

SATISFACTION WITH FOOD IN INSTITUTIONALIZED OLDER ADULTS: ASSOCIATION WITH AGE AND YEARS OF RESIDENCE

VALLADARES M^{*1}, CAROLINA ROLDÁN

FACULTAD DE SALUD Y CIENCIAS SOCIALES. UNIVERSIDAD DE LAS AMÉRICAS. CHILE.

SAMUEL DURÁN-AGÜERO

ESCUELA DE NUTRICIÓN Y DIETÉTICA. FACULTAD DE CIENCIAS PARA CUIDADO DE LA SALUD, UNIVERSIDAD SAN SEBASTIAN. CHILE.

ABSTRACT

Introduction: The increase in the elderly population requires strategies to promote healthy aging. Nutrition is a central element in achieving this, and the concept of quality of life associated with food has been defined, referring to the impact that diet and eating habits have on a person's overall well-being. Due to demographic changes, the number of individuals requiring long-term care facilities has risen, leading to the recognition of the need for comprehensive measures that include elements of quality of life.

The objective of this study was to assess satisfaction with food among independent elderly individuals in institutional settings.

Methodology: This is a cross-sectional mixed study, where individuals aged 60 and over who were institutionalized and independent were evaluated. Satisfaction with food was measured in the participating elderly using the SWFL (Satisfaction with Food-related Life) scale. Additionally, a semi-structured interview was conducted with the same participants to explore their opinions about the food provided in the residence.

Results: Individuals (56) with higher satisfaction scores regarding food are significantly older and have longer residency periods ($p=0.01$ and $p=0.005$, respectively). Those with greater satisfaction enjoy a wider variety of foods and strongly value companionship during meals. Conversely, individuals with lower food satisfaction scores express the need for their dietary preferences to be considered in meal planning at the residence.

Conclusion: Being institutionalized can provide elderly individuals with the benefit of companionship during meals, which is highly valued, even more so than the quality of the food itself. It is necessary to incorporate elements of individual preferences in the design of meal guidelines in long-term care facilities for the elderly.

Keywords: Food satisfaction, older adults, long-term care facility for the elderly

INTRODUCTION

Globally, the population of older adults (>60 years) is expected to double by the year 2050, creating a context of significant changes in social, cultural, economic, institutional, and family dynamics (1). Considering this demographic transition, it is crucial to develop strategies to promote healthy aging. Nutrition plays a fundamental role in the quality of life of older individuals, to the extent that the concept of quality of life associated with food has been defined, referring to the impact that diet and eating habits have on a person's overall well-being (2, 3). The concept of quality of life relates to different elements that directly influence physical, mental, and emotional health, as well as satisfaction and enjoyment of daily life; older adults with higher quality of life indices have a lower risk of mortality (4).

As they age, the quality of life and nutrition of older adults depend on their autonomy, which influences whether they live in their own homes or in institutions (5). Long-term care facilities are generally characterized by pre-established schedules and group activities, often without considering the personal preferences of the residents. Such centers have recognized the need for more comprehensive measures that include elements of quality of life

(6). In relation to nutrition, evidence consistently shows that older adults in these institutions present a nutritional imbalance, generated by inadequate intake of energy and/or nutrients (7, 8). This is exacerbated by the frequent observation of alterations in the consumption of certain foods due to issues with chewing and swallowing. However, there is recent evidence regarding how older adults perceive their satisfaction with food, but evidence regarding institutionalized individuals is still scarce, and non-existent in Chile. Therefore, considering the current relevance, the objective of this study was to evaluate food satisfaction in autonomous institutionalized older adults.

METHODS

Participants

Older adults aged 60 and over living in the "Casa de Acogida Villa Padre Hurtado" were evaluated (n=56). This residence has three usage modalities: villa (evaluated in this study), intermediate care, and special care. The Villa accommodates older individuals in situations of social vulnerability. The admission profile includes individuals who are physically and mentally self-sufficient, without any psychiatric, psychological, or dementia-related medical conditions. All meals (breakfast, lunch, snack, and dinner) are provided for residents. All participants who agreed to take part signed an informed consent form previously approved by the Universidad de las Américas.

Design and Measurements

This is a cross-sectional mixed study, where the satisfaction with food of institutionalized older adults was assessed (quantitative study). Additionally, a semi-structured interview was conducted with the same participants to explore their opinions on the food received in the residence, as well as their experiences (qualitative study).

Satisfaction with Food

Satisfaction with meals among the participating older adults was measured using the SWFL (Satisfaction with Food-related Life) scale. This scale focuses exclusively on food, treating it as a separate aspect of overall quality of life, which includes factors such as health, family relationships, or available resources. This questionnaire has been validated for use in the Chilean population, demonstrating high levels of internal consistency (9), and it measures the following five items:

1. Food and meals are very positive elements in my life.
2. I am very satisfied with my food.
3. My life related to food and meals comes close to the ideal.
4. Regarding food, my living condition is excellent.
5. Food and meals provide great satisfaction in my daily life.

Responses are made on a 6-point Likert scale, where a higher score indicates greater satisfaction with food.

Statistical Analysis

For the analysis of SWFL scores, an average variable was created from the scores of the five items, which was dichotomized using the percentile classification (p25). SWFL scores \leq p25 were classified as "low satisfaction" and scores \geq p25 were considered "high satisfaction."

The non-parametric Mann-Whitney statistical test was used for group comparisons, with a statistical significance considered at $p \leq 0.05$. Statistical analyses were performed using Stata 14.

Analysis of the Semi-Structured Interview

The process began with a complete and accurate transcription of the interview, followed by a coding procedure where relevant themes or categories were identified and labeled. A relationship matrix was then generated between these categories to visualize their interconnections, and finally, the findings were interpreted.

RESULTS

Quantitative Study

Within the characteristics of the sample, 60% were women, with an average age and years of residence of 79 vs. 77 ($p=0.321$) and 4.8 vs. 2.5 ($p=0.512$) for women and men, respectively. The most prevalent diagnosed conditions included hypertension, type II diabetes mellitus, osteoarthritis, and sleep disorders.

According to SWFL scores (the average of the 5 items) greater than 3.9 (p25), individuals are categorized as "high satisfaction" (HS), while a score of ≤ 3.9 is considered "low satisfaction" (LS).

When comparing scores categorized as HS and LS, significant differences were observed in average age and years living in the residence. HS individuals had a higher average age than LS individuals: 78 vs. 72 years ($p=0.01$). Additionally, HS individuals had significantly longer residence time at the facility, 7.8 vs. 4.2 ($p=0.005$).

Qualitative Study

The analysis of the semi-structured interviews revealed three main categories: food preferences (likes and dislikes), meal context, and suggestions to improve food. Since differences between the HS and LS groups were previously observed, the responses of each group were analyzed separately to identify specific patterns.

- **Food Preferences:** The LS group mentioned preferred foods associated with different types of meat preparations (beef and chicken) accompanied by rice; fish was mentioned to a lesser extent. Among the foods they least preferred were potatoes, soups, and legumes. Conversely, HS individuals named a wide variety of foods, focusing on soups, legumes, salads, fruits, eggs, meats, and fish, among others. They even mentioned desserts such as flans. On the other hand, when asked about dislikes, a significant number indicated "I like everything," while also mentioning that they dislike "pantrucas" and find meals with little salt or "bland" to be unappealing.
- **Meal Context:** In this category, responses from both AS and LS groups were similar, indicating that they enjoyed mealtimes because they share them with others. They value the presence of the staff members who accompany them, so they do not have to eat alone. During these moments, they can converse, making the mealtime much better. They also mentioned enjoying not having to worry about what will be cooked and knowing they will have something to eat.
- **Suggestions to Improve Food:** Similar elements emerged from both groups, highlighting the possibility of being able to decide what foods could be offered to them, having more input regarding what is served at each meal. The idea was mentioned that, at some point, they could be asked about what they would like to eat. They also expressed that the meals lack flavor, there is little variety, and claimed that on certain occasions, they might prefer something else they like more.

DISCUSSION

The main finding of this study shows for the first time that individuals with higher food satisfaction are significantly older and have longer residency periods. Furthermore, those with greater satisfaction display greater variability in food preferences and positively value eating with other residents. This aligns with reports that institutionalized older adults perceive their quality of life as "Good" (10); however, adults living in long-term care homes are nutritionally vulnerable, often consuming insufficient amounts of energy, macronutrients, and micronutrients to maintain their health and function. Additionally, a meta-analysis determined that the quality of life of institutionalized older adults is worse than that of those who are not (11). Thus, the observations made in this study, alongside those of Schwartzmann (10), may suggest that older individuals with longer residency value the importance of the environment in which food is consumed and the social interaction during meals, highlighting their relationship with the institution's staff and the opportunity to share the table with other residents. This has been widely described in a systematic review that establishes that social interactions with family, friends, peers, and the community influence successful and healthy aging in the older adult population (12).

Regarding individuals with lower food satisfaction, a relevant aspect they mention is their desire for their food preferences to be considered to some degree. This is consistent with a less-studied aspect of nutrition in older adults, which is eating not solely for homeostatic or energy needs but for hedonic factors. This refers to the act of consuming foods that generate a sense of pleasure, which also contributes to increased satisfaction with food, as described by Lengyel (2004) (13) and observed in this study when participants positively noted the consumption of foods provided by family members.

It would be interesting to incorporate elements of food enjoyment that allow for the inclusion of nutritional requirements and foods that trigger pleasure in eating (non-homeostatic eating).

Individuals with higher satisfaction show similar average scores to older adults who are not institutionalized (14), which is strongly associated with the presence of companionship and social support. Considering the results obtained in this study, it is suggested that residential facilities for older adults take their preferences into account and that they consider aspects of food enjoyment and not exclusively nutritional contribution elements.

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