received consultation admission by a specialist in internal medicine, 33.3% received direct care by a nursing professional, and 33.3% were reviewed by other specialities. Only 16.7% received a structured discharge plan for ostomy management and 8.3% of family members received support for this same process.

Related to the QOL, the Shapiro-wilk test showed normal distribution in the total QOL index and the

dimensions corresponding to psychological well-being, physical well-being, body image, pain, sexual activity, nutrition, driving, self-sufficiency, positive adaptation, and negative adaptation. The variables that did not show normal distribution were the dimensions related to social concern, help/advice, and help.

The mean difference analysis between the groups (Table 2) showed no statistical differences in the QOL index for any of the dimensions that make up the QOL of ostomates; therefore, a homogeneous behavior of both groups is interpreted in terms of the final result obtained with each intervention.

When analyzing the averages obtained between the first moment and the second moment for each group separately, it was found that each intervention managed to improve some of the dimensions of QOL, but not the total index. In this sense, statistical differences were identified between the beginning and end for the intervention group in the body image dimension ($p = .012$) and the positive adaptation dimension ($p = .027$) (Table 3). In the control group, statistical

differences were found at baseline and end of the intervention in the physical well-being dimension ($p = 0.037$) and the social concerns dimension ($p = .0349$) (Table 3).

Discussion

People with digestive ostomies face situations that interrupt daily life, physical, emotional, social, and sexual alterations,

Table 1. Sociodemographic and Clinical Characteristics of the Participants.

Variable	Group	
	Intervention %	Control
Sex		
Male	25.0	33.3
Female	25.0	16.7
Marital status		
No partner	25.0	16
With partner	25.0	33.3
Level of education		
Primary	33.3	25.0
Secondary	16.7	16.7
University	0.0	8.3
Source		
City	50.0	33.3
Field	0.0	16.7
Reason for ostomy		
Cancer (colon or rectum)	50.0	33
Peritonitis	0.0	16.7
Stoma type		
Descending	41.7	25.0
Ileostomy	8.3	25.0
Temporality of the ostomy		
Permanent	25.0	41.7
Temporary	25.0	8.3

which require education to improve self-care skills in order to overcome complications and maintain QOL. Previous studies emphasize the importance of education to improve psychological and social adaptation and influence the person's cultural systems; organized education can reduce the time of independence, which translates into reduced health costs (Ashghali & Dorri, 2020; Millard et al., 2020).

Scientific evidence refers to the need for thorough training based on care plans by health professionals, particularly stoma nurses, to obtain results that influence their adaptation to the new condition (Ercolano et al., 2016; Fernandes & Brito, 2020). Such care plans should be oriented to the identification of objectives related to behavioral changes, and adjustments in social roles including work, as well as to generate a fluid therapeutic communication, which allows nursing to identify emotional reactions to the changes generated by the ostomy and to objectively influence the achievement of individual goals of the patients. The mean total QOL score of people with intestinal stomata in the present study was 51.0 for the intervention group and 47.6 for the control group after the intervention, demonstrating a significant increase for people with ostomies. A study conducted in Brazil to assess the QOL of ostomates used the COH-QOL-OQ instrument to assess the QOL of ostomates, showing similar mean scores of 7.48 considering moderate and good QOL (Anaraki et al., 2012).

The QOL dimensions showed an increase in scores in both the intervention and control groups. The dimension related to psychological well-being showed very similar scores in both groups, before and after the intervention (intervention group 45.3–70.0) (control group 49.3–66.6). This may be related to the temporary stoma, in both groups, there were people who had a permanent and temporary stoma, who suffer anguish in the same way. However, the people who had programmed the closure of their stoma

Table 2. Mean Difference Between Intervention Group and Control Group.

Variable	Media \pm Standard deviation		T-test or Mann-Whitney test	p value
	Group intervention	Group control		
Psychological well-being	24.67 \pm 24.7	17.33 \pm 19.2	$t = 0.574$	.579
Physical wellness	18.00 \pm 32.2	25.33 \pm 22.0	$t = -0.460$	.655
Body image	30.0 \pm 20.9	20.0 \pm 19.4	$t = 0.855$	.412
Pain	-6.67 \pm 63.1	30.0 \pm 29.6	$t = -1.287$	.227
Sexual activity	6.67 \pm 20.6	23.3 \pm 23.3	$t = -1.309$	.220
Nutrition	22.1 \pm 34.5	12.2 \pm 30.0	$t = 0.528$	.609
Social concerns	37.5	40.5	$Z = -0.287$	.774
Management	3.3 \pm 34.4	16.6 \pm 32.0	$t = -0.694$	.503
Self-sufficiency	34.1 \pm 43.0	25.0 \pm 37.8	$t = 0.392$	.703
Help and advice	42.0	36.0	$Z = -0.561$	.575
Positive adaptation	30.0 \pm 23.6	11.6 \pm 25.6	$t = 1.287$	.227
Negative adaptation	21.6 \pm 27.1	6.6 \pm 10.3	$t = 1.265$	.234
Quality of life index	18.7 \pm 20.3	20.1 \pm 19.2	$t = -0.125$	.903

Table 3. Difference in Mean at the Beginning and end of the Interventions for Each Group Separately.

Variable	Media \pm Standard deviation		T-test or Wilcoxon	p value
	Pre	Post		
Psychological well-being	45.3 \pm 29.8	70 \pm 27.3	t = 2.445	.058
Intervention group Control group	49.3 \pm 9.3	66.6 \pm 18.0	t = 2.210	.078
Physical Wellness	50.6 \pm 18.7	68.6 \pm 26.2	t = 1.366	.230
Intervention Group Control group	40.6 \pm 9.6	66.0 \pm 16.3	t = 2.820	.037*
Body image	43.3 \pm 36.6	73.3 \pm 17.5	t = 3.503	.017*
Intervention group Control group	44.1 \pm 18.5	64.1 \pm 22.2	t = 2.513	.054
Pain	61.6 \pm 30.6	55.0 \pm 44.6	t = -0.259	.806
Intervention group Control group	38.3 \pm 27.1	68.3 \pm 21.3	t = 2.477	.056
Sexual activity	33.3 \pm 41.3	40.0 \pm 37.9	t = 0.791	.465
Intervention group Control group	10.0 \pm 24.4	33.3 \pm 24.2	t = 2.445	.058
Nutrition	54.7 \pm 22.1	76.8 \pm 30.6	t = 1.570	.177
Intervention group Control group	59.1 \pm 28.5	71.4 \pm 13.8	t = 1.000	.363
Social concerns	70.0 \pm 36.8	86.6 \pm 24.2	Z = -1.069	.285
Interventions group Control group	78.3 \pm 19.4	95.0 \pm 8.3	Z = -2.121	.034*
Management	60.0 \pm 41.9	63.3 \pm 63.3	t = 0.237	.822
Intervention group Control group	50.0 \pm 24.4	66.6 \pm 30.1	t = 1.274	.259
Self-sufficiency	57.5 \pm 35.7	91.6 \pm 14.3	t = 1.944	.110
Intervention group Control group	40.8 \pm 35.8	65.8 \pm 37.0	t = 1.619	.166
Help and advice	53.3 \pm 37.2	86.6 \pm 20.6	Z = -1.841	.066
Intervention group Control group	53.3 \pm 41.3	80.0 \pm 21.9	Z = -1.604	.109
Positive adaptation	38.3 \pm 36.5	68.3 \pm 19.4	t = 3.105	.027*
Intervention group Control group	38.3 \pm 20.4	50.0 \pm 23.6	t = 1.115	.315
Negative adaption	48.3 \pm 23.1	70.0 \pm 22.8	t = 1.955	.108
Intervention group Control group	48.3 \pm 7.5	55.0 \pm 8.3	t = 1.581	.175
Quality of life index	51.0 \pm 21.2	69.7 \pm 22.2	t = 2.251	.074
Intervention group Control group	47.6 \pm 9.0	67.8 \pm 15.0	t = 2.561	.051

*p < .05.

before one year showed less acceptance of their new condition, they were anxious, different from those who had a permanent ostomy, who were able to cope in less time with their condition. They showed a higher degree of satisfaction with life. In this regard, the research on the impact of stoma on lifestyle and health-related QOL in patients living with stoma showed similarities in the mean QOL score of the participants (4.13 ± 1.07). Ostomates scored relatively well in both the physical (5.68 ± 1.76) and spiritual (4.32 ± 1.36) domains. Permanent ostomates scored significantly higher than temporary ostomates ($p = .04$) (Davis et al., 2020).

Another similar study showed that people with less than one year of permanent stoma have greater social activity, personal development, and goals in their lives (Fortes et al., 2012; Maciel et al., 2019). The study conducted by, Zhang et al. (2019), revealed a significant association of QOL, related to effective communication, between patients and healthcare staff in terms of direction for the acquisition of ostomy care skills.

In the present study, the participant's perceptions of the QOL and the physical well-being dimension increased, with a score that increased in both groups before and after

the intervention (intervention group 50.6–68.6) (control group 40.6–66.0) with significant differences $p = .037$, in the control group, this shows that the educational processes do not necessarily have to be face-to-face but can be provided by means of multimedia products or through virtuality so that the patient can be constantly reviewing. In a similar study by Cengiz et al., (2020), evidence significant ($p < .05$) in terms of decreased complication with stomas after home visits and phone calls by nurses for educational prevention intervention, but no significant difference was obtained in terms of QOL between the intervention and control group, however, the perceptions of the participants manifested benefits in the dimension of life. Phatak et al., (2014) in their systematic literature review, found 3 studies evaluated readmissions, none found a difference in the intervention group compared to the control group, however, education was established as a key component to improve the QOL of the person with an ostomy.

Body image is considerably affected in ostomized people, having a device attached to the abdomen and a bag for stool disposal, generates important self-images disorders, associated with uncertainty and anguish due to the changes that the person must undergo. *This is similar to that reported*

by Ssewanyana et al. (2021), in their study, carried out in a hospital Ugandans; about the serious negative psychological effects in terms of anxiety, concerns about body image change, and depression in ostomized people. Other study conducted by Capilla et al. (2021), showed improvement in self-esteem in a group of ostomized persons after the intervention of a nursing plan, oriented to body changes through follow-up during the presurgical and postsurgical period. The present study evidenced significance in the score for the dimensions of body image ($p = 0.17$) and positive adaptation ($p = 0.27$) for the intervention group. However, the control group presented an increase in the percentages in these dimensions showing improvement in the QOL, although it did not show statistical significance.

The different dimensions of QOL showed an increase in the percentages after the educational intervention for the intervention group and after video exposure in the control group, demonstrating the importance of education either face-to-face and/or virtual. A study conducted by randomized trial, to test the effectiveness of a telehealth approach and the positive impact on the unique physical, psychological, social, and spiritual need of cancer-structured ostomy care training on QOL and anxiety, had a positive effect on improving knowledge and practices for self-efficacy.

The sexual dimension obtained fewer percentage points before and after the intervention (intervention group 33.3–40.0), (control group 10.0–33.3). Sexuality in people with digestive stomas is affected by the insecurity that patients have with their bodies, due to the existing taboos and prejudices at insecurity that patients have with their bodies due to the exiting taboos and prejudices at a socio-cultural level, added to the uncertainty and fear of losing control due to the stoma and having accidents (Petersén & Carlsson, 2021). Another study expresses that sexual function is an important component in the QOL and is configured as essential in existence, so the result becomes transcendental in all stages of health and disease (Meira et al., 2020). A study conducted on older men about sexual health and QOL expressed that, their ostomy had caused interference with their ability to be intimate, however, after educational intervention they were able to gain confidence in their sexual relationships. These men also reported that problems with intimacy and sexual function were the biggest challenges they faced from having an ostomy (Symms et al., 2008).

The score of the self-sufficiency dimension increased considerably in both groups, before and after intervention (intervention group 40.8–91.6) (control group 40.8–65.8) although no significant differences were evidenced; the person with a stoma who achieves sufficiency related to self-care, ostensibly improves his QOL. The above demonstrates the importance of establishing care plans by nurses adjusted to personal needs in the different stages of adaptation to their new condition of life, establishing a leading space for dialogue so that the patient can express themselves openly and can help themselves in

areas that people consider intimate. This suggests the need for psychological support to overcome stoma-related changes and improve the QOL of these patients (Ssewanyana et al., 2021).

Strengths and Limitations

The study should be evaluated in the context of several limitations, the most noticeable being the small sample size, due to the health conditions of the individuals, a considerable number of whom were at the end of life and had to be excluded. The small sample size prohibited the study from having statistical significance. The disposition and positive attitude of the patients, to achieve significant learning regarding the care of themselves and their condition was a strengthening factor

Implications for Practice

This study provided information about the experiences of people with an ostomy, the changes that the body undergoes, and coping with the new reality. The findings of this study can be used to design personalized support programs for people with digestive ostomies, for adequate adaptation, and to provide an improvement in QOL.

Conclusions

The present study evidenced the positive effects on the QOL of people with ostomies after socio-educational interventions through face-to-face and virtual pedagogical mediations, which are established by means of different communication techniques. The educational intervention carried out in the intervention group and the pedagogical mediation implemented in the control group, had a significant influence on the improvement of the ostomized people's QOL dimensions and was conceived as a fundamental piece to face the situation in people.

The findings obtained offer knowledge for nursing in order to provide attention to people with ostomies taking into account actions that promote the care of the body and the bodily manifestations that generate discomfort and alteration of its image, interacting through the expansion of strategies focused on individuality, in relation to comfort, through spaces to dialogue and resolve doubts, negotiate self-care strategies, promote autonomy, self-confidence, and continuous leadership of one's own life, in addition to other aspects that strengthen safety and enhance the QOL of the person, their family, and their social environment.

It is important to create specialized home care teams, specifically with nursing professionals who are experts in the care of ostomates, to support the patient after the ostomy is performed, in order to achieve adequate coping and maintain the QOL in different dimensions.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Ethical Considerations

The research was approved by the Scientific Committee of the institution under study and by the Ethics Committee of the Catholic University of Manizales (Caldas-Colombia).


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Author Contributions

Study conception and design were handled by PAD and CLVR. Data collection was done by PAD, SMCV, and LALG. Data analysis and interpretation were carried out by CLVR. Writing of the article was done by PAD, CLVR, SMCV, and LALG. Critical revision of the article was done by CLVR and PAD.

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