Quality of life of elderly in a long-term care facility in the city of Teresina-PI

Matheus Henrique da Silva Lemos¹, Maria Amélia de Oliveira Costa², Valdilia Maria de Andrade Silva³, Walicy Cosse Silva³ and Flavia de Sousa Holanda²

¹Programa de Pós-Graduação em Ciências e Saúde, Universidade Federal do Piauí, Centro de Ciências e Saúde, 64000-590, Teresina, Piauí, Brazil. ²Faculdade de Enfermagem, Centro Universitário UniFacid-Wyden, Teresina, Piauí, Brazil. ³Programa de Pós-Graduação em Enfermagem, Universidade Federal do Piauí, Teresina, Piauí, Brazil. *Author for correspondence. E-mail: lemosmh@gmail.com

ABSTRACT. The purpose of this research was to evaluate the quality of life of elderly people in a Long Stay Care Facility for the Elderly (ILPI) in the city of Teresina. This is a descriptive and exploratory study with a quantitative methodology. Data collection was carried out between March and April 2019, through the application of the Pentacle of Well-being questionnaire for the elderly at a Long-stay Care Facility in the city of Teresina-PI. Data analysis was performed using the Tabwin 4.1.4 program. Twenty elderly people were interviewed and as to the profile found, 45% (n = 9) were between 80 and 89 years old and 50% (n = 10) were female and male. Regarding the questionnaire, the components nutrition, preventive behavior, social relationship and stress control showed satisfactory results, except for the component 'physical activity', in which 65% (n = 13) of the elderly rarely perform any physical activity. The lifestyle of the elderly is considered satisfactory, however, the Physical Activity component showed an unsatisfactory result.

Keywords: aged; health transition; home for the aged.

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Introduction

The aging process is defined as an end stage of development of every healthy individual and its changes are natural. These changes should not be confused with diseases and dependencies, because the physiological changes of this process interfere with the elderly's ability to interact and respond to stimuli from the environment required by society. This process has its peculiarities and significantly involves biopsychosocial, cultural, epidemiological and demographic aspects (Veras, Teixeira, Granja, & Batista, 2015).

This phase is defined as a change in the age structure of the population, being a natural, irreversible, and worldwide phenomenon. Elderly person in Brazil is characterized by 60 years of age or older, and this age group has been growing rapidly and in proportional terms. Within this group, the so-called ‘older, very old or elderly in advanced old age’ (over 80 years), have also been increasing proportionally and more rapidly, constituting the population segment that has grown the most recently (Alves et al., 2017).

According to the Pan-American Health Organization, in 2025, it is estimated that Brazil will occupy the sixth place in terms of the elderly population contingent, reaching about 32 million people aged 60 years or more. There will be an increase in the elderly population in relation to other age groups, and the main determinants of this accelerated demographic transition in Brazil are the significant reduction in fertility rate, associated with a strong reduction in infant mortality rate and increased life expectancy (Cordeiro et al., 2017).

Thus, the demographic transition causes the epidemiological transition, in other words, the profile of diseases of the population changes radically and it becomes necessary to learn how to control and prevent the most frequent diseases of the elderly, which increases the concern with the quality of life of the elderly. Therefore, the aging process brings with itself the emergence of losses related to functional capacities and the emergence of chronic diseases such as hypertension, diabetes mellitus, cerebrovascular accident, and degenerative diseases such as Alzheimer’s and Parkinson’s (Closs & Schwanke, 2012; Vieira, Santos, Damasceno, Sousa, & Oliveira, 2016).

In this regard, these institutions should seek the interdependence of the elderly as well as meet their needs in general, such as housing, good hygiene, food, health promotion, and medical follow-up, since there is a...
kind of isolation from their family and social activities, which usually makes they live in limited situations, what can affect their way of life (Alves-Silva, Scorsolini-Colin, & Santos, 2013; Lima, Gomes, Frota, & Pereira, 2016).

It is possible to state that Quality of Life (QoL) is an excellent predictor of aging because it has very broad and important approaches, such as biological, psychological, emotional, social and economic. It is of utmost importance to assess the quality of life of these institutionalized elderly people, as well as to obtain information in order guide the assessment and intervention of care, aiming at improving the health and living conditions of this population, providing, therefore, a better quality of life (Miyamoto, Cabrera, Esteves, & Lourenção, 2016).

Given this context, knowing the quality of life of the elderly in a long-stay institution is of great value for the analysis of the knowledge of such a problem in the region. Thus, the study aimed to assess the quality of life of the elderly in a long-stay institution in the city of Teresina.

**Material and methods**

This was an observational, descriptive, exploratory research with a quantitative approach aimed at assessing the quality of life of the elderly in a long-stay care institution. This study complied with resolution 466/12 of the National Health Council (CNS) in its ethical, legal and scientific aspects that deals with research involving human beings, thus ensuring respect and protection to the participants. The research was conducted after submission to and approval by the Research Ethics Committee (CEP) of the Integral Diferencial College - FACID/WYDEN - with prior submission of the Institutional Consent Form (TCI).

Data collection was carried out in March and April 2019 and began after the research participants were informed about the study and its purposes, and signed the Informed Consent Form in two copies, one for the participant and another for the researcher, giving their authorization and knowledge about the research, with its benefits and risks. Ensuring the confidentiality and privacy of the subject, maintaining their anonymity, thus respecting Resolution No. 466/12.

The research was carried out in a long-stay institution for the elderly located in the city of Teresina-PI. The place for the research was chosen due to its easy access and the satisfactory demand of elderly people for the work to be carried out. It is a 24-hour long-stay institution for the elderly people who have been abandoned or whose family ties have been broken. The objective is to offer shelter to the elderly, respecting their dignity and guaranteeing health, social, and nutritional assistance. The elderly housed in the shelter rely on specialized monitoring through an interdisciplinary team of social workers, nurses, nursing technicians, and caregivers.

The participants of the study were 20 elderly people who are institutionalized in this philanthropic institution. The elderly of both genders from this philanthropic institution, aged 60 years or older, were included in this study, since this is the age range considered as elderly by the World Health Organization. The study excluded the elderly who were not registered as residents in the institution studied.

To collect the data, we used an adaptation of the instrument that assessed Quality of Life (QL), called the Pentacle of Well-Being, which was validated in Brazil by Nahas, Barros, and Francelacci in 2000. The questionnaire is equally subdivided into 15 items among 5 factors: Nutrition, Physical Activity, Preventive Behavior, Relationships, and Stress Control, and a four-point scale was used to answer the items: 0 never, 1 rarely, 2 almost always, and 3 always, a score that favored a faster and better understood data collection.

The data obtained through the reading of the questionnaires answered by the elderly were transcribed into an Excel 2016 spreadsheet by the process of double entry. After being analyzed in the Statistical Package for the Social Sciences (SPSS, Chicago, IL, USA) software, Version 20.0, a descriptive analysis of the data was performed, presenting them as frequency, percentage, mean, and standard deviation.

The study and the data collection procedure was carried out after a favorable opinion from the research ethics committee, with the Certificate of Submission for Ethical Appreciation (CAAE) number 98563418.0.0000.5211.

**Results**

Table 1 shows the data related to the profile of the institutionalized elderly according to gender and age group. From the data obtained it was possible to verify an equality for sex, with 10 males (50%) and 10 females (50%). Regarding the age bracket, there was a greater number of elderly individuals in the 80 to 89 age group, with a percentage representation of 45%.
Table 1. Distribution of the institutionalized elderly according to sex and age group, Teresina, PI, 2019.

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>10</td>
<td>50</td>
</tr>
<tr>
<td>Female</td>
<td>10</td>
<td>50</td>
</tr>
<tr>
<td>Age Group</td>
<td></td>
<td></td>
</tr>
<tr>
<td>60-69 years old</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>70-79 years old</td>
<td>6</td>
<td>30</td>
</tr>
<tr>
<td>80-89 years old</td>
<td>9</td>
<td>45</td>
</tr>
<tr>
<td>&gt; 90 years old</td>
<td>3</td>
<td>15</td>
</tr>
</tbody>
</table>

Source: Direct research.

Table 2 presents numbers related to the nutritional aspects of the elderly interviewed. When asked about the intake of fruits and vegetables, all the 20 elderly (100%) stated that they ingested such foods on a daily basis. 12 elderly (60%) said they always eat meat and sweets. All the elderly (100%) said they had daily meals including a full breakfast.

Table 2. Questions about Physical Activity and the total score of the pentacle of well-being in institutionalized elderly, Teresina, PI, 2019.

<table>
<thead>
<tr>
<th>Question</th>
<th>Never</th>
<th>Rarely</th>
<th>Almost always</th>
<th>Always</th>
<th>%</th>
<th>%</th>
<th>%</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Do you perform physical activities weekly?</td>
<td>2</td>
<td>10</td>
<td>13</td>
<td>65</td>
<td>1</td>
<td>5</td>
<td>4</td>
<td>20</td>
</tr>
<tr>
<td>B. In your daily life, do you walk or cycle as a means of transportation,</td>
<td>3</td>
<td>15</td>
<td>13</td>
<td>65</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>20</td>
</tr>
<tr>
<td>and do you prefer to use the stairs rather than the elevator?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Direct research.

When questioned about performing physical activity, as shown in Table 3, it was verified that 13 elderly people (65%) said they rarely performed any activity during the week. When questioned about walking or using bicycles as a means of transportation and using stairs instead of elevators, 13 of them (65%) also said they rarely performed these activities.

Table 3. Nutrition questions and the total score of the pentacle of well-being in institutionalized elderly, Teresina, PI, 2019.

<table>
<thead>
<tr>
<th>Question</th>
<th>Never</th>
<th>Rarely</th>
<th>Almost always</th>
<th>Always</th>
<th>%</th>
<th>%</th>
<th>%</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>C. Does your daily diet include fruits and vegetables?</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>20</td>
</tr>
<tr>
<td>D. Do you like sweets and meats?</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>35</td>
<td>1</td>
<td>5</td>
<td>12</td>
<td>60</td>
</tr>
<tr>
<td>E. How many varied meals do you eat a day, including a full breakfast?</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>20</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Direct research.

Table 4 highlights aspects related to the public’s preventive care, with 17 elderly people (85%) stating that they know their blood pressure levels and that they always have their blood pressure checked. Fifteen of them (75%) said they do not smoke or have smoked and 18 (90%) reported always using seat belts when using vehicles (cars).

Table 5 shows that all the elderly reported being satisfied with their friendships, and 19 elderly (95%) said they always include their friends in leisure gatherings. When asked about being active at the shelter and looking for activities to do, 19 of them (95%) said they always try to be participatory in the activities at the place. Regarding the data related to stressful factors for the elderly, all the interviewees (100%) said they set aside some part of their day to relax. 15 elderly people claimed to get bored easily. As for participation in leisure meetings, all 20 (100%) said they were present.

Table 4. Questions about Preventive Behavior and the total score of the pentacle of well-being in institutionalized elderly, Teresina, PI, 2019.

<table>
<thead>
<tr>
<th>Question</th>
<th>Never</th>
<th>Rarely</th>
<th>Almost always</th>
<th>Always</th>
<th>%</th>
<th>%</th>
<th>%</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>F. Do you know what your blood pressure is? Is your pressure checked?</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>10</td>
<td>1</td>
<td>5</td>
<td>17</td>
<td>85</td>
</tr>
<tr>
<td>G. Do you smoke or have you smoked?</td>
<td>15</td>
<td>75</td>
<td>4</td>
<td>20</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>H. When you ride in a car, do you wear your seatbelt?</td>
<td>1</td>
<td>5</td>
<td>1</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>18</td>
<td>90</td>
</tr>
</tbody>
</table>

Source: Direct research.
Table 5. Questions about Social Relationship and Stress Control the total score of the pentacle of well-being in institutionalized elderly, Teresina-PI, 2019.

<table>
<thead>
<tr>
<th>Question</th>
<th>Never</th>
<th>%</th>
<th>Rarely</th>
<th>%</th>
<th>Almost always</th>
<th>%</th>
<th>Always</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Do you have friends here? Are you satisfied with these friendships?</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>20</td>
<td>100</td>
</tr>
<tr>
<td>J. Does your leisure include meetings with these friends?</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>19</td>
<td>95</td>
</tr>
<tr>
<td>K. Do you try to be active here at the shelter? Do you feel useful in this environment?</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>19</td>
<td>95</td>
</tr>
<tr>
<td>L. Do you set aside time every day to relax?</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>20</td>
<td>100</td>
</tr>
<tr>
<td>M. Are you easily bored?</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>25</td>
<td>0</td>
<td>0</td>
<td>15</td>
<td>75</td>
</tr>
<tr>
<td>N. Do you participate in leisure meetings?</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>20</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Direct research.

Discussion

It is known that today, the expansion of the elderly public is responsible for several changes in the socioeconomic scenario, especially related to the demand for social and health services. This growth is similar for males and females. In this study, the same amount was observed for elderly of both genders, which is similar to the data from an epidemiological study where 51.3% of the 154 elderly were male and 48.7% were female (Oliveira & Novaes, 2013).

The elderly in the study were aged between 80 and 89 years. The growth of the elderly population is a phenomenon on a global scale that has occurred progressively. Figures indicate that by 2025 the estimated total will be about 1.2 billion people aged 60 years or more, of which those aged 80 years or more is the fastest growing group (Ferreira & Yoshitome, 2010).

Research has shown that the population segment that has stood out the most in its growth is the group composed of people 80 years of age or older. In Brazil, this group has had progressive growth in recent years. After the second half of the 21st century, estimates have pointed to a population of older people that will have grown in large proportions, with one in every five people belonging to the group of the elderly. The WHO shows that between 2000 and 2050 the number of elderly people aged 80 years and over will have grown from 1.2 million to 10.2 million (Saad, 2016).

Regarding nutritional aspects of the elderly, all of them reported eating fruits and vegetables daily, and most described having a taste for foods such as meat and sweets. These data on nutrition are important, since many times the food of the elderly is inadequate for their needs. Studies show that the elderly tend to have lower energy needs than young individuals, which is attributed to factors such as lower basal metabolic rate, body composition of the elderly, and decreased muscle mass. Research highlights that currently there is an insufficient intake of nutrients in the elderly population, which is often caused by the reduced variation of foods that make up the daily menu of the Brazilian elderly, consisting mainly of rice, beans, and beef, which offer almost all the energy value that these elderly ingest (Fisberg et al., 2013; Tramontino, Nuñez, Takahashi, Santos-Daroz, & Rizzatti-Barbosa, 2017).

Dietary control is essential for the prevention and control of diseases such as diabetes, as the ingestion of foods with high sugar content, for example. In a study conducted among the elderly it was observed that only 35.7% had glycemic values within normality, while the majority presented glucose intolerance or diabetes. Thus, guidelines on the types of foods that should be avoided, control of sugar intake, are essential to maintain glycemic levels within normal standards, and avoid complications of diabetes. Healthy eating and physical exercise should also be added to improve the health of the elderly (Previato, Barros, Mello, Silva, & Nimer, 2015).

In this study, the elderly reported having all the basic daily meals. It is important that meals are taken in adequate quantities, respecting regular schedules with intervals in between to promote digestion and absorption of nutrients. An adequate frequency of meals per day, consisting of healthy foods and in the company of family members/caregivers is associated with a satisfactory and good quality diet (Gomes, Soares, & Gonçalves, 2016).

The level of physical activity practiced by the elderly in the study was low, where most reported rarely practicing any exercise, walking, cycling, or using stairs. The results contrast with the current literature that advocates physical activity among the elderly as a way to maintain aspects such as physical fitness, preventing falls, and maintaining independence and mobility. Research has shown that physical activity in the elderly
has a positive influence on components such as flexibility, strength, balance, coordination, among others (Moreira, Teixeira & Novaes, 2014).

It is important to encourage the elderly to practice physical exercises in order to improve their health status in old age, due to its direct and indirect benefits that prevent problems and delay functional losses, reducing the risk of diseases and disorders often associated with aging (Fidelis, Patrizzi & Walsh, 2013).

Most elderly people report knowing their blood pressure values as well as having their blood pressure checked constantly. The verification of blood pressure is essential to monitor its changes and detect hypertension peaks, especially in the elderly population, which is more susceptible to this problem. In a study conducted with 115 elderly people, 51.4% were hypertensive, the disease being more present in females, with low education, overweight, and sedentary (Andrade et al., 2014).

Smoking is a serious health problem with major clinical repercussions, with approximately 1 to 1.5 million elderly smokers in Brazil. However, in this study the elderly said they had never smoked. In a study that observed the profile of elderly smokers, it was found that they were of lower financial status and education level, and that presented as a risk factor the fact of having family members or friends who were smokers (Carvalho, Gomes, Loureiro, & Bezerra, 2015; Kümpel, Castro, Freitas, Souza, & Porto, 2014).

The use of seat belts was confirmed by most of the elderly when riding in cars. Such a measure is important to increase the safety of this public in traffic, since the epidemiological numbers related to traffic accidents with the elderly have increased with consequent trauma for this population, especially due to their greater fragility presented by advanced age (Santos, Rodrigues, & Diniz, 2015).

Concerning social relationships of the studied elderly, it was observed that they said they were satisfied with their friendships, were actively participating in leisure activities, and always tried to feel useful in their daily tasks. These results evidenced in the participants' answers present a great contrast to the literature on the institutionalization of the elderly. Institutionalization is often caused by situations of family abandonment, exclusion and isolation, which have a negative impact on the elderly, compromising their emotional state and quality of life, making them more removed from group life (Cordeiro, Paulino, Bessa, Borges, & Leite, 2015).

The quality of life of the elderly is not restricted only to physiological aspects, but also to social and emotional aspects. Thus, the physical limitation and decrease in their functional capacity is a risk factor for the elderly to also present decline in their social interaction and mental balance, being necessary that the caregivers of this public are attentive to offer support and care that meet their needs and stimulate their interaction in groups (Menezes et al., 2018).

The participation in leisure activities and taking time for relaxation were evidenced in the answers given by the elderly. These habits are essential because they contribute to ensure a better quality of life in old age and a lower risk of stressful episodes. However, it was also found that most of the elderly in the study said they find it easy to get bored. Studies attribute this greater ease of stress to aging itself. Aging can generate stress for the elderly and cause disturbances in their lives. This is explained by the many changes that aging brings, such as loss of autonomy, decrease in functional capacity, isolation, fear, insecurity, where the elderly often have no control over such events. Therefore, monitoring, support, and strengthening the bond with the elderly person is essential to prevent stressful moments and give him/her not only physical but also emotional comfort (Santos, Oliveira, Antunes, & Faria, 2018).

**Conclusion**

The lifestyle profile of the elderly people studied was considered satisfactory, with good eating habits, health knowledge, and good social relationships. Only the Physical Activity component was considered unsatisfactory. Therefore, it is important to encourage elderly to practice physical activity in order to provide a good quality of life for them.

Accordingly, it is expected that the performance of the multiprofessional team of these long-stay institutions can provide awareness to the elderly about the importance of maintaining a healthy lifestyle, and when necessary, intervene positively in the parameters that make up the quality of life.

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