

Nursing care and repercussions in the life of the person with anal incontinence: integrative review

Cuidados de enfermagem e suas repercussões na vida da pessoa com incontinência anal: revisão integrativa

Cuidados de enfermería y sus repercusiones en la vida de la persona con incontinencia anal: revisión integrativa

Lívia Nunes Rodrigues Leme^I; Norma Valéria Dantas de Oliveira Souza^{II}; Priscilla Farias Chagas^{III}

ABSTRACT

Objective: to review the scientific production on anal incontinence (AI), and nursing knowledge on the subject to date. **Method:** this integrative review was conducted in June and July 2018 in virtual databases and the journal *Revista Estima*. Thirteen studies were selected. **Results:** the studies reviewed, published from 2006 to 2017, comprised four literature reviews and nine reports on other studies: one prospective, two comparative descriptive, two longitudinal, three descriptive and one comparative. Three analytical categories were identified: Technologies for AI management; Main complication – AI-related dermatitis; and Complexity of nursing care and therapeutic actions. **Conclusions:** knowledge production by nursing on this subject, although still incipient, plays an important role. The care described in the studies has beneficial effects the lives of people with AI, in that it can prevent complications and improve quality of life.

Descriptors: Fecal incontinence; nursing care; nursing; life quality.

RESUMO

Objetivo: revisar a produção científica sobre incontinência anal (IA), atualizando o conhecimento de enfermagem sobre o tema. **Método:** revisão integrativa, realizada em junho/julho de 2018, em bases virtuais de dados e na Revista Estima. Foram selecionados 13 estudos. **Resultados:** os estudos revisados foram publicados no período de 2006 a 2017, sendo quatro revisões bibliográficas, um estudo prospectivo, dois comparativos descritivos, dois longitudinais, três descritivos e um comparativo. Identificaram-se três categorias analíticas: Tecnologias para o manejo da IA; Principal complicação – dermatite associada à IA; e Complexidade dos cuidados de enfermagem e ações terapêuticas. **Conclusões:** a enfermagem desempenha importante papel na produção científica desta temática, apesar de ainda incipiente. Os cuidados descritos nos estudos revisados repercutem positivamente na vida da pessoa com IA, na medida em que podem prevenir complicações e trazer melhorias na qualidade de vida.

Descritores: Incontinência fecal; cuidado de enfermagem; enfermagem; qualidade de vida.

RESUMEN

Objetivo: revisar la producción científica sobre incontinencia anal (IA), actualizando los conocimientos de enfermería sobre el tema. **Método:** revisión integradora, realizada en junio / julio de 2018, en bases de datos virtuales y en el Revista Estima. Se seleccionaron trece estudios. **Resultados:** los estudios revisados se publicaron de 2006 a 2017, con cuatro revisiones bibliográficas, un estudio prospectivo, dos comparativos descriptivos, dos longitudinales, tres descriptivos y uno comparativo. Se identificaron tres categorías analíticas: Tecnologías para la gestión de la IA; Complicación principal - dermatitis asociada a la IA; y Complejidad del cuidado de enfermería y acciones terapéuticas. **Conclusiones:** la enfermería desempeña un importante papel en la producción del conocimiento en esta temática, aunque todavía incipiente, visto la captación de sólo 13 artículos, sin recorte temporal. Los cuidados descritos en los estudios son susceptibles de aplicabilidad, repercutiendo positivamente en la vida de la persona con IA en la medida en que pueden prevenir complicaciones y traer mejoras en la calidad de vida.

Descritores: Incontinencia fecal; cuidados de enfermería; enfermería; calidad de vida.

INTRODUCTION

Incontinence is a frequent problem in the population, especially in the elderly and in women, resulting in serious biopsychosocial damage to this population^{1,2}. Anal Incontinence (AI) is defined by the International Continence Society (ICS) as any involuntary loss of feces and/or gases in an inappropriate location and in any age group after obtaining sphincter control³.

^INurse. Specialist. Master Student, Rio de Janeiro State University. Brazil. E-mail: livialememri@gmail.com

^{II}Nurse. PhD. Associate Professor, Rio de Janeiro State University. Brazil. E-mail: norval_souza@yahoo.com.br

^{III}Nurse. Specialist. Master Student, Rio de Janeiro State University. Brazil. E-mail: priscillafarias15@yahoo.com.br

Anal continence is maintained by the structural and functional integrity of the anorectal neuromuscular unit and of the pelvic floor⁴. Several mechanisms contribute to normal continence: intestinal motility, fecal volume and consistency, level of consciousness, sphincter tone, and integrity of neuronal innervation^{5,6}. Any pathology that changes these mechanisms may lead to AI, such as disorders of the anal sphincter muscles and of the pelvic floor, neuromuscular disorders, and changes in feces consistency and rectal sensitivity^{7,8}. AI is therefore a disorder that can be related to age and diseases such as Crohn's, ulcerative colitis, celiac disease, diabetes and concomitant constipation and diarrhea⁹.

AI has a prevalence that is difficult to evaluate due to underreporting. Rates may range from 2% to 17% of the general population¹⁰. In Brazil, there is little data and one study cites prevalence variations ranging from 3.6% of self-reported incontinence to 70.1%, with reports of liquid fecal incontinence¹¹.

Underreporting is due to cultural aspects, patient embarrassment or mis-perception of it being a normal consequence of aging¹¹. AI often leads to emotional and social disorders, impaired working relations, loss of self-esteem and depression^{2,6,12}, which can lead to more serious situations.

AI treatment includes one or more of the following: diet, medications, bowel training, pelvic floor exercises and biofeedback, surgery, rectal irrigation, and colostomy¹³. The nurse plays a key role in the care of people with this disorder, applying or guiding several of these treatments, requiring him to be able to develop a safe and skilled care to this population. The nurse must plan an individualized assistance aiming at care in its different dimensions.

It is important to know what nursing has produced about nursing care for people with AI and this article presents the study of publications about this nursing care as its theme.

The main objective of this study was to review the scientific production on AI, updating the nursing knowledge on the subject. The following were selected as specific objectives: to identify the methodological design of research related to nursing care to the person with AI; and to analyze nursing care, discussing its repercussions in the life of the person with AI.

This study is justified by the need to deepen the knowledge on the subject, producing relevant data that can serve as a basis for future research. In addition, this work may contribute to improving the quality of nursing care, aiming at preventing complications and improving the client's quality of life.

METHODOLOGY

This is a descriptive research, of the integrative review type, characterized by providing the synthesis of knowledge and the practical incorporation of conclusions from scientifically recognized studies, due to the methodological rigor and relevant findings¹⁴. This review incorporates six phases.

The first was to identify the theme and the research question, namely: What has been published on nursing care for individuals with AI?

In the second phase, the inclusion and exclusion criteria of the studies were established. Thus, the following were selected as inclusion criteria: studies in Portuguese, English and Spanish; in the public domain; without temporal cut-out, to broaden the capture of studies; published in the Virtual Health Library (*Biblioteca Virtual em Saúde*, BVS), the Scientific Electronic Library Online (SciELO) and the United States National Library of Medicine (PUBMED) databases, as well as in publications from the *Estima* Journal, a periodical in the area of Stomatherapy. As for the exclusion criteria, theses, dissertations and monographs were deleted.

Data was collected in June and July 2018, using the following descriptors: *fecal incontinence* and *nursing*, and the keyword *anal incontinence*, in different combinations using the Boolean *AND* in the search.

The initial search resulted in 3370 studies, subdivided into two groups, according to the following combinations: fecal incontinence and nursing: 2092 studies; and anal incontinence and nursing: 1278 studies.

Applying the inclusion and exclusion criteria, the search resulted in 331 articles, of which 51 were selected for full reading because they approached the object of study. 38 studies were excluded because they did not meet the research objectives. The final sample was composed of 13 articles, according to the diagram presented in Figure 1.

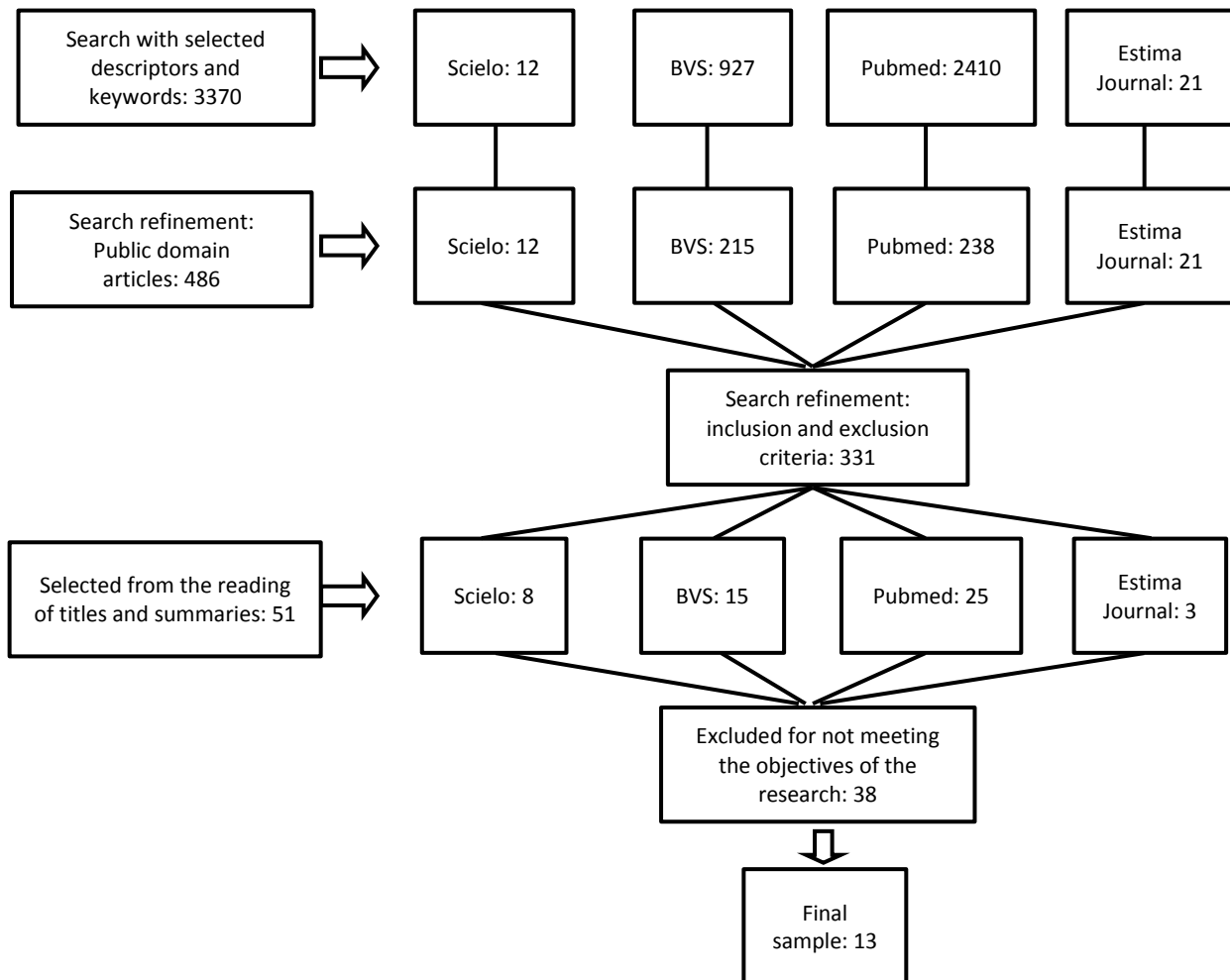


FIGURE 1: Description of data collection, 2018.

The third phase was characterized by the evaluation, selection and definition of the information to be extracted from the captured publications. Therefore, a form was prepared containing the following variables: title, journal/Qualis, year/place of publication, type of study and main subject, and nursing care.

In the fourth phase, the evaluation of the selected studies was performed, grouping them in a synoptic table that contained information captured from the described form. This was followed by the fifth phase, the interpretation of the results, by means of a joint analysis of the form and the summary table.

The results were presented through categories, which emerged with the logic of approximation of the results; and followed by the discussion of the findings, composing the sixth and last phase of this research. The analysis of the studies allowed to identify convergences, allowing the creation of categories, which facilitated the discussion process of the focus of this study. From the analysis three analytical categories emerged: Technologies for the treatment of AI; Main complication due to AI; and AI and the complexity of care and therapeutic actions.

Data treatment was performed in the light of Bardin's content analysis technique. This is an analysis technique that consists of a set of procedures in which, through the interpretation of the content of any class of documents, the analysis can be performed and, thus, collaborate in the interpretation of the results¹⁵.

RESULTS AND DISCUSSION

The present study reviewed 13 articles^{4,16-27} that met the previously established criteria and an overview of them is presented below. The characterization of the captured production is listed in Figure 2.

Title of the article	Periodical/ Qualis	Year/ Place of publication	Type of study	Main subject
O enfermeiro na atenção à pessoa com incontinência anal ¹⁴ .	CuidArte Enfermagem B5	2017/SP	Bibliographic review	The role of the nurse in the care of the person with AI
Incidence and Characteristics of Incontinence-Associated Dermatitis in Community-Dwelling Persons with Fecal Incontinence. ¹⁶	J. Wound Ostomy Continence Nurs. A1	2015/USA	Prospective cohort study	IAD in AI outpatients
Nuevos dispositivos de derivación y colección fecal: efectos adversos descritos en la bibliografía. ¹⁷	Enferm. Intensiva	2014/Spain	Bibliographic review	Applied equipment for the control of feces
Incontinence-associated dermatitis in community-dwelling individuals with fecal incontinence. ¹⁸	J Wound Ostomy Continence Nurs. A1	2013/USA	Descriptive and comparative study	IAD in AI outpatients
Profundizando en el conocimiento sobre el manejo del dispositivo para control de la eliminación fecal en el paciente crítico. ¹⁹	Enferm. Intensiva	2013/Spain	Longitudinal observational analytical study	Applied equipment for the control of feces
Symptoms associated with dietary fiber supplementation over time in individuals with fecal incontinence. ²⁰	Nurs. Res. A1	2011/USA	Longitudinal study	Evaluation of fiber supplementation for patients with AI.
Use and evaluation of disposable absorbent products for managing fecal incontinence by community-living people. ²¹	J. Wound Ostomy Continence Nurs. A1	2011/USA	Descriptive analysis	Use and evaluation of absorbent products in AI outpatients
Effective management of acute faecal incontinence in hospital: review of continence management systems. ²²	Frontline Gastroenterol.	2010/United Kingdom	Bibliographic review	Applied equipment for the control of feces
Diet and eating pattern modifications used by community-living adults to manage their fecal incontinence. ²³	J. Wound Ostomy Continence Nurs. A1	2010/USA	Descriptive comparative study	Dietary changes in cases of AI
Goals of fecal incontinence management identified by community-living incontinent adults. ²⁴	West. J. Nurs. Res. A1	2010/USA	Descriptive analysis	Identify AI patients' goals
Health literacy and emotional responses related to fecal incontinence. ²⁵	J. Wound Ostomy Continence Nurs. A1	2010/USA	Descriptive analysis	Health education and its influence on care seeking and patient communication about AI
Comparison of recall and daily self-report of fecal incontinence severity. ²⁶	J. Wound Ostomy Continence Nurs. A1	2008/USA	Comparative analysis	Comparison between recollection and daily self-report of the severity of AI
Fecal incontinence in acutely and critically ill patients: options in management. ²⁷	Ostomy Wound Manage. B1	2006/USA	Bibliographic review	AI management options

FIGURE 2: Scientific production in specialized nursing care for people with AI, 2006-2017. Rio de Janeiro, 2018.

The articles included in this review demonstrate the importance of nursing professionals in the scientific production related to the theme, although other areas also have an interface with AI.

It was found that most articles were published in journals of high scientific impact, eight being in journals with Qualis A1^{16,18,20,21,23-26}, one in a B1 journal²⁷, one in a B5 journal⁴, and the journal Qualis was not identified in three publications^{17,19,22}. Qualis is a system for evaluating the quality of the intellectual production in postgraduate

programs, in a classification carried out by the evaluation areas, where journals are classified into quality indicative strata – A1, the highest; A2; B1; B2; B3; B4; B5; C – with zero weight, being updated annually²⁸⁻³⁰.

Considering the importance and high scientific rigor of the journals in which most of the articles were published, it is understood that these studies dealt with themes of national and international interest, with scientific evidence able to assist professionals in their decisions to improve care in several aspects.

It was found that only five studies can be considered as more current, with less than 5 years of publication, six have between 5 and 10 years of publication and two were published more than 10 years ago. Therefore, the need to update studies on the subject is necessary, with a view to improving the production of knowledge about nursing care for this population.

Four bibliographic reviews, one prospective study, two descriptive comparative studies, two longitudinal studies, three descriptive studies and one comparative study were evidenced in the sample.

The main subject of the articles was varied, five talk about equipment and products for the control and management of AI, two about Incontinence Associated Dermatitis (IAD), two about food and dietary issues, one about the nurse's role in relation to patients with AI, one about identifying AI patients' goals, one about the influence of health education, and one about comparing the recollection and daily self-report of AI severity. The variety of subjects reveals nurses' range of action in caring for the person with AI.

The following are the analytical categories that emerged from the analysis of the captured studies.

Technologies for the management of anal incontinence

This category discusses the equipment and adjuvants used to manage and promote the quality of life of people with AI. The main equipment cited in the studies were those used for absorption and control of feces elimination. The authors cite diapers²⁷, absorbents²¹, collector systems²⁷ and feces management^{17,19,22,27}. As for the adjuvants, one study addressed skin protection products such as barrier creams or ointments and perineal cleansers²⁷.

Diapers are the equipment used to absorb the body's effluents and should avoid leaks²⁷. Their use is common to minimize the constraints arising from AI. However, when used improperly, they may increase the risk of skin lesions such as perineal dermatitis^{4,27}. In addition, diapers have the limitation of not controlling odors. Given the currently available technologies, diapers have not been considered as recommended resources for prolonged AI management due to these risks and limitations²⁷.

Absorbents are often used by individuals with AI who are outside the hospital in order to avoid embarrassment and to reduce related worries and anxieties. However, few absorbent products are specifically designed to absorb feces. Instead, most individuals must conform using products designed for urine loss or menstruation²¹. Thus, it is necessary to develop specific absorbents for this population, allowing access to more suitable, comfortable, effective and low cost products.

Collector systems consist of a self-stick skin barrier and of an attached pouch that can be connected to a bedside drain collector. It is a closed system, totally external and non-invasive²⁷. When used properly, it can prevent injuries, minimize odor, track the output of feces accurately, conserve care, minimize expenses and increase the patient's acceptance and comfort²⁷.

Management systems consist of a soft silicone catheter that is inserted into the rectum and secured by a low pressure retention balloon at the proximal end of the catheter designed to contain and divert fecal output to a collection bag at the distal end^{17,19,27}. They are indicated for bedridden patients with liquid and semi-liquid feces or for patients with perineal lesions with risk of infection¹⁷.

These systems have several advantages such as removal of moisture in the skin and consequent reduction of IAD, reduction of infections, promotion of well-being and dignity to the patients, reduction of personnel and material and clothing costs, possibility of irrigation and medication instillation directly through the system if necessary^{22,27}. Some adverse effects may also be cited, such as loss of peri-tube feces, rectal or anal bleeding due to necrosis or ulceration, anal sphincter atony, infection, obstruction and intestinal perforation¹⁷.

Despite these potential complications, the benefits of such equipment are high and their use should not be discouraged, and it is recommended that individuals using them be routinely monitored for prevention and early identification of any complications^{17,19}.

Adjuvants such as creams, skin barrier ointments and perineal cleansers, are designed to prevent injury and/or to treat the skin. These are products that can be combined with other technologies, but with care to avoid maceration or not to impair the adhesive capacity of other equipment by the excessive use of the products²⁷.

Main complication due to anal incontinence

The present category discusses the main complication of AI cited in the studies: Incontinence Associated Dermatitis (IAD), an inflammation of the skin associated with moisture, as a result of its contact with feces in the case of AI, or with feces and urine, in mixed incontinence^{4,16,18}. It presents with areas of erythema, edema or loss of skin integrity, which may cause discomfort and/or pain. Individuals with IAD also have a higher risk of developing pressure injuries in the affected region. Skin damage of IAD can occur in various areas of the perineum, intergluteal region, thighs and groin area^{16,18}. Intestinal enzymes and bacteria can affect skin integrity and cause the damage described.

The side effects of skin contact with feces are hyperhydration and maceration, as well as increased temperature in the region due to the improper use of containment devices such as diapers and absorbents⁴.

The prevalence of IAD can be as high as 20% in hospitalized patients, 50% in critically ill patients and 41% in AI outpatients¹⁶. In the latter, the severity of IAD is typically mild, with spread generally limited to only one area of the body, erythema being the most common symptom. Despite the mild symptoms, IAD often produces discomfort, with reports of pain in 78% to 38% of the individuals, as well as symptoms of itching or burning¹⁶.

The association between AI severity and IAD severity is weak, suggesting that people with AI of any severity are at increased risk for IAD. The specific characteristics of AI severity that are significantly related to the severity of IAD are the number of leaking feces and the frequency of incontinence¹⁸.

The time for the onset of IAD symptoms in outpatients varies by approximately 14 days, which is considerably longer compared to critically and severely ill patients, when the average onset of symptoms is 4 days¹⁶.

Feces consistency may or may not imply a greater risk for IAD. One study cites that prolonged skin contact with feces of any consistency represents an increased risk¹⁸, while another mentions that liquid feces are associated with a higher probability of IAD due to higher skin irritant content, nutrient malabsorption and impaired patient nutrition, especially in hospitalized patients⁴.

Anal incontinence and the complexity of care and therapeutic actions

This category seeks to discuss the complexity of care and of the therapeutic actions taken to cure and/or minimize the problem of AI, including highlighting the appropriation of knowledge from other areas, such as nutrition and physical therapy, with the intention of improving the quality of life of people with AI.

Nursing care for this population begins with the issue of health education and guidance on the various aspects involving AI and the achievement of well-being. Studies in this review state that patients should be advised on the use and choice of collection and adjuvant equipment^{4,21,27}, on the eating habits and dietary changes to improve AI^{4,20,23}, on the medications that may influence the onset and worsening of AI,⁴ on the usual skin care¹⁶ and also regarding the methods for the prevention of IAD^{4,16,18}.

The evaluation of the therapeutic modalities is also part of nursing care, so as to select with the patient the best therapeutic resource for each case. The nurse should evaluate and guide the pelvic floor exercises, biofeedback, irrigation, percutaneous tibial nerve stimulation and cognitive techniques to reduce anxiety⁴. Identifying the management options for AI that are preferred by patients allows for a better planning according to their priorities and preferences, thus establishing a greater likelihood of adherence to the proposed treatments²⁴.

Regarding the technologies for the management of AI, there are several care measures that nurses should develop. Diapers and other absorbent equipment need to be changed at each episode of AI, promoting skin cleansing and the use of barrier creams to prevent the occurrence of IAD^{4,27}. Care of fecal management systems also needs to be part of the nurse's work routine^{19,22,27}. For example, it is recommended to identify the profile of individuals at risk of complications¹⁹, to perform the digital examination before system insertion, to manage complications such as obstruction and deviation, and to control the retention balloon²².

The nurse should also investigate IAD in outpatients, questioning them about AI, the presence of symptoms and the severity, since the stigma and embarrassment resulting from it often prevent patients from seeking help spontaneously.^{16,18} The nurse should teach self-assessment using mirrors, for example, to check the perineal region and the surrounding areas.¹⁶ Hospitalized patients using AI management technologies also need to be routinely evaluated for the prevention and care of IAD^{17,19,22,26}.

Emotional support is also part of the nursing care for this population. The professional should advise and support the person to overcome setbacks and to reflect on their own goals, as well as knowing the possible emotional responses to AI in order to promote therapeutic support, facilitating the acceptance of AI and a better adherence to treatment^{24,25}.

CONCLUSION

The study reveals the importance of nursing in the production of knowledge on this subject, but it is still incipient, considering the capture of only 13 articles, without determining temporal cut-outs, obtaining publications from 2006 to 2017.

Nursing is directly linked to the various types of care described, which can have a positive impact on the life of individuals with AI, as they can prevent complications and bring improvements in the quality of life of assisted clients. The nurse should promote an individualized and comprehensive approach in order to enable greater adherence to the proposed treatments, resulting in a better prognosis.

It is considered that a limitation of the study was to adopt analysis of articles only in the public domain, thus restricting the capture of a larger quantity of publications, which could further enrich the production of results and the discussion of the collected data.

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