









EFFECT OF TELENURSING ON THE ADAPTIVE PROCESS OF PEOPLE WITH INTESTINAL STOMA: CLINICAL TRIAL

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ABSTRACT

Objective: To analyze the effect of telenursing on the adaptive process of people with intestinal ostomy. **Method:** Randomized, single-blind clinical trial. The verification scale of the level of adaptation of the person with ostomy was applied, and two groups were formed. The control group received conventional care with professionals from the reference center, and the intervention group received conventional follow-up associated with the complementary intervention via telephone (three phone calls on the 20th, 40th and 60th day after initial contact). At the end of the intervention, the participants were evaluated again through the scale. Recruitment occurred from the first contact and had a sample of 16 participants in the intervention group and 17 in the control group. **Results:** There was a similarity in the levels of adaptation at baseline between the two groups. However, post-intervention data showed a significant difference between the groups during the study and lower values of the means of the control group compared to the measures of the intervention group, demonstrating a higher level of adaptation in the intervention group. **Conclusion:** The study verified the effect of telenursing on the adaptive process of the person with a stoma and suggests benefits in complementary monitoring via telenursing at the level of adaptation of people with a stoma after ≤ 12 months of surgery.

DESCRIPTORS: Telenursing. Telephone. Adaptation, psychological. Ostomy. Models, nursing. Enterostomal therapy.

EFEITO DA TELE-ENFERMAGEM NO PROCESSO ADAPTATIVO DE PESSOAS COM ESTOMIA INTESTINAL: ENSAIO CLÍNICO

RESUMO

Objetivo: Analisar o efeito da tele-enfermagem no processo adaptativo de pessoas com estomia intestinal. **Método:** Ensaio clínico randomizado, uniciego. Aplicou-se a escala de verificação do nível de adaptação da pessoa com estomia, e formaram-se dois grupos. O grupo controle recebeu atendimento convencional com profissionais do centro de referência, e o grupo intervenção obteve o acompanhamento convencional associado à intervenção complementar via telefone (três chamadas telefônicas realizadas no 20º, 40º e 60º dia após contato inicial). Ao final da intervenção, os participantes foram avaliados novamente pela escala. O recrutamento ocorreu desde o primeiro contato e contou com uma amostra de 16 participantes no grupo intervenção e 17 no grupo controle. **Resultados:** Notou-se semelhança nos níveis de adaptação no baseline entre os dois grupos, entretanto dados do pós-intervenção demonstraram diferença significante dos grupos no decorrer do estudo e menores valores

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Section Editor: Jaqueline Aparecida S. Sokem 

Received: Feb. 27, 2023 | Accepted: Jun. 28, 2023

How to cite: Freitas LS, Silva IP, Sena JF, Ó LB, Silva BWAC, Diniz IV, Santos VLCG, Costa IKF. Effect of telenursing on the adaptive process of people with intestinal stoma: clinical trial. ESTIMA, Braz. J. Enterostomal Ther. 21: e1401. https://doi.org/10.30886/estima.v21.1401_IN

das médias do grupo controle comparados às medidas do grupo intervenção, indicando maior nível de adaptação no grupo intervenção. **Conclusão:** O estudo verificou o efeito da tele-enfermagem no processo adaptativo da pessoa com estomia e sugere benefícios no acompanhamento complementar via tele-enfermagem no nível de adaptação de pessoas com estomia de tempo ≤ 12 meses de cirurgia.

DESCRITORES: Telenfermagem. Telefone. Adaptação psicológica. Estomia. Modelos de enfermagem. Estomaterapia.

EFFECTO DE LA TELEENFERMERÍA EN EL PROCESO ADAPTATIVO DE PERSONAS CON ESTOMÍA INTESTINAL: ENSAYO CLÍNICO

RESUMEN

Objetivo: Analizar el efecto de la teleenfermería en el proceso adaptativo de personas con ostomía intestinal. **Método:** Ensayo clínico aleatorizado, simple ciego. Se aplicó la Escala de Verificación del Nivel de Adaptación de la Persona con Ostomía y se formaron dos grupos, el grupo control recibió atención convencional con profesionales del centro de referencia y el grupo intervención recibió seguimiento convencional asociado a la intervención complementaria vía telefónica (3 llamadas telefónicas los días 20, 40 y 60 después del contacto inicial). Al final de la intervención, los participantes fueron evaluados nuevamente mediante la escala. El reclutamiento se produjo desde el primer contacto y contó con una muestra de 16 participantes en el grupo de intervención y 17 en el grupo control. **Resultados:** Hubo similitud en los niveles de adaptación al inicio del estudio entre los dos grupos, sin embargo, los datos posteriores a la intervención mostraron una diferencia significativa entre los grupos durante el estudio y verificaron valores más bajos de las medias del grupo control en comparación con el medidas del grupo de intervención, demostrando un mayor nivel de adaptación en el grupo de intervención. **Conclusión:** El estudio verificó el efecto de la teleenfermería en el proceso adaptativo de la persona con estoma y sugiere beneficios en el seguimiento complementario a través de la teleenfermería a nivel de adaptación de la persona con estoma después de ≤ 12 meses de la cirugía.

DESCRIPTORES: Teleenfermería. Teléfono. Adaptación psicológica. Estomía. Modelos de enfermería. Estomaterapia.

INTRODUCTION

The intestinal elimination ostomy interferes in all aspects of the individual's life, causing unsatisfactory changes in relationships with oneself and others, reflecting in the impairment of their quality of life. This condition implies the need to exteriorize an intestinal segment to eliminate effluents. Because of this, the individual's adaptation process becomes paramount, based, among other things, on support and guidance focused on integrating stoma care with their lifestyle^{1,2}.

Adaptation is a progressive and individual process, a consequence of social relationships, values, customs and lived experiences, which directly influence coping with reality, known as adaptive mechanisms oriented by survival, growth, reproduction, mastery and transcendence³. In facilitating an effective adaptive process, the nurse's role includes qualified assistance to promote self-care and the person's autonomy^{2,4}.

Concerning an individual's adaptation to the making of the stoma, the use of Roy's adaptation model (RAM) and its nursing process as guiding tools for care are highlighted. The critical judgment of stimuli and behaviors enables the nurse to assess the level of adaptation of the individual with a stoma.

Despite the knowledge of the difficulties imposed by ostomy, more attention must be paid to the adaptive aspects inherent to the condition. In addition, the distance from major reference centers, and the shortage of specialized professionals, among other obstacles, make it difficult for people with ostomies to access care, jeopardizing the support for the needs experienced. It is also noteworthy that the difficulty in accessing care can generate a condition of less knowledge in self-care, leading to social restrictions and psychological and physical consequences⁵.

In the Unified Health System (Sistema Único de Saúde-SUS), responsible for free assistance in Brazil, the resolution of the system has always been on the agenda and for the rise. Remote care is an effective response to the existing high demand.

By using remote care strategies, health care for users becomes effective anywhere, providing universal access guaranteed by federal legislation and currently regulated by the Federal Nursing Council⁶.

In this regard, telenursing, considered non-face-to-face electronic nursing care, especially monitoring via telephone, emerges as a low-cost and accessible complementary strategy, which promotes nurse-patient interaction, through the use of devices that overcome the obstacle of time and distance^{6,7}.

Other studies support the benefits of tele-nursing in complementary assistance to people who need follow-up after hospital discharge. This tool avoids unnecessary trips to health services and allows nurses to monitor and develop educational guidelines, which can favor the health status of the population^{5,8}.

The effectiveness of remote assistance has already been declared by several authors in the most different scenarios and populations, even influencing aspects of self-care and quality of life^{9,10}. Thus, the development of the study was thought to help people with ostomy in their adaptation, despite the physical distance from the nurse.

OBJECTIVE

This research aimed to analyze the effect of tele-nursing on the adaptive process of people with intestinal ostomy.

METHODS

Kind of study

The present is a single-blind clinical trial, carried out from May to December 2018 in the Specialized Center for Rehabilitation and Habilitation of Rio Grande do Norte (Centro Especializado em Reabilitação e Habilitação do Rio Grande do Norte-CERHRN). The CERHRN is a reference institution for caring for people with a stoma and distributing materials necessary to manage the stoma. The center also allows these individuals to live together, meet and integrate. The service is carried out by a multidisciplinary team composed of a nurse, a doctor, a dermatologist, a psychologist, a nutritionist and a social worker.

Study design

The study was developed in two phases. Initially, an attempt was made to verify the adaptation level of the participants before and after the intervention period, and subsequently, it was identified whether there were changes in the adaptation level of the groups.

Two groups were formed to verify the effect of the intervention: the Control Group (CG) and the Intervention Group (IG). The CG received conventional care from the CERHRN multidisciplinary team at the specialized center, according to the participants' demands and needs. The IG received the same conventional follow-up associated with the complementary intervention via telephone on the 20th, 40th and 60th day after the first contact, as proposed by authors¹⁰. The intervention via telephone contact was developed by the study researcher only for people from IG.

Participants

The sample size was established using the Armitage and Berry technique from 1987, considering standard deviation = 20, the difference to be detected = 20, the value of 5% for significance level, 80% for test power and selection of the one-tailed hypothesis test. Thus, the amount of 17 individuals was obtained for each group.

As for the inclusion criteria, individuals aged 18 years or older, with the cognitive capacity to answer the questions, with an intestinal ostomy during the data collection period, with surgery time \leq 12 months and with telephone contact were selected. Delimitation of surgery time (up to 12 months) was based on the finding that subjects with ostomy time \leq 1 year

had lower scores in all modes of Roy's adaptation model (physiological, self-concept, role function and interdependence)¹¹. Individuals who did not complete the instrument and people under the influence of alcohol/illicit drugs during the interview were excluded.

Instrument and data collection

The sample was established in the first contact at CERHRN, and the CG and IG were determined through an envelope containing papers with the terms CG and IG.

When attending the center, the ostomy time ≤ 1 year was checked, the research's objective, purpose and relevance were clarified, and after agreeing to participate in the proposed investigation, the individuals signed the Free and Informed Consent Form (FIC).

The participants answered an interview with sociodemographic and clinical data, also containing data regarding the ostomy, management of the collection device and aspects of adaptation (age, sex, race, profession, marital status, number of children, monthly income, education, religion, weight and height, presence of comorbidities, chemotherapy and/or radiotherapy, type of ostomy, type of bag, ostomy time, reason for making it, criteria for permanence, complications, who is in charge of changing the bag, feeling of adaptation to ostomy, main problems of adaptation to the ostomy).

To verify the level of adaptation of people with a stoma, the scale for ascertaining the level of adaptation of the ostomate (*Escala de Nível de Adaptação da Pessoa com Estomia-ENAE*) was applied through an interview, which contains 32 items, divided into the adaptive modes addressed by Roy's adaptation model – the physiological mode (n = 7 items), self-concept (n = 17 items), role function (n = 4 items) and interdependence (n = 4 items). When requesting a response to the affirmative, the respondent could answer:

- Strongly agree = 4;
- Partially agree = 3;
- Indifferent = 2;
- Partially disagree = 1;
- Strongly disagree = 0.

The total score ranges from 0 to 128, considering scores closer to 0 as indicative of worse adaptive levels¹².

Intervention

In possession of the information collected through the questionnaire and the ENAE, the assistance was planned via telephone centered on each IG participant's reality, followed by the intervention (three telephone calls) with a subsequent evaluation of its effect.

The calls addressed information regarding the difficulties and questions based on the answers to the applied instruments, access to the necessary materials, stoma management, as well as encouraging self-care, coping with the new reality and strategies to facilitate the adaptive process, for example, considering that these are the main obstacles in the life of the person with a recent ostomy^{11,13,14}. When questioning the main adaptive difficulties in the initial interview, the participants reported specific activities, which were organized into themes and according to the frequency that each term was mentioned. The activities were allocated by the adaptive mode of Roy's adaptation model according to the works that originated the instrument.

At the end of the intervention, the group participants were re-evaluated by ENAE.

Data analysis

Data were analyzed using descriptive and inferential statistics. The χ^2 test was used to verify statistically significant differences (<0.05) between the sociodemographic and clinical variables of the groups. After certifying the regular distribution

by the Shapiro-Wilk test, the ENAE scores were compared at baseline and in the post-intervention period of both groups, using the Student's t-test and the values of the first and second evaluations of each group by paired Student's t-test.

Ethical aspects

In compliance with the ethical precepts required by research involving human beings, the study received a favorable opinion from the Federal University of Rio Grande do Norte's Research Ethics Committee under number 1,527,460. The research subjects had their privacy and anonymity respected. The interviews took place only after an explanation of the purpose of the research and the signature of the FIC inside a room reserved for this purpose, where only the participant and the researcher were present. The Consolidated Standards of Reporting Trials CONSORT instrument was used to evaluate the study and the applicability of the results. The study is inserted in the Brazilian Registry of Clinical Trials platform, with the identification: RBR-6fgjcb.

RESULTS

The results indicated refer to the sample with 33 participants since one participant from the GI was lost during the study data collection, as he did not return the contact. The CONSORT flowchart in Fig. 1 shows the structure.

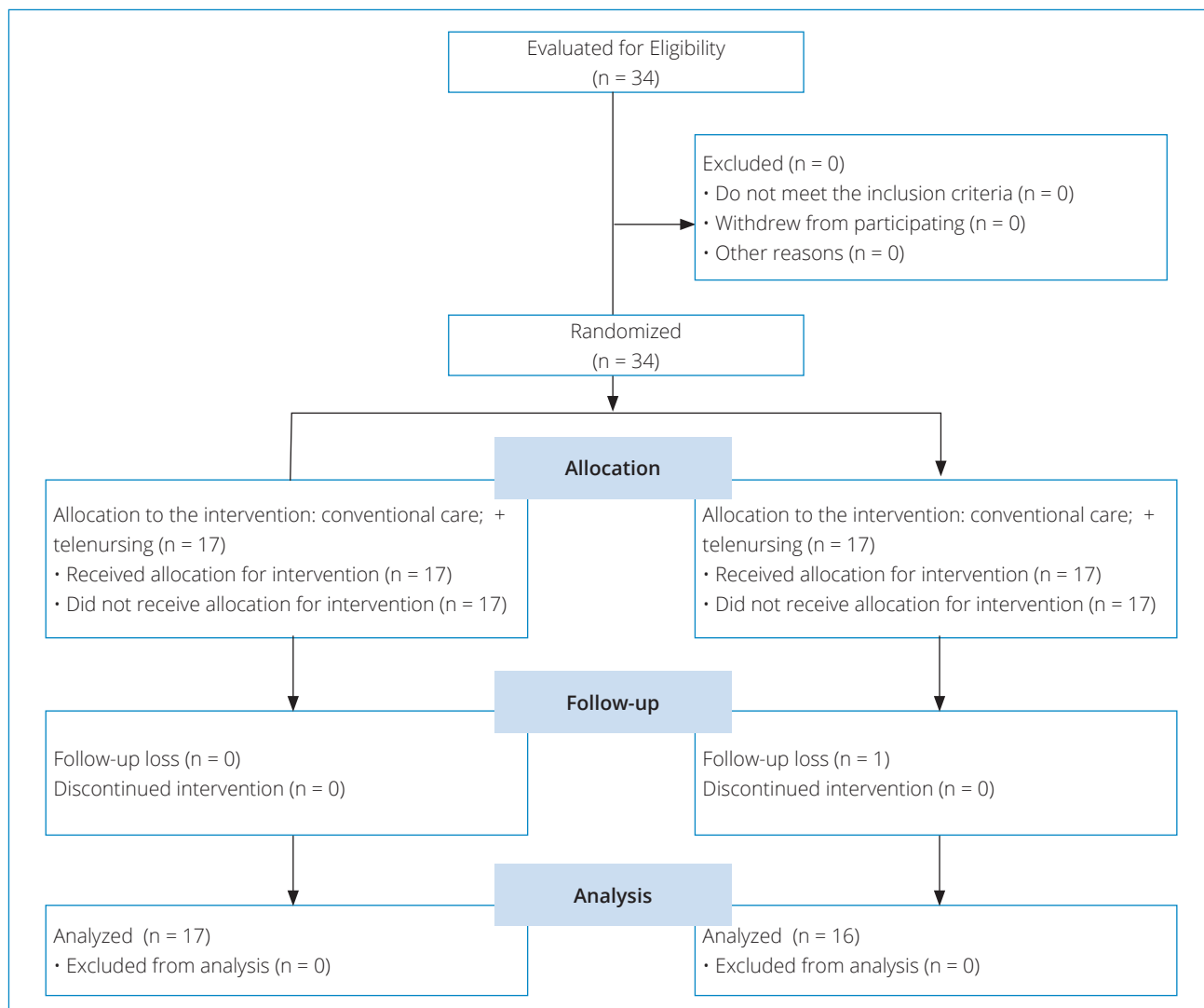


Figure 1. CONSORT 2010 model flowchart. Natal, Rio Grande do Norte, Brasil, 2022.

There was a homogeneity of data between the CG and IG after using the χ^2 test. Given the absence of statistically significant differences verified by the use of the test, it was determined that the product of the analysis of the level of adaptation of the interviewees refers primarily to the intervention carried out via tele-nursing.

The frequencies of the study participants' characteristics were established to define their profile. According to the variables analyzed, it was found that 24 (72.7%) respondents were male and aged ≤ 60 years, 19 (57.6%) were brown, 18 (54.5%) professed Catholicism as a religious belief, 20 (60.6%) lived with a partner, 23 (69.7%) had an income of up to one minimum wage, 17 (51.5%) received retirement benefits, and 18 (54.5%) studied up to the elementary school.

Concerning clinical and health issues, it was identified that 19 subjects had no illnesses or injuries (57.6%); 24 (72.7%) did not receive radiotherapy, and 21 (63.6%) did not receive chemotherapy; 27 (81.8%) had a colostomy and had a temporary ostomy; and 29 (87.9%) used a one-piece collection bag, with the individual replacing the device in 54.5% of cases. When questioned about adaptation to the stoma, 15 (45.5%) stated that they felt adapted.

Regarding the health problems that occur with the making of the ostomy, the predominance of intestinal cancer (39.3%) was noted as the leading cause. As for the presence of complications, it was observed that 13 (39.3%) participants developed some complications in the stoma and/or peristomal skin, with bleeding and dermatitis being the most common.

Concerning adaptive modes, there was no statistical significance regarding the level of adaptation at baseline between CG and IG. However, the data obtained in the subsequent test showed a statistically significant difference when comparing the two study groups, in addition to verifying that the mean values of the CG were lower than the IG measurements. In Table 1, it is possible to verify the mean, standard deviation and p values of each adaptive mode by group before and after the intervention.

Table 1. Adaptive modes of the control and intervention groups and their means, standard deviation and p at baseline and post-intervention. Natal, Rio Grande do Norte, Brasil, 2019.

Adaptive mode	Groups	Baseline		Post-intervention	
		Mean (SD)	p-value*	Mean (SD)	p-value*
Physiological	Control	14.1 (4.0)	0.763	10.8 (4.3)	< 0.001
	Intervention	14.7 (6.6)		17.8 (5.6)	
Self-concept	Control	38.1 (14.0)	0.423	34.9 (12.6)	0.008
	Intervention	41.8 (12.4)		46.4 (10.7)	
Role function	Control	8.0 (4.4)	0.659	6.5 (3.4)	0.016
	Intervention	8.7 (4.5)		9.8 (3.9)	
Interdependence	Control	6.5 (3.4)	0.703	5.4 (3.3)	0.007
	Intervention	7.0 (3.7)		8.8 (3.5)	
Global average score	Control	66.9 (22.5)	0.489	57.5 (20.4)	0.001
	Intervention	72.4 (22.4)		82.9 (20.1)	

*Student's *t* test; SD: standard deviation.

When analyzing the data from the CG, it was found that the group's adaptive scores were lower in the post-intervention period when compared to the results obtained at baseline for the same group, with a reduction of 9.4 in the total mean. On the other hand, the results of the IG showed an increase in adaptive scores when comparing the baseline and post-intervention groups, with an increase in the total mean of 10.5 points (Table 2).

Table 2. Measures of central tendency and dispersion and p at baseline and post-intervention in the control and intervention groups. Natal, Rio Grande do Norte, Brasil, 2019.

Adaptive mode	Phase	Control group			Intervention group		
		Min.-Max.	Mean (SD)	p-value*	Min.-Max.	Mean (SD)	p-value*
Fisiológico	Baseline	8 – 21	14.1 (4.0)	< 0.001	0 – 24	14.7 (6.5)	< 0.001
	Pós-intervenção	4 – 20	10.8 (4.3)		7 – 26	17.8 (5.6)	
Autoconceito	Baseline	12 – 54	38.1 (14.0)	0.046	18 – 64	41.9 (12.4)	< 0.001
	Pós-intervenção	12 – 60	34.9 (12.6)		26 – 64	46.4 (10.6)	
Função de papel	Baseline	0 – 14	8.0 (4.4)	0.013	0 – 14	8.8 (4.5)	0.016
	Pós-intervenção	1 – 12	6.5 (3.4)		2 – 15	9.8 (3.9)	
Interdependência	Baseline	1 – 12	6.5 (3.3)	0.001	0 – 12	7.0 (3.6)	0.011
	Pós-intervenção	0 – 12	5.4 (3.3)		1 – 13	8.8 (3.5)	
Score médio global	Baseline	30 – 96	66.9 (22.5)	< 0.001	18 – 113	72.4 (22.4)	< 0.001
	Pós-intervenção	24 – 96	57.5 (20.4)		37 – 117	82.9 (20.1)	

*Paired Student's t-test; SD: standard deviation.

To consider the content of the reports about the main obstacles to the adaptation process, Table 3 presents the main themes uttered by the respondents (CG and IG) during the first interview (baseline), distributed by adaptive modes of the adaptation model from Roy. Allocation into adaptive modes occurred according to perceptions of disposition through readings of studies published in the scientific literature and Roy's definition of each mode.

Table 3. Absolute and relative frequencies of the main adaptive difficulties after making the ostomy, according to the adaptive mode. Natal, Rio Grande do Norte, Brasil, 2019.

TOPICS	n	%
Physiological mode		
Gas production	4	12.1
Eating habits	3	9.1
Changes in sleep pattern	2	6.1
Self-concept mode		
Clothing changes	4	12.1
Sexuality	2	6.1
Role function mode		
Leisure activities	9	27.3
Work activities	8	24.2
Homeworks	6	18.2
Interdependence mode		
Return to society	10	30.3
Collection system management	4	12.1
Stoma management	4	12.1

To assist in the adaptive process of the IG participants, the links addressed aspects of the main difficulties mentioned at the time of the interview, as well as other demands inherent to the new condition, such as self-care actions, activities of daily living, changes in self-image, impact self-esteem and quality of life and sexuality issues. In subsequent phone calls, the participants expressed the implementation and effects of the guidance provided by the researcher, and she sought to identify other problems and/or difficulties that still needed adjustments and advice.

Among the speeches, some respondents revealed satisfaction with having telephone follow-ups because of the difficult financial situation, which made it impossible to attend more frequent appointments. Other participants also needed to stay at home to care for relatives, complicating participation in face-to-face care.

Participants were informed about the ancillary condition of remote monitoring and the importance of face-to-face assistance with professionals from the specialized reference service.

DISCUSSION

The results showed the impact of the telephone intervention on the IG, which offered better adaptive levels than the CG, after the telephone calls, which addressed the main difficulties of the participants in their readaptation process.

As for the results related to aspects of the physiological mode, it is considered that people with a stoma do not have control of eliminations and have this function displayed in a bag. Therefore, they need continuous surveillance for the proper management inherent in stoma care. The production of flatus and its uncontrolled excretion were highlighted as impacting factors in the adaptation process to the new reality of people with ostomy².

In remote monitoring, participants were instructed about changes in eating habits and the importance of nutritional tracking to minimize the occurrence of flatus that generate embarrassing situations since the diet's components alter the stools' characteristics and the frequency of gas elimination^{2,15,16}. Some people deprive themselves of eating certain foods to achieve better comfort and well-being. Thus, it is necessary to be monitored by health professionals who verify and direct the implementation of these new habits and warn about this so that there are no nutritional losses with substantial restrictions for maintaining good health¹⁷.

The making of the stoma causes changes in the individual's life in many aspects, including their sleep pattern. Reports referring to worsening sleep quality were related to feelings of anxiety, sadness and fear and also determined by the discomfort of the ostomy bag, the act of getting up to empty the device and fear of the risk of detachment/leakage of effluents¹⁸. In the intervention, guidelines were addressed regarding positioning when sleeping to avoid pressing the collection device, emptying the bag before going to sleep to avoid waking up in the middle of the night to discard the effluents and avoiding foods that produce flatus or diarrhea. Changes in sleep resulting from the stoma are common, so it was explained to the participants that the routine would be adjusted over time, and then the rest nights would be more peaceful.

Regarding the self-concept mode, self-image disorders appear to come with ostomy through transforming one's body and image, leading to a relearning of how to take care of oneself and adapt to the new body constitution. In this sense, there were strategies used by people with ostomy to hide the collector device, such as avoiding pieces that fit the body and giving preference to clothes with larger sizes. In addition, it was observed that specific models show the volume of the device, thus embarrassing the person^{2,4}.

During the telephone intervention, it was suggested the use of elastic belts that promote greater security to the adhesive plate and help in disguising the collector, as well as the use of opaque color collector equipment during social and leisure activities, as this equipment color prevents the visualization of feces by others. Furthermore, using garments that are not too tight to the body was advised, as they, in addition to highlighting the device, can put too much pressure on the equipment.

Other resources found in the literature would facilitate this aspect through bowel control systems, such as using the occluder system and bowel irrigation. The occluder was reported as an appropriate strategy for disguising the stoma and, combined with the irrigation technique, has a positive impact on self-esteem, quality of life and adaptation, providing a greater sense of hygiene and also demonstrating benefits in the development of activities of daily living, including in aspects

related to sexuality, however, such as self-irrigation, the use of the occluder device must be carefully evaluated and requires a medical prescription¹⁹.

As for sexuality, there is a lack of attention to its aspects and repercussions on the individual's quality of life. The lack of consideration regarding this component is manifested by several conditions: distraction regarding its importance, omission of the report by the person with ostomy and even due to the prejudice that still exists when dealing with these issues²⁰.

It appears that ostomy affects all aspects of the individual's life, regardless of gender. Authors point out that men and women who underwent ostomy reported low sexual activity because, besides negative feelings, men had some erection and/or ejaculation dysfunctions, and women had dyspareunia due to decreased lubrication and vaginal elasticity. Thus, in addition to the embarrassment, shame and fear of being rejected by the partner, the person with an ostomy may have dysfunctions in their organs, affecting their sexual performance.²⁰ In the telephone contacts, strategies for coping and returning to sexual activity and searching for the psychology service, if necessary, were oriented.

Concerning the role-function adaptive mode, distancing from work, leisure and daily activities is seen as the main adaptive difficulty in this population. The development of routine and leisure activities is hampered by the continuous concern about the detachment of the collection bag, leakage of effluents, embarrassment due to the elimination of flatus, exposure of the device, as well as the manifestation of feelings of incompetence and uselessness presented by members of this population².

As for employment issues, adaptations to the infrastructure of the workplace need to be used to provide a more appropriate environment for stoma care to favor the reintegration of the person into their work functions since idleness tends to reflect on the financial situation, as well as psychosocial issues²¹.

The ostomy construction demands additional expenses for obtaining devices, adjuvants and accessories complementary to the stoma care. Despite an ordinance that guarantees access to collector and auxiliary equipment in Brazil, it is known that the quantity needs to be increased, and the lack of these elements is frequent. Low remuneration influences the acquisition of materials on the market. It can harm the adaptation process since lower levels of well-being were observed in patients who do not have the financial conditions to purchase supplies for the proper management of the stoma^{22,23}.

The so-called remote access routes provided counseling regarding managing difficulties in coping with the new reality, to not isolate the person with an ostomy or restrict their work and leisure activities. The referrals were based on the perspective of preparing individuals for stoma care in places that do not provide adequate infrastructure for stoma care, encouraging participants to assemble and always have at hand a set of materials necessary for cleaning, managing the stoma and changing the collector device to minimize the occurrence of leaks and other unexpected situations that may cause embarrassment to the individual.

As for daily activities, the instructions given focused on alerting the risk of developing complications from exaggerated physical exertion and weight lifting. Information about the importance of progressively resuming routine chores was also provided.

About the last mode of Roy's adaptation model, the interdependence mode, centered on interpersonal relationships and needs for affection, the common contempt of people with an ostomy for themselves and their isolation from society are observed, as it presupposes the disapproval and rejection of others. Thus, the need for follow-up by a multidisciplinary team that contributes to treating these demands and rehabilitating this individual is notorious².

Adaptive issues and difficulties require a committed approach, usually worked on in support groups. Sharing experiences and teachings by people who experience the same circumstances has a positive value in the conceptions of people with ostomy²⁴.

In the phone calls, the clarifications addressed the stimulus to developing self-care, autonomy and independence to get the return of usual activities. Participation in support group meetings was also encouraged since the exchange of experiences and the reports of other people in the same condition influence the readaptation process, as well as promoting coexistence in society and the development of strategies for the production of stoma care.

Directions about the existence and importance of the psychology service offered by the specialized center were also present in remote contacts.

Follow-up via telephone contact is considered an effective strategy in patient care, as it collaborates in the adaptive process and provides health care to several individuals in different aspects. The nurse's contributions are highlighted as the most suitable professional to conduct this care, as long as their skills are adequate to establish this communication⁸.

While the IG results showed improvements in the level of adaptation of people with ostomy, the CG had a decrease in the adaptive score assessed by ENAE. It is considered that the time of the study was insufficient to verify the progress regarding the adaptive aspects of the CG, understanding that the levels of adaptation vary according to experiences and with time, with a significant adaptation being perceived after one year of construction of the stoma¹¹.

As the main difficulties of the research, we highlight the effort to reach the quantitative sample by the criterion of including people with up to one year of surgery, influenced by the recovery and rehabilitation time of these subjects, making their selection difficult in the place of data collection. Also noteworthy is the effort to be able to reapply the ENAE (post-intervention) in the CG since there was no communication with the group after the first approach, considering this point even a research bias, as there is no way to guarantee that the participants of the GC attend more than one appointment at the reference center.

It is suggested the development of more studies with a more significant number of participants and a more extended follow-up period to analyze the different characteristics that also influence the adaptive process of this public.

As an expectation of contribution to science, it is hoped that this research will collaborate with the confirmation of the importance of tele-nursing in health practices in the country and thus encourage its use as an effective strategy in remote and complementary assistance for people with a stoma.

CONCLUSION

Through the study, it was possible to verify the effect of telenursing on the adaptation of a person with a stoma and suggest the benefits of complementary follow-up via telephone in the level of adaptation of people with a stoma after \leq 12 months of surgery since the follow-up intervention showed improvement in the levels of adaptation of people with ostomy compared to the CG.

The help of this complementary strategy in the remote monitoring of people with an ostomy who have adaptive needs to cope with the new condition stands out.

When using Roy's adaptation model combined with telenursing, nurses can identify the most affected adaptive mode to intervene appropriately and continuously in in-person care to collaborate in the individual's comprehensive care.

AUTHORS' CONTRIBUTION

Substantive scientific and intellectual contributions to the study: Freitas LS, Costa IKF, Santos VLCCG. Conception and design: Freitas LS, Costa IKF. Collection, analysis and interpretation of data: Freitas LS, Silva IP, Sena JF, O LB, Silva BWAC, Diniz IV. Article writing: Freitas LS, Silva IP, Sena JF, O LB, Silva BWAC, Diniz IV. Critical review: Costa IKF, Santos VLCCG. Final approval: Freitas LS, Silva IP, Sena JF, O LB, Silva BWAC, Diniz IV, Santos VLCCG, Costa IKF.

DATA STATEMENT AVAILABILITY

All data were generated or analyzed in the present study.

FUNDING

Conselho Nacional de Desenvolvimento Científico e Tecnológico

<https://doi.org/10.13039/501100003593>

[Number 42895/2019-4](#)

ACKNOWLEDGMENTS

Not applicable.

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