Health care service for ostomy patients: profile of the clientele

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ABSTRACT: The study aimed to identify the profile of ostomy patients in a Health Care Service in São José do Rio Preto, São Paulo, Brazil. This is an exploratory, descriptive and retrospective study. Data were obtained by registration forms of patients assisted from January 1st, 2000, to December 31st, 2010. Out of the 252 ostomy patients, 51.1% were females and 48.9% were males; the age group with the highest concentration was from 68 to 78 years old (26.3%) for both genders, with mean age of 73 years old. The main reason for making the stoma was rectal (35.0%) and colon neoplasm (14.1%). The prevalent stoma was temporary colostomy (41.4%) and the period of permanence of the collecting equipment was longer than 36 months. Even though the service provides full assistance to the ostomy patients, it is necessary to review human resources aspects to provide appropriate assistance to its clientele.

Keywords: ostomy; nursing care; quality of life; health profile.

INTRODUCTION

In the past few decades, cancer has become a established public health issue worldwide. In 2008, statistics showed colon and rectal cancer as the third most common type of the disease among men, and the second among women. According to the estimates of the National Cancer Institute (INCA) for 2012, in Brazil 14,180 new cases of colon and rectal cancer are expected among men, and 15,960 among women. These values correspond to an estimated risk of 15 new cases among 100 thousand men, and 16 among 100 thousand women1.

Mortality due to this type of cancer can be controlled by means of programmatic actions of detec-
tion and treatment, which can enable the detection of early stage cancer. In the past two decades, the clear advances in scientific knowledge and the appearance of new techniques and surgical materials in the coloproctology field increased therapeutic possibilities, thus improving the prognosis of patients affected by this type of disease.

Surgery is the primary therapeutic intervention for cancer, and most of the time it involves tumor resection, followed by anastomosis of healthy areas, thus keeping anal fecal discharge. However, when malignant tumors are placed in the lower rectum, anastomosis is not technically possible. In this case, it is necessary to make a stoma, thus producing a new path for fecal discharge.

The word “stoma” comes from the Greek, and it means mouth, or opening. It is used to refer to the exteriorization of any viscer. The intestinal stoma is the exteriorization of the intestines through the abdominal wall. It has different names, depending on the exposed segment. For instance, if it is placed on the colon, it is called colostomy; if it is in the ileum, ileostomy, if in the jejunum, jejunostomy.

Ostomy patients need specific care, multiprofessional specialized follow-up that meets their biopsychosocial needs and qualified nursing care, which should be initiated in the preoperative period and continue throughout the period in which the patient should be with the stoma, and this could be permanent.

Many doubts may come up in the first days after hospital discharge, such as issues related to the treatment, the onset and/or maintenance of signals and symptoms and the appearance of new problems. The nurse has a closer relation to the patient and family members, and for that this professional is essential to assist the ostomy patient.

Therefore, support services to ostomy patients play an important role, since they involve the whole care process addressed to continuing the actions initiated in the admission stage, with the objective of rehabilitation based on self care and better quality of life. However, nowadays these services are not sufficiently publicized. So, it is necessary to create policies that aim to value the ostomy patients, including information concerning their conditions and needs, social support and employment, among others.

In Brazil, studies that describe the profile of ostomy patients are rare, which makes it difficult to characterize the national scenario of relevant aspects to this population. Consequently, it is not possible to prepare an epidemiologic databank that could subsidize specific interventions for this population.

This study aimed to identify the profile of ostomy patients in a health care service in São José do Rio Preto, São Paulo, and surroundings.

METHOD

It is an exploratory, descriptive and retrospective study in a documental analysis. The research was conducted at the health care service to the ostomy patient in São José do Rio Preto, located in the specialized outpatient clinic related to the Secretariat of Health. The place was chosen because it is a regional reference to the cities of the Health Regional Board – DRS XV.

Collection was carried out in September, 2010, and records from January 2010 to December 2010 were analyzed.

In order to compose the sample of this study, the following inclusion criteria were considered: to be registered in the health care service in the period of 2000 to 2010; to have intestinal stoma; to live in the city of São José do Rio Preto and surroundings; and to be older than 18 years old.

Data to identify the profile of patients were taken from their registers, and separated into variables such as gender, age group, basal disease that led to the stoma, type of device and time of use of the collecting device.

The study was approved by the Ethics Research Committee, protocol n. 4073/2010. And the results were analyzed by descriptive statistics with calculations of absolute and relative frequency.

RESULTS

The health care service for the ostomy patient has been caring for the patients in São José do Rio Preto for 17 years, and is addressed to patients in the city and surroundings (31 cities) and the macroregions Votuporanga (18 cities), Fernandópolis (12), Jales (16) and Santa Fé do Sul (6), which belongs to the DRS XV, resulting in approximately 200 patients/month.

The objectives are to systematize and individualize care to the patient with intestinal and urinary stoma in order to provide guidance, technical support, and to teach about its use and the hygiene of the collecting
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In this period, it was prevalent among women (129 patients; 51.1%) in relation to men (123; 48.9%), and the age group that presented with higher concentration, for both genders, was from 68 to 78 years old (26.3%), with mean age of 73 years old (Table 1).

As demonstrated in Table 2, among the causes for ostomy, cancer was shown as the main one, corresponding to 54.5% of the cases.

Regarding the neoplasms, the main ones were rectal (35%) followed by colon (14.1%), accounting for 49.1% of the cases.

In Figure 1, it is demonstrated that the most used device in this study (210 cases) was the system of a transparent draining device with a synthetic resin barrier that should be changed every three to seven days, followed by (21 cases) the two-piece drainage device (base and bag).

The time of use of the collecting device is variable (Table 2), and 26% of the patients used it from 12 to 24 months. It was mostly used for more than 36 months.

![Figure 1](image-url)

**Figure 1.** Characterization of the devices used by the ostomy patients in the Service for Ostomy Patients (São José do Rio Preto, 2011).

<table>
<thead>
<tr>
<th>Age group (years)</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>18–28</td>
<td>1</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>28–38</td>
<td>6</td>
<td>8</td>
<td>14</td>
</tr>
<tr>
<td>38–48</td>
<td>14</td>
<td>6</td>
<td>20</td>
</tr>
<tr>
<td>48–58</td>
<td>18</td>
<td>29</td>
<td>47</td>
</tr>
<tr>
<td>58–68</td>
<td>31</td>
<td>24</td>
<td>55</td>
</tr>
<tr>
<td>68–78</td>
<td>36</td>
<td>30</td>
<td>66</td>
</tr>
<tr>
<td>&gt;78</td>
<td>17</td>
<td>27</td>
<td>44</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>123</td>
<td>129</td>
<td>252</td>
</tr>
</tbody>
</table>

**Table 1.** Numeric and percentage distribution of ostomy patients registered in the Service for Ostomy Patients, according to age group and gender (São José do Rio Preto, 2011).
**Table 2.** Distribution of the number and percentage of ostomy patients in the Service for Ostomy Patients, according to gender and base diagnosis (São José do Rio Preto, 2011)*.

<table>
<thead>
<tr>
<th>Base diagnosis</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
</tr>
<tr>
<td>Rectal neoplasm</td>
<td>42</td>
<td>34.4</td>
<td>40</td>
</tr>
<tr>
<td>Colon in neoplasm</td>
<td>22</td>
<td>18.0</td>
<td>11</td>
</tr>
<tr>
<td>Colonic diverticular disease</td>
<td>12</td>
<td>9.8</td>
<td>13</td>
</tr>
<tr>
<td>Chagasic megacolon</td>
<td>10</td>
<td>8.1</td>
<td>8</td>
</tr>
<tr>
<td>Perforated acute abdomen</td>
<td>6</td>
<td>4.9</td>
<td>2</td>
</tr>
<tr>
<td>Fire arm injury</td>
<td>3</td>
<td>2.4</td>
<td>1</td>
</tr>
<tr>
<td>Ulcerative colitis</td>
<td>3</td>
<td>2.4</td>
<td>4</td>
</tr>
<tr>
<td>Trauma</td>
<td>2</td>
<td>1.6</td>
<td>2</td>
</tr>
<tr>
<td>Paraplegia</td>
<td>2</td>
<td>1.6</td>
<td>1</td>
</tr>
<tr>
<td>Appendicitis</td>
<td>2</td>
<td>1.6</td>
<td>1</td>
</tr>
<tr>
<td>Sigmoid neoplasm</td>
<td>0</td>
<td>0.0</td>
<td>7</td>
</tr>
<tr>
<td>Cervix uteri neoplasm</td>
<td>0</td>
<td>0.0</td>
<td>2</td>
</tr>
<tr>
<td>Fournier’s syndrome</td>
<td>2</td>
<td>1.6</td>
<td>0</td>
</tr>
<tr>
<td>Perianal fistula</td>
<td>2</td>
<td>1.6</td>
<td>0</td>
</tr>
<tr>
<td>Sigmoid volvulus</td>
<td>1</td>
<td>0.8</td>
<td>4</td>
</tr>
<tr>
<td>Crohn’s disease</td>
<td>1</td>
<td>0.8</td>
<td>0</td>
</tr>
<tr>
<td>Enterocutaneous fistula</td>
<td>1</td>
<td>0.8</td>
<td>0</td>
</tr>
<tr>
<td>Colorectal neoplasm</td>
<td>1</td>
<td>0.8</td>
<td>3</td>
</tr>
<tr>
<td>Other causes</td>
<td>10</td>
<td>8.1</td>
<td>13</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>122</td>
<td>100.0</td>
<td>112</td>
</tr>
</tbody>
</table>

*The same patient had more than one pathology.

**Table 3.** Distribution of the number and percentage of ostomy patients in the Service for Ostomy Patients, according to time of use of the collecting device and gender (São José do Rio Preto, 2011).

<table>
<thead>
<tr>
<th>Time of use of the collecting device</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
</tr>
<tr>
<td>≤12 months</td>
<td>18</td>
<td>14.7</td>
<td>29</td>
</tr>
<tr>
<td>12–24 months</td>
<td>36</td>
<td>27.3</td>
<td>30</td>
</tr>
<tr>
<td>24–36 months</td>
<td>16</td>
<td>13.0</td>
<td>12</td>
</tr>
<tr>
<td>≥36 months</td>
<td>57</td>
<td>45.0</td>
<td>54</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>127</td>
<td>100.0</td>
<td>125</td>
</tr>
</tbody>
</table>

Both for men (45%) and for women (43.2%); it was also possible to observe that the time of use of the stoma was superior to 36 months for both genders (111; 43.7%).

In this study, according to Table 3, the time of use of devices superior to 36 months is prevalent, and 106 (42%) of the stomas were temporary.

In Figure 2, it is possible to observe the duration of stomas (permanent or temporary) and their location.

As to the location of the stoma, 182 (72.5%) were colostomy patients, 59 (23.1%) were ileostomy patients, and 11 (4.4%) were ileoileostomy patients.

In the studied period, only three patients used the colostomy irrigation system and the stoma protector. The small number of patients can be a result of the lack of information of health professionals in relation to its handling and benefits, since a considerable number (30.1%) of patients would have the indication to...
adhere to the irrigation system, thus improving their quality of life.

As to hospital stay, most ostomy patients (102; 58.7%) were admitted to the emergency room, while 72 (41.3%) underwent elective surgery.

**DISCUSSION**

According to rule n. 400, from November 16, 2009, which established the National Guidelines of Ostomy Patients in the Unified Health System (SUS), the health care service to the ostomy patients is classified into: Health Care Service to the Ostomy Patients I and II. Service I should have a general doctor, a nurse and a social worker – to conduct guidance activities for selfcare, prevention of complications and provision of collective equipment of protection and safety. Service II must have at least one general doctor, a nurse, a social worker, a psychologist and a nutritionist – to conduct all activities in Service I, including the treatment of complications of stomas and the formation of health professionals.14

This service fits classification II, since it is considered as reference to assist ostomy patients of DRS XV. However, during the period that comprised data collection, it is clear that the team needs other professional fields in order to properly approach this clientele.

The female prevalence was observed with higher concentration in the age group between 68 and 78 years for both genders, as demonstrated in Table 1.

A similar study conducted with the Ostomy Patient Group of Juiz de Fora (MG) observed that out of the 59 registered ostomy patients, 54.2% were females, and 77% were 51 years old or older.7

In the Program of Education and Support to the Ostomy Patient in Ribeirão Preto (SP), out of the 50 investigated patients, 64% were females. The highest percentage of males was aged from 48 to 58 years old, and females were aged from 68 to 78 years old.8 In another study,9 which evaluated the profile of ostomy patients in Rio Grande do Sul, 62.5% were females. As observed, the mentioned research had mostly women, which confirms the data in this study.

On the other hand, a study performed in 2005 verified that intestinal ostomy patients were aged between 51 and 80 years old, and 62.4% were males.10 In other studies,6,11, the male gender was also prevalent, with 56.7 and 53.5% of the cases, respectively.

It is demonstrated that the gender of the ostomy patients may influence the social adaptation. Thus, women in the preoperative period demonstrate significant levels of despair, depression and fear, but the adaptation tends to take less time. Men, especially those with sexual impotence problems, take longer to satisfactorily respond to daily activities, and they even present more difficulties concerning selfcare.12

In the variable age, all mentioned studies, including this one, show the age 50 years or more as being more frequent for ostomy.

Even though the percentage of users increases with age, there are still many younger users (0 to 50 years), especially males, which represent 30.4% of the total, while this age group refers to 15% of the women.6 In our study, these numbers were more discreet, 17.2 and 14.9%, respectively, considering 18 to 48 years.

Cancer is usually diagnosed in an advanced stage, which compromises prognosis and the survival of patients. The diagnosis of colon cancer can be suggested by history and physical examination, changes in the intestinal habit, such as frequency, caliber or the presence of blood in stool; these manifestations suggest neoplasm.1

Table 2 shows the classification of ostomy patients concerning the diagnosis that led to the ostomy. Out of the 234 patients, the most prevalent diagnosis...
was cancer, especially rectal and colon cancer. Similar data were shown in other studies\textsuperscript{5,7,9,10,12}, which is in accordance with what is publicized by the National Cancer Institute\textsuperscript{1}.

It is important to say that it is a challenge for all of those who are involved in the process of caring for the ostomy patient to search for better care conditions, considering specialized and quality services, access to professionals, facility to acquire the sufficient amount of material and with adequate quality\textsuperscript{15}.

The process of selecting the proper devices for the ostomy patient should be based on the evaluation of individual needs and on the characteristics of the stoma. This evaluation includes variables such as stoma, consistency of the effluent, surgical construction and size of the stoma in millimeters and protrusion level, by which it is possible to detect complications, among others\textsuperscript{16}.

It was observed that the most used device (Figure 1) was a piece. It is implied that this fact is due to the facility to handle the device, once most patients are at an advanced age and might have difficulties to handle other types of devices.

In this study, 80.7\% of the ostomy patients had been using the device for more than 12 months. In another study, similar data were found, and 74\% of the patients had used for more than 12 months\textsuperscript{7}. Similar studies \textsuperscript{6,15} showed that 90\% of the ostomy patients used the device from 35 to 120 months, and 73.7\% of the colostomized patients also used it for more than 12 months. In relation to the findings in Figure 2, concerning the location of the stoma, most patients were colostomized, which was confirmed by other studies\textsuperscript{5,9,11,12}. It was also observed that 102 (41.4\%) of the stomas were temporary.

Temporary stomas, that is, when the functional continuity can be established or when they are performed in order to protect from anastomosis, are usually built with two paths to enable traffic, without the need for laparotomy. The permanent stoma is used when it is necessary to extirpate part of the rectum or anus, thus leading the patient to have fecal incontinence. There seems to be no consensus concerning the time for closing a temporary stoma. The classic period is 8 to 12 weeks, demonstrated in most publications, but it should be analyzed with clinical critical sense\textsuperscript{6}.

A study conducted in Teresina (PI) showed that the time of permanence of an intestinal stoma ranged from 68.42\% in the temporary to 31.58\% in the permanent stoma. Other studies showed differences between these data, once one of them\textsuperscript{12} demonstrated 81.25\% of the interviewees with permanent stoma, and 18.75\% with temporary stoma. Another study\textsuperscript{9} showed 66 patients (75\%) with permanent stoma, 13 (14.8\%) with temporary stoma and 9 (10.2\%) without this information. On the other hand, other studies confirm that temporary stomas consisted of 60.98\% of the total, while 39.02\% of the stomas were permanent\textsuperscript{17}. The different results as to its permanence are due to the fact that the stomas are directly related to the causes that motivated their confection\textsuperscript{18}.

Concerning colostomy, as with ileostomy, there is no voluntary control of elimination, since stool and gas are continuously drained. However, in some cases it is possible to perform bowel conditioning by irrigating the colostomies\textsuperscript{18}.

Education for the bowel irrigation of colostomy is not spread in our society, and this can be related to the lack of knowledge from health professionals or to the deficiency in human and material resources. In this matter, we point to the role of the nurse to educate the patient in rehab after colostomy, especially as to the method of bowel irrigation. So, the stoma therapy nurse, or not, but a professional trained to teach the technique, is essential. It is important that this person know about the specificity of each health change and the differences for treating diseases; this person should be open to acquire more knowledge that can enable qualified professional assistance, aiming to the adequate rehabilitation of this group of patients\textsuperscript{19,20}.

The type of hospital stay is directly related to the causes that motivated the stomas. Obstructions, trauma caused by white and fire guns and that motivated by inflammatory syndromes are determinant for emergency surgeries\textsuperscript{4,6,16,18}.

Finally, we should mention that the service described in this study did not use medical records with data concerning the clinical evolution of the registered patients, so the information is only based on registration forms that are filled at the time of including the ostomy patients in the program. So, the exist-
ing data are insufficient to create a broader characterization of the clientele. Thus, there is no information as to quality of life; we do not know how these people feel about the service of the program and which their real needs are.  

CONCLUSION

We conclude the female gender was prevalent in relation to the male gender, with mean age of 73 years for both genders. The patients assisted at the Service for Ostomy Patients have stomas due to rectal and colon cancer. The prevalent stoma was temporary colostomy, and time of permanence of the collecting equipment was superior to 36 months. As a preliminary result, the type of study does not allow us to go deeper into other aspects of the profile of the ostomy patients, or to relate them to the quality of the service, since the data come from registration forms. However, the service is considered as reference when it comes to assisting ostomy patients in the DRS XV, thus providing full, individual and systematic assistance. But even though it provides devices with different characteristics, it is still necessary to have other professionals that can dedicate exclusively to the program, aiming to provide full and interdisciplinary assistance to this clientele.

This study shows important results for future interventions in terms of epidemiology, such as prevention campaigns, early diagnosis and treatment, besides spreading information concerning education and subsides for the health team and the nurses to know the features of this population better. It also demonstrates this gap in the assistance of these patients, since the data available from the registration forms are not sufficient to better understand their individual needs, and consequently, to improve their quality of life.

REFERENCES


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