Socio-demographic and clinical characterization of intestinal ostomized people: an integrative literature review

Caracterização sociodemográfica e clínica de pessoas ostomizadas intestinais: uma revisão integrativa da literatura

Caracterización socio demográfica y clínica de personas ostomizadas intestinales: una revisión integrativa de la literatura

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Abstract
This study aims to identify and analyze the sociodemographic and clinical characteristics of people with intestinal ostomy in the Brazilian literature. This is an Integrative Review of Scientific Literature, whose search for studies occurred in the following databases: Lilacs, CINAHL, PubMed/MedLine, BDENF, Scopus, SciELO Virtual Library and reverse search of selected articles. Of the 14 articles compiled, 78.57% have a descriptive design; the Lilacs database had the highest number of articles (64.28%); the Revista Brasileira de Coloproctologia was the one that published most (42.85%), with a predominance of publications equally in the years 2017 and 2018 (21.42%); the Northeast region predominated in the number of articles published (49.98%). The predominant age ranged from 60 to 100 years (47.86%); married (26.64%); male (53.83%), of mixed ethnicity (20.97%), Catholic (6.51%), retired (23.11%), with elementary education (33.95%) and salary income ≤ 1 minimum wage (24.60%). There was a predominance of colostomy (83.95%), urgent (11.83%), without preoperative demarcation (4.22%), temporary permanence (42.69%), having the neoplasm as the cause main (51.14%), with complication of dermatitis (3.88%), diameter 20-40mm (1.69%), of 1 piece (16.15%), with pasty effluent (3.03%). The scarcity of Brazilian research on the subject is highlighted. However, it was possible to expand knowledge about the studied population.
Keywords: Ostomy; Colostomy; Ileostomy; Intestinal elimination; Health profile.

Resumo
O presente estudo tem como objetivo identificar e analisar as características sociodemográficas e clínicas de pessoas com estomia intestinal na literatura brasileira. Trata-se de uma Revisão Integrativa da Literatura Científica, cuja busca

dos estudos ocorreu nas bases de dados: Lilacs, CINAHL, PubMed/MedLine, BDENF, Scopus, Biblioteca virtual SciELO e busca reversa dos artigos selecionados. Dos 14 artigos compilados, 78,57% apresentam delineamento descritivo; a base de dados Lilacs apresentou maior número de artigos (64,28%); a Revista Brasileira de Coloproctologia foi a que mais publicou (42,85%), com predomínio de publicações igualmente nos anos 2017 e 2018 com (21,42%); a região Nordeste predominou no número de artigos publicados (49,98%). A idade predominante variou de 60 a 100 anos (47,86%); casado (26,64%); do sexo masculino (53,83%), de etnia pardo (20,97%), católico (6,51%), aposentado (23,11%), com escolaridade de nível fundamental (33,95%) e renda salarial ≤ 1 salário mínimo (24,60%). Predominou-se a colostomia (83,95%), de caráter de urgência (11,83%), sem demarcação pré-operatória (4,22%), de permanência temporária (42,69%), tendo a neoplasia como causa principal (51,14%), com complicação de dermatite (3,88%), diâmetro 20-40mm (1,69%), de 1 peça (16,15%), com efluente pastoso (3,03%). Destaca-se a escassez de pesquisas brasileiras sobre a temática. Entretanto, foi possível ampliar o conhecimento sobre a população estudada.
Palavras-chave: Estomia; Colostomia; Ileostomia; Eliminação intestinal; Perfil de saúde.

Resumen
Este estudio tiene como objetivo identificar y analizar las características sociodemográficas y clínicas de las personas con ostomía intestinal en la literatura brasileña. Se trata de una Revisión Integrativa de Literatura Científica, cuya búsqueda de estudios se realizó en las siguientes bases de datos: Lilacs, CINAHL, PubMed / MedLine, BDENF, Scopus, Biblioteca Virtual SciELO y búsqueda inversa de artículos seleccionados. De los 14 artículos recopilados, el 78,57% tiene un diseño descriptivo; la base de datos Lilacs tuvo el mayor número de artículos (64,28%); la Revista Brasileira de Coloproctologia fue la que más publicó (42,85%), con predominio de publicaciones por igual en los años 2017 y 2018 (21,42%); la región Nordeste predominó en el número de artículos publicados (49,98%). La edad predominante osciló entre 60 y 100 años (47,86%); casado (26,64%); masculino (53,83%), de etnia mixta (20,97%), católico (6,51%), jubilado (23,11%), con educación básica (33,95%) e ingreso salarial ≤ 1 salario mínimo (24,60%). Hubo predominio de colostomía (83,95%), urgente (11,83%), sin demarcación preoperatoria (4,22%), permanencia temporal (42,69%), teniendo la neoplasia como causa principal (51,14%), con complicación de dermatitis (3,88%). %), diámetro 20-40 mm (1,69%), de 1 pieza (16,15%), con efluente pastoso (3,03%). Se destaca la escasez de investigación brasileña sobre el tema. Sin embargo, fue posible ampliar el conocimiento sobre la población estudiada.
Palabras clave: Ostomía; Colostomía; Ileostomía; Eliminación intestinal; Perfil de salud.

1. Introduction

The words ostomy or stoma have Greek origin that represent mouth, opening or orifice aimed at the externalization of any hollow viscera of the body. It is characterized by being an artificial opening from the gastrointestinal tract. This surgical opening, when performed in the intestine, has the purpose of diverting and externalizing a portion of the intestine through the abdominal wall, being indicated when there is injury, obstruction or dysfunction in any part of the intestine (Fernandes et al., 2010; Ramos et al., 2012; Ribeiro et al., 2019).

The stomas are given specific denominations according to the externalized part, namely: in the large intestine: colostomy, in the small intestine: ileus = ileostomy; having as main purpose the deviation of feces and gases, directing the fecal content to the external environment, using intestinal effluent collecting equipment (Fernandes et al., 2010; Ramos et al., 2012; Ribeiro et al., 2019).

Several clinical conditions lead to the preparation of intestinal stomas, among them: neoplasms, inflammatory bowel diseases, diverticular diseases, as well as external causes, such as white arm wounds, gunshot or blunt trauma, consequent to car accidents or interpersonal violence, among others (Aguiar et al., 2017).

The knowledge of the characteristics of people with intestinal ostomy enables a planning of care to this population that meets their personal needs and subsidizes the institutions that treat this clientele to improve the service provided. However, the scarcity of studies in relation to the profile of ostomized people in Brazil and, to date, the absence of official data on the quantity of this social group, substantially compromises the quality of any health care proposal in this population.

Care for people with intestinal ostomy is regulated by Ordinance n. 400/2009. The objective of this Ordinance is the rehabilitation of patients with emphasis on self-care, prevention and treatment of complications in the ostomies and supply of protective and safety collection and adjuvant equipment (Brasil, 2009). Therefore, the care services of this population must

maintain reliable records in order to enable the feasibility, availability and use of data that converge in the elaboration of health and disease indicators that portray the profile of the ostomized, establishing an important instrument to be used in the various segments of the health area and similar.

Identifying the profile of people with intestinal ostomy allows a better knowledge of this population, contributes to the management of care as well as to the action on morbidities and mortality. Moreover, it collaborates to implementing actions, aiming at joint work between the official agencies, in favor of health compatible with a dignified and healthy life (Cunha et al., 2013). In Brazil, studies describing the profile of people with intestinal ostomy are insipid, which hinders compiling the data and characterizing information indispensable for this population in order to subsidize public health policies (Sasaki et al., 2012).

An integrative literature review, performed by Cunha, Ferreira, Backes (Cunha et al., 2013) in 2013, aimed to identify the sociodemographic and clinical characteristics of ostomized people (intestinal stomas and gastrostomies) compiled from Latin American scientific journals, from the past ten years (July 2002 to July 2012) in LILACS database and *Estima* Journal, official publication vehicle of the Brazilian Association of Stomatherapy: ostomy, wounds and incontinences (SOBEST). The final sample consisted of only six articles, evidencing the scarcity of studies, which did not allow a comprehensive evaluation of the sociodemographic and clinical characteristics of the ostomized people.

In view of the above, there is a scarcity of studies on the subject, requiring an analysis of the Brazilian scientific production regarding the sociodemographic and clinical characteristics of people with intestinal ostomy.

Thus, the objective of the present study to identify and analyze the sociodemographic and clinical characteristics of people with intestinal ostomies in the Brazilian literature.

2. Methodology

This study was based on the methodological approach of a Integrative Literature Review (Roman & Friedlander, 1998).

The construction of the integrative review requires some steps to be followed in order to minimize failures. Thus, the following steps were followed: 1) selection of the hypothesis or research question; 2) search strategy (establishment of inclusion and exclusion criteria, database and selection of studies); 3) categorization of the studies (extraction, organization and summarization of the data); 4) evaluation of the studies included in the review; 5) interpretation of the results and; 6) synthesis of knowledge (Mendes et al., 2008).

For the elaboration of the research question of the integrative review, the PICO strategy (acronym for patient, intervention, comparison, outcomes) was used. The use of this strategy to formulate the research question in the development of review methods enables the identification of keywords/descriptors, which help locating relevant primary studies in databases (Overholt & Stillwelln, 2011).

To direct the study, the following research question was elaborated: What are the sociodemographic and clinical characteristics of people with intestinal ostomies, present in the Brazilian literature?

The first element of the strategy (P) consists of the adult intestinal ostomized patient; the second (I), identification of sociodemographic and clinical characteristics. The fourth (O), studies that characterized the sociodemographic and clinical profile of people with intestinal ostomy. Depending on the review method, not all elements of the PICO strategy are used. In this integrative review, the third element, that is, the comparison (C), was not used.

To answer the research question, inclusion and exclusion criteria were established. Inclusion criteria were: complete articles, without time clipping, available online, in Portuguese, English and Spanish, whose main objective was the research of sociodemographic and clinical variables of Brazilian people with intestinal ostomy. Publications such as theses, dissertations, papers published as abstracts, repeated articles, literature review articles, case studies, editorials, letters, studies of elaboration, validation or adaptation of instruments and scales and qualitative studies were excluded.

The bibliographic survey was conducted in June 2019, through online searches for national and international scientific productions. The recovery of these productions was compiled through the following databases: Latin American and Caribbean Health Sciences Literature (LILACS), Current Nursing and Allied Health Literature (CINAHL), PubMed/Medline (National Library of Medicine and National Institutes of Health), Nursing Database (BDENF), Scopus, Online Scientific Electronic Library (SCIELO) and reverse search of selected articles, i.e., reference of reference.

The DeCS/MeSH descriptors were defined: *Estomia*/Ostomy, *Colostomia*/Colostomy, *Ileostomia*/Ileostomy, *Eliminação Intestinal*/Intestinal Elimination, *Dados Demográficos*/ Demographic Data, *Adulto*/Adult, *Estatística*/Statistics, *Perfil de Saúde*/Health Profile and key words: *Dados*/Data, *Colostomias*/Colostomies, *Pessoas Estomizadas*/Ostomized People, *Caracterização*/Characterization, *Estomizado*/Ostomized, *Estomizados*/Ostomized, *Estomizada*/Stomized, *Estomizadas*/Stomized, *Caracterização Clínica*/Clinical Characterization, *Caracterização Sociodemográfica*/Sociodemographic Characterization, *Estoma Abdominal*/Abdominal Stoma.

The use of the Boolean operator (AND) allowed access to the articles between the descriptors and keywords, and the terms were combined in different ways, according to each database, to enable the adequate recovery of the literature. Table 1 presents the search engine used in each database, which keywords / descriptors were used and how many articles were selected according to the inclusion methods. It is worth highlighting that all the keywords / descriptors used in the database Scopus and Medline/Pubmed were listed, but no eligible article was obtained.

**Table 1 –** Search engine and number of texts retrieved from different databases, 2019.

Database	Key words/descriptors	Eligible articles
Lilacs (09)	Estomia and Intestinal and Adulto	01
	Colostomias	03
	Eliminação and Intestinais	01
	Estomia and Estatística	01
	Estomizados and Dados	01
	Estomizado	01
	Colostomia and Dados	01
Bdenf (01)	Colostomia and Perfil and Saúde	01
Cinahl (02)	Estomia	01
	Ileostomia	01
Scopus (0)	Stoma; Stoma and Statistics; Ostomy and Data; Ostomy and Clinical Characterization; Ostomy and Health Profile; Ostomy and Sociodemographic Characterization; Ostomy and Characterization; Ostomy; Stomas and Statistics; Stomas and Data; Stomas and Clinical Characterization; Patients Ostomy and	00

	Health Profile; Patients Ostomy and Characterization; Stomas and Sociodemographic characterization; Ostomy People; People Stomas and Data; People Stomas and Statistics; People Stomas and Clinical Characterization; People Stomas and Health Profile; People Stoma and Characterization; People Stomatized and Sociodemographic; Intestinal Eliminations; Intestinal and Data Elimination; Intestinal Eliminations and Clinical Features; Intestinal Eliminations and Health Profile; Intestinal Eliminations and Clinical Characterization; Intestinal Eliminations and Sociodemographic Characterization; Colostomies; Colostomies and Data; Colostomies and Statistics; Colostomies and Clinical Characterization; Colostomies and Health Profile; Colostomies and Sociodemographic Characterization; Ostomy; Ostomy and Data; Stomized and Statistics; Ostomy and Clinical Characterization; Ostomy and Health Profile; Ostomy and Sociodemographic Characterization; Abdominal Stoma and Demographic Data.	
Medline/ Pubmed (0)	Estomia; Estomia and Estatística; Estomia and Dados; Estomia and Caracterização Clínica; Estomia and Perfil de Saúde; Estomia and Caracterização Sociodemográfica; Estomia and Caracterização; Estomizados; Estomizados and Estatística; Estomizados and Dados; Estomizados and Caracterização Clínica; Estomizados and Perfil de Saúde; Estomizados and Caracterização; Estomizados and Caracterização Sociodemográfica; Pessoas Estomizadas; Pessoas Estomizadas and Dados; Pessoas Estomizadas and Estatísticas; Pessoas Estomizadas and Caracterização Clínica; Pessoas Estomizadas and Perfil de Saúde; Pessoas Estomizadas and Caracterização; Pessoas Estomizadas and Sociodemográficas; Eliminações Intestinais; Eliminações intestinais and Estatísticas; Eliminações Intestinais and Dados; Eliminações Intestinais and Características Clínicas; Eliminações Intestinais and Perfil de Saúde; Eliminações Intestinais and Caracterização Clínica; Eliminações Intestinais and Caracterização Sociodemográfica; Colostomias; Colostomias and Dados; Colostomias and Estatísticas; Colostomias and Caracterização Clínicas; Colostomias and Perfil de Saúde; Colostomias and Caracterização Sociodemográficas; Estomizada; Estomizada and Dados; Estomizada and Estatísticas; Estomizada and Caracterização Clínica; Estomizada and Perfil de Saúde; Estomizada and Caracterização Sociodemográfica; Estoma Abdominal and Dados Demográficos.	00
Scielo (02)	Estomia and Caracterização	01
	Eliminação Intestinal	01
TOTAL		14

Source: Authors (2019).

Figure 1 describes the number of articles that were found in the database, the number of articles that were excluded because they did not match the inclusion criteria or because they were repeated, and how many publications were included in the study, totalling a number of 1,351 publications in all, leaving only 14 eligible studies in full, according to what was presented in the flowchart following the orientations of the PRISMA group (Moher, 2009).

Figure 1. Flowchart of identification and selection of publications according to the PRISMA Statement.
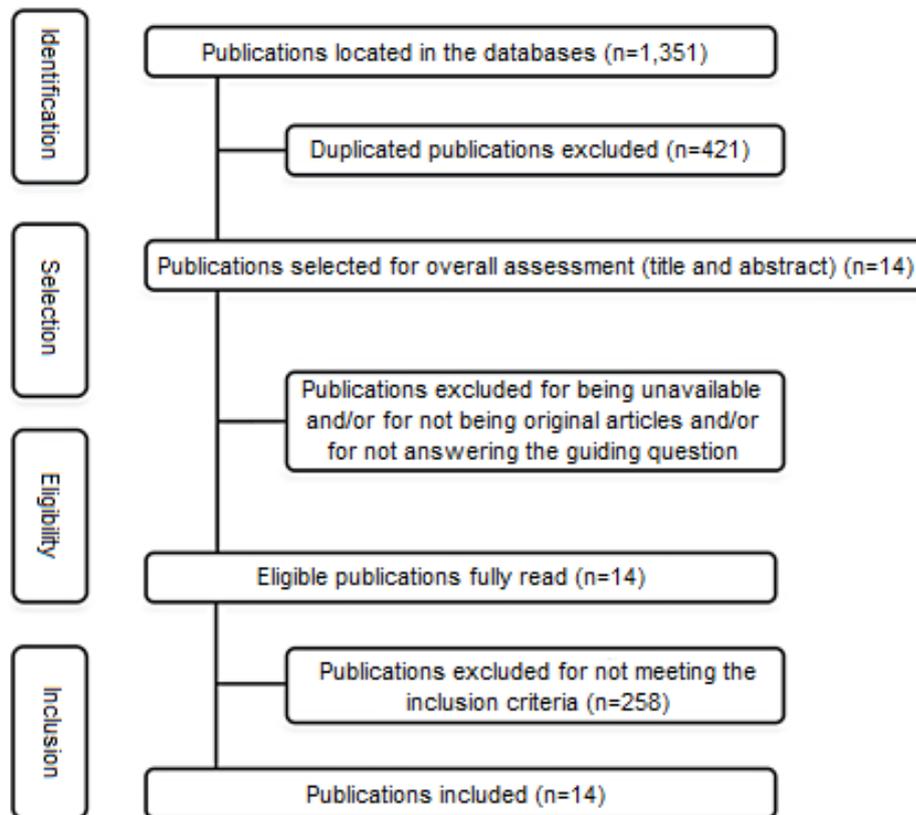
Source: Authors (2019).

In the selection of the articles, a careful reading of the title and abstract was performed in order to verify the adequacy with the guiding question and, later, a complete reading of the manuscripts to certify the inclusion and exclusion criteria established, and the analysis of the articles was performed descriptively.

Thus, the 14 articles that contemplated the object of the research were fully read. Two researchers performed the selection and analysis of the articles, aiming to avoid biases in their screening and description.

3. Results

The main information extracted from the articles for this study was organized as chart in the perspective of better visualization of the results.

Chart 1 briefly describes the results of the 14 articles included in the integrative review, according to author/year of publication, the authors professional category, the title of the article, used method, journal, database where they were found and the clinical sociodemographic characterization, so that a summary of each article description could be presented, making it easy for the reader to analyse each one of them individually.

Chart 1 – Description of the results included in the integrative review, according to author/year, professional category, title of the article, method, journal, database and sociodemographic and clinical characterization. Três Lagoas, MS, Brazil, 2019.

Author/ Year	Prof. Category	Title of the article	Method	Journal	Database	Sociodemographic and Clinical Characterization
Luz et al., 2009	Nurse	Characterization of patients submitted to intestinal stomas in a public hospital of Teresina-PI, Brazil	Descriptive study	Text and Context Nursing, v. 18, n. 1, p. 140-146, 2009	LILACS	Sociodemographic: sex, marital status, age group, education, family income, occupation. Clinical: type of stoma, diagnosis, surgical character, stay, effluents.
Fernandes et al., 2010	Nurse	Profile of the ostomized patients resident in the city of Ponte Nova, Minas Gerais, Brazil	Descriptive study	Journal of Coloproctology, v. 30, n. 4, p.385-392, 2010	LILACS	Sociodemographic: sex, marital status, age group, family income, ethnicity, occupation. Clinical: type of stoma, diagnosis, complications, effluents.
Sasaki et al., 2012	Nurse	Health care service for ostomy patients: profile of the clientele	Exploratory, descriptive and retrospective study	Journal of Coloproctology (Rio de Janeiro), v. 32, n. 3, p. 232-239, 2012	LILACS	Sociodemographic: sex, age group. Clinical: type of stoma, diagnosis, surgical character, types of bag.
Melotti et al., 2013	Medical Student	Characterization of patients with ostomy treated at a public municipal and regional reference center	Retrospective, documentary, descriptive study	Journal of Coloproctology (Rio de Janeiro), v. 33, n.2, p. 70-74, 2013	LILACS	Sociodemographic: sex, age group, education, occupation. Clinical: type of stoma, diagnosis, stay.
Barbosa et al., 2014	Nurse	Clinical and epidemiological aspects of	Descriptive, exploratory	Journal of Nursing and Health Care, v. 3, n. 1, p.	BDENF	Sociodemographic: sex, marital status, age group, education, occupation.

		intestinal ostomy patients in a municipality of Minas Gerais	study	64-73, 2014		Clinical: type of stoma, diagnosis, permanence.
Salomé et al., 2015	Nurse	Profile of ostomy patients residing in Pouso Alegre city	Descriptive study	Journal of Coloproctology (Rio de Janeiro), v. 35, n.2, p. 106-112, 2015	LILACS	Sociodemographic: sex, marital status, age group, education, occupation. Clinical: type of stoma, diagnosis, complications, stay, preoperative stoma demarcation, diameter, types of bag.
Santos et al., 2016	Physician	Children and adolescents ostomized in a reference hospital. Epidemiological profile	Observational, descriptive, individual study	Journal of Coloproctology (Rio de Janeiro), 36, n. 2, p. 75-79, 2016	SCIELO	Sociodemographic: sex, age group, ethnicity. Clinical: type of stoma, diagnosis, stay.
Lins Neto et al., 2016	Physician	Epidemiological characterization of ostomized patients attended in referral Center from the city of Maceió, Alagoas, Brazil	Cross-sectional, descriptive study	Journal of Coloproctology (Rio de Janeiro), v.36, n.2, p.64-68, 2016	LILACS	Sociodemographic: : sex, age group. Clinical: type of stoma, diagnosis, stay.
Andrade et al., 2017	Nurse	Sociodemographic, clinical and self-care aspects of persons with intestinal stoma	Cross-sectional study	UERJ Nursing Journal, v.25, p. 19368, 2017	LILACS	Sociodemographic: sex, marital status, age group, education, family income, occupation, religion. Clinical: type of stoma, diagnosis, stay, types of bag.
Aguiar et al., 2017	Nurse	Clinical and sociodemographic aspects	Cross-sectional study	Nursing Journal of Minas Gerais, v. 21, p.1013, 2017	LILACS	Sociodemographic: sex, marital status, age group, education, family income, occupation, religion.

		of people with a temporary intestinal stoma				Clinical: type of stoma, diagnosis, surgical character.
Queiroz et al., 2017	Nursing Student	Characterization of patients with an ileostomy that are treated on a reference service for patients with an ostomy	Exploratory, retrospective study	Enfermería Global, n. 46, p. 13-24, 2017	SCIELO	Sociodemographic: sex, marital status, age group, education, family income, ethnicity, occupation. Clinical: diagnosis, stay.
Freitas et al., 2018	Nurse	Characterization of the clientele and evaluation of health care service of the person with elimination stoma	Descriptive, cross-sectional study	Estima Journal, v. 16, p. 0918, 2018	CINAHL	Sociodemographic: sex, marital status, age group, education, family income, ethnicity. Clinical: type of stoma diagnosis, complications, surgical character, stay, effluents.
Ecco et al., 2018	Nurse	Profile of colostomized patients in the association of ostomized of Rio Grande do Norte	Descriptive, cross-sectional study	Estima Journal, v. 16, p.0518, 2018	CINAHL	Sociodemographic: sex, marital status, age group, education, family income, ethnicity, occupation. Clinical: diagnosis, stay.
Nascimento et al., 2018	Nurse	Sociodemographic and clinical profile of patients in postoperative recovery from intestinal stoma creation	Descriptive study	Ciencia y enfermería, v. 24, p. 15, 2018	LILACS	Sociodemographic: sex, age group, education, family income, ethnicity, occupation, religion. Clinical: type of stoma, diagnosis, surgical character, preoperative demarcation, types of bag.

Source: Authors (2019).

Of the 14 articles compiled, 78.57% are descriptive, and the Lilacs database presented most articles on the subject (64.28%). The journal that most stood out among the publications was the Journal of Coloproctology (42.85%), with a predominance of publications in 2017 and 2018 with 21.42%, respectively, with a predominance of national journals (85.71%). Regarding the professional category of the authors, most articles (71.42%) were performed by nurses, (14.28%) by physicians and (7.14%) by nursing and medical students.

Regarding the geographic region, 49.98% were developed in the northeast region of the country, followed by the southeast region (42.85%) and the south region (7.14%), respectively.

Table 2 and Table 3 show variables sociodemographic and clinical from compiled articles. To reach these data, it was necessary to analyse the variables of each article so that they could be standardized and as much data as possible could be included. After that, the data from each variable of all the articles were added to obtain the total quantity and percentage of the analysed variables.

Table 2 – Sociodemographic variables. Três Lagoas, MS, Brazil, 2019.

Sex	Number*	Percentage
Female	917	45.58%
Male	1,083	53.83%
Uninformed	12	0.60%
Marital Status		
Married	536	26.64%
Single	286	14.21%
Widowed	182	9.05%
Divorced	55	2.73%
Other marital status	18	0.89%
Uninformed	935	46.47%
Age Group		
Child (0-12)	78	3.88 %
Adult (18-59)	773	38.42%
Elderly (60-100)	963	47.86%
Outside the established criteria	198	9.84%
Uninformed	0	0%
Schooling		
Illiterate	386	19.18%
Semi-literate	42	2.09%
Elementary School	683	33.95%
High School	142	7.06%
Higher Education	57	2.83%
Incomplete Higher Education	4	0.20%
Uninformed	698	34. 69%
Family Income		
No wage	40	1.99%
≤ 1 Minimum Wage	495	24.60%
1- 4 Minimum Wages	146	7.26%
≥5 Minimum Wages	20	0.99%
Outside the established criteria	299	14.86%
Uninformed	1,012	50.30%
Ethnicity		
White	352	17.50%
Black	63	3.13%
Yellow	54	2.68%
Brown	422	20.97%
Uninformed	1,121	55.72%
Occupation		
Housekeeper	142	7.06%

Employed	408	20.28%
Retired	465	23.11%
Leave from INSS	9	0.45%
Unemployed	48	2.39%
Uninformed	940	46.72%
Religion		
Catholic	131	6.51%
Evangelical	12	0.60%
Spiritist	0	0%
No Religion	2	0.10%
Other religion	30	1.49%
Uninformed	1,837	91.30%

*N = 2,012 (Sum of all patient data from the 14 studies included).
Souce: Authors (2019).

Table 3- Clinical characteristics. Três Lagoas, MS, Brazil, 2019.

Type of Stoma	Number*	Percentage
Colostomy	1,689	83.95%
Ileostomy	323	16.05%
Uninformed	0	0%
Diagnosis		
Neoplasm	1.029	51.14%
Chagas Megacolon	67	3.33%
Crohn's disease	11	0.55%
Fournier syndrome	16	0.80%
Bowel obstruction	56	2.78%
Appendicitis	3	0.15%
Diverticulitis	50	2.49%
Acute Abdomen	74	3.68%
Inflammatory Diseases	49	2.44%
Trauma	83	4.13%
White arm injury	25	1.24%
Firearm Injury	37	1.84%
Others	426	21.17%
Uninformed	86	4.27%
Complications		
Dermatitis	78	3.88%
Prolapse	16	0.80%
Retraction	14	0.70%
Abscess	0	0%
Hernia	24	1.19%
Fistula	1	0.05%
Infection	0	0%
Bleeding	0	0%
Others	3	0.15%
No complications	4	0.20%
Uninformed	1,872	93.04%
Surgical Character		
Urgency	238	11.83%
Elective	173	8.60%
Uninformed	1,601	79.57%
Stay		
Temporary	859	42.69%
Permanent	700	34.79%
Uninformed	453	22.51%

Preoperative stoma demarcation		
Yes	41	2.04%
No	85	4.22%
Uninformed	1,886	93.74%
Diameter		
0-20mm	10	0.50%
20-40mm	34	1.69%
40-60mm	23	1.14%
60-80mm	3	0.15%
Uninformed	1,942	96.52%
Types of Bag		
One Piece	325	16.15%
Two Pieces	102	5.07%
Uninformed	1,585	78.78%
Effluents		
Liquid	22	1.09%
Semi-liquid	7	0.35%
Pasty	61	3.03%
Solid	31	1.54%
Uninformed	1,922	93.99%

*N = 2,012 (Sum of all patient data from the 14 studies included).
Source: Authors (2019).

The sociodemographic characteristics of the most cited intestinal ostomized people (Table 2) were age group (100%), gender (99.40%) and schooling (65.31%) and the least cited were religion (8.7%), race (44.28%) and marital status (49.70%). The clinical part (Table 3) that most stood out were type of stoma (100%), diagnoses (95.73%), stay (77.49%). The least characterized were diameter (3.48%), effluents (4.47%), preoperative stoma demarcation (6.26%), complications (6.96%), surgical character (20.43%) and types of bag (21.22%).

4. Discussion

Knowing the sociodemographic and clinical aspects of people assisted by ostomy care programs is essential to establish care protocols aimed at improving the care provided (Fernandes et al., 2010). Data analysis revealed the predominance of people with intestinal ostomy between 60 and 100 years old, male. This fact corroborates other studies (Salomé et al., 2015; Aguiar et al., 2017; Ecco et al., 2018; Freitas et al., 2018). The elderly have characteristics more vulnerable to chronic-degenerative diseases, including neoplasms. In this study, the main cause of the preparation of the ostomy was neoplasm (51.14%). These characteristics of the sample are in line with other studies (Fernandes et al., 2010; Sasaki et al., 2012; Melotti et al., 2013; Barbosa et al., 2014; Salomé et al., 2015; Lins Neto et al., 2016; Aguiar et al., 2017; Andrade et al., 2017; Queiroz et al., 2017; Ecco et al., 2018; Freitas et al., 2018; Nascimento et al., 2018).

In epidemiological terms, neoplasm is common in both sexes. In Brazil, the estimate of colorectal cancer for the year 2020, according to a study conducted by the National Cancer Institute (INCA), is 20,540 cases in men, representing 9.1% of the total, and in women 20,470 cases, representing 8.2% of the total (Moura et al., 2018; Instituto Nacional Do Câncer, 2020).

Regarding the level of education, most surveyed users are in the category of low schooling, consisting of elementary school (33.95%), illiterate (19.18%) and semi-literate (2.09%), agreeing with other studies (Luz et al., 2009; Melotti et al., 2013; Barbosa et al., 2014; Salomé et al., 2015; Aguiar et al., 2017; Andrade et al., 2017; Queiroz et al., 2017; Ecco et al., 2018; Freitas et al., 2018; Nascimento et al., 2018). The low level of education may have a direct influence on family income, a fact that corroborates the data, where the majority had an income lower than or equal to a minimum wage (25.60%), a characteristic that can be observed in other studies (Fernandes et al., 2010; Andrade et al., 2017; Queiroz et al., 2017; Ecco et

al., 2018; Freitas et al., 2018; Nascimento et al., 2018). The relationship between education level and salary income revealed that schooling is directly associated with the remuneration received, because it is believed that people with a higher level of education have greater opportunities to be well paid (Queiroz et al., 2017).

Some difficulties were found in characterizing/grouping the age group and family income in the studies analyzed in this review, due to the non-occurrence or possibility of standardization of these variables by the authors of the studies (Luz et al., 2009; Sasaki et al., 2010; Melotti et al., 2013; Lins Neto et al., 2016; Santos et al., 2016; Aguiar et al., 2017; Andrade et al., 2017; Freitas et al., 2018; Nascimento et al., 2018), resulting in data outside the criterion established for age group (9.84%) and family income (14.86%). To create the criteria for variation between age group and family income, the best standardization method was studied in order to allow the inclusion of as many data as possible.

The analysis of the professional profile revealed mostly retired patients (23.11%). Similar data could be found in other studies (Melotti et al., 2013; Barbosa et al., 2014; Salomé et al., 2015; Andrade et al., 2017, Queiroz et al., 2017). It is possible that the professional profile found occurs due to most patients being over 60 years of age. Another contributing fact is that ostomized patients can receive government assistance for the period of the disease or even permanently, based on Decree n. 5,296 of December 2, 2004 (Cerqueira et al., 2020).

The predominance of brown patients in this study (20.97%) raises a possible hypothesis that may be related to the fact that ethnicity is self-reported, as our country has a high miscegenation and classification of color and race (Cerqueira et al., 2020). However, these data differ from other studies (Fernandes et al., 2010; Freitas et al., 2018). Nevertheless, they corroborate data from other studies in which there was also this predominance (Santos et al., 2016; Queiroz et al., 2017; Ecco et al., 2018; Nascimento et al., 2018; Gonzaga et al., 2020).

Regarding marital status, most of the sample has a partner (26.64%). This variable is similar to studies (Luz et al., 2009; Barbosa et al., 2014; Salomé et al., 2015; Aguiar et al., 2017; Andrade et al., 2017; Queiroz et al., 2017; Ecco et al., 2018; Freitas et al., 2018). The importance of such information is emphasized because support from the partner is a relevant and fundamental factor for the psychosocial adaptation of this patient (Andrade et al., 2017).

Regarding religion, the majority was Catholic (6.51%). Faith and belief are considered important tools for the survival process, because, through religion, people find the strength to cope with pain and anguish in daily life, producing relief from suffering (Aguiar et al., 2017). Similar data were found in other studies (Aguiar et al., 2017; Nascimento et al., 2018).

Regarding clinical characteristics, colostomy (83.95%) was the one that most prevailed among the types of stoma, as in other studies (Luz et al., 2009; Fernandes et al., 2010; Sasaki et al., 2012; Melotti et al., 2013; Barbosa et al., 2014; Salomé et al., 2015; Lins Neto et al., 2016; Santos et al., 2016; Aguiar et al., 2017; Andrade et al., 2017; Ecco et al., 2018; Freitas et al., 2018; Nascimento et al., 2018). Moreover, most individuals were not submitted to preoperative stoma demarcation (4.22%), which may cause complications, poor stoma location, difficulty in self-care, poor equipment adaptation and skin visualization (Miranda et al., 2016).

Regarding the type of complication, 3.88% had dermatitis. Dermatitis usually occurs due to inadequate indication of the equipment or excessive cutting of the protective barrier orifice in relation to the ostomy, leaving the skin exposed to the action of the effluent (Fernandes et al., 2010). This fact corroborates studies that performed the same analysis (Fernandes et al., 2010; Salomé et al., 2015; Freitas et al., 2018).

Regarding the diameter of the stoma, 1.69% were 20–40 mm. Corroborating data from another study in which there was also this predominance (Salomé et al., 2015). It is known that the diameter interferes with the adaptation of the device. However, the literature had no information on the ideal dimension of an intestinal stoma (Freitas et al., 2018).

When analyzing the characteristics of the effluent eliminated by the ostomy, there was a predominance of those with pasty effluent (3.03%). This characteristic was similar in other studies (Fernandes et al., 2010; Freitas et al., 2018).

It is noteworthy that the values presented in the percentages (religion, preoperative stoma demarcation, complications, diameter and effluents) are minimal and discrepant due to the absence of standardization of variables by the studies, in which only three of the fourteen studies presented information on complications (Fernandes et al., 2010; Salomé et al., 2015; Freitas et al., 2018) and effluents (Luz et al., 2009; Fernandes et al., 2010; Freitas et al., 2018) two studies characterized religion (Aguiar et al., 2017; Nascimento et al., 2018) and preoperative stoma demarcation (Salomé et al., 2015; Nascimento et al., 2018) and only one study presented information on diameter (Salomé et al., 2015), demonstrating the heterogeneity of the variables studied in the articles that comprised the sample of the present study. Therefore, the information obtained is insufficient to perform a more abrasive characterization of the intestinal ostomized person.

It is worth mentioning that the indication of the type of collecting bag should be individualized, in order to consider the characteristics of each person's ostomy, as well as their level of education. There is a greater recommendation of the one-piece system, because this equipment requires fewer instructions, being the most practical option for the health professional, for the person with ostomy and for the less educated caregiver (Instituto Nacional Do Câncer, 2020). In the study, the indication of one piece (16.15%) prevailed, coinciding with other studies (Sasaki et al., 2012; Andrade et al., 2017; Nascimento et al., 2018). On the other hand, it differs from a study where the two-piece type predominated (Salomé et al., 2015).

Concerning the temporality of the ostomy, the majority was temporary (42.69%). This fact corroborates studies (Luz et al., 2009; Lins Neto et al., 2016; Santos et al., 2016; Queiroz et al., 2017; Ecco et al., 2018; Freitas et al., 2018). The permanence or not of the ostomies is directly related to the diagnosis of indication of their manufacture. Permanent is often associated with colorectal cancers and temporary, with traumas (Miranda et al., 2016).

Regarding the surgical procedure performed, most patients underwent urgent procedures (11.83%), a fact that may influence the quality of life of these patients, who were not prepared for such a procedure (Freitas et al., 2018). Similar data could be found in other studies (Luz et al., 2009; Sasaki et al., 2012; Aguiar et al., 2017; Aguiar et al., 2018; Freitas et al., 2018).

It is noteworthy that the data from the articles of this research are insufficient to trace a broader characterization of the intestinal ostomized, since the available data in relation to sociodemographic and clinical characteristics are not sufficient and/or homogeneous to understand better individual needs and, consequently, to collaborate to develop care protocols aimed at improving the care provided and, consequently, to contribute to the quality of life of intestinal ostomized people. However, this study points to important results for future interventions in epidemiological terms, supporting multidisciplinary health teams, including nurses and managers, with greater involvement in the knowledge of the profile of this public. However, the services that treat the ostomized need to improve the instruments of evaluation of the ostomized person, because this study evidenced that important variables for a better knowledge of the profile of the ostomized differ between the analyzed studies, a fact that was clear when describing or grouping them in order to know the Brazilian profile of intestinal ostomized people.

The instrument elaborated can be used in Care Programs for the Person with Intestinal Ostomy, in order to standardize the information (database) to enable future comparisons between the Brazilian regions and comprehensive specialized care for all patients. Currently, each Program works in a way, because each professional has an understanding of ordinance 400/2009. There is no integration between the three healthcare levels, justifying the divergence in the care to these patients.

This article has limitations. Due to the inclusion criteria and descriptors used, there is the possibility of not identifying and/or recovering some studies that addressed the research theme and possibly published in international and even national journals. On the other hand, this research may have implications for future studies of the characterization of the intestinal ostomized in the various services, enabling the elaboration of a more robust data collection instrument for better characterization, standardization and elaboration of efficient strategies for the treatment and rehabilitation of this population.

5. Conclusion

Although people with intestinal ostomy regarding sociodemographic and clinical variables have been characterized, the Brazilian scientific production, in the modality of scientific article, on the subject is scarce and many articles do not describe important variables and in detail about the characterization of this population, hindering making differences between studies, since data collection instruments do not seem to follow a uniformity regarding characterization variables. However, this study is relevant due to the compilation of data, which allowed an overview of the intestinal ostomized in Brazil, even with limitations.

As a suggestion for the following studies, we have listed the necessity of a standardized form preparation for the characterization of the patients with intestinal ostomies, since, from the analysed studies, the variables the researchers used were diverse, leaving many of the studies with gaps concerning the characterization of these patients.

Therefore, future researches need to be done so that they can produce a more uniform tool to characterize this population and from that on to better know this group, so that the best care for these clients can be offered.

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References

Aguiar, J. C., et al. (2017). Aspectos sociodemográficos e clínicos de estomizados intestinais provisórios. *Rev Min Enferm.*, 21, e-1013. https://doi.org/10.5935/1415-2762.20170023

Aguiar, J. C., Pereira, A. P. D. S., & Pinto, M. H. (2018). Reconstrução de trânsito intestinal: fatores que influenciam a realização. *Revista Eletrônica de Enfermagem*, 20 (32). https://doi.org/10.5216/ree.v20.47606

Andrade, R. S., et al. (2017). Aspectos sociodemográficos, clínicos e de autocuidado de pessoas com estomas intestinais. *Revista Enfermagem UERJ*, 25. http://dx.doi.org/10.12957/reuerj.2017.19368

Barbosa, M. H., et al. (2014). Aspectos clínicos e epidemiológicos de estomizados intestinais de um município de Minas Gerais. *Revista de Enfermagem e Atenção à Saúde*, 3(1), 64-73. http://seer.uftm.edu.br/revistaeletronica/index.php/enfer/article/view/931

Brasil. (2009). Ministério da Saúde. Secretaria de Atenção à Saúde. Portaria n° 400 de 16 de novembro de 2009. Diretrizes Nacionais para a Atenção à Saúde das Pessoas Ostomizadas. Brasília. http://www.planalto.gov.br/ccivil_03/Leis/L8142.htm

Cerqueira, L. C. N., et al. (2020). Clinical and sociodemographic characterization of ostomized patients treated at a referral center. *Revista Rene.*, 21. https://doi.org/10.15253/2175-6783.20202142145

Cunha, R. R., Ferreira, A. B., & Backes, V. M. S. (2013). Revisão - Características Sócio-Demográficas e Clínicas de Pessoas Estomizadas: Revisão de Literatura. *ESTIMA*, 11(2). https://www.revistaestima.com.br/estima/article/view/327

Ecco, L., et al. (2018). Perfil de pacientes colostomizados na Associação dos Ostomizados do Rio Grande do Norte. *ESTIMA, Braz. J. Enterostomal Ther.*, 16, e0518. https://doi.org/10.30886/estima.v16.351_PT

Fernandes, R. M., Miguir, E. L., & Donoso, T. V. (2010). Perfil da clientela estomizada residente no município de Ponte Nova. *Rev Bras de Coloproctologia*, 30(4), 385-392. https://doi.org/10.1590/S0101-98802010000400001

Freitas, J. P., Borges, E. L., & Bodevan, E. C. (2018). Caracterização da clientela e avaliação de serviço de atenção à saúde da pessoa com estomia de eliminação. *Revista Estima.*, 16, e0918. https://www.revistaestima.com.br/estima/article/download/402/pdf_1/1210

Gonzaga, A. C., et al. (2020). Perfil de crianças e adultos com estomia intestinal do centro de referência da Bahia-Brasil. *ESTIMA, Braz. J. Enterostomal Ther.*, 18, e0520. https://doi.org/10.30886/estima.v18.698_PT

Instituto Nacional de Câncer. (2020). Ministério da Saúde. Estatísticas de câncer: Incidência estimada conforme a localização primária do tumor e sexo. Brasil. https://www.inca.gov.br/numeros-de-cancer

Lin Neto, M. A. F., Fernandes, D. O. A., & Didoné, E. L. (2016). Epidemiological characterization of ostomized patients attended in referral Center from the city of Maceió, Alagoas, Brazil. *Revista J. Coloproctol.*, 36(2), 64-68. https://doi.org/10.1016/j.jcol.2014.08.016

Luz, M. H. B., et al. (2009). Caracterização dos pacientes submetidos a estomas intestinais em um hospital público de Teresina-PI. *Texto contexto - enferm.*, 18(1) https://doi.org/10.1590/S0104-07072009000100017

Melotti, L. F., et al. (2013). Characterization of patients with ostomy treated at a public municipal and regional reference center. *Revista J. Coloproctol.*, 33(2). https://doi.org/10.1590/S2237-93632013000200005

Mendes, K. D., Silveira, R. C., & Galvão, C. M. (2008). Revisão integrativa: método de pesquisa para a incorporação de evidências na saúde e na enfermagem. *Rev Text e Contet Enfermagem*, 17(4), 25-47. https://doi.org/10.1590/S0104-07072008000400018

Miranda, S. M., et al. (2016). Caracterização Sociodemográfica e Clínica de Pessoas com Estomia em Teresina. *Estima*, 14(1), 29-35. doi.org/10.5327/Z1806-3144201600010005

Moher, D., et al. (2009). Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement. *Rev Plos Medicine.*, 6(7), 34-55. https://doi.org/10.1371/journal.pmed.1000097

Moura, R. R. A., Guimarães, E. A. A., & Moraes, J. T. (2018). Análise clínica e sociodemográfica de pessoas com estomias: estudo transversal. *Revista Estima*, 16(3818). https://doi.org/10.30086/estima.v16.637_PT

Nascimento, M. V. F., et al. (2018). Perfil sociodemográfico e clínico de pacientes em pós-operatório de confecção de estomas intestinais de eliminação. *Revista ciencia y enfermeira*, 24(15). http://dx.doi.org/10.4067/s0717-95532018000100215

Overholt, E. F., & Still Welln, S. B. (2011). Asking compelling, clinical questions. in: Melnyk, B. M., & Overholt, E. F. *Evidence-based practice in nursing & healthcare: a guide to best practice.* Philadelphia, cap. 11, p. 256.

Queiroz, C. G., et al. (2017). Caracterización de ileostomizados atendidos en un servicio de referência de ostomizados. *Enfermeria Global*, 16(2). https://doi.org/10.6018/eglobal.16.2.230551

Ramos, R. S., et al. (2012). O perfil dos pacientes estomizados com diagnóstico primário de câncer de reto em acompanhamento em programa de reabilitação. *Rev Caderno Saúde Coletiva*, 20(3), 280-6. http://www.cadernos.iesc.ufrj.br/cadernos/images/csc/2012_3/artigos/CSC_v20n3_280-286.pdf

Ribeiro, W. A., et al. (2019). Perfil de pacientes do núcleo de atenção à saúde da pessoa estomizada: na ótica sociocultural e econômica. *Rev Nursing*, 22(251), 2868-2874. http://www.revistanursing.com.br/revistas/251/pg53.pdf

Roman, A. R., & Friedlander, M. R. (1998). Revisão integrativa de pesquisa aplicada à enfermagem. *Rev Cogitare Enferm.*, 3(2), 109-112. http://dx.doi.org/10.5380/ce.v3i2.44358

Salomé, G. M., et al. (2015). Profile of ostomy patients residing in Pouso Alegre city. *Revista Journal of Coloproctology*, 35(2), 106-112. https://www.scielo.br/pdf/jcol/v35n2/2317-6423-jcol-35-02-00106.pdf

Santos, O. J. D., et al. (2016). Children and adolescents ostomized in a reference hospital. Epidemiological profile. *Revista J. Coloproctol.*, 36(2), 75-79. https://doi.org/10.1016/j.jcol.2016.03.005

Sasaki, V. D., et al. (2012). Health care service for ostomy patients: profile of the clientele. *Rev de Coloproctologia*. 2012, 32(3), 52-66. http://dx.doi.org/10.1590/S2237-93632012000300005