

Epidemiological profile of patients with elimination stomas at a brazilian university hospital**

Kárida Franciely Alves Barbosa^{1*} , Mardem Machado de Souza¹ ,
Felipe Pereira Lemos Costa¹ , Maristella Rodrigues Nery da Rocha¹ 

ABSTRACT

Objective: To analyze the profile of patients with elimination stomas treated from 2022 to 2024 at a Brazilian public university hospital. **Method:** A retrospective cross-sectional study with a quantitative approach, based on the analysis of electronic medical records of patients with elimination stomas. **Results:** A total of 357 medical records of individuals aged 4 to 97 years, of both sexes, were analyzed. Most lived in Cuiabá (37.5%), were male (55.7%), had completed elementary education (48.7%), and had a monthly family income ranging from R\$ 706.00 to R\$ 4,236.00 (89.9%). The main reason for stoma creation was cancer of the digestive tract (45.7%). Colostomies predominated (58.5%), as did elective surgeries (63.9%) and permanent stomas (63.0%), with end stomas (74.2%) and no preoperative stoma site marking (98.9%). Most patients had some type of stoma complication (52.7%), although the peristomal skin was intact (59.1%). Regarding the use of supplies, a large proportion used one accessory product and a two-piece appliance. **Conclusion:** The study made it possible to characterize the profile of patients treated at the service during the period analyzed, understand the specific characteristics of the target population, inform care strategies, and support the development of more targeted and effective public health policies.

DESCRIPTORS: Ostomy. Health profile. Enterostomal therapy. Intestinal neoplasms. Ulcerative colitis. Crohn disease.

Perfil epidemiológico de pacientes con ostomías de eliminación en un hospital universitario brasileño**

RESUMO

Objetivo: Analisar o perfil dos pacientes com estomias de eliminação atendidos de 2022 a 2024 em um hospital público e universitário brasileiro. **Método:** Estudo transversal retrospectivo de abordagem quantitativa, com análise de prontuários eletrônicos de pacientes com estomias de eliminação. **Resultados:** Foram analisados 357 prontuários de indivíduos de 4 a 97 anos, de ambos os sexos. A maioria residia em Cuiabá (37,5%) era do sexo masculino (55,7%), com ensino fundamental (48,7%) e renda familiar mensal variando de R\$ 706,00 a R\$ 4.236,00 (89,9%). A confecção da estomia teve como principal causa câncer do trato digestório (45,7%). A predominância foi de colostomia (58,5%), por cirurgias eletivas (63,9%) e de permanência definitiva (63,0%), com exteriorização terminal (74,2%) e sem demarcação pré-operatória (98,9%). A maioria apresentava alguma complicação na

¹Hospital Universitário Júlio Müller  – Cuiabá (MT) Brasil.

*Corresponding author: karida.barbosa@hotmail.com

Section Editor: Juliany Lino Gomes Silva 

Received: March 8, 2026 | Accepted: August 14, 2026

How to cite: Barbosa KFA, Souza MM, Costa FPL, Rocha MRN. Epidemiological profile of patients with elimination stomas at a Brazilian university hospital. ESTIMA, Braz J Enterostomal Ther. 2026;24:e1951. https://doi.org/10.30886/estima.v24.1951_IN

** Article origin: Extracted from the dissertation "Epidemiological profile of patients with elimination stomas treated at the stoma therapy outpatient clinic of a university hospital in Cuiabá, Mato Grosso," submitted to the Graduate Program in Sciences Applied to Hospital Care (HJUM/UFMT) in 2026.

estomia (52,7%), porém com a pele periestoma íntegra (59,1%). Em relação ao uso de insumos, grande parte usava um adjuvante e dispositivo de duas peças. **Conclusão:** O estudo possibilitou delinear o perfil dos pacientes atendidos no serviço no período analisado, compreender as especificidades do público-alvo, subsidiar estratégias de atendimento e auxiliar o desenvolvimento de políticas públicas em saúde mais direcionadas e efetivas.

DESCRIPTORES: Estomia. Perfil de saúde. Estomaterapia. Neoplasias intestinais. Colite ulcerativa. Doença de Crohn.

Perfil epidemiológico de pacientes com estomias de eliminação em hospital universitário brasileiro**

RESUMEN

Objetivo: Analizar el perfil de los pacientes con ostomías de eliminación atendidos entre 2022 y 2024 en un hospital público y universitario brasileño. **Método:** Estudio transversal retrospectivo de enfoque cuantitativo, con análisis de historias clínicas electrónicas de pacientes con ostomías de eliminación. **Resultados:** Se analizaron 357 historias clínicas de individuos de 4 a 97 años, de ambos sexos. La mayoría residía en Cuiabá (37,5%), era de sexo masculino (55,7%), tenía educación primaria (48,7%) y una renta familiar mensual que variaba entre R\$ 706,00 y R\$ 4.236,00 (89,9%). La principal causa de la confección de la ostomía fue el cáncer del tracto digestivo (45,7%). Predominaron las colostomías (58,5%), realizadas mediante cirugías electivas (63,9%) y de carácter definitivo (63,0%), con exteriorización terminal (74,2%) y sin marcación preoperatoria (98,9%). La mayoría presentaba alguna complicación en la ostomía (52,7%), aunque con la piel periestomal íntegra (59,1%). En cuanto al uso de insumos, gran parte utilizaba un adjuvante y un dispositivo de dos piezas. **Conclusión:** El estudio permitió delinear el perfil de los pacientes atendidos en el servicio durante el período analizado, comprender las especificidades de la población objetivo, fundamentar estrategias de atención y contribuir al desarrollo de políticas públicas de salud más específicas y efectivas.

DESCRIPTORES: Estomía. Perfil de salud. Estomaterapia. Neoplasias intestinales. Colitis ulcerosa. Enfermedad de Crohn.

INTRODUCTION

An ostomy is the creation of an opening or a new pathway through a surgical technique, with the purpose of temporarily or permanently diverting the natural passage of food, air, or bodily waste. The type of ostomy is defined according to the location of the exteriorized segment, such as colostomy (colon), ileostomy (ileum), urinary diversion (depending on the location, which may involve the kidney, bladder, or ureter), tracheostomy (trachea), gastrostomy (stomach), and jejunostomy (jejunum)^{1,2}.

Intestinal ostomies, including ileostomies and colostomies, are intended for the elimination of fecal effluent. Surgical intervention may be required for several conditions, such as neoplasms, diverticulitis, inflammatory bowel disease, megacolon, congenital abnormalities, trauma, and surgical complications. Neoplasms affecting the colon and rectum are the main factors leading to the creation of an intestinal ostomy. According to data from the Brazilian National Cancer Institute (INCA), approximately 45,630 new cases of colon and rectal cancer are estimated for each year of the 2023–2025 three-year period in Brazil, with an average of 21,970 cases in men and 23,660 in women. In Mato Grosso, the estimate for the same three-year period is 500 new cases/100,000 inhabitants, including 270 in men and 230 in women. When possible, ostomy reversal takes into account the clinical course of the disease and the patient's clinical condition^{1,3}.

Urinary ostomies are created from the kidneys, ureters, or bladder for the purpose of eliminating urine. The most commonly used technique is ureterostomy, or the Bricker procedure, in which a small segment of the small intestine is connected to the

ureters and exteriorized through the abdominal wall, thus forming the stoma. The conditions that most frequently require ureterostomy are bladder tumors, severe functional disorders, and anatomical abnormalities. Bladder cancer currently ranks 12th among the most frequent types of cancer and is the main factor leading to the creation of a urinary ostomy. According to INCA, an estimated 11,370 cases are expected in Brazil for each year of the 2023–2025 three-year period, including 7,870 in men and 3,500 in women. In Mato Grosso, 100 new cases are estimated, including 70 in men and 30 in women^{1,3,4}.

The number of people with ostomies has been steadily increasing. In 2020, according to the Brazilian Association of Ostomates, an estimated 300,000 people were living with an intestinal stoma in Brazil. Currently, there are no exact data for the country because of underreporting and weaknesses in the data recording system. Worldwide, approximately 1 in every 10,000 people has an ostomy⁵.

Living with an elimination ostomy represents a major turning point in a patient's life, requiring physical, emotional, and social adaptations that extend beyond the purely clinical domain. Feelings such as loss or decreased self-esteem, depressive symptoms, difficulties in marital and family relationships, distorted body image, and difficulty with social interaction may commonly occur. In this context, interventions such as individual psychological counseling, participation in support groups, and access to clear and consistent information about ostomy care are essential to facilitate acceptance of the new condition and strengthen self-confidence. Sharing experiences with other individuals facing similar challenges enables the development of coping strategies and the reduction of stigma and feelings of isolation^{2,6}.

Given the physical and emotional impacts on the patient's life, living with an attached pouch, and the need to adapt to new lifestyle habits and physiological and psychological changes, appropriate and humanized support from specialized health care services is of great importance. Such services should have a multidisciplinary team composed of physicians, nurses, psychologists, stoma therapists, and social workers who respect and promote the well-being and quality of life of individuals and their families, fostering interaction and support networks with a view to ensuring safety and rehabilitation^{6–8}.

Regarding access to ostomy collecting equipment, Ordinance No. 400/2009 of the Ministry of Health guarantees the provision of services with a specialized structure, adequate physical facilities, specific material resources, and trained professionals. However, the availability of care centers in the state of Mato Grosso⁹ remains insufficient to meet existing demand, directly affecting the lives of people with ostomies. This gap in access to public services often forces patients to purchase collecting equipment out of pocket, representing a substantial financial burden.

A Brazilian study estimated that the annual cost of collecting devices and accessories ranges from R\$ 2,340.00 to R\$ 5,535.00, with an average cost of approximately R\$ 4,050.00 in specialized services when complications associated with the ostomy and peristomal skin are present, demonstrating a significant impact on household budgets when these materials are not fully provided by the Brazilian Unified Health System¹⁰. Internationally, a study conducted in Sweden identified high direct and indirect costs during the first year after ostomy creation, reinforcing the economic impact of this condition¹¹. These findings reinforce that the high cost of collecting devices represents an important barrier to appropriate ostomy management, contributing to the inappropriate use of materials and an increase in complications^{10,11}.

Scientific research on people with ostomies differs between national and international settings. In Brazil, descriptive studies conducted in university hospitals and specialized services predominate, focusing mainly on epidemiological and clinical characterization, although limitations related to geographic coverage and methodological design remain^{12,13}. Internationally, in addition to describing patient profiles, studies have focused on quality of life, self-care, psychosocial adaptation, and assessment of the quality of care, frequently based on systematic reviews and studies with larger samples^{14,15}.

Despite advances, gaps persist in multicenter studies and in the application of evidence to the organization of services and public policies.

Knowledge of the epidemiological, sociodemographic, and clinical profile of patients with elimination ostomies provides a broader understanding of the characteristics and specific needs of this population, supporting the planning and organization of care strategies that are better suited to their circumstances. Furthermore, this knowledge contributes to improving health care and strengthening decision-making within health services, while providing technical and scientific support for the formulation and improvement of more targeted, equitable, and effective public policies aimed at comprehensive care for people with ostomies^{5,8}.

OBJECTIVES

To analyze the epidemiological profile of patients with elimination ostomies treated from 2022 to 2024 at a Brazilian public university hospital.

METHODS

This is an observational, cross-sectional, retrospective study with a quantitative approach based on medical record review, in accordance with the *RECORD Guideline*¹⁶. The study included patients treated at the Stoma Therapy Outpatient Clinic of the University Hospital of Mato Grosso. Through the University Hospital Management Application (AGHU), 359 electronic medical records were accessed, of which 357 were included in the analysis because all variables were duly completed. Data collection took place between May and July 2025 and was based on the medical records of 357 patients with elimination ostomies treated from September 2022 to December 2024. Patients with an elimination ostomy, active registration, and a nursing consultation between September 2022 and December 2024 were included, while those who had died or undergone ostomy reconstruction were excluded.

For data collection, a spreadsheet containing sociodemographic and clinical variables was developed based on the care form used at the service. The following variables were included: age, sex, educational level, income, occupation, municipality of residence, smoking, alcohol consumption, pre-existing comorbidities, condition leading to ostomy creation, waiting time for surgery, preoperative stoma site marking, type of ostomy, exteriorization, duration of the ostomy, stoma complications, peristomal skin condition, type of device used, and use of accessories.

The collected data were tabulated using *Microsoft Excel*® software and processed using *Statistical Package for the Social Sciences for Windows (SPSS)* software, version 31.0. Descriptive statistics were calculated considering the type of scale and distribution of the study variables, thereby obtaining tabulations and calculations of proportions and percentages, which enabled their analysis and discussion.

The study was approved by the Research Ethics Committee of Júlio Müller University Hospital, under CAAE No. 86176025.1.0000.5541 and opinion No. 7.481.922. Access to the medical records was authorized by the Regulation Sector (STCOR), in compliance with the ethical principles established in Resolution No. 466/2012 of the Brazilian National Health Council.

RESULTS

Among the 357 medical records analyzed, patients from municipalities in the interior of the state, older adults, men, individuals with low educational levels, and those with a monthly income of up to three minimum wages predominated. Cancer was the main indication for stoma creation, with elective surgeries, colostomies, permanent stomas, and end stomas predominating. A high rate of absence of preoperative stoma site marking was also observed, along with stoma-related and peristomal skin complications. Regarding stoma management, two-piece collecting devices predominated, and accessories were used by a substantial proportion of participants. These findings are presented in Tables 1 and 2.

DISCUSSION

This study analyzed the clinical and epidemiological profile of patients with elimination ostomies treated between 2022 and 2024 at a public university hospital in Mato Grosso, showing a higher occurrence among males than females, with a mean age of 65.5 years, elementary education, and an income of up to three minimum wages. This result is similar to that of studies addressing the same topic^{17,18}.

National studies describing the profile of people with intestinal ostomies have shown a predominance of male patients treated at referral services^{12,17,18}. However, the literature also indicates that men tend to seek health services less frequently

Table 1. Sociodemographic profile of patients with elimination ostomies treated at a university hospital. Brazil, September 2022 to December 2024.

Variables	n	%
Sex		
Male	199	55,7
Female	158	44,3
Age group (years)		
0 to 10	5	1,4
11 to 20	9	2,5
21 to 30	14	3,9
31 to 40	34	9,5
41 to 50	46	12,9
51 to 60	67	18,8
61 to 70	95	26,6
71 to 80	54	15,1
81 to 90	30	8,4
Over 91	3	0,8
Municipality		
Capital (Cuiabá)	134	37,5
Municipalities in the interior of Mato Grosso: Araputanga, Barra do Bugres, Barra do Garças, Brasnorte, Cáceres, Campo Novo do Parecis, Campo Verde, Chapada dos Guimarães, Colíder, Colniza, Comodoro, Confresa, Diamantino, Dom Aquino, Figueirópolis do Oeste, Glória d'Oeste, Indiavaí, Itamarati, Jangada, Jauru, Juara, Juína, Matupá, Mirassol d'Oeste, Nobres, Nortelândia, Nossa Senhora do Livramento, Nova Brasilândia, Nova Marilândia, Nova Maringá, Nova Mutum, Nova Xavantina, Novo Horizonte do Norte, Novo Mundo, Poconé, Ponte Branca, Pontes e Lacerda, Porto Espiridião, Porto Estrela, Primavera do Leste, Rosário Oeste, Salto do Céu, Santo Afonso, São José dos Quatro Marcos, São José do Rio Claro, Sinop, Tangará da Serra, Terra Nova do Norte, Vale de São Domingos, Várzea Grande and Vila Bela da Santíssima Trindade	223	62,5
Educational level		
Preschool	1	0,3
Special education	1	0,3
Illiterate	32	9,0
Elementary education	174	48,7
High school education	106	29,7
Higher education	42	11,8
Not reported	1	0,3
Occupation		
Retired	118	33,1
On medical leave	27	7,6
Employed	139	38,9
Unemployed	19	5,3
Homemaker	37	10,4
Student	12	3,4
Not reported	5	1,4
Income		
Up to 3 minimum wages/month	321	89,9
4 to 10 minimum wages/month	20	5,6
Not reported	4	1,1
No income	12	3,4
Total	357	100

Source: Research data, electronic medical records.

Table 2. Clinical profile of patients with elimination ostomies treated at a university hospital. Brazil, September 2022 to December 2024.

Variables	n	%
Comorbidities		
No	152	42.6
Yes	205	57.4
Mobility		
Preserved	304	85.2
Impaired — use of crutches, cane, or walker	24	6.7
Impaired — wheelchair use	22	6.2
Impaired — bedridden	2	0,6
Impaired — reduced gait	2	0,6
Impaired — assistance from another person or furniture	3	0,8
Smoking status		
Former smoker	125	35.0
Current smoker (1 to 30 years)	40	11.2
Current smoker (31 to 65 years)	12	3.4
Passive smoker	14	3.9
Denies smoking	166	46.5
Alcohol consumption		
Daily	4	1.1
Socially	82	23.0
Stopped drinking alcohol	11	3.1
Denies alcohol consumption	260	72.8
Type of ostomy		
Colostomy	209	58.5
Ileostomy	117	32.8
Colostomy and ileostomy	1	0,3
Colostomy and urostomy	1	0,3
Wet colostomy	2	0,6
Urostomy	27	7.6
Exteriorization		
End	265	74.2
Double-barrel	7	2.0
Loop	84	23.5
End and loop	1	0,3
Duration of the ostomy		
Permanent	225	63.0
Temporary	125	35.0
Not reported	7	2.0
Surgical waiting time		
Elective	228	63.9
Emergency	129	36.1
Reason for surgery		
Accident	4	1.1
Urinary tract cancer	25	7.0
Digestive tract cancer	163	45.7
Postoperative complication	18	5.0
Congenital anomalies	13	3.6
Reproductive system cancer	17	4.8

It continues...

Table 2. Continuation.

Variables	n	%
Stab wound	3	0,8
Gunshot wound	17	4,8
Inflammatory bowel disease	25	7,0
Fecal diversion	18	5,0
Diverticulitis	18	5,0
Familial adenomatous polyposis	7	2,0
Intestinal obstruction	7	2,0
Acute obstructive abdomen	1	0,3
Chagas disease	3	0,8
Perforated appendicitis	2	0,6
Intestinal stenosis	3	0,8
Fistula	6	1,7
Megacolon	6	1,7
Not reported	1	0,3
Preoperative stoma site marking		
No	353	98,9
Yes	4	1,1
Complication		
Absent	169	47,3
Scarring	16	4,5
Retraction	31	8,7
Bleeding	5	1,4
Hernia	40	11,2
Slough	1	0,3
Granuloma	10	2,8
Skin folds	1	0,3
Prolapse	41	11,5
Prolapse and hernia	25	7,0
Near a bony prominence	18	5,0
Peristomal skin condition		
Intact	211	59,1
Ulceration	83	23,2
Hyperemia	55	15,4
Lesion	8	2,2
Type of appliance		
One-piece drainable appliance	30	8,3
One-piece closed appliance	1	0,3
Two-piece appliance	315	87,0
Two-piece urostomy appliance	16	4,4
Total*	362	100
Use of accessories		
None	130	36,4
1	145	40,6
2	71	19,9
3 or more	11	3,1

Source: Research data, electronic medical records.

CA: cancer.

* A total of 362 appliances were considered, as 5 individuals had 2 stomas.

than women, particularly for preventive measures and continuous follow-up, which may contribute to late diagnoses and greater clinical complexity at the time of surgical intervention. This male reluctance to seek care has been discussed in studies highlighting sociocultural factors related to patterns of masculinity as elements that influence disengagement from health services¹⁹. This scenario may result in greater vulnerability to complications and adverse impacts on quality of life, as demonstrated in international studies analyzing outcomes during the first year after surgery, including peristomal complications and psychosocial impairment¹⁶.

Regarding age, the occurrence of this event among older adults may be related to chronic diseases and lifestyle habits, since most patients in this study had pre-existing comorbidities. Older adults with ostomies experience significant changes in their routines, with direct repercussions on lifestyle and the organization of daily activities, which may make the process of adapting to the new condition challenging^{12,13,18,20}.

As shown in this study⁷, such changes require a period of physical, emotional, and social adjustment. In this context, when functional and cognitive abilities are preserved, individuals can and should be encouraged to develop self-care skills, with appropriate support and guidance, in order to meet the demands arising from the adaptations imposed by the ostomy.

Regarding family income, this study found a predominance of patients earning between one and three minimum wages, indicating that this population is situated within a context of high socioeconomic vulnerability. Similar findings have identified a substantial concentration of people with intestinal ostomies within this same income range at referral centers in Brazil^{17,18}. This economic profile may directly affect their ability to cope with the demands imposed by the ostomy, particularly regarding access to supplies, transportation for specialized follow-up, and maintenance of self-care, reinforcing the importance of public policies and care strategies that take the socioeconomic conditions of this population into account.

Regarding educational level, most participants had an elementary education, a finding similar to those of current studies. In other words, they had few years of schooling, which may affect their understanding of information provided during consultations or leave limited time for self-care, given the need to ensure a family income^{2,10,18}.

Regarding occupation, most patients with intestinal ostomies were engaged in work activities. This profile revealed the diversity of situations they experienced and indicated that, despite having an ostomy, many maintained occupational ties, which is corroborated by current research highlighting the importance of social and occupational reintegration in this group. However, some authors emphasize that retirement and leave from work for health treatment are common among patients, often as a consequence of the physical and social limitations imposed by their clinical conditions.

Studies on this topic predominantly report a profile of retired patients, which may be related to population aging and the high prevalence of neoplasms as an etiology of ostomy creation. Furthermore, the literature emphasizes that returning to work requires adaptations in the workplace and emotional support, with multidisciplinary teams playing a fundamental role in promoting patient autonomy and quality of life, including among those engaged in household or educational activities^{12,18}.

The territorial area of Mato Grosso is 903,357 km², making it the third-largest state in Brazil, with some municipalities located approximately 1,300 km from the capital, Cuiabá. Considering the state's territorial size, in October 2014, Resolution CIB/MT No. 229 was issued regarding the reallocation of financial resources from the state Technical Reserve to expand service provision by adjusting the programming of the Ostomy Pouch Service in the state. This resolution provided for the reallocation of funds among four implementing municipalities: Sinop, Rondonópolis, Colíder, and Cuiabá, each responsible for specific regions. Currently, the state has three centers that distribute ostomy supplies, located in Cuiabá, Sinop, and Rondonópolis. However, Cuiabá has been providing follow-up to patients residing in several regions, including those not designated under Resolution CIB/MT No. 229⁸.

In the present study, four patients receiving follow-up resided in a municipality located approximately 1,120 km from the capital. Travel to the service may take approximately 15 hours, depending on the means of transportation and the patient's physical limitations; in some situations, patients require ambulance transportation accompanied by a health care team. Financial considerations also represent an obstacle, as patients sometimes have to bear travel expenses. Given this scenario, the difficulty in accessing care is evident. A reassessment of the regions and distances between municipalities is necessary to promote the decentralization of services. To this end, the 16 existing regional offices in the state could be used, bringing ostomy assessment and device supply services closer to users and ensuring more comprehensive and humanized access²¹.

In the present sample, most patients had preserved mobility. However, among those with limitations, cases of substantial functional restriction were observed, including one patient residing approximately 300 km away. This patient was bedridden and required ambulance transportation to access health services.

Data analysis revealed that most patients were neither smokers nor alcohol users; however, comparison with other findings was not possible because the literature reviewed did not include studies explicitly reporting these specific data in similar populations.

The discussion regarding the predominance of colostomies observed in the study sample can be supported by the findings of the articles analyzed. Studies highlight that colostomies generally account for the largest proportion of ostomies created, reflecting the epidemiological profile primarily associated with colorectal diseases and intestinal neoplasms, which are frequent indications for this procedure. Taken together, these results suggest a consistent national pattern, highlighting the need for targeted care policies and investment in professional training to ensure appropriate management of patients with colostomies^{2,10,12,13,18,22}. In contrast, two international studies analyzing demographic data from patients undergoing ostomy creation identified a predominance of ileostomies, although cancer was the main surgical indication, demonstrating differences in care practices and criteria for selecting the type of ostomy across different care settings^{14,15}.

The analysis of the ostomy exteriorization technique observed in the present study, in which the end technique predominated regardless of ostomy type, is consistent with findings reported in recent studies. Studies emphasize that the end technique is widely adopted because of its simplicity and low risk of complications, contributing to its clinical and economic preference in the care of patients with ostomies, and highlighting that this technique facilitates postoperative management and patient adaptation to the new condition^{2,23}. In contrast, at a hospital located in southern Brazil, the loop technique was the most commonly used¹².

The present study revealed that most ostomies created were permanent, a finding supported by recent Brazilian studies and differing from a study conducted in Finland, in which temporary ostomies were more frequent¹⁵. Permanent ostomies are associated with conditions in which physiological restoration of intestinal transit is not possible, such as advanced colorectal cancer or other irreversible diseases. Permanence poses additional challenges for patients, not only physically but also psychologically and socially, significantly affecting quality of life. However, the decision to create a permanent ostomy often arises from the clinical need to ensure safe intestinal function, even though it entails greater management complexity and the need for continuous support. It is important to emphasize that specialized follow-up, including multidisciplinary support and continuing education, mitigates the adverse effects of a permanent ostomy and improves patients' quality of life^{2,23,24}.

In this study, elective surgeries for ostomy creation predominated across several hospitals in Mato Grosso. This finding contrasts with results reported in other Brazilian regions, where comparative analyses have demonstrated a higher frequency of emergency surgeries for ostomy creation, reflecting the demand for emergency interventions in less predictable and more severe clinical situations. These differences reaffirm the need for public policies that address both optimization of surgical planning and emergency support in stoma therapy, ensuring appropriate care for all clinical needs^{15,25}.

The data from this study indicate that cancer, particularly colorectal cancer, was the main reason for ostomy creation, corroborating the results of several recent national studies. The predominance of oncological causes in profiles of ostomy users emphasizes the high incidence of cancer as the main indication for surgery. Furthermore, the increasing incidence of colorectal cancer in Brazil, together with population aging and epidemiological changes, contributes to the growing demand for surgical ostomies associated with this condition^{2,10,13,14,17,18}.

Of the 357 patients evaluated, 353 did not undergo preoperative stoma site marking, a finding that highlights the crucial importance of preoperative abdominal marking in intestinal ostomy creation to improve clinical outcomes and reduce procedure-related complications. Compared with a study conducted in Finland, in which most patients underwent stoma site marking before surgery, fewer patients experienced postoperative complications¹⁵. Appropriate stoma site marking is an essential intervention for surgical success and psychosocial adaptation, as it enables better stoma positioning and facilitates self-care. In the present study, low adherence to this practice may have contributed to increased complications and challenges in patient rehabilitation, corroborating the literature emphasizing the need for qualified and continuous involvement of stoma therapy nurses during the preoperative and postoperative periods².

Most patients experienced some type of ostomy-related complication, demonstrating the substantial occurrence of these events in the care setting, with prolapse being the most frequent, followed by parastomal hernia. A study conducted at a referral center in Bahia identified the main complications as skin irritation, granuloma, and retraction, highlighting the importance of early interventions to minimize the impact of these adverse events on patients' quality of life¹⁷. An analysis of the population with ostomies in a region of Minas Gerais also found a high incidence of complications, identifying factors such as inadequate guidance and insufficient support as significant contributors to their increased occurrence. The convergence of these findings demonstrates that ostomy complications constitute a frequent and relevant challenge in clinical stoma therapy practice, highlighting the need for standardized follow-up protocols and training of health professionals¹⁰.

In the present study, most patients used two-piece ostomy appliances, similar to the findings of a study conducted in Portugal²⁰, as well as at least one accessory, reflecting a care practice aimed at increasing safety and comfort during adaptation to the appliance. This preference contrasts with a Brazilian study conducted in the state of Ceará, in which 76.6% of participants used one-piece flat or convex appliances and 71.0% did not use any accessories²³, as well as with another study conducted in the United Kingdom, in which 97.0% used a one-piece system¹⁴. This divergence may be related to differences in clinical protocols, regional availability of appliances and accessories, and the demographic and clinical characteristics of the patients treated. Variation in the type of appliance used underscores the importance of individualized and multidisciplinary assessment when selecting appropriate equipment, considering the patient's anatomical characteristics, physical activity, and socioeconomic profile. Furthermore, it highlights the need for equitable access to a range of appliance options so that each patient's specific needs can be effectively addressed.

Limitations of the study

The limitations of this study are related to its retrospective design, potential recording bias, and the use of secondary data obtained from medical records. However, despite these limitations, the present study, by analyzing the epidemiological, sociodemographic, and clinical characteristics of patients with ostomies using secondary data, may support actions aimed at improving the care provided to these patients through more appropriate approaches.

Recommendations

It is essential that this topic be widely studied and disseminated, particularly through further research investigating the profile of people with elimination ostomies in the Central-West Region of Brazil. A deeper understanding of these aspects may contribute to improving care practices and management strategies aimed at providing more comprehensive and humanized care. In addition, disseminating these findings may help raise awareness among health professionals and managers regarding the importance of public policies focused on the prevention and care of these conditions.

CONCLUSION

The study made it possible to characterize the main variables of the population investigated and identify weaknesses in the care process. The findings provide relevant evidence for planning and improving care, facilitating the organization of care pathways, multidisciplinary practice, and the adoption of evidence-based practices. The absence of preoperative stoma site marking is noteworthy, revealing an important gap in perioperative care and reinforcing the need to implement an institutional protocol, strengthen the role of stoma therapy nurses, and provide continuous training for multidisciplinary teams.

Difficulties in accessing health services in Mato Grosso also indicate the need to decentralize care, thereby expanding access and equity in care for people with ostomies. Thus, this research contributes to improving care and provides support for the development of institutional and regional policies.

Acknowledgments: Not applicable.

Author contributions: KFAB: Project administration, Formal analysis, Conceptualization, Data curation, Writing – original draft, Writing – review and editing, Methodology, Resources, Validation, Visualization. MMS: Project administration, Formal analysis, Conceptualization, Supervision, Software, Resources, Validation, Visualization. FPLC: Data curation. MRNR: Data curation. **Research data availability:** All data were generated or analyzed in the present study.

Funding: Not applicable.

Conflict of interest: None declared.

Research ethics committee approval: Approved by the Research Ethics Committee of Júlio Müller University Hospital/Federal University of Mato Grosso (HUUFMT), under opinion No. 7.481.922/2025, Certificate of Presentation for Ethical Consideration No. 86176025.1.0000.554.

REFERENCES

1. Brasil. Ministério da Saúde. Secretaria de Atenção Especializada em Saúde. Departamento de Atenção Especializada e Temática. Guia de atenção à saúde da pessoa com estomia. Brasília: Ministério da Saúde; 2021.
2. Silva PR, Alemão MM, Araújo MT, Alonso CS, Borges EL. Impacto da demarcação da estomia de eliminação nos custos assistenciais do cuidado ao paciente. ESTIMA, Braz J Enterostomal Ther. 2024;22:e1502. https://doi.org/10.30886/estima.v22.1502_PT
3. Brasil. Instituto Nacional de Câncer José Alencar Gomes da Silva. Estimativa 2023: incidência de câncer no Brasil. Rio de Janeiro: INCA; 2022.
4. Silva MAS, Rocha MM, Medeiros RG, Vasconcelos SR, Silva AA, Lima TMP. Cuidados de enfermagem aos pacientes com ostomias urinárias: um estudo de revisão. Rev Eletr Estácio. 2022;8(1):1-7.
5. Stolberg JT, Martins W. A importância do enfermeiro estomaterapeuta na assistência integral ao ostomizado: uma revisão integrativa da literatura. RECIMA21. 2023;4(7):e473470. <https://doi.org/10.47820/recima21.v4i7.3470>
6. Oliveira LB, Girondi JBR, Grespi LO, Soldera D, Souza TS, Szpin CC, et al. Desafios para o autocuidado de pessoas com estomias de eliminação intestinal: estudo qualitativo. Rev Eletr Enferm. 2025;27:79845. <https://doi.org/10.5216/ree.v27.79845>
7. Tomasi AVR, Santos SMA, Honório GJS, Girondi JBR. Convivendo com estomia intestinal e a incontinência urinária. Texto Contexto Enferm. 2022;31:e20210398. <https://doi.org/10.1590/1980-265X-TCE-2021-0398pt>
8. Carneiro AF, Oliveira AR, Ribeiro WA, Grassel CS, Klein LC, Guedes MMF, et al. Contributions of stomatherapy to nursing care for people with intestinal ostomy. Braz J Sci. 2023;3(1):183-92. <https://doi.org/10.14295/bjs.v3i1.487>
9. Secretaria de Estado de Saúde de Mato Grosso. Plano Estadual de Saúde 2016–2019 [Internet]. Cuiabá: SES-MT; 2014 [cited 2025 Oct 15]. Available from: [https://www.saude.mt.gov.br/storage/old/files/229-\[10449-201014-SES-MT\].pdf](https://www.saude.mt.gov.br/storage/old/files/229-[10449-201014-SES-MT].pdf)
10. Alonso CS, Borges EL, Ruas AML, Garcia TF. Custo direto com tecnologias para manejo da colostomia definitiva em um serviço especializado. ESTIMA Braz J Enterostomal Ther. 2023;21:e1340. https://doi.org/10.30886/estima.v21.1340_PT
11. Carlsson E, Forsmark A, Sternhufvud C, Scheffel G, Andersen FB, Persson EI. Short- and long-term direct and indirect costs of illness after ostomy creation: a Swedish nationwide registry study. BMC Health Serv Res. 2023;23(1):837. <https://doi.org/10.1186/s12913-023-09850-5>
12. Gomes ES, Simon BS, Dalmolin A, Druzian JM, Santos EB, Girardon-Perlini NMO. Caracterização sociodemográfica e clínica de pacientes em pós-operatório de estomia intestinal de eliminação. Rev Enferm Atual In Derme. 2024;98(2):e024341. <https://doi.org/10.31011/read-2024-v.98-n.2-art.2136>
13. Saraiva ES, Gomes GC, Barros EJJ, Minasi ASA, Biscaglia TA, Gomes LC. Sociodemographic profile of the people living with elimination stoma in a Stomatherapy Service at a University Hospital in Southern Brazil. Res Soc Dev. 2022;11(14):e83111435973. <https://doi.org/10.33448/rsd-v11i14.35973>
14. Brady RRW, Sheard D, Howard K, Vestergaard M, Boisen EB, Mather R, et al. The prevalence of leakage, peristomal skin complications and impact on quality of life in the first year following stoma surgery. Nurs Rep. 2025;15(3):107. <https://doi.org/10.3390/nursrep15030107>

15. Başçeken SI, Dokcu Ş, Caparlar MA, Aslan F, Demirci S. Does the stoma site marking affect stoma quality? *Med J SDU*. 2024;31(2):119-24. <https://doi.org/10.17343/sdutfd.1312882>
16. Benchimol EI, Smeeth L, Guttman A, Harron K, Moher D, Petersen I, et al. The Reporting of studies Conducted using Observational Routinely-collected health Data (RECORD) statement. *PLoS Med*. 2015;12(10):e1001885. <https://doi.org/10.1371/journal.pmed.1001885>
17. Gonzaga AC, Almeida AKA, Araújo KOP, Borges EL, Pires Junior JF. Perfil de crianças e adultos com estomia intestinal do centro de referência da Bahia-Brasil. *ESTIMA Braz J Enterostomal Ther*. 2020;18:e0520. https://doi.org/10.30886/estima.v18.698_PT
18. Diniz IV, Barra IP, Silva MA, Oliveira SHS, Mendonça AEO, Soares MJGO. Perfil epidemiológico de pessoas com estomias intestinais de um centro de referência. *ESTIMA Braz J Enterostomal Ther*. 2020;18:e2620. https://doi.org/10.30886/estima.v18.929_PT
19. Silva PHG, Santana VCL, Pessoa RGS, Silva AIF. A avaliação da resistência masculina na busca aos serviços de saúde. *Res Soc Dev*. 2023;12(3):e19912340356. <http://dx.doi.org/10.33448/rsd-v12i3.40356>
20. Dias ASL, Soares-Pinto IE, Queirós SMM, Pereira RD, Mendes Z, Romano S. Prevalência, incidência e caracterização sociodemográfica e clínica das pessoas com estoma de eliminação em Portugal. *Revista de Enfermagem Referência*. 2024;6(3):e32565. <https://doi.org/10.12707/RVI23.103.32565>
21. Secretaria de Estado de Saúde de Mato Grosso. Mapas de saúde MT [Internet]. Cuiabá: SES-MT; 2020 [cited 2025 Oct 15]. Available from: [https://www.saude.mt.gov.br/storage/old/files/mapa-de-saude-mt-\[502-270820-SES-MT\].pdf](https://www.saude.mt.gov.br/storage/old/files/mapa-de-saude-mt-[502-270820-SES-MT].pdf).
22. Rolim TCA, Pereira ADA, Ferreira CLL, Silva FP. Pessoa com estomia no município de Santa Maria/RS: características sociodemográficas e clínicas. *Disciplinarum Scientia*. 2022;22(2):71-8. <https://doi.org/10.37777/dscs.v22n2-006>
23. Jorge TV, Marques ADB, Mourão LF, Pinheiro RM, Silva AL, Lopes DGLZ. Perfil sociodemográfico e clínico de pessoas com estomia por causa oncológica: estudo observacional. *ESTIMA Braz J Enterostomal Ther*. 2023;21:e1313. https://doi.org/10.30886/estima.v21.1313_PT
24. Tieppo GVL, Alves LS, Sava SFS, Lopes VJ, Soares VPM, Lourenço JP, et al. Impactos da estomia na qualidade de vida de pacientes oncológicos: revisão integrativa. *Rev Foco*. 2024;17(5):e4933. <https://doi.org/10.54751/revistafoco.v17n5-103>
25. Alves AN, Thorpe LIF, Gonçalves NS, Cavalcanti BMC, Silva Filho JC, Bezerra SMMS, et al. Análise comparativa entre a realização de cirurgias de colostomia eletiva e de urgência nas regiões do Brasil no período de 2015-2020. In: *Anais do Congresso Brasileiro de Estomaterapia*; 2024.