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RESEARCH

CLINICAL AND SOCIODEMOGRAPHIC ASPECTS OF PEOPLE WITH A TEMPORARY INTESTINAL STOMA

ASPECTOS SOCIODEMOGRÁFICOS E CLÍNICOS DE ESTOMIZADOS INTESTINAIS PROVISÓRIOS

ASPECTOS SOCIODEMOGRÁFICOS Y CLÍNICOS DE PACIENTES SOMETIDOS A OSTOMÍA PROVISIONAL

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ABSTRACT

This study aimed to characterize sociodemographic and clinical aspects of people with a temporary intestinal stoma seen by care service targeted at ostomates. This is a quantitative, cross-sectional descriptive study, including 117 people with a temporary intestinal stoma. Data were collected through medical chart review and a structured interview. Sixty-four patients (5.7%) were male, with a mean age of 62.9 years, 59.8% were married, 74.4% were Catholic and 70.9% had up to eight years of study. Most (52.9%) had a paid labor activity, 60 of which (51.3%) had discontinued their work activities, and 44.4% had not returned, receiving a social security leave. Of the 57 (48.7%) that had not interrupted their work activities, 33.3% were retired, 13.6% performed unpaid activities and 1.7% were self-employed without the possibility of having a leave. Most had a family income of up to two minimum wages (67.5%). Neoplasias were the major cause of indication of stoma (47.9%), followed by acute abdomen (31.6%). Colostomies were the most frequent stomas (75.2%), the mean duration of stoma implantation was 5.3 years (median 3 years, minimum 6 months and maximum 25 years). Knowledge of the characteristics of the attended population contribute for care planning according to the real needs of people with a stoma, thereby enabling greater effectiveness of the service and consequently greater user satisfaction.

Keywords: Ostomy; Surgical Stomas; Nursing Care; Health Profile.

RESUMO

O estudo objetivou caracterizar aspectos sociodemográficos e clínicos das pessoas com estomia intestinal provisória atendidas por um serviço de atenção ao estomizado. Trata-se de estudo transversal, de natureza quantitativa, com 117 pessoas com estomia intestinal provisória. A coleta de dados ocorreu por meio de revisão de prontuário e entrevista estruturada. Houve prevalência do sexo masculino (54,7%), idade média de 62,9 anos, 59,8% casados, 74,4% católicos, 70,9% com até oito anos de estudo, 52,9% exerciam atividade laboral remunerada; destes, 51,3% interromperam suas atividades laborais e 44,4% não retornaram, com afastamento pela previdência. Dos 57 (48,7%) que não interromperam as atividades laborais 33,3% eram aposentados, 13,6% exerciam atividade não remunerada e 1,7% era autônomo sem direito a afastamento. A maioria possuía renda familiar até dois salários mínimos (67,5%). A neoplasia predominou como causa de confecção da estomia (47,9%), seguida pelo abdome agudo (31,6%). As colostomias foram mais frequentes (75,2%); a permanência da estomia foi, em média, de 5,3 anos (tempo mínimo de seis meses e máximo 25 anos). Concluiu-se que o conhecimento das características da população atendida contribui para o planejamento da assistência conforme as reais necessidades da mesma, possibilitando mais efetividade do serviço e, consequentemente, melhora na satisfação do usuário.

Palavras-chave: *Estomia; Estomas Cirúrgicos; Cuidados de Enfermagem; Perfil de Saúde.*

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RESUMEN

El estudio caracteriza aspectos sociodemográficos y clínicos de pacientes ostomizados provisionalmente atendidos por en un servicio de atención al ostomizado. Estudio transversal realizado con 117 personas con estoma intestinal provisorio. Los datos fueron recogidos por medio de la revisión de los expedientes clínicos y de entrevistas estructuradas. Prevalencia del sexo masculino (54,7%), edad mediana de 62,9 años; 59,8% casados, 74,4% católicos, 70,9% con hasta ocho años de estudio, 52,9% ejercían actividad laboral remunerada; 51,3% de ellos debieron interrumpir sus actividades laborales y 44,4% no retornaron y solicitaron pensión de la seguridad social. De los 57 (48,7%) que no interrumpieron las actividades laborales 33,3% eran jubilados, 13,6% ejercía actividad no remunerada y 1,7% eran trabajadores autónomos sin derecho a pensión por alejamiento. La mayoría tenía ingreso familiar de hasta 2 sueldos mínimos (67,5%). La neoplasia predominó como causa del estoma (47,9%), seguida por abdomen agudo (31,6%). Las colostomías fueron más frecuentes (75,2%), la permanencia del estoma fue en media de 5,3 años (mínimo de 6 meses y máximo de 25 años). El conocimiento de las características de la población atendida contribuye a la planificación de los servicios de acuerdo con las verdaderas necesidades de la población, posibilitando servicios más eficientes y efectivos y, consecuentemente, mejora el nivel de satisfacción de los usuarios.

***Palabras clave**: Estomía; Estomas Quirúrgicos; Atención de Enfermería; Perfil de Salud.*

INTRODUCTION

Stoma is a surgical derivation in which the exteriorization of the light of a hollow organ occurs, creating a communication with the external environment. In intestinal stomas the main purpose is the diversion of the flow of feces and gases, being common the exteriorization of the colon (colostomy) or the ileum (ileostomy).[1]

Several diseases affecting organs of the digestive system, or close to it, can lead to the construction of intestinal stomas, especially neoplasias, inflammatory bowel diseases, diverticular diseases, in addition to external causes, in which intestinal lesions may occur, whether due to cold weapon or gun injury, or blunt trauma resulting from car accidents or interpersonal violence, among others.[1]

The construction of the stoma determines bodily changes and in daily activities, mainly related to their specific care and the presence of a collection equipment for the stoma, eventually leading the patient to experience negative feelings about his/her body, influencing self-esteem and interpersonal relationships.[2,3]

Due to these changes and difficulties, ostomates start to need different collecting and adjunctive equipment for their rehabilitation process, varying according to age, type of stoma, physical characteristics of the individual and the stoma, besides the existence or not of complications.[4]

According to the disease, the portion of the affected organ, the type of surgical technique employed and other factors such as associated diseases, the stoma can be classified as temporary, when there is a possibility of reconstruction of the intestinal transit, or permanent, when there is no such possibility.[1]

The procedure of reconstruction of intestinal transit is not devoid of risks, presenting variable morbidity and mortality rates according to the characteristics of the individuals, associated diseases, disease that led to the construction of the stoma, in addition to inherent factors to the health service.[5-7] However, the permanence of the stoma can generate local complications such as peristomal dermatitis and even possible evolution to surgical correction such as prolapse, retraction of the stoma, hernia, among others.[8] The self-image and the self-esteem of the ostomate also undergo changes, influencing in their daily life.[2,8]

In this scenario, the objective of this study was to characterize sociodemographic and clinical aspects and to verify the association of variables of patients with temporary intestinal stoma attended by a care service to type II ostomates, a specialized care service with a multidisciplinary team.

Knowledge of the users' profile of the care service to ostomates helps in the planning of actions geared specifically to the needs of this population, directing the performance of the multidisciplinary team.

METHOD

This is a cross-sectional, quantitative study carried out in a care service for type II ostomates located in the interior of the state of São Paulo. This service attends a region of 90 municipalities, including the service's head office city, a micro-region composed of 30 nearby municipalities and a macro-region composed of 59 municipalities located geographically farther from the service head office city. It has a team consisting of a coloproctologist physician, a stomatherapist nurse, a nutritionist, a psychologist and a social worker who provide specialized and interdisciplinary care to people with stoma, with a view to rehabilitation, including guidance for self-care, prevention and treatment of complications in stomas, training and supply of collection and protection and safety bags.[4]

The study population consisted of people who met the following inclusion and exclusion criteria: having a temporary intestinal stoma; being 18 years old or over; living in one of the municipalities of the region under the responsibility of the care service to type II ostomates; not presenting diseases with cognitive and mental alterations; not be bedridden; and agreeing to participate in the study after invitation and clarification on the objectives, procedures, guarantee of anonymity and of not being disadvantaged in case of refusal to participate, being this

formalized by signing the Free and Informed Consent Form, as foreseen in CNS Resolution 466/12.

In order to select the participants, we initially analyzed all records of ostomates who had been enrolled followed up at the aforementioned service, in order to identify those who had a temporary stoma. Of the 470 records of people with stoma analyzed, 117 had temporary stoma and fit the inclusion and exclusion criteria, corresponding to the final sample of the study. There was no loss or refusal.

Data were collected through a review of the medical records and a structured interview using an instrument developed by the researchers themselves, considering sociodemographic aspects (gender, age, marital status, schooling, religion, current occupation, post-surgery leave and family income) and clinical aspects (date of stoma, disease, length of stay with stoma, type of stoma, reason of non-reconstruction, type and amount of equipment that the patient makes use). The review of the medical records allowed obtaining more reliable and more assertive clinical data. The instrument was pre-tested in a pilot study applied to 10 people with the objective of obtaining the necessary information for the final data collection instrument with specificity and clarity necessary for the understanding of the respondents, avoiding possible biases of non-understanding or influence of the interviewer. At the end of the test, the instrument was not modified and the interviews were included in the final sampling.

The interviews occurred in a systematic manner, when users arrived at the service for monitoring and delivery of collecting equipment between September and November 2015.

The data were stored in a database using a Microsoft Excel® 2007 spreadsheet in order to allow the statistical analysis of the data, which are presented in the form of tables and graphs. Researchers performed descriptive analysis of the sample characterization variables; analysis of variance with Tukey's multiple post-hoc comparison test to check if there is an association between age and the cause of the stoma; analysis of variance or the Mann-Whitney test to check whether there is an association between the time with stoma and the clinical characteristics; and Spearman's correlation test to correlate age and length of stay with stoma. The significance level applied for all tests was $p < 0.05$. The Minitab 17 (minitab inc) software was used for statistical analysis.

The study was previously approved by the Research Ethics Committee (REC) under the opinion no. 1,228,105 in compliance with the legal requirements for studies involving human beings.

RESULTS

The study was attended by 117 people with a temporary stoma, of whom 64 (54.7%) were males. The mean age of the participants was 62.9 years, with a standard deviation of 14.48, median of 63, minimum age of 23 and maximum of 95 years. Most participants were married (70 - 59.8%), with up to eight years of study (83 - 70.9%), Catholic religion (87 - 74.4%) and exclusively dependent on SUS health services (106 - 90.6%). A total of 62 (52.9%) people were engaged in paid work and the average family income was 2.08 minimum wages (MW), standard deviation 1.07, median 2 MW, with a minimum family income of 1 and a maximum of 6 MWs. Of the 62 (52.9%) who had paid work, 60 (96.8%) interrupted their activities, having received a leave by the social security; and 52 (83.8%) did not return to work after the procedure, remaining apart from work. Of the 57 (48.7%) who did not interrupt their work activities, 39 (68.4%) were retired, 16 (28.1%) exercised unpaid work at home, and two (3.5%) were self-employed and returned to activities after recovery (Table 1).

Table 1 - Sociodemographic aspects of people with temporary intestinal stoma attended in a care service to type II ostomates in the interior of the state of São Paulo, 2015 (n=117)

Sociodemographic aspects of ostomates		N	%
Gender	Male	64	54.7
	Female	53	45.3
Age group	20-29	2	1.7
	30-39	7	5.9
	40-49	11	9.4
	50-59	26	22.3
	60-69	28	23.9
	70-79	27	23.1
	80 and more	16	13.7
Marital status	Single	15	12.8
	Married	70	59.8
	Divorced	9	7.7
	Widowed	23	19.7
Schooling	None	8	6.8
	Up to 8 years	83	70.9
	Up to 11 years	21	17.9
	More than 12 years	5	4.4
Religion	Catholic	87	74.4
	Non-Catolic	30	25.6
Health service	Dependent on SUS	106	90.6
	Agreed to the private health insurance company	11	9.4
Labor activity	Paid	62	52.9
	Non-paid	16	13.7
	Retired	39	33.3
Family income	Up to 2 minimum wages*	79	67.5
	From 3 to 4 minimum wages	35	29.9
	5 and more minimum wages	3	2.6

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Table 1 - Sociodemographic aspects of people with temporary intestinal stoma attended in a care service to type II ostomates in the interior of the state of São Paulo, 2015 (n=117)

Sociodemographic aspects of ostomates		N	%
Interrupted work activities after surgery	Yes	60	51.2
	No	57	48.7

* Value of the minimum wage: R$ 788.00 according to Decree 8.381/2014 published in the Official Gazette of the Federal Government on 12/30/2014.

Regarding the clinical characteristics, the neoplasia was the main reason for stoma (56-47.9%), followed by acute abdomen (37-31.6%). For the analysis of age in relation to the disease, people with acute abdomen and neoplasia were found to be significantly older than those with other types of diseases (Table 2).

Table 2 - Comparison of the age with the reason for temporary stoma, 2015 (n=117)

Variable		Age			p-value[1]
		N	Mean±SD	Median	
Disease	Acute abdomen	37	68.32±13.25 a	69.00	<0.001
	Neoplasia	56	64.46±11.57 a	66.50	
	Others*	24	51.21±16.33 b	52.00	

[1] p-value for the Analysis of Variance (ANOVA) test at p <0.05. Different letters in the same column indicate significant differences by the Tukey multiple comparison test at p <0.05. *Others: grouped fistula, Fournier's syndrome, external causes, inflammatory bowel diseases and Chagas' disease without perforation or obstruction of the colon.

As to the length of stay with the stoma, a mean of 5.3 years was found, with a standard deviation of 5.1 years, a median of three years, a minimum of six months and a maximum of 25 years between the date of construction of the stoma and the date of the interview. The results obtained from the comparison between the length of stay with stoma and the various variables addressed in the study are shown in Table 3. According to these results it is possible to assume the absence of significant differences in the length of stay with the stoma when ostomates were compared in relation to disease (p = 0.099), type of surgery (p = 0.342), type of stoma (p = 0.709) and characteristic of surgery (p = 0.590).

The results of the Spearman's test for correlation between the ages of ostomates assessed regarding the length of stay with the stoma that there was a weak correlation between these variables, although it was significant (r = 0.416, p <0.001). The Spearman coefficient value was positive, assuming that the greater the age of the person with the stoma, the longer the person will remain with the stoma (Figure 1).

Table 3 - Association of clinical characteristics and length of stay with stoma, 2015 (n=117)

Variable		Length of stay with stoma			p-value[1]
		N	Mean±SD2	Median	
Disease	Acute abdomen	37	6,28±5,01	5,25	0,099[1]
	Neoplasia	56	3,95±4,41	2,16	
	Others	24	5,97±5,99	3,63	
Type of surgery	Colectomy	54	5,76±5,28	3,58	0,342[1]
	Retosigmoidectomy	49	4,91±5,18	2,41	
	Others	14	3,18±2,76	1,70	
Type of stoma	Colostomy	88	5,15±5,24	2,83	0,709[2]
	Ileostomy	29	4,95±4,45	2,41	
Characteristic of the surgery	Elective	55	4,78±4,95	2,50	0,590[2]
	Urgency	62	5,38±5,14	2,83	

[1]p-value for the Analysis of Variance test at p <0.05; 2p-value for the Mann-Whitney test at p <0.05.

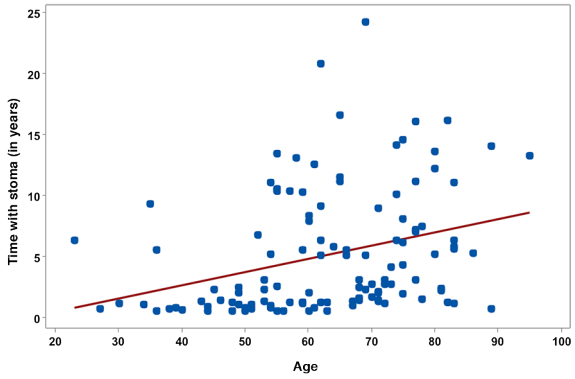

Figure 1 - Correlation between the age of the ostomates and the length of stay with the stoma.

DISCUSSION

Regarding the sociodemographic aspects, it was observed a predominance of the elderly men and a significant increase of ostomates according to the increase of the age. These results are similar to some national and international studies on the profile of people with stoma.[2,8,9] The increase in the number of people with intestinal stoma associated with aging may be related to the fact that some diseases affect the elderly more often due to pathological aging. These comorbidities increase the risk of surgical complications.[10]

This risk seems to be linked to the prolongation of the time with a temporary stoma.

In this study, the majority of the population was married, followed by widows/widowers and singles. The stoma, the collecting equipment and the inability to control gases and feces change the image that one has of oneself, starting to experi-

ence negative feelings about one's body and inferiority towards their partner, influencing the individual's sexuality and the marital relationship, that is, the alteration of sexuality is related not only to physical alterations, but also to self-image, self-esteem and emotional changes of the person with the stoma.[11,12] In this context, the support and the presence of the partner, relatives and the friends during the adaptation phase contribute to the coping of the difficulties that arise with the stoma, including in the aid and incentive to perform care, contributing to rehabilitation and improving self-esteem.[13]

In a Brazilian study that analyzed the characteristics of people submitted to intestinal flow reconstruction, the mean length of stay with the stoma until reconstruction was 15.7 months, with mean age at the reconstruction of 43 years; external causes were the main reason for the construction of the stoma.[6] We found in our results a mean of 5.3 years with stoma and mean age of 62.09 years, that is, both the length of stay with stoma and the age were higher. These data strengthen the results of the Spearman's test, assuming that the advanced age of the ostomate is correlated with greater length of stay with the stoma. Comorbidities associated with aging increase morbidity and mortality rates, which may be contributing to the reconstruction time found. The overload of public health services may also be contributing to the increase of this time.

It is noteworthy that, even after the adjustment period, emotional distress related to the stoma and changes in lifestyle may persist.[10] Thus, it is understood that the stay of a temporary stoma for longer periods can extend the emotional suffering of the individual.

Schooling may be linked to the difficulties of access to education experienced by the older portion of the Brazilian population. The level of knowledge generated by the few years of study can determine the accomplishment of activities with less financial return. Smaller wages result in lower social security benefits, contributing to findings on household income. These results were in agreement with other studies carried out in different regions of the country, such as Minas Gerais,[9] Rio Grande do Sul,[14] Paraíba[15] and Ceará.[16]

In relation to religion, it was observed that the majority was Catholic. Faith and belief are considered important tools for the survival process, because through religion people find strength to face pain and anguish in daily life, receiving relief from suffering.[3,10] According to data from the Brazilian Institute of Geography and Statistics (IBGE), the Brazilian population is composed mostly of Catholics.[17]

The majority of people with stoma that are economically active did not return to work after recovery from the surgical procedure, remaining apart and receiving social security benefits. Return to work is part of the process of rehabilitation of the person with stoma, collaborating in social inclusion, reinforcing the feeling that they are able to continue working and performing daily tasks. The salary is an increment to the financial needs in case of low family income. It is therefore the task of team professionals who assist people with stoma to guide them and prepare them for return to work.[18]

Considering that the stoma may limit the execution of some activities, it is necessary to search for adequate conditions of access, transportation and adapted work. The Brazilian legislation included the ostomate as a disabled person, who may enter or remain in the public service as well as in the private service through specific quotas.[19]

The fact that the majority of the sample is dependent on the Unified Health System (SUS) may be related to two major factors: family income and current legislation. It was verified that the majority of the study population is elderly, with a family income of up to two minimum wages, which makes it difficult for them to obtain a private health service.

In the current legislation, there are two ordinances that contemplate the distribution of equipment for the person with a stoma: ordinance 400, of November 16, 2009, which regulates the distribution of equipment for the SUS, and the ordinance 12738, of November 30, 2012, which determines that health insurance companies are responsible for making these equipment available to their clients, whether in a hospital, outpatient facility or home environment.[4,20] According to data from government institutions, the average coverage rate for health insurance companies of the state of São Paulo in September 2015 was 39.4%.[21]

Neoplasms were the main cause of stoma, which corroborates data found in other studies.[8,9,14,16] According to the National Cancer Institute (INCA), colorectal cancer is among the most frequent in the country, being the third largest cause of cancer for women (after only skin and breast cancer) and the fourth largest cause of cancer among men (getting behind skin, prostate and lung cancer). The same institution estimated for the biennium 2016-2017 that colorectal cancer would be the second most prevalent cancer in both sexes in the Southeast region of Brazil, not considering skin cancers.[22]

Studies that have analyzed the profile of users submitted to reconstruction of intestinal flow have pointed to external causes as the most prevalent in this population.[6,7] These causes are related to violence, especially in traffic and interpersonal violence. In this study the external causes were the least prevalent among the reasons for stoma.

Two situations may have contributed to this data. Firstly, according to data from the Public Security Secretariat of the state of São Paulo, the region where the study was conducted is not among the most violent in the state[23]. Secondly, reconstruction of intestinal flow in which the underlying cause was external may require less time between the construction of the stoma and the reconstruction of intestinal flow, since there is

no prolonged treatment, as in cases of neoplasms, which may require adjuvant therapies. Some studies have also included the performance of surgery without the need for a specific analysis of the colon, when the underlying cause is external[24], facilitating the process of reconstruction.

Colectomy was the most used surgical technique for the preparation of stoma in the studied population, followed by Hartman type rettosigmoidectomy. Similar data were found in national studies.[6,13] Terminal and mainly Hartman colostomies present high rates of post-reconstruction complications; therefore, their indication should be restricted.[13]

Stomas are performed in the colon (colostomy) and ileum (ileostomy) in loops that have size and mobility that allow their proper exteriorization and fixation in the abdominal wall.[1] In this study, colostomies were more prevalent than ileostomies, corroborating with that found by other authors.[6,7,9,13] The results did not show a significant increase in length of stay with the stoma because of the type of stoma, whether it was colostomy or ileostomy.

Considering the people with a temporary stoma, a limitation of this study was not considering the meaning of the stoma for the participants, which could aid in the planning of individual care for the person with a temporary stoma.

CONCLUSION

The present study made it possible to know the sociodemographic and clinical characteristics of a population of people with a temporary intestinal stoma, treated in a care service to type II ostomates located in the interior of the state of São Paulo.

The data revealed that the majority of the studied population was male, elderly, married, Catholic, with eight years of schooling, with income of up to two minimum wages, dependent on SUS and that interrupted labor activities after the stoma was made. The majority had a colostomy, with a length of stay of five years or more.

This information may provide an agreement between care and service planning, according to the real needs of the person with a temporary stoma, thus guaranteeing access to services and equipment according to the needs and particularities of these clients, contributing to a more effective service and consequent improvement in user satisfaction. It also provided reflection on the causes of construction of the temporary intestinal stoma, with strategies such as campaigns aimed at prevention and early diagnosis of cancer, mainly colorectal cancer, improving the population's knowledge about these diseases.

The integration of services and sectors that perform the rehabilitation of disabled people with bodies that promote the return or replacement of this population in the labor market can enhance this action. The return to work generates a sense of being useful and helps the subsistence of the being and of their dependents, contributing to the process of rehabilitation and reducing costs with prolonged leaves by social security.

Further studies in this theme will contribute to a better understanding of the difficulties encountered by people with a temporary intestinal stoma, helping to plan the care directed to their real needs.

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