

Repercussions of intestinal ostomy on male sexuality: an integrative review

Repercussões da estomia intestinal na sexualidade de homens: revisão integrativa
Repercusiones de la estoma intestinal en la sexualidad de hombres: revisión integradora

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ABSTRACT

Objective: To analyze scientific productions about the repercussions of intestinal ostomy on male sexuality and discuss its implications for planning nursing care. **Method:** Integrative literature review conducted in the databases Scientific Electronic Library Online, Latin American and Caribbean Literature in Health Sciences, Sciverse Scopus, Web of Science, Cumulative Index to Nursing and Allied Health Literature and National Library of Medicine and National Institutes of Health, with no pre-established time frame and using the descriptors "sexuality," "ostomy," "colostomy," "men" and "nursing." **Results:** 21 articles were included to compose the interpretative analysis. Studies have shown that intestinal ostomy can affect male sexuality and reflect negatively on biophysiological, psychoemotional, and sociocultural dimensions. **Final Considerations:** Through education strategies in programs that follow-up ostomized men from preoperative to rehabilitation, the nurse can assist in adapting to reality, as well as in the quality of life.

Descriptors: Sexuality; Men; Ostomy; Men's Health; Masculinity.

RESUMO

Objetivo: Analisar as produções científicas sobre as repercussões da estomia intestinal na sexualidade masculina e discutir as implicações para o planejamento do cuidado de enfermagem. **Método:** Revisão integrativa da literatura, realizada nas bases de dados Scientific Electronic Library Online, Literatura Latino-Americana e do Caribe em Ciências da Saúde, Sciverse Scopus, Web of Science, Cumulative Index to Nursing and Allied Health Literature e National Library of Medicine and National Institutes of Health, sem recorte temporal pré-estabelecido e utilizando-se os descritores "sexuality," "ostomy," "colostomy," "men" e "nursing". **Resultados:** Foram incluídos 21 artigos para compor a análise interpretativa. Os estudos apontaram que a estomia intestinal pode afetar a sexualidade masculina e refletir negativamente nas dimensões biofisiológica, psicoemocional e sociocultural. **Considerações finais:** Mediante estratégias de educação em programas que acompanhem os homens estomizados desde o pré-operatório até a reabilitação, a enfermeira pode auxiliar na adaptação à realidade, bem como na qualidade de vida.

Descritores: Sexualidade; Homens; Estomia; Saúde do homem; Masculinidade.

RESUMEN

Objetivo: Analizar las producciones científicas sobre las repercusiones de la estoma intestinal en la sexualidad masculina y discutir las implicaciones para el planeamiento del cuidado de enfermería. **Método:** Revisión integradora de la literatura, realizada en las bases de datos Scientific Electronic Library Online, Literatura Latinoamericana y de Caribe en Ciencias de la Salud, Sciverse Scopus, Web of Science, Cumulative Index to Nursing and Allied Health Literature y National Library of Medicine and National Institutes of Health, sin recorte temporal preestablecido y utilizándose los descriptores "sexuality," "ostomy," "colostomy," "men" y "nursing". **Resultados:** Han sido incluidos 21 artículos para componer el análisis interpretativa. Los estudios apuntaron que la estoma intestinal puede afectar la sexualidad masculina y reflejar negativamente en las dimensiones biofisiológica, psicoemocional y sociocultural. **Consideraciones finales:** Mediante estrategias de educación en programas que acompañen los hombres ostomizados desde el preoperatorio hasta la rehabilitación, la enfermera puede auxiliar en la adaptación a la realidad, así como en la calidad de vida.

Descritores: Sexualidad; Hombres; Estoma; Salud del Hombre; Masculinidad.

INTRODUCTION

The intestinal ostomy, also known as stoma and ostomy, consists of an artificial opening, produced surgically, whose purpose is to divert the flow of effluents to the external environment. Such a condition can impact the lives of affected individuals due to transformations that affect human multi-dimensionality, including negative repercussions involving sexuality⁽¹⁻²⁾.

In the United States of America, it is estimated that approximately 120 thousand surgeries are performed every year that require the construction of an ostomy, and 700 thousand Americans, among children and older adults, at some point in their lives have already needed this procedure for intestinal or urinary diversion⁽³⁾. In Brazil, this estimate reaches 1 million and 400 thousand surgical procedures per year, totaling approximately 34 thousand people who are irreversibly ostomized in the country⁽⁴⁾.

The most common conditions that require the placement of an intestinal ostomy include diverticular and inflammatory bowel diseases such as Crohn's disease and ulcerative colitis, in addition to abdominal trauma, colorectal anomalies and colorectal cancer⁽⁵⁾.

When it comes to sexuality, it is known that the existence of an intestinal stoma can influence the quality of life of the ostomized person, which is multi-determined by biopsychosocial aspects, covering their biological potential, the emotions and beliefs acquired and modified in the socialization process⁽⁶⁾. Concerning the male population, the ostomy sometimes has numerous negative repercussions on sexuality, including mourning for the amputated "invisible" limb, loss of self-confidence and control over intestinal eliminations, in addition to "scratches" on masculinity, since fragility and insecurity are synonyms socially conceived for women⁽⁷⁻⁸⁾. Also, the surgical procedure for the construction of the ostomy may influence the sexual functioning of men, since intestinal resections and peroneal nerve injuries can result, triggering various physiological problems, such as erectile dysfunction, ejaculatory disorders, and infertility^(7,9-10).

When considering the magnitude of the impacts generated on male sexuality as a result of the ostomy, one identifies almost nonexistent systematic interventions by nurses and other health professionals for the individualized care of these men, establishing an impasse in the professional-patient bond and creating difficulties in approaching this theme⁽⁷⁾. Thus, the relevance of research that addresses the sexuality of men with intestinal ostomy is identified, as the scarcity of studies investigating this topic is notorious. Thus, we highlight the importance of the active contribution of health professionals, including nurses, to the development of a therapeutic plan and actions that provide less distress, greater safety, and comfort in the sexual act, aiming at closer sexuality of what the male public experienced before the presence of the ostomy.

OBJECTIVE

To analyze scientific productions about the repercussions of intestinal ostomy on male sexuality and discuss its implications for planning nursing care.

METHOD

Ethical aspects

Due to the bibliographic nature of the research, the Research Ethics Committee's evaluation and approval were waived; however, the ethical aspects and the copyright of the productions, as mentioned earlier, were respected.

Study design

This research is an integrative bibliographic review, carried out based on the accurate fulfillment of six steps, namely: 1) identification of the problem; 2) establishment of inclusion and exclusion criteria and bibliographic research; 3) definition of information and categorization of studies; 4) evaluation of selected productions; 5) analysis of results; and 6) presentation of the review with the synthesis of knowledge⁽¹¹⁾.

Data collection and organization

In this study, the PICO strategy was adopted to elaborate the research problem and define the eligibility criteria, in which (P) Participants: men; (I) Intervention: repercussions of the intestinal ostomy; (C) Comparison: not applied in this research; (O) Outcomes: sexuality of ostomized men and the implications for nursing care planning. The research question was: What are the repercussions of intestinal ostomy on male sexuality?

For the search strategy, Health Sciences Descriptors (DECS) that best fit the question of research were chosen and used in the English language as a way to capture as much as possible studies published in the international scientific community, namely: *Sexuality; Ostomy; Colostomy; Men* and *Nursing*. Crossings with the terms were carried out in pairs and in trios, interconnected by the Boolean operators "AND" and "OR," with the following combinations: *Sexuality AND Ostomy OR Colostomy AND Men; Men AND Ostomy AND Nursing; Colostomy AND Men AND Sexuality; Men AND Ostomy AND Sexuality;* and *Ostomy AND Men*.

The search took place between May and August 2018, in the electronic databases: Scientific Electronic Library Online (SciELO), Latin American and Caribbean Literature in Health Sciences (LILACS), Sciverse Scopus (Scopus), Web of Science (WoS), Cumulative Index to Nursing and Allied Health Literature (CINAHL) and National Library of Medicine and National Institutes of Health (PubMed).

Considered inclusion criteria were: primary studies with full text, in English, Spanish or Portuguese, without a time frame that were related to the research object. The exclusion criteria were: review studies, conference abstracts, annals, editorials, monographs, dissertations, and thesis, in addition to investigations with an unclear design or objective and investigations that addressed non-intestinal ostomies.

After the survey, we read the titles (selection of publications considered, at first, relevant), subsequently, selected by quality criterion (reading of abstracts followed by reading, exploring and analyzing the productions in full until the composition of the *checklist* with the studies included in the review). Such actions aimed at reducing probable systematic errors or bias in the measurement of the studies by interpretation mistakes of the results of the studies design, to guarantee rigor and reliability of

results. Four out of the six authors carried out the survey and had access to the *checklist* with information from all studies included in the review. Thus, peer review was adopted in order to reach consensus and allow greater reliability to the results.

From each included article, relevant information was extracted and added to a *checklist*, previously prepared by the authors, which contained the following variables: title, year of publication, the language of origin and publication, authors, country of origin, journal, objective, methodology, main results, conclusions or final considerations and recommendations, when present. Such an instrument, when used, allowed to compile and synthesize information for later presentation with discussion and analysis of the findings.

Figure 1 shows the process of identifying and selecting studies according to the recommendations of the *Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA)*⁽¹²⁾.

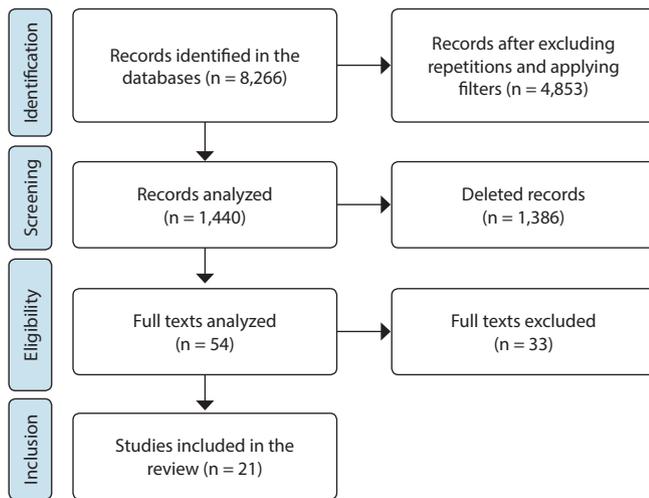


Figure 1 - Flowchart of identification and selection of studies included in the review according to the recommendations of *PRISMA*⁽¹²⁾

RESULTS

Eight thousand two hundred sixty-six publications on the topic were identified from the search without filters in the databases searched. After the screening, considering the established inclusion and exclusion criteria, 1,440 articles were chosen to reading the titles and abstracts. Of these, we read 54 in full, with the final sample for this review consisting of 21 publications. Chart 1 shows the findings regarding the summary of the characterization of the studies selected to compose the sample.

Chart 1 - Summary of studies included in the integrative review according to the title, year, country of study and main results, Salvador, Brazil, 2019

Title/year/country of the study	Main results
<i>Sexual experiences of Chinese patients living with an ostomy</i> ⁽¹³⁾ 2017 China	Impacts on the quality of sexual life with the appearance of sexual dysfunction, changes in impulse, sex arousal, orgasm, and sexual satisfaction
<i>Sexuality of patients with bowel elimination ostomy</i> ⁽¹⁴⁾ 2017 Brazil	Sexual inactivity in some cases and among the sexually active, reduced sexual desire, perceived lack of interest of the partner, changes in the frequency of sexual encounters

To be continued

Chart 1

Title/year/country of the study	Main results
<i>A descriptive, cross-sectional study to assess the quality of life and sexuality in Turkish patients with a colostomy</i> ⁽⁹⁾ 2017 Turkey	Alteration of daily life and sexual activity routines; problems with erection, decreased libido and sexual satisfaction
<i>Demands of care of stomatized oncological patients assisted in primary health care</i> ⁽¹⁵⁾ 2017 Brazil	Social isolation and changes in lifestyle (the formation of gas and the odor from the pouch promote barriers to frequent specific social environments), changes in the way of dressing in order to hide the pouch, concern about self-image in front of the partner (a), decreased self-esteem and apprehension about the possibility of eliminating odor and feces during sex
<i>Oncology ostomized patients' perception regarding sexual relationship as an important dimension in quality of life</i> ⁽¹⁶⁾ 2017 Brazil	Changes in body image, in sexual function, marital adjustment and behavioral changes related to sexuality; problems with social relationships (feeling of exclusion and dependence)
<i>Experiences and coping with the altered body image in digestive stoma patients</i> ⁽¹⁷⁾ 2016 Brazil	Fear of the new reality and the exercise of self-care related to the stoma; the emergence of emotional decline due to the need to handle the ostomy
<i>The impact of an ostomy on the sexual lives of persons with stomas: a phenomenological study</i> ⁽¹⁸⁾ 2016 Peru	Discomfort during sexual intercourse, feeling of inability to engage in sexual intercourse, limitations in positions performed during sex, changes in body image and psychological problems such as anxiety and psychological distress
<i>Sexuality of people with intestinal ostomy</i> ⁽¹⁹⁾ 2015 Brazil	Altered body image, increased when facing self-image in front of the mirror, ostomy rejection, social isolation, fear of having sex, conflicting feelings, and concern
<i>Gastrointestinal ostomies and sexual outcomes: a comparison of colorectal cancer patients by ostomy status</i> ⁽²⁰⁾ 2014 United States	Sexual dysfunction and psychological distress associated with changes in body image
<i>Living with digestive stomas: strategies to cope with the new bodily reality</i> ⁽²¹⁾ 2014 Brazil	Shame and discomfort due to gas, fear of lack of control over the body
<i>Clinical profile and post-operative lifestyle changes in cancer and non-cancer patients with ostomy</i> ⁽²²⁾ 2012 Iran	Changes in diet, which affect weight loss, emotional changes (depression) and job change
<i>A cross-sectional survey of quality of life in colostomates: a report from</i> ⁽²³⁾ 2012 Iran	Impairments in sexual function and sexual pleasure
<i>Health-related quality of life among long-term Rectal Cancer survivors with an ostomy: manifestations by sex</i> ⁽²⁴⁾ 2009 United States	Prevalence in the development of erectile dysfunction and decreased return to sexual activity after ostomy surgery

To be continued

Chart 1 (concluded)

Title/year/country of the study	Main results
The meanings of being a man with intestinal stoma due to colorectal cancer: an anthropological approach to masculinities ⁽²⁵⁾ 2009 Brazil	Body changes, apprehension about sexual activity (feeling of being less of a man, problems with desire and penile erection), inability to return to work (feeling of failure, disappointment, and marginalization for not being able to support the family)
The sexuality meanings for people with permanent bowel stoma ⁽²⁶⁾ 2009 Brazil	Coping with the refusal of family support, disengagement in social and work activities, denial of sexuality and refusal of sexual contact initiated by the other
<i>Sexual health and quality of life among male veterans with intestinal ostomies</i> ⁽²⁷⁾ 2008 United States	Erectile dysfunction and reduced frequency of sex
<i>Boundary breaches: the body, sex and sexuality after stoma surgery</i> ⁽²⁾ 2008 Australia	Difficulty in dealing with altered appearance (bodily crisis), psychological distress (shame, loneliness, conflict, hatred, fear, sadness and depression), abstaining from intimate relationships, limits on positions held during sex and feeling less attractive to the partner
<i>Experiences of Swedish men and women 6 to 12 weeks after ostomy surgery</i> ⁽²⁸⁾ 2002 Sweden	Alienation of the body (decreased confidence, emotional shock, frightening experience when seeing the stoma for the first time, disgust), fear of hurting the stoma and feeling pain during sex, uncertainty about life with the stoma, difficulty in telling about the new reality to others, embarrassment due to loss of control over bowel movement, pain and skin rash around the stoma
<i>Preadmission and postdischarge of persons with an ostomy</i> ⁽²⁹⁾ 1996 United States	Concern about the ability to have sex, to participate in love games during sexual intercourse, to achieve pleasure during sex, and to be able to maintain the sexual interest of themselves and their partner.
<i>Sexual functioning after ostomy surgery</i> ⁽³⁰⁾ 1991 Netherlands	Reduced sexual arousal capacity (desire, erection, and lubrication) and orgasmic capacity
<i>Sexual adjustment in ileostomy patients before and after conversion to continent ileostomy</i> ⁽³¹⁾ 1981 Sweden	Reduced or absent sexual activity (the collection pouch emerged as a mechanical obstacle that interfered with sex)

DISCUSSION

Specifically, in men, intestinal ostomy can have an impact on sexuality and trigger physical, psychoemotional, and or social problems. Initially, the following outcomes stand out: erectile dysfunction, changes in sexual impulse, arousal, libido, ejaculatory disorders, and infertility, socially all considered threats to hegemonic masculinity.

Sexual function is an essential component of quality of life. It is broad and transposes the sexual intercourse itself. Sexual expression, in turn, constitutes the essential function of a person's life and, as a result, becomes vital in all stages of health and illness. The complete sexual function consists of the transition between

the stages of excitement and relaxation, with the inclusion of pleasure and satisfaction. On the other hand, sexual dysfunction occurs when there is an inability to participate in the sexual act with satisfaction or compromising on desire or arousal or orgasm^(9,32).

Male sexual dysfunction includes problems with erection, decreased libido, and abnormal ejaculation⁽³²⁾, situations presented by ostomized men, in the reviewed studies^(9,28).

Undamaged male sexual function requires interactions between vascular, neurological, hormonal, and psychological/psychiatric systems. The abnormalities may be related to the factors mentioned earlier and also associated with drugs and surgical interventions, in addition to diabetes mellitus, systolic arterial hypertension, obesity, physical inactivity, and lower urinary tract problems⁽³³⁾. There are also other risk factors, whether the origin is organic, psychosocial, or sociodemographic, such as age, family income, and education⁽³⁴⁾.

For the psychogenic activity to occur during erection, sexual images, which can originate in responses to erotic, visual, auditory, or fantasy stimuli, must happen and be boosted during the daily life of men, in the establishment of their relationships. Psychological factors are actively involved in cases of erectile dysfunction in which performance anxiety, characterized by a fear of failure during intercourse, emerges as an important causative agent, being involved in cognitive, affective, and interpersonal factors⁽³⁵⁻³⁶⁾. Men with ostomies, on the other hand, have presented changes in their body image, expressed by dysphoria, fear⁽¹⁷⁾, anguish, alteration of self-esteem, and this, finally, leads them to mental illness^(2,22).

In cases where erectile dysfunction emerges, interventions aimed at the lifestyle of men are recommended. This evidence is found in a systematic review that analyzed 5,465 studies and revealed the inclusion of physical exercise, with emphasis on aerobic exercises of moderate to high intensity, as a resource/strategy for the improvement of sexual dysfunction⁽³⁷⁾.

Also, sexuality influences behavior, defines genders, roles, and is part of people's lifestyles. In this context, sexual dysfunction compromises not only sexual satisfaction, but also the individual's overall life satisfaction. It is decisive for reducing the quality of life, decreases self-esteem, causes depression and anxiety, which culminate in losses in interpersonal relationships and with the significant person in affective and sexual relationships^(2,18,20,22).

In this sense, the ostomy may represent an obstacle in interpersonal relationships as they depend on the body, which comprises the existential basis of the human being, plus social values and attributes. In the presence of an ostomy, the body becomes transformed, which causes men to hide the ostomy. Such an attitude can be a reaction to representations and standards of the aesthetic (healthy) body, socially established⁽¹⁸⁻²¹⁾. The altered body image influences the appearance of diverse reactions, such as the feeling of loss of the ideal body, forcing the individual to adaptations and stress-generating demands^(16,38).

Although the involvement of professionals with sufficient knowledge and skills to assist ostomized patients is considered a factor that has greater impact on their lives, studies reveal that health care providers do not consider themselves comfortable in handling the problems arising from an ostomy and even less in dealing with the sexuality of sick people⁽³⁹⁾, as they feel they are not qualified to assist, so they attribute this service to specialist professionals⁽⁴⁰⁾.

A cross-sectional study carried out with 3,000 ostomized people from North America, and the United Kingdom revealed

that patients reported having technical difficulties with the management of their stomas and that they had the perception of having received inadequate information regarding the presented difficulty, a fact that was also associated to the presence of emotional, marital and social problems⁽⁴¹⁾.

In order to reduce and minimize the impact generated by the stoma on quality of life, we emphasize how crucial the care operated by nurses is, especially concerning stomatherapy nursing consultation. A study carried out with 100 men in Portugal identified this issue; it also highlighted the establishment of personalized support and follow-up to people in their different stages of adaptation. Thus, nurses are required to overcome challenges, such as optimization, adjustments, and personalization of interventions for each individual, in their unique and specific characteristics⁽⁴²⁾.

Also, regarding the approach to sexuality, it has been evident that health professionals are unprepared. A study carried out with nursing professionals in the city of São Paulo, Brazil, found the presence of prejudices, taboos, value judgments, and neutrality in conduct during professional practice. In addition, institutional failures were also identified, such as the lack of spaces for discussions about sexuality in professional training programs⁽⁴³⁾.

A review study of Brazilian origin, which sought to investigate the impacts of ostomy on quality of life and sexuality, identified that ostomized people need to resume their sexuality with the new condition, which demands from health professionals knowledge and skills to address the issue and propose appropriate support. The study also pointed out that changes in sexuality are associated with body image and affect esteem as well as interpersonal interaction with the significant person, family, and friends. These situations also confirm the findings of this review, in which the results identified the occurrence of reduced desire, dissatisfaction with sexual life, reduced sexual encounters, marital adjustments, changes in behaviors related to sexuality⁽⁴⁴⁾ such as changes in sexual positions, lack of desire or reduction of interest, which can evolve to inactivity or even rejection⁽¹⁴⁾.

Given the appearance of primary effects related to the manifestations resulting from the surgical procedure and changes in body image, psychoemotional, and mental repercussions also usually emerge. A study of Brazilian origin with men who had sexual difficulties revealed low quality in sexual functioning and the affective-marital relationship, with compromise in the climax and the experience of intense pleasure - for example, low sex arousal marked by premature ejaculation. Such impacts can influence male perception about the pleasure experienced in sexual encounters⁽⁶⁾. Moreover, in the case of men who live with stomas, these developments can occur due to apprehension, discomfort, and fear of leaking feces or gas, odor, and fear of hurting the stoma during sexual intercourse, in addition to the feeling of lack of control over the body, frightening experiences, self-rejection of the stoma and difficulty adapting to the new reality.

The repetition of negative experiences during the sexual encounter added to the frustrations, disappointments, and demands can still generate fear about the next sexual intercourse, mainly because men relate sexuality to the sexual act with penetration. The concern with performance, fear of failure, and fear of experiencing new frustrations cause men to suffer damage to their esteem and self-confidence, sometimes compromising their emotional health⁽⁶⁾.

Besides, the presence of an intestinal ostomy in a man can affect the expression of his sensuality, hinder intimate involvement with the partner. Once impaired, this expression can reduce the possibility of using erotic games, exploring different forms of stimulation and other sources of feeling pleasure, in addition to causing changes in sexual intercourse, reducing the frequency of encounters and reducing interaction with the significant person in the expression of their preferences and fantasies during sexual intercourse⁽²⁹⁾. Events like these were related to changes in sleep patterns and decreased comfort when sleeping with a significant person. In addition to this context, there is a shame, which, in turn, can cause anxiety, reduce the couple's intimacy and even end the relationship⁽⁴⁵⁾. A study carried out in Romania also identified the appearance of depression associated with this problem⁽³⁸⁾.

These repercussions are linked to the construction of masculinities, mainly to hegemonic masculinities, in which values such as virility, strength, and honor need to be self-affirmed⁽²⁵⁾. In the findings, there was a feeling of failure, helplessness, of becoming less of a man because of sexual dysfunction, in addition to disappointment and marginalization due to the possibility of not being able to provide for the family as a result of new adaptations, as in the exercise of labor functions^(9,13,23-27,30-31).

Considering the emergence of consequences for mental health, the United States Wound, Ostomy and Continence Nurses Society (WOCN), recommends that all patients with ostomy should be assisted with education, training, and psychosocial support so that they can adapt with success to problems related to illness and improvement of self-care⁽⁴⁶⁾.

Given these effects, other developments arising from the surgical act appear, affecting the physical health of men concerning the length of the procedure and the severity of the problem that originated the construction of the stoma. It also includes intestinal manifestations expressed through the loss of sphincter control, production of offensive gases and odors, pain and skin rash around the stoma due to the routine demand of using devices for the collection of waste, loss of control over gaining/losing weight, requiring changes and adaptations in eating habits as well as the adoption of a new diet, and pouch leakage. All these impacts require higher hospital and home care to patients to manage these problems. Besides, the lack of development of self-care skills with the stoma can result in depression and consequent social isolation^(2,22), which increases health needs and assistance costs⁽¹⁵⁾.

The repercussions are not limited to the sexual function: they are expressed in the quality of life of men, bearing in mind that sexuality also manifests itself as a human identity, which is strongly affected. Therefore, this article finds that the limitations generated by the stoma reflect in the development of daily practices and leisure and public environments attendance as well as work.

A study carried out in Portugal reinforces the findings of the present study and points to the occurrence of negative impacts on the labor activity of ostomized men (with the abandonment of work), in the adoption of a diet and the adjustments to the new condition⁽⁴⁷⁾.

In this perspective, due to the intestinal ostomy, men may have their integrity and autonomy affected, generating, in the marital relationship, a kind of mourning, and in the external world, personal and social conflicts^(2,19). Because of this situation,

couple/family therapy is essential, because men tend to have difficulties in talking about the ostomy with the significant person and dealing with the problem with friends and family. However, when supported by the family and relationships network, they are better able to adapt to the new condition⁽²⁸⁾.

From then on, attention based on gender and masculinity relationships is recommended to build learning about sexuality and sexual health, as a way of reducing stereotypes, prejudices, and stigmas of the ostomized person^(25,43). Based on this knowledge, nurses, when caring for ostomized men, will help to resolve doubts, negotiate self-care strategies, expand autonomy, promote confidence and encourage the role of men to enhance their active participation in recognition of their health and care needs in their therapeutic processes.

We highlight the need to develop, with men, actions to promote body care, stoma care, dealing with bodily manifestations that generate discomfort, interface with sexual education, and the exercise of sexuality. Also, during nursing care planning, adaptation care can be stimulated through the expansion of emptying strategies to prepare the sexual act, for example, in addition to others that expand self-care and construction of family bonds and social support network, providing greater security, sexual satisfaction and improvement in the quality of life.

Study Limitations

As a limitation of the study, despite not defining a time frame, only productions captured from the descriptors used were included, and other validated terms could have extended the search. Besides, we considered for analysis only studies in English, Portuguese, and Spanish and in specific databases; however, we did not intend to exhaust the topic but to raise new questions for other investigations given the relevance of the theme.

Contributions to nursing and public health fields

The results observed in this review are relevant since we achieved the proposed objective, contributing to a better understanding and improvement of the approach to male sexuality, especially the health of men with intestinal stoma. Moreover, the contribution is important because these people are assisted, mainly, in the public health services of the country, places where nursing care is present and can be decisive for improving health, adapting to reality, and quality of life.

FINAL CONSIDERATIONS

The results allowed us to identify that the construction of an intestinal ostomy can cause changes, often definitive, in the sexuality of men, with significant repercussions in the biophysiological, psychoemotional and sociocultural dimensions.

We understand that nurse support is essential through nursing care planning, which can contribute to the quality of life of ostomized men through education strategies in programs that follow up men from preoperative to rehabilitation. The results presented support the safe decision-making of this professional, as it provides substantial knowledge to allow the implementation of practices in performing care for men experiencing intestinal ostomy and maintaining healthy sexuality.

We found, from this review, an evident gap in productions that deal with the repercussions generated on male sexuality resulting from intestinal ostomy and the implications for the nurse's performance. Thus, this study presents scientific relevance with a significant potential to contribute to the expansion of knowledge directed to the training of nurses focused on the assistance scope and to the direction of health actions and the implementation of focused public policies.

REFERENCES

1. Santos VLCC, Sawaia BB. A bolsa na mediação "estar ostomizado" - "estar profissional": análise de uma estratégia pedagógica. *Rev Latino-Am Enfermagem*[Internet]. 2000 [cited 2019 Feb 20];8(3):40-50. Available from: <http://www.scielo.br/pdf/rlae/v8n3/12398.pdf>
2. Manderson L. Boundary breaches: the body, sex and sexuality after stoma surgery. *Soc Sci Med*. 2005;61(2):405-15. doi: 10.1016/j.socscimed.2004.11.051
3. United Ostomy Associations of America. What is an Ostomy? [Internet]. 2015 [cited 2019 Feb 22]. Available from: <http://www.ostomy.org/What is an Ostomy.html>
4. Associação Brasileira dos Ostomizados. Quantitativo aproximado de pessoas ostomizadas no Brasil. [Internet]. 2015 [cited 2019 Feb 15]. Available from: http://www.abraso.org.br/estatistica_ostomizados.htm
5. Rocha J. Estomas intestinais (ileostomias e colostomias) e anastomoses intestinais. *Medicina (Ribeirão Preto)*. 2011;44(1):51-6. doi: 10.11606/issn.2176-7262.v44i1p51-56
6. Galati MCR, Alves JEDO, Delmaschio ACC, Horta ALM. Sexualidade e qualidade de vida em homens com dificuldades sexuais. *Psico-USF Itatiba*. 2014;19(2):242-52. doi: 10.1590/1413-82712014019002014
7. Lucia MCS, Paula MAB. Sexualidade de pessoas com estomia. In: Santos VLCC, Cesaretti IUR. *Assistência em estomaterapia: cuidando de pessoas com estomia*. 2ª ed. São Paulo: Atheneu; 2015. 624 p.
8. Pereira A. Masculinidades e saúde do homem. In: Sousa AR, Pereira A. *Saúde de homens: conceitos e práticas de cuidado*. Águia Dourada: Rio de Janeiro; 2017. 688 p.
9. Yilmaz E, Çelebi D, Kaya Y, Baydur H. A descriptive, cross-sectional study to assess quality of life and sexuality in turkish patients with a colostomy. *Ostomy Wound Manage*. 2017;63(8):22-9. doi: 10.25270/owm.2017.08.2229

10. Connell RW, Messerschmidt JW. Masculinidade hegemônica: repensando o conceito. *Rev Estud Fem.* 2013;21(1):241-82. doi: 10.1590/S0104-026X2013000100014
11. Mendes KDS, Silveira RCCP, Galvão CM. Revisão integrativa: método de pesquisa para a incorporação de evidências na saúde e na enfermagem. *Texto Contexto Enferm.* 2008;17(4):758-64. doi: 10.1590/S0104-07072008000400018
12. Moher D, Liberati A, Tetzlaff J, Altman DG, The PRISMA Group (2009). Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement. *PLoS Med.* 2009;6(6):e1000097. doi: 10.1371/journal.pmed1000097
13. Zhu X, Chen Y, Tang X, Chen Y, Liu Y, Guo W et al. Sexual experiences of Chinese patients living with an ostomy. *J Wound Ostomy Cont Nurs [Internet].* 2017 [cited 2019 Jan 3];44(5):469-74. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/28877113>
14. Moreira WC, Vera SO, Sousa GN, Araújo SNM, Damasceno CKCS, Andrade EMLR. Sexuality of patients with bowel elimination ostomy. *Rev Pesqui: Cuid Fundam.* 2017;9(2):495-502. doi: 10.9789/2175-5361.2017.v9i2.495-502
15. Barba PD, Bittencourt VLL, Kolankiewicz ACB, Loro MM. Demands of care of stomatized oncological patients assisted in primary health care. *Rev Enferm UFPE [Internet].* 2017 [cited 2019 Jan 5];11(8):3122-9. Available from: <https://periodicos.ufpe.br/revistas/revistaenfermagem/article/view/110217>
16. Kimura CA, Guilhem DB, Kamada I, Abreu BS, Fortes RC. Oncology ostomized patients' perception regarding sexual relationship as an important dimension in quality of life. *J Coloproctol.* 2017;37(3):199-204. doi: 10.1016/j.jcol.2017.03.009.
17. Hueso-Montoro C, Bonill-de-las-Nieves C, Celdrán-Mañas M, Hernández-Zambrano SM, Amezcua-Martínez M, Morales-Asencio JM. Experiences and coping with the altered body image in digestive stoma patients. *Rev Latino-Am Enfermagem.* 2016;24(e2840). doi: 10.1590%2F1518-8345.1276.2840
18. Vural F, Harputlu D, Karayurt O, Suler G, Edeer AD, Ucer C et al. The impact of an ostomy on the sexual lives of persons with stomas: a phenomenological study. *J Wound Ostomy Cont Nurs.* 2016;43(4):381-84. doi: 10.1097/WON.0000000000000236
19. Cardoso DBR, Almeida CE, Santana ME, Carvalho DS, Sonobe HM, Sawada NO. Sexualidade de pessoas com estomias intestinais. *Rev Rene [Internet].* 2015 [cited 2019 Feb 5];16(4):576-84. Available from: <http://periodicos.ufc.br/rene/article/view/2750>
20. Reese JB, Finan PH, Haythornthwaite JA, Kadan M, Regan KR, Herman JM et al. Gastrointestinal ostomies and sexual outcomes: a comparison of colorectal cancer patients by ostomy status. *Support Care Cancer.* 2014;22(2):461-68. doi: 10.1007/s00520-013-1998
21. Bonill-de-las-Nieves C, Celdrán-Mañas M, Hueso-Montoro C, Morales-Asencio JM, Rivas-Marín C, Fernández-Gallego MC. Living with digestive stomas: strategies to cope with the new bodily reality. *Rev Latino-Am Enfermagem [Internet].* 2014 [cited 2019 Feb 5];22(3):394-400. Available from: http://www.scielo.br/pdf/rlae/v22n3/pt_0104-1169-rlae-22-03-00394.pdf
22. Anaraki F, Vafaie M, Behboo R, Maghsoodi N, Esmaeilpour S, Safaee A. Clinical profile and post-operative lifestyle changes in cancer and non-cancer patients with ostomy. *Gastroenterol Hepatol Bed Bench [Internet].* 2012 [cited 2019 Feb 15];5(1):26-30. Available from: 10.0000/www.ncbi.nlm.nih.gov/PMC4017481
23. Mahjoubi B, Mirzaei R, Azizi R, Jafarinia M, Zahedi-Shoolami L. A cross-sectional survey of quality of life in colostomates: a report from Iran. *Health Qual Life Outcomes* 2012;10(136):1-6. doi: 10.1186/1477-7525-10-136
24. Krouse RS, Herrinton LJ, Grant M, Wendel CS, Green SB, Mohler MJ, et al. Health-related quality of life among long-term rectal cancer survivors with an ostomy: manifestations by sex. *Am J Clin Oncol.* 2009;27(28):4664-70. doi: 10.1200/JCO.2008.20.9502
25. Dazio EMR, Sonobe HM, Zago MMF. Os sentidos de ser homem com estoma intestinal por câncer colorretal: uma abordagem na antropologia das masculinidades. *Rev Latino-Am Enfermagem [Internet].* 2009 [cited 2019 Jan 5];17(5):664-69. doi: 10.1590/S0104-11692009000500011
26. Paula MAB, Takahashi RF, Paula PR. Os significados da sexualidade para a pessoa com estoma intestinal definitivo. *Rev Bras Colo-Proctol.* 2009;29(1):77-82. doi: 10.1590/S0101-98802009000100011
27. Symms MR, Rawl SM, Grant M, Wendel CS, Coons SJ, Hickey S, et al. Sexual health and quality of life among male veterans with intestinal ostomies. *Clin Nurse Spec.* 2008;22(1):30-40. doi: 10.1097/01.NUR.0000304181.36568.a7
28. Persson E, Hellstrom A. Experiences of Swedish men and women 6 to 12 weeks after ostomy surgery. *J Wound Ostomy Cont Nurs.* 2002;29(2):103-08. doi: 10.1067/mjw.2002.122053
29. Pieper B, Mikols C. Predischarge and postdischarge concerns of persons with an ostomy. *J Wound Ostomy Cont Nurs [Internet].* 1996 [cited 2019 Feb 2];23(2):105-09. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/8845888>
30. Van De Wiel HBM, Weijmar Schultz CM, Hengeveld MW, Staneke A. Sexual functioning after ostomy surgery. *J Sex Marital Ther.* 1991;6(2):195-207. doi: 10.1080/02674659108406534
31. Nilsson LO, Kock NG, Kylberg F, Myrvold HE, Palselius I. Sexual adjustment in ileostomy patients before and after conversion to continent ileostomy. *Dis Colon Rectum.* 1981;24(4):287-90.
32. Shamloul, R, Ghanem, H. Erectile dysfunction. *Lancet.* 2013;381(9861):153-65. doi: 10.1016/S0140-6736(12)60520-0
33. Sarris AB, Nakamura MK, Fernandes LGR, Staichak RL, Pupulum AF, Sobreiro BP. Fisiopatologia, avaliação e tratamento da disfunção erétil: artigo de revisão. *Rev Med.* 2016;95(1):18-29. doi: 10.11606/issn.1679-9836.v95i1p18-29
34. Araújo DB, Borba EF, Abdo CHN, Souza LAL, Goldstein-Schainberg C, Chahade WB, et al. Função sexual em doenças reumáticas. *Acta Reumatol Port. [Internet].* 2010 [cited 2019 Feb 15];35(1):16-23. Available from: https://www.researchgate.net/publication/44633297_Sexual_function_in_rheumatic_diseases_Funcao_sexual_em_doencas_reumaticas

35. Siddiqui MA, Peng B, Shanmugam N et al. Disfunção erétil em pacientes jovens tratados cirurgicamente com doença da coluna lombar: um estudo prospectivo de acompanhamento. *Espinha (PhilaPa 1976)*. 2012;37:797-801. doi: 10.1097/brs.0b013e318232601c
36. Burnett AL. Evaluation and management of erectile dysfunction. In: Wein AJ, Kavoussi LR, Campbell MF, et al. *Campbell-Walsh urology*. 10th ed. Philadelphia: Elsevier; 2012; 1:721-29.
37. Ferreira C, Gouveia M, Carmona S, Sanches R. Disfunção erétil: haverá melhoria com o exercício físico? *Rev Port Med Geral Fam*. 2017;33(6):430-31. doi: 10.1136/bjsports-2016-096418
38. Ciorogar G, Zaharie F, Ciorogar A, Birta D, Degan A, Balint I, et al. Quality of life outcomes in patients living with stoma. *HVM Bioflux [Internet]*. 2016[cited 2019 Feb 15];8(3):137-140. Available from: <http://www.hvm.bioflux.com.ro/docs/2016.137-140.pdf>
39. Santana Carvalho ES, Paiva MS, Aparício EC. Awkward bodies, but not forgotten: representations of women and men about their wounded bodies. *Rev Bras Enferm*. 2013;66(1):90-6. Available from: 10.1590/S0034-71672013000100014
40. Gemmill R, Kravits K, Ortiz M, Anderson C, Lai L, Grant M. What do surgical oncology staff nurses know about colorectal cancer ostomy care? *J Contin Educ Nurs*. 2011;42:81-8. doi: 10.3928/00220124-20101101-04
41. Nichols TR. Social connectivity in those 24 months or less postsurgery. *J Wound Ostomy Continence Nurs*. 2011;38:63-8. doi: 10.1097/WON.0b013e318202a804
42. Miranda LSG, Carvalho AAS, Paz EPA. Qualidade de vida da pessoa estomizada: relação com os cuidados prestados na consulta de enfermagem de estomaterapia. *Esc Anna Nery*. 2018;22(4):e20180075. doi: 10.1590/2177-9465-ean-2018-0075
43. Ziliotto GC, Marcolan JF. Representações sociais da enfermagem: a sexualidade de portadores de transtornos mentais. *Rev Min Enferm [Internet]*. 2014 [cited 2019 Feb 15];18(4):966-72. Available from: <http://www.reme.org.br/artigo/detalhes/976>
44. Da Vera SO, Sousa GN, Araújo SNM, Carvalho Alencar D, Silva MGP, Dantas LRO. Sexualidade e qualidade de vida da pessoa estomizada: reflexões para o cuidado de enfermagem. *Reon Facema [Internet]*. 2018 [cited 2019 Feb 05];3(4):788-93. Available from: <http://www.facema.edu.br/ojs/index.php/ReOnFacema/article/view/278/162>
45. Revicki D, Howard K, Hanlon J, Mannix S, Greene A, Rothman M. Characterizing the burden of premature ejaculation from a patient and partner perspective: a multi-country qualitative analysis. *Health Qual Life Outcomes*. 2008;6(1):33. doi: 10.1186/1477-7525-6-33
46. Ostomy Guidelines Task Force, Goldberg M, Aukett LK, Carmel J, Fellows J, Folkedahl B, et al. Wound, Ostomy and Continence Nurses Society (WOCN). Management of the patient with a fecal ostomy: best practice guide for clinicians. *J Wound Ostomy Continence Nurs*. 2010;37(6):596-98. doi: 10.1097/WON.0b013e3181f97e37
47. Oliveira AMP. Qualidade de vida da pessoa portadora de ostomia na Unidade Local de Saúde Nordeste [Internet]. Bragança: Instituto Politécnico de Bragança, Escola Superior de Saúde; 2016 [Dissertação]. Available from: <https://bibliotecadigital.ipb.pt/bitstream/10198/13339/1/Tese%20Final%20CD.pdf>