

# RIASE

REVISTA IBERO-AMERICANA DE SAÚDE E ENVELHECIMENTO  
REVISTA IBERO-AMERICANA DE SALUD Y ENVEJECIMIENTO

## PROFILE OF ELDERLY WITH OSTOMY

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## ABSTRACT

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**Objective:** To characterize the sociodemographic and clinical profile of elderly with ostomy.

**Methods:** This is a quantitative, descriptive and cross-sectional research. Held in the non-governmental institution of Natal/RN. Data collection was carried out by applying a structured questionnaire and the analysis was carried out by descriptive statistics.

**Results:** The study sample comprised 29 elderly people, aged 67.93 years in average, equally distributed according to sex. Most of them did not complete primary education, were already retired, pensioner and/or the beneficiary with family income of up to 2 minimum wages and lived in the metropolitan area of Natal, who followed a religion. As for the clinical variables, most were colostomy caused by cancer, showing definite stomata after 5 years of surgery.

**Conclusions:** These data can help people to recognize the profile of elderly patients living with ostomy and contribute to the reformulation of public policies, by public sectors and the institution.

**Keywords:** Health profile; health of the elderly; ostomy.

## INTRODUCTION

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The world faces the process of demographic transition, marked by falls in fertility and mortality rates and an increase in life expectancy, causing the gradual ageing of human populations. At the same time, recent diseases and ways of conducting health production have been rethinking new epidemiological profiles for societies, in which Chronic Non communicable Diseases - CNCD might lead over infectious and parasitic diseases, in a process called Epidemiological Transition. The speed with which both of these transitions have occurred in Brazil in recent decades, marked by a context dominated by social inequalities, poverty and institutional weaknesses, raise important reflections for managers and researchers of health systems<sup>(1)</sup>.

The aging process implies progressive functional decline (senility), whose most severe condition leads to CNCD (senescence). CNCD's affect elderly people's activities of daily living (ADLS), making them less independent. Studies show a chronological increase in dependence of 5% among those with 60 years and of 50% among those with 90 years or more<sup>(2)</sup>.

If on the one hand diseases that affect the gastrointestinal tract (TGI) of elderly patients are related to a lower number of deaths when compared to others that affect systems of greater importance, on the other, they are responsible for increasing the frequency of complaints and discomforts of varied order, such as: indigestion, belching, diarrhea, constipation, nausea, vomiting, anorexia, and weight loss or increase flatulence, besides also contributing to a higher incidence of gallbladder diseases and several types of cancers at this age<sup>(3)</sup>.

Sometimes, these functional changes in TGI can evolve to the point that at the time they become noticeable, there is the need for surgical intervention. And it is from this moment on that ostomy can appear as a therapeutic resource that significantly changes the life of elderly people<sup>(4)</sup>.

The word ostomy is of Greek origin and it means “opening” or “mouth”, also being the name chosen to call the surgical opening of an organ for its derivation<sup>(5)</sup>. In literature, it is common to find name variations, such as stoma, ostomy and ostoma, despite all having the same meaning; it is also worth to point out that the surgical procedure promotes the exteriorization of the prolapsed organ through the skin, temporarily or not.

This way, we corroborate with Barros, Santos, Lunardi and Lunardi Filho (2012) when they say that it is time to rethink care by considering the complexity of association between the Gerontology and stomatherapy fields as forms of practical production and knowledge on nursing, based on the care of elderly with ostomy and its socio-familiar context.

With this in mind, this study aimed at characterizing the socio-demographic and clinical profile of elderly with ostomy.

## METHODOLOGY

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This is a quantitative, descriptive and cross-sectional research held from March 2013 to December 2014. The target population of the survey comprised members of a non-governmental organization of support to ostomates of Rio Grande do Norte, with headquarters in the city of Natal. According to the data provided by the organization's president, there are around 675 registered members. Study sample was defined through an arithmetic mean of monthly frequencies of the year 2012 and then multiplied by 6, which would correspond to the amount of months destined to data collection, totaling 234 patients with ostomy. For the calculation of the sample, we considered a Sampling

Error of 5%, a 95% confidence level, and a minimum percentage of 90%, as the number of adults exceeded this percentage. Application was carried out according to the following equation by Santos (2013)<sup>(6)</sup>.

$$n = \frac{N \cdot Z^2 \cdot p \cdot (1 - p)}{Z^2 \cdot p \cdot (1 - p) + e^2 \cdot (N - 1)}$$

Where:

**n** – calculated sample      **Z** – normal standardized variable associated with the level of confidence

**N** – population              **p** – real probability of event

**e** – sampling error

We obtained a total of 88 patients with ostomy. However, in the collection period, we exceed this amount in 93 patients with ostomy by convenience-sampling, from which we only selected patients with 60 or more years, corresponding to a total of 29 subjects, who represent 31.2% of the sample.

To do so, attending the institution during the data collection period, being over 60 years, presenting ostomy of colostomy or Ileostomy type were also considered inclusion criteria. We excluded from the sample those individuals undergoing the postoperative period, from hospital discharge to the time when the patient needs to return to the hospital because of surgery complications; we also excluded those with severe cognitive deficit, assuming they could not answer to the questions.

For data collection, we asked participants to sign the written informed consent, allowing them to attend the structured interview, which was conducted in space provided by the institution. Our structured questionnaire covered information on the patients' socio-demographic conditions and on their ostomy.

The obtained information were analyzed with the software Statistical Package for the Social Sciences – SPSS and also through descriptive statistics, its data being based on the literature in the field.

Data came from the master's dissertation of the first author, defended in 2015, and whose title registered at Plataforma Brazil was "Percepção dos Ostomizados: estudo correlacional entre autoimagem e autoestima", according to Resolution 466/12 of the Brazilian National Council of Health - CNS, being later submitted to the Ethics Committee of the Federal University of Rio Grande do Norte - UFRN, and accepted by August 2013, under the CAAE number 19159713.5.0000.5537. The authors declare no conflicts of interest.

## RESULTS

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Study sample comprises 29 elderly patients, with a ages ranging from 60 to 81 years, whose average was around 67.93 years with a standard deviation of 6.227. We equally divided individuals according to sex, with a slight difference between those living with or without a partner. As for schooling, we observed a low instructional level, only 10% of sample having completed a graduation course, which is lower when compared to the percentage for those with no instruction. Regarding occupation, we observed that at least 13.7% of older people see themselves working even after retirement, the family income of most of them accounting from one to two minimum wages (72.4%).

We obtained relevant data regarding the region of residence, considering only 3 subjects of the sample reside in countryside municipalities of the state, which might indicate a difficulty of access of these users. During the data collection period, it was common to see a single individual from countryside municipalities attending NGOS to take inputs (bags, powder, paste) for everyone in their region. In addition, these associates were deprived from attending period consults with a stomatologist. Thereby, the most common profile we found reflects elderly who live in the metropolitan region of Natal. Finally, regarding the psicoespiritual support that religion can offer, we observe a strong relationship between faith (89.7%) and practice (75.9%). Table 1 contains the consolidated data.

Table 1 – Socio-demographic variables of elderly with ostomy, Natal, RN, Brazil, 2014.

| Variable                                      | Requencial Measures |      |
|---|---------------------|------|
|   | n (=29)             | %    |
| <b>Sex</b>                                    |                     |      |
| Male  | 15                  | 51,7 |
| Female  | 14                  | 48,3 |
| <b>Relationship status</b>                    |                     |      |
| Living without the partner                    | 12                  | 41,4 |
| Living with the partner                       | 17                  | 58,6 |
| <b>Schooling</b>                              |                     |      |
| None  | 4                   | 13,8 |
| Incomplete Elementary and Secondary Education | 13                  | 44,8 |
| Complete Elementary and Secondary Education   | 2                   | 6,9  |
| Incomplete High School Education              | 1                   | 3,4  |
| Complete High School Education                | 6                   | 20,7 |
| Complete College Graduation                   | 2                   | 6,9  |
| Master's degree                               | 1                   | 3,4  |
| <b>Occupation</b>                             |                     |      |
| Retired, Pensioners and/or Beneficiaries      | 25                  | 86,2 |
| Homemaker                                     | 2                   | 6,9  |
| Gardener                                      | 1                   | 3,4  |
| Taxi driver                                   | 1                   | 3,4  |
| <b>Family income</b>                          |                     |      |
| Up to 2 Minimum Wages                         | 21                  | 72,4 |
| Above 2 to 8 Minimum Wages                    | 3                   | 13,8 |
| Above 8 Minimum Wages                         | 3                   | 13,8 |
| <b>Area of residence</b>                      |                     |      |
| Countryside of RN                             | 3                   | 10,3 |
| Metropolitan zone of Natal                    | 26                  | 89,7 |
| <b>Religion</b>                               |                     |      |
| Don't have one                                | 3                   | 10,3 |
| Follow a religion                             | 26                  | 89,7 |
| Are not practitioners                         | 5                   | 17,2 |
| Are practitioners                             | 22                  | 75,9 |
| Not answered                                  | 2                   | 6,9  |

Source: survey data.

Ostomized people’s conditions allowed us to clinically characterize a sample of elderly with prevalence for the colostomy type; cancer shows up as the main cause (75%) for ostomy surgery, only one non-clinical case being registered as not associated with the opening (car accident). Coincidentally, we found the same percentage (65.5%) for people with ostomy permanent and with time of use of up to 5 years. As we can see in Table 2.

Table 2 – Clinical variables associated with elderly with ostomy, Natal, RN, Brazil, 2014.

| Variable                       | Requencial Measures |      |
|--------------------------------|---------------------|------|
|                                | n (=29)             | %    |
| <b>Type</b>                    |                     |      |
| Ileostomy                      | 3                   | 10,3 |
| Colostomy                      | 25                  | 86,2 |
| Did not know                   | 1                   | 3,4  |
| <b>Causes</b>                  |                     |      |
| Cancer                         | 21                  | 75   |
| Bowel Obstruction              | 1                   | 3,6  |
| Fournier’s syndrome            | 1                   | 3,6  |
| Intestinal Perforation         | 1                   | 3,6  |
| Familial adenomatous polyposis | 1                   | 3,6  |
| Crohn’s disease                | 1                   | 3,6  |
| Car Accident                   | 1                   | 3,6  |
| Diverticulitis                 | 1                   | 3,6  |
| <b>Permanence</b>              |                     |      |
| Temporary                      | 10                  | 34,5 |
| Permanent                      | 19                  | 65,5 |
| <b>Ostomization Time</b>       |                     |      |
| Up to 5 years                  | 19                  | 65,5 |
| Above 5 years                  | 10                  | 34,5 |

Source: survey data.

## DISCUSSION

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There is still a lack of studies addressing the association between stomatherapy and gerontology. In Brazil, the studies follow a more qualitative bias, as we can see in Cetolin, Beltrame, Cetolin & Presta (2013)<sup>(7)</sup>; and Barros, Santos, Lunardi & Lunardi Filho (2012)<sup>(2)</sup>. From the few studies using mixed methods found in international literature, the socio-demographic characterization of two studies<sup>(8,9)</sup> showed average age of 72.4 years in samples, showing to be higher than the one found in our study, despite the standard deviation presented by the second study being 10.3, a value more close to ours. Regarding the distribution by sex, although the two studies had much bigger samples compared to ours, N = 284 and N = 246, respectively, both men account for almost 60% of the sample. When comparing our study to another with a smaller sample, data still don't match, as was the case of the research carried out by Cetolin, Bakker, Cetolin & Presta (2013)<sup>(7)</sup>, in which the sample was made up of 12 participants of whom 8 were women, totaling 67% overall representation of participants.

In the variable that evaluates relationship status, despite observing a discrete difference between the groups, the number of people living without a partner is expressive (41.4%). In this sense, the study of Altschuler, Ramirez, Grant, Wendel, Hornbrook & Herrinton et al. (2009) with ostomized women survivors of colorectal cancer allows us to see the very positive effects of male partners to the psychosocial adjustment of these patients<sup>(10)</sup>.

Concerning the schooling level, we noted that while in Natal-RN the percentage of elderly with ostomy with only high school (20.7%) is almost the double compared to the ones who have graduated from university (10.3%), which is very different from what we see in the United States, where the percentage of graduates from university (33.7%) exceeds the number of people who completed high school (24.6%) in 9.1%.

If we analyzed the relation between the percentage variables in elderly with ostomy who have retired already and family income, our proportion of retired people (86.2%) when compared to the North-American one (75.2%) is around 11% higher. However, when analyzing the income for most individuals who live in Brazil (72.4%), annual income can vary from 10.244 to 20.488 reais; in the United States, 25.9% for participants of a study, it varies between 15,001 and 30,000 dollars and other 25.5% individuals have an annual income ranging between 30,001 to 50,000 dollars<sup>(8)</sup>. Even when comparing an individual who lives in Natal-RN, with the best income within their group, they would still receive less than a North-American. However, it is worth to highlight that when comparing the reality of these two countries, we need to keep in mind that their economic development is way different.

We can consider the high rates related to religion as natural: valuing something beyond our reality; spirituality as expression or recognition of a transcendental being that fosters spiritual beliefs when deciding whether or not to do something; as a possibility to perceive positive and negative experiences in a different way, thus also encouraging positive and negative emotions, helping individuals to define their values and priorities associated or not to a formal structure or community<sup>(11)</sup>.

As for the analysis of the clinical variables, the study by Krouse, Herrinton, Grant, Wendel, Green, Mohler et al., (2009) showed a similar behavior to the one in our findings, as the classification of type of ostomy with slight increase in the percentage of elderly with colostomy (93.4%) compared with ileostomy (4.1%)<sup>(8)</sup>. The three international studies found<sup>(8,9-10)</sup> understand colorectal cancer and the temporal cut as superior to 5 years as independent variables, as they aimed at carrying out long term assessments on survivors, which served as base for our work: we opted for having the same periodic delimitation regarding stomization for our study.

## CONCLUSION

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These data can contribute to the emergence of new local public policies for these specific users, both by public gestors and the institution; we suggest further study to try to use a wider sample to approach individuals from different regions; we also see the need to investigate new variables to address the stomatherapy and gerontology interface.

The study has its limitations because despite the institution where we carried out our research supporting people with ostomy all over the state of Rio Grande do Norte-RN, the sample size and its subsequent distribution by origin of residence mainly restricted to the capital and metropolitan area of the cities in its surroundings limits the generalization of findings, being representative of this homogeneous group of elderly who attend the institution in Natal periodically.

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