

# Feeding and Nutrition for People with Dementia in Gerontological Services: A Focus Group Study

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**Purpose:** This work sought to describe the experience of managers and caregivers with feeding and nutrition for older adults with dementia, in Colombian gerontological services.

**Participants and Methods:** This is a qualitative focus group study with fourteen gerontological care centers for people with dementia.

**Results:** The study reveals that care related to food and nutrition for people with dementia is organized based on the comprehensive assessment of the resident. Although there are basic support strategies, each caregiver requires specific knowledge, attitudes, behaviors, and institutional support, to generate a context that favors the health and quality of life of those involved.

**Conclusion:** The experience of caring for people with dementia in aspects related to their food and nutrition, seen from the perspective of managers and caregivers of gerontological services in a developing country, strengthens specific strategies and public policies. This, in turn, reduces the burden on caregivers.

**Keywords:** Diet, Food, and Nutrition, aged, dementia, health facility environment, long-term care, dietary services

## Introduction

In the last sixty years, life expectancy worldwide has increased by 25 years.<sup>1</sup> Between 2000 and 2050, people over 60 years of age will double from 605 million to 2000 million people, and adults over eighty years of age will quadruple from sixty million to 395 million people.<sup>2</sup> This increase will be more noticeable in low- and middle-income countries like Colombia, where more than 80% of the population will be over sixty-five years old in 2050.<sup>2</sup>

An increase in age will lead to a further increase in cognitive impairments. The WHO reports that between 2% and 10% of older adults suffer from diseases that cause dementia and that this probability doubles with every 5 years of age.<sup>3</sup>

Dementia is a clinical syndrome characterized by a persistent deterioration of higher mental functions that alters functionality in daily activities, but without compromising consciousness.<sup>4</sup> This is one of the main causes of disability and dependency among older adults in the world, especially that generated by Alzheimer's disease with about 70% of cases.<sup>5</sup> Dementia can also affect caregivers, families, and society<sup>5</sup> (WHO, 2020). The WHO has included the care of people with dementia among the eight highest health care priorities in Latin America and has supported the creation of policies and action plans based on research to improve the quality of life of people with dementia and their caregivers.<sup>2</sup>

Eating is one of the activities that become challenging for people with dementia and causes the greatest concern for caregivers.<sup>6</sup> Although cognitive impairment in older adults is not necessarily related to lower food intake<sup>7</sup> disruptive behaviors during meals, weight loss, dysphagia, and choking risks can cause distress, feelings of guilt, and overload for the caregiver. This can negatively affect the bond between these older adults and their caregivers, and in turn, the care they provide.<sup>8</sup>

Batchelor-Murphy et al<sup>9</sup> reports an increase from 25% to 85% in problems associated with nutrition for institutionalized older adults, while only 20% of their caregivers receive adequate information in this regard. According to the authors, the support required ranges from guaranteeing access to quality food to food consumption itself.

Abdelhamid et al<sup>10</sup> analyzed specific interventions for older people with dementia and grouped them into four areas: 1) oral supplements, 2) food or drink modification including pureed and reformed foods, or thickened liquids, 3) management of swallowing problems, and 4) food assistance at mealtime or between meals. However, they point out that the evidence supporting decision-making is weak. Few studies include objective indicators to measure nutritional health.

A lack of guidance on how to support people with dementia and their caregivers was identified by Mole et al<sup>11</sup>, Liu et al<sup>12</sup> complement their findings by indicating that these interventions must address the cognitive functions, intake, and training of caregivers; and encourage interaction between them and older adults. They must also address modifications to the environment and routines. Donnelly et al<sup>13</sup>, Murphy et al.<sup>14</sup> Palese et al<sup>15</sup> and Slaughter et al<sup>16</sup> say that it is essential to consider the context, the support for the caregiver, and the demands of older adults, who should be the focus of the action.

Jung et al<sup>17</sup> highlight that there are difficulties associated with food and nutrition in institutions with older adults, and that these generate burdens for their caregivers. According to Vázquez and Martell,<sup>18</sup> interventions associated with nutritional health are essential and must comprehensively consider the well-being of people in their culture and context. Liu et al<sup>19</sup> propose that a strategy based on the experiences of people who provide food services to older adults with dementia is necessary. However, despite the search, the researchers did not find reports of experiences of nutritional health care for people with dementia, nor did they find specific guidelines to alleviate the burden of their caregivers in Latin American countries. This leads to the following research question: What is the experience of directors or caregivers regarding the food and nutrition of older adults with dementia cared for in gerontological services in Colombia?

## Methods

This is a qualitative focus groups study carried out between 2021 and 2023, to explore the experience of managers and caregivers with the food and nutrition of older adults with dementia, in Colombian gerontological services. Study findings are reported using the criteria for reporting qualitative research (COREQ).<sup>20</sup>

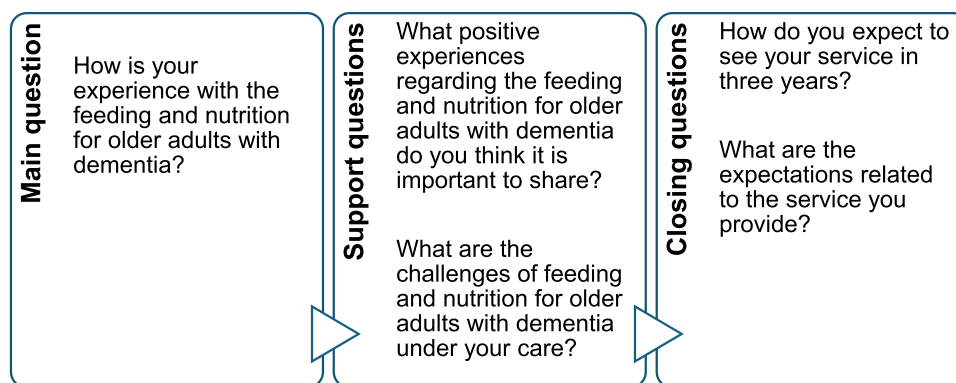
## Recruitment and Participants

The twenty-six participants were directors or caregivers of fourteen gerontological services that served people with dementia and that were in the Andean region of Colombia. They were selected based on a census of regional institutions.

The study follows the saturation criteria to create four focus groups.<sup>21</sup> Participants were distributed from five to eight members in each one.

## Procedures and Data Collection

The focus groups took place in the Living Lab of a university; they lasted approximately sixty minutes and followed an interview guide with open questions designed to reflect on, debate, and propose ideas about the feeding and nutrition (see Figure 1).



**Figure 1** Guideline interview questions for the focus groups.

## Data Analysis

The researcher team coordinated the focus groups, supported by four doctoral students who observed the groups, one in each. We used the interactions and discussions of the participants to understand the studied phenomenon. We recorded and transcribed all group interviews verbatim for data processing and analysis. Two researchers then analyzed the data independently and met with the other researchers to compare the results and reach a consensus. We reviewed the emic and etic aspects of the study to ensure that we had an open mind to understand the phenomenon.

The parameters in the analysis favor an exhaustive description of the studied phenomenon.<sup>22</sup> These included: 1) Reading the verbatim transcriptions of the focus group participants to get an idea of their experience, 2) extracting significant statements as descriptor codes, 3) formulating nominal codes from the perspective of those who have lived the experience, 4) analyzing the nominal codes to group them into categories and subcategories that arise from similar themes in the interviews (see Table 1), 5) exhaustively describing the experiences based on the codes, categories and subcategories identified, 6) validating the information with the participants to see if our description of the experience responds to their experience and the meaning they gave it, and 7) communicating the participants' experience.

## Validity, Trustworthiness, and Rigor Guarantee

The researchers complied with the following aspects to guarantee the quality of the study: 1) make a careful selection of the participants according to the purpose of the research, 2) define logistical aspects of the focus groups including the detailed recording of the information and observations, 3) validate the findings with an intragroup technique through independent analysis and subsequent comparison of the proposed codes and themes, 4) verify the reliability of the results by requesting two experts to review them, 5) Verify the credibility of the study with continuous observation and researcher validation, 6) verify the transferability criterion with a detailed description of the context, methods and findings, and 7) verify confirmability by sharing the arguments that led to final conclusions to ensure that these findings were not influenced by their own perspectives.<sup>23</sup>

## Ethical Considerations

Each participant was informed of the purpose and content of the study, and they all signed informed consent forms. The researchers agreed to keep their identities confidential and informed them that they could withdraw from the study at any time.

Figure 2 illustrates the overview of the process for organising, conducting and analyzing the focus groups (See Figure 2).

## Results

Characteristics of the cohort: The cohort was made up of fourteen representatives from different institutions, including four directors and ten professionals delegated by management for their knowledge regarding food and nutrition of older adults with dementia.

Study categories: Two main categories, three subcategories, and a central theme emerged from the focus group discussion. The central theme was titled "Approaches to caring for the food and nutrition of an institutionalized older adult with dementia" (see Figure 3).

Each of these descriptions, which in sum, describes the experience and meaning of managers and caregivers with the food and nutrition of older adults with dementia in Colombian gerontological services, are detailed below.

**Table 1** Coding Example

Original text	Descriptor Codes	Nominal codes	Subcategory	Category
"[...]Since they often choke or do not pass the food, for one, giving the food to them is not the same. It takes much longer. It takes longer and is usually more difficult. [...]."	They often choke or do not pass food.	Dysphagia	Factors that hinder feeding and nutrition	Assessment of the person with dementia
	Giving them food is not the same. It takes much longer. It takes longer and is usually more difficult.	Time and skill requirement	Care needs for feeding and nutrition	

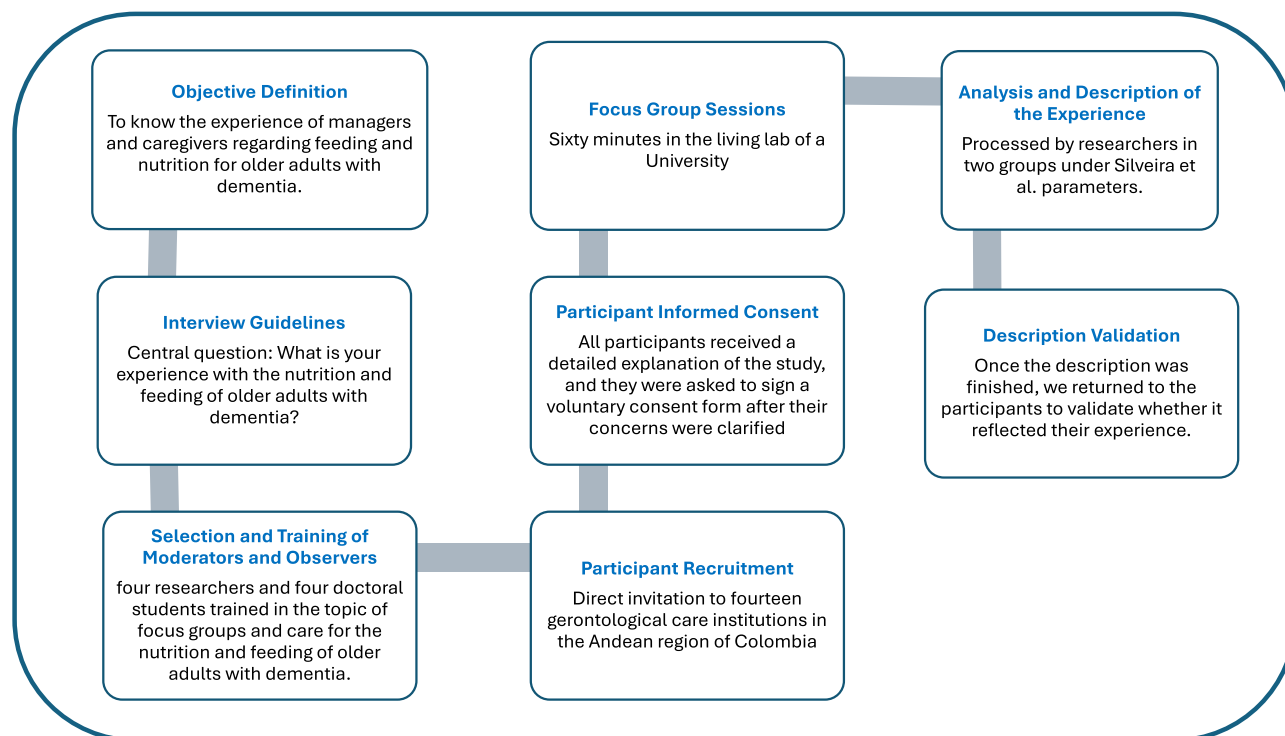


Figure 2 Summary of the study process.

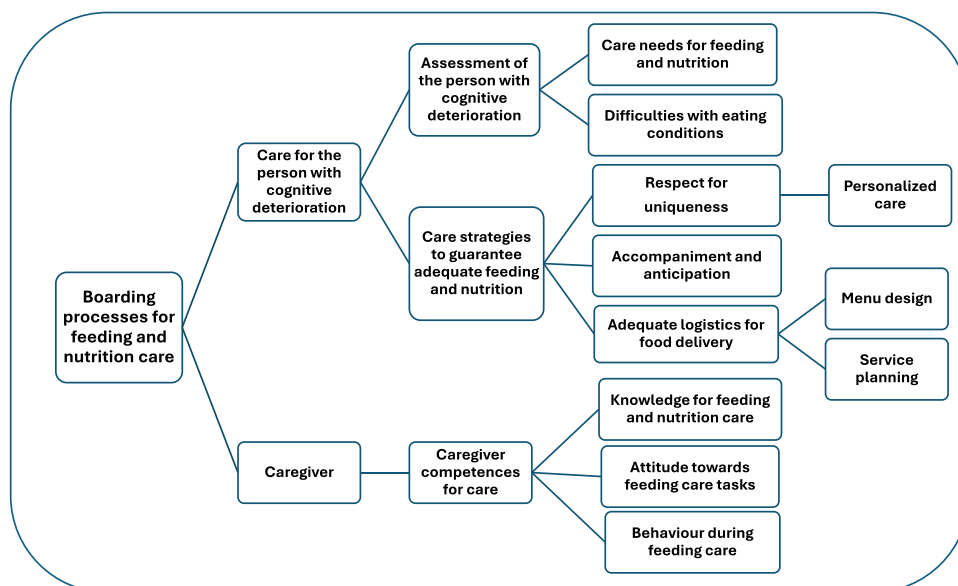


Figure 3 Codes, categories, and subcategories that make up the central theme.

## Care for the Person with Cognitive Deterioration

### Assessment of the Person with Cognitive Deterioration

#### Care Needs for Feeding and Nutrition

Participants see the assessment care needs as an essential process to detect, prevent, or manage health problems. This assessment takes an initial global look at these needs under subjective and objective parameters and considers the affected person and caregiver. There is also a permanent monitoring of the person’s changing condition. Caregivers asked

questions about appetite, hydration, autonomy in feeding, taste and satisfaction with food, type and amount of food consumed, frequency and timing of meals, preferences and food aversions, and the presence of chewing or swallowing difficulties in the initial interview. Then they corroborated functionality and cognition data, as well as anthropometric data, such as weight, height, body mass index, arm, calf, waist and hip perimeters, hydration level and the condition and functionality of the teeth, through objective and subjective assessments. In some cases, specialized personnel made this assessment using scales to measure the risk of malnutrition.

Before the elderly person enters the institution, a survey is carried out with the family members about the elderly person's preferred foods to take into account when creating the feeding regime in the institution. [01-01-02]

In the entry form that you make for them, you say what you like about food, and you always try to give them what they like. [02-01-73]

As time goes by, they identify what they like and what they don't. [01-01-03]

We apply some instruments, in the nutritional area there is the "nutritional test", in my specific area we apply the Barthel scale which is to look at independence in basic activities such as eating, and we measure each year how these results are happening or progressing with the older person. [04-01-157]

We relate the weights of the last nutrition with the current one and if they have maintained the same measurements. [03-01-100]

### Difficulties with Eating Conditions

Participants point out that the food and nutrition of older adults with cognitive impairment in their care has several difficulties. They include physical and physiological factors, presence of comorbidities, psycho-emotional and communication difficulties, memory disorders, behavioral changes, cultural and believes patterns, and socioeconomic status. Regarding physiological factors they mention ones that can affect the senses, chewing, digestion and absorption of nutrients. Participants also say that dental deterioration is common, making it difficult for them to chew hard foods, such as fruits, meat, or chicken. Many of them have dysphagia, which creates an elevated risk of aspiration or asphyxiation. This risk requires changes in the consistency of food, and this is difficult to accept both by the affected older adult and by their family members, who often request that people with dementia receive what they call a normal meal.

By changing the consistency to manage the swallowing problem, we generate another problem, which is the organoleptic part that they do not like very much, it is a big challenge. [04-01-155]

Often these older adults with dementia have comorbidities that alter their appetite and metabolism or require adjustments to meet their nutritional needs. In some cases, they receive medications that interfere with appetite or nutrient absorption. It is also challenging to manage the diverse types of diets (low sodium, hypoglycemic, soft, etc.) that are served at each meal, which respond to the prescription that each of the residents has. It is common for older adults to find the diet given to their neighbor at the table more palatable than the one they receive, and many have difficulty understanding and accepting changes in diet associated with their health status. In general, everyone is bothered by a change in diet, but depending on the person's condition, some situations become more difficult to manage.

It is difficult to please everyone and give them pleasure and make a pleasant meal, because the fact of blending food, sometimes the appearance is not so pleasant, the color changes, it does not look pleasant, and it is not appetizing. [04-01-154]

Psycho-emotional difficulties are also common, such as the feeling of abandonment and loneliness that is frequently associated with expressions of anxiety or depression, and that increases the already existing effects of cognitive deterioration. In these cases, the ability to feed themselves, and even the interest in eating, often decreases. However, opposite reactions can occur: It is common that when the person's cognitive impairment is mild or moderate they sit next to others with more severe impairment and take their food away.

...the patient was a painter and his adaptation to the diet was very complex, he was given a lot of insulin. He would sit with other residents who have Alzheimer's and take away their food. [01-01-42]

Communication difficulties between the elderly and the staff who care for them are common due to cognitive deterioration. It is hard to understand what is happening to people with dementia, for example if something is causing them pain or in some cases to understand what they are requesting. Furthermore, over time many of them tend to lose their appetite and interest in food and some develop anorexia. Medical prescriptions for nutritional supplements and vitamins are used frequently.

When we work with limited older adults, we try to guess what hurts them, what does not hurt them, what they are expressing, what they are feeding on. [02-02-207]

He has lost interest in food, so you ask him, do you want this or this and his response is 'I don't care. [02-01-60]

Losing interest in food is quite difficult. [02-01-63]

Memory disorders also cause difficulty in attention. Residents may forget they received their meals for the day or not feel full. When they feel hungry, they claim that they have not been given the food they already received. When mealtime is delayed, some of them become agitated and start screaming. Similar situations occur when they consume food products that their relatives bring them and forget about it, later blaming the institution's staff for having taken it away and consumed it.

Conflicts are created between older adults and workers, since families bring gifts such as cookies or candy, which the older adult consumes and then does not remember that they consumed them; There are problems with this. [01-01-32]

Behavioral changes also affect the eating process. Hyperactivity is common. In these cases, they begin to walk as soon as they finish eating, which is difficult to control. Cognitive deterioration is also evident when people with dementia put objects that are not edible in their mouths, which requires extreme monitoring and surveillance.

(She) finishes eating and immediately gets up and starts walking around the place. We want her to sit down and rest the food, wait a while and then, well, then they can hang out with other people. there is more that they lose than what they consume. [03-01-123]

Sometimes they put things in their mouths that are not edible because it caught their attention. [04-01-161]

Culture and beliefs are also factors that affect food and nutrition. When a resident enters the institution, they must often modify certain habits related to eating. This is one of the most complex processes regarding their adaptation. They do not like many foods recommended for being healthy, such as vegetables and salads, and tend to reject them. They also tend to add salt and sugar because they perceive that the food is tasteless. Some, although not all, older adults manage to adapt to changes over time thanks to interaction with other people in the home.

Because no matter how much we have good intentions to provide a complete, balanced, sufficient, and adequate diet, it is difficult because they come with different customs and reject certain types of foods. It is difficult for the user to consume a salad when he is not used to it, or with bread, the day there is no bread for breakfast, that day is terrible. [04-01-173]

Socio-economic also affect both the nutritional background of the person and the possibility of eating certain foods, which sometimes affects adequate nutrition.

The economic and sociocultural factor interferes a lot, we have a vulnerable population who are some beneficiaries of the municipal mayor's program, so there are various levels of very low strata where people come with very altered nutritional conditions from a very young age, and with poor diets, then it is difficult. [04-01-170]

It is not the same as managing certain limited resources to provide what the user requires. [04-01 -171]

Altogether, these difficulties can generate negative consequences for the health, well-being, and autonomy of institutionalized older adults and as the disease progresses, these difficulties become accentuated, generating greater dependency and the consequent requirement for assistance from their caregivers.

In the institution, together with the nutrition area, what we seek is for the person to maintain their independence to carry out the eating process, which is required both to attend the food service in the dining room and to eat their food independently, but with As the disease progresses, some lose independence in feeding and require assistance from a caregiver, until they become completely dependent on the process. [04-01-156]

## Care Strategies to Guarantee Feeding and Nutrition

### Respect for Uniqueness

Management strategies for feeding and nutrition of older adults with cognitive impairment include respect for uniqueness, accompaniment and anticipation, and adequate logistics for the delivery of food.

Directors and caregivers of these gerontological services strengthen autonomy as a central element to guide care related to food and nutrition as a way to respect uniqueness. This includes compliance with the customs of each person, the evocation of their memories and the consideration of their culture.

Attention to the elderly addresses preferences, takes into account flavors, preparation, the order in which the meals are served, offer what they like and adjust the general menus; addressing what each older adult wants individually.

Personalized care includes considering preferences as well as limitations, accompaniment and support at mealtime, management of difficulties, examples for the older adults and their families, adapting the diet to individual needs and preferences, giving adequate time for change, offer support and accompaniment during meals, and promote healthy habits that improve the nutritional status and well-being of these people. Integrating memories and generating sensory input that includes sight, taste, and smell can be stimulating and rewarding for residents at mealtime.

Addressing limitations is also part of caring for the nutritional health of these people. This requires handling special foods for chewing problems, swallowing problems, weight loss or greater physical or cognitive deterioration; and even using alternative feeding routes to meet or supply their nutritional requirements.

The topic of nutrition, like many things, must be personalized. Not everyone suffers from the same thing or goes through the same situation. [03-01-123]

Sometimes you need to be able to communicate and know the perception of people who do not have oral, written, or gestural language skills. [03-02-223]

When a new resident enters, the dietary changes are strong, because they come from a life in a family home in which they were fed differently. In the institution everything is portioned, and vegetables are included, for this reason the changes are abrupt and must be made gradually so as not to create a shock in their diet. [01-01-38]

### Accompaniment and Anticipation

Accompaniment and anticipation are necessary strategies. The first can be done with friends or like-minded people, always having adequate supervision to guarantee the consumption of appropriate foods.

... we also provide daily support to the guest when serving they do not want something at the moment, or want something else. [01-01-12]

They create affection with other older adults in the institution, for this reason it is important that they sit down to eat with their group of friends, so that the mealtime is more pleasant. [01-01-05]

Support includes the protection of residents, the service they are offered and the willingness to help them by adopting specialized techniques and approaches that respond to their needs at mealtime. This also includes ratification by family members about the way they consume food and its importance.

They support family members so that they also help with the older adult, calling them and telling them that they have to consume those foods for their own good. [01-01-43]

They take into account whether they require the assistance of any staff so that the older adult can consume their food with that help. [01-01-16]

### Adequate Logistics for Food Delivery

Adequate logistics for the delivery of food services is essential. The first part is the design of menus, who prepares them, and how the food is presented so that it is balanced and meets the demands of specific diets. The second is programming of the service, which includes organization and harmonization to integrate approaches, articulating the work, guiding the caregivers, and sharing the eating experience for the designed menus. A detailed clinical record of the diet and nutritional

status of each person is a basic element to guarantee logistical success, keeping the subject as the center of attention of all the food and nutrition services provided.

They handle all eating regimens breakfast, lunch, dinner, maintaining the entire balance in the operation. [01-01-11]

Things need to be organized to make them work. [04-01-183]

## Caregivers

### Caregiver competences for care

#### Knowledge for feeding and nutrition care

Caregivers need to remain attentive and be aware of everything that surrounds the food and nutrition of elderly adults as part of their competencies. The context of care has opportunities, but it can also be adverse.

It is essential for the caregiver to know the eating preferences of the people in their care, the importance of nutrition, to identify nutritional requirements and to be up to date with regulatory demands on the services.

Likewise, it is necessary to recognize contextual situations that make the eating experience of older adults with cognitive impairment more difficult. The risks of infection or contamination, their economic situation, inequality between users, the lack of adequate assessments for specific problems, and a history of malnutrition, are relevant aspects to consider when caring for them.

Cultural knowledge on the part of caregivers can also have an impact, especially when food-related care is associated with people's prognosis or quality of life.

Despite some progress there is still a lot of ignorance. Every day it is evident amid the accelerated change that caregivers lack updated training to support adequate decision making. There are some caregivers who still have misconceptions about dementia as a normal part of old age; others are unaware of effective strategies to care for these people. For their part, families suggest valuable strategies for management, but some of them do not correspond to the dietary tastes of the person being cared for. Caregivers also point out that they receive complex professional instructions with emphasis on restrictions and rather than how to give food. In some cases, the management guidelines are generic do not account for weight loss or malnutrition for various reasons. Sometimes the recommendations are aimed at promoting commercial products as if they provided "magic cures". In this sense, the service requires nutritionists and specialized personnel to support complex food and nutrition cases.

The ideal world in the nutrition of older adults would be to be able to achieve an experience of tastes and flavors, loaded with nutrients. [01-02-196]

I work in the institution as the chef, I am a chef at the school of gastronomy., I have a specialization in vegetarian food, international food and Colombian food, I am also involved in this medium, conducting workshops and a gluten-free eating course at the school. and I complement with bibliography that helps to understand how the book, brain of bread, Dr. David who talks specifically about this disease, Alzheimer's related to food. [03-01-132]

We have different perspectives on how the diet of the elderly should be managed. [04-02-245]

They are managing it with medications and weekly therapies, but they have never talked to me about nutrition. [03-01-104]

These managers and caregivers find teamwork and group management necessary. Managing groups of older adults is complex, especially when there are people with dementia amid heterogeneous conditions.

Interdisciplinary teamwork can benefit older adults. [04-02-243]

You have to rely on your direct caregivers... they are very substantial support. [01-01-19].



## Attitude Towards Feeding Duties

The caregiver must feel that they benefit as a person by carrying out the task of care. Because of their contribution to the people in their charge on the one hand, and because they can grow as a person and feel satisfied by carrying out this work on the other.

Food is a fundamental aspect to improve quality of life. It constitutes a path of opportunities where committed caregivers can grow. Resident satisfaction leads to staff satisfaction. It is therefore essential to have a pleasant environment, know the taste preferences of the guests and ensure that there is a balance between the foods they enjoy and those they require.

Caregivers report that contributing to the quality of life of people with dementia makes them feel useful, especially when they create pleasant moments and prevent their deterioration from accelerating. However, grief is common and difficult to assimilate. Seeing the changes and deterioration from increasingly younger ages, paired with the lack of interest in the food that they previously enjoyed a lot, has an impact on caregivers. However, serving people who require support leads to personal growth and satisfaction tied to knowledge and skill.

The attitudes of managers matter since some are not concerned about having specialized food. Often the options available are insufficient to adequately meet the needs of these people.

The industry, for its part, is pushing for a change in diet towards medications or nutritional supplements that require fewer care activities.

It is your daily work and what you are doing, and it makes you grow as a person. [04-01-142]

Love and patience are tools that we must offer to people with these ailments. [04-02-241]

Reach out to these people and raise their awareness so that it is not just about giving them food and keeping them healthy but about going a little further. [04-01-189]

The objective is to provide them with more quality of life in their last years or days at home, with a lot of love and affection; With this, the care staff will feel satisfied doing something for them. [01-02-203]

## Behavior During Feeding Care

This category refers to the way people and institutions behave towards the food service of residents. This behavior must evolve in accordance with the adaptation process of users to their housing site and should contribute to the quality of life and well-being of users and their families.

Caregivers should take their time when face with difficulties adapting to feeding. They should have patience, gradualness, and gentleness. The ability to negotiate is important to adequately feed and nourish these older adults who modify some habits but tend to maintain their preferences, but who do not always have the capacity to understand these adjustments.

...at 12:35 pm she must have her lunch, if she is not there at that time, she starts screaming that she is starving. The strategy is to be patient while she calms down. [01-01-33]

Adaptive behavior requires understanding and change. The lack of memory often requires reminders and demonstrations for older adults and their family members. Some institutions record videos or take photos during the feeding to remind people that they consumed the food and how they did it.

A conflict is created if older adults do not remember what they consumed, arguing that the nurses were the ones who ate their presents or meals. The institution's strategy is to take photos as evidence that the older adult consumed the food. Those photos are also shown to family members. [01-01-39]

Food selection and handling are also important. This selection includes both permitted and restricted foods. The healthiest foods are often not what they like the most, so it is necessary to find the right balance so that they enjoy food, but that it is also nutritious. On the other hand, it is important to remain alert to societal dietary trends that do not have a solid scientific basis.

In food management the goal is to ensure that the food is as natural as possible. However, its consistency, presentation and smell can be modified by liquefying it, grinding it, portioning it, making it juicier, preparing it as a compote or puree, and adding sauces.

One tries to organize a menu so that everyone likes the presentation, the type of food. [04-01-181]

the presentation of the food, with different colors and shapes. [03-02-227]

We seek that the presentation and consistency of the food, in addition to being easy to consume and swallow, is pleasant and meets the needs of the elderly without generating risk to their health. [03-02-236]

Preventive behavior is the basis for this care environment. Initially, preventing situations of greater cognitive deterioration through adequate nutrition is more useful and simpler than managing conditions or complications. Healthy eating patterns must be cultivated in the person. It is essential to ensure that residents accept the diet offered to them, which they must follow given their health condition.

Adequate nutrition can help contain the disease. It is not just about providing food and ensuring that people do not feel hungry, it is about ensuring they feel good and are as well-nourished as possible that through the eating experience.

In cases, for example, of a change in diet for some older adults, the helpers sit down with them and talk about why they have to consume those foods, so that they do not reject them. [01-01-34]

Gerontological service managers and caregivers need to be aware of the importance of nutrition, strengthen their knowledge, and understand nutritional parameters and guidelines to ensure that the foods delivered during meals provide the nutrients and antioxidants required for people with dementia. This helps maintain their health, prevent other diseases, and delay cognitive deterioration. It is also necessary to ensure an adequate consistency of food to avoid complications, especially those associated with dysphagia, which is common in this group.

It is important to know if the diet is for people with established cognitive impairments or if it includes a preventive process, that is, before generating cognitive impairment. [03-01-131]

It is extremely important that we should not reach the limit but start earlier with prevention. [04-01-144]

There is a case where the person has a severe cognitive impairment and a very severe swallowing disorder, swallowing is impossible for him, and we saw that it was very difficult to feed him. Fortunately, after many efforts we managed to find an alternative way of feeding that is the safest for him, a gastrostomy type that seems like it is going to be performed, then we are going to try to improve the nutritional part. [04-01-150]

That the food, in addition to being easy to consume and swallow, is pleasant and meets the needs of the adult without generating risks. [02-02 2012]

That the presentation and consistency of the food, in addition to being easy to consume and swallow, is pleasant and meets the needs of the elderly without generating risk to their health. [03-02-236]

The organization of logistics in aspects related to food and nutrition is a priority for administrators. This requires them to have an area specialized in food assistance, guaranteeing the required human and material resources to ensure the quality preparation, dispensing and storage of food.

It is required to have a set of strategies. [02-02-215]

(I would like) there to be an area specialized in food assistance for older adults and there to be clinically trained personnel for these pathologies, and for them to be educated in the classrooms in nutrition and well-being for older adults... [02-02-215]

Work in interprofessional teams is mandatory to guarantee the food and nutrition of residents and organize the care they require. Likewise, it is necessary to have clarity and management capacity with health insurers, so that institutions receive the medications and nutritional supplements that residents require in an adequate and timely manner.

The institution manages a file for each older adult with their name and food preferences. All collaborators in the institution must know about these files and what they contain. [01–01-27]

Articulation of the professionals who serve. [03–02 –228]

The managers and caregivers of institutions are aware of the various needs of each person and the change that can occur over time, which is why they constantly monitor them and try to incorporate healthy foods into the diet. Identifying these changing needs ratifies management behaviors and can identify the cause of nutritional deterioration or digestive disorders.

Guests, through a survey together with the family, indicate their tastes and preferences, diets; then from the nursing and nutrition area they are evaluated. [01–01-10]

It is important because you know the person's medical history and can advise based on that. [03–01-127]

It is essential to have the support of caregivers who know the residents, how to interpret non-verbal communication when they cannot express themselves orally and are attentive to their needs. Likewise, administrators must accompany residents and their caregivers during their adaptation process and address the situations that arise daily by ensuring that the feeding experience is pleasant and rich in tastes and flavors. Part of this is the pleasant presentation of food, the variety of shapes and colors, and the arrangement of the eating environment. The administration of the institution is also responsible for considering the quality of life and well-being of the caregivers of these older adults with cognitive disorders.

Finally, it is necessary to create spaces with other institutions, share experiences to exchange knowledge and strategies. These alliances can also propose research projects that contribute to the knowledge about this problem and transfer it to practice.

Many times, there are similar situations and sometimes we as an institution think that it only happens in our institution. [04–02-247]

## Discussion

The results of this study achieved the proposed objective of describing the experience of managers and caregivers regarding the nutrition and feeding of institutionalized older adults with dementia in Colombia as a first step towards its understanding and transformation. Based on the analysis, we identified the approaches to the care and feeding of the people in these institutions as a central theme. This encompasses two issues that are closely related to each other: the care of people with cognitive impairment and the preparation of caregivers to meet the needs of users.

This information allows us to infer that the main challenge is to ensure a balanced nutrition according to the particular needs and health problems of individuals, but that this needs to guarantee the uniqueness of care for each person as well. Administrators and caregivers must be prepared to recognize the tastes preferences of users and return to elements of Colombian gastronomy, which can bring back memories and contribute to improving food acceptance and enjoyment. Likewise, it is evident that other factors such as the dining room environment and social interaction with friends contribute to mealtime enjoyment and quality of life. Caregivers must have the skills to identify the particular health needs of the people in their care, manage the difficulties that may arise during meals related to behavioral changes, and maintain appropriate interaction with residents and families to ensure quality of care.<sup>24</sup>

Understanding the experience of caregivers responsible for feeding older adults with cognitive impairment helps us understand their complexities and constantly changing nature.<sup>19</sup> It helps us see that caregivers need support. This study confirms that this knowledge will be essential to create these strategies.

There are several common problems in the nutritional and feeding evaluation of people with dementia that can be assess with the three most used tools: the Edinburgh Eating Assessment in Dementia (EdFED) the Behavior Inventory Feeding (FBI) and the Feeding scale. The Edinburgh scale, which is the best rated, identifies frequent behaviors like the need to be closely supervised, the need for help, difficulty swallowing and various types of distractions.<sup>25</sup>

Our study groups identified factors that contribute to eating difficulties in people with dementia. These include cognitive impairment, physical dysfunction, social, psychological, environmental, and cultural aspects, all of which require systemic solutions.<sup>26</sup> Therefore we need to established comprehensive strategies that must be built by an interdisciplinary team to improve nutrition and quality of life of people with dementia.<sup>27</sup>

Dementia is associated with malnutrition and the burden on the caregiver who must often interpret communication with older adults with cognitive impairment. Is important to have strategies like adequate assessment tools, clear guidelines that include the family, and support for the caregivers of these people; like we do in this study.<sup>28</sup>

Another point from our study is that the nutrition of people with cognitive impairment should focus on them and consider environmental conditions, relationships with peers and constant assistance. This aligns with findings that indicate that these strategies can help older adults with dementia who receive care in nursing homes.<sup>29</sup>

Liuet al analyzed the admission of institutionalized residents with dementia. They highlight that it is relevant to promote the autonomy of the people with dementia, provide easy-to-eat foods, support at mealtime, and better training to staff to improve food and nutrition services for these people.<sup>30</sup> Their findings coincide with ours and we propose similar strategies. However, our study considers a broader sociopolitical context that may give greater momentum to this type of service qualification.

The integration of specialists such as speech therapists can complement and improve care for people with dysphagia and guide caregivers in their management.<sup>31</sup> Despite the absence of specialized speech therapy personnel, this specific recommendation could complement the proposals in this research.

Decision-making is complex when feeding elderly people with dementia. However, this training or strategy was not proposed by the caregivers participating in this study to improve the service. It is essential that they learn to make decisions together with the multidisciplinary team and their families.<sup>32</sup>

The results of this study show that the diet and nutrition of older people with dementia occupy a prominent place for managers and caregivers of gerontological centers because it demonstrates the quality of care in the institution, impacts the adaptation of older people, and contributes to their health, quality of life and well-being. The nutritional evaluation of the person entering the institution is essential to recognize their health status, including their level of cognitive and functional status. It is a challenge to articulate nutritional requirements with the palatability of the foods residents enjoy. Food taste is a significant contributing factor to the acceptance of the institution by people with dementia. Therefore, Institutions must strengthen management strategies during meals to guarantee nutrition, safety in food intake, maintain a harmonious environment despite behavioral changes, and guarantee a humanized service. Future research should focus on strategies to promote the food and nutrition of residents in gerontological centers as an aspect that favors the humanization of the service and impacts the quality of life of older adults with dementia.

These results have some limitations. They reflect the experience of administrators and caregivers of gerontological services in one region of the country, which is why they cannot be generalized to other regions or countries. Due to its characteristics, the study did not include individual interviews or the point of view of family members. These aspects could be considered in future research.

## Conclusions

The experiences of managers and caregivers of specialized gerontological services describe the complexity of care to address the nutritional needs of people with dementia. Our study reveals that care related to feeding and nutrition for people with dementia are structured on the bases of the subject assessment. Although there are basic support strategies, each caregiver requires specific knowledge, attitudes, behaviors, and institutional support, to generate a context that favors the health and quality of life of people with dementia. The results of this study show the need to strengthen specific strategies and public policies that help improve the nutrition and feeding of people with dementia, and that can reduce the burden on their care.

## Institutional Review Board Statement

The study was conducted in accordance with the Declaration of Helsinki, and approved by the General Directorate of Research and the Institutional Research Ethics Committee of Universidad de La Sabana (ING 253 2020), 15 07 2020; ENF 60 2021, 01-03-2022).

## Data Sharing Statement

Data are available on request due to restrictions, eg, privacy or ethical. The data presented in this study are available on request from the corresponding author. The data are not publicly available due to the group being interested in improving and contacting different organizations that are interested in the same topics.

## Informed Consent Statement

Written informed consent was obtained from all subjects involved in the study including the publication of anonymous responses.

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## Disclosure

The authors declare no conflicts of interest.

## References

1. World Bank Life expectancy at birth, global in years. 2023; Available from: <https://data.worldbank.org/indicator/SP.DYN.CDRT.IN?end=2021&start=1960&view=chart>. Accessed July 19, 2024.
2. World Health Organization. Dementia. 2023; Available from: <https://www.who.int/news-room/fact-sheets/detail/dementia>. Accessed July 19, 2024.
3. World Health Organization, Ageing and Health. 2023; Available from: <https://www.who.int/news-room/fact-sheets/detail/ageing-and-health>. Accessed July 19, 2024.
4. Garre-Olmo J. Epidemiología de la enfermedad de Alzheimer y otras demencias [Epidemiology of Alzheimer's disease and other dementias]. *Rev Neurol*. 2018;66(11):377–386. doi:10.33588/rn.6611.2017519
5. World Health Organization. Global status report on the public health response to dementia. Geneva: World Health Organization. 2021; Available from: <https://www.who.int/publications/i/item/9789240033245>. Accessed July 19, 2024.
6. Robledo V. Tiempos y espacios para el cuidado: perspectivas etnográficas desde la experiencia de quien cuida [Times and spaces for care: ethnographic perspectives from the experience of the caregiver]. *Rev Maguaré*. 2021;35(1):127–158. doi:10.15446/mag.v35n1.96667
7. Lanyau Dominguez Y, Rodriguez Suarez A, Macias Matos C, Suarez Medina R, Llibre Rodriguez JJ, Quintero Alejo ME. Sobre el patrón alimentario de los adultos mayores y las asociaciones entre el consumo de alimentos y los trastornos cognitivos [On the eating pattern of older adults and the associations between food consumption and cognitive disorders]. *Rev Cubana de Alimentación y Nutr*. 2020;30(2):319–338.
8. Austbø Holteng LB, Frøiland CT, Corbett A, Testad I. Care staff perspective on use of texture modified food in care home residents with dysphagia and dementia. *Ann Palliat Med. Annals of Palliative Medicine*. 2017;6(4):310–318. doi:10.21037/apm.2017.06.24
9. Batchelor-Murphy MK, Steinberg FM, Young HM. Dietary and feeding modifications for older adults. *Am J Nurs*. 2019;119(12):49–57. doi:10.1097/01.NAJ.0000615796.40279.9c
10. Abdelhamid A, Bunn D, Copley M, et al. Effectiveness of interventions to directly support food and drink intake in people with dementia: systematic review and meta-analysis. *BMC Geriatr*. 2016;16(1):26. doi:10.1186/s12877-016-0196-3
11. Mole L, Kent B, Abbott R, Wood C, Hickson M. The nutritional care of people living with dementia at home: a scoping review. *Health Soc Care Community*. 2018;26(4):e485–e496. doi:10.1111/hsc.12540
12. Liu W, Cheon J, Thomas SA. Interventions on mealtime difficulties in older adults with dementia: a systematic review. *Int J Nurs Stud*. 2014;51(1):14–27. doi:10.1016/j.ijnurstu.2012.12.021
13. Donnelly R, Wei C, Morrison-Koechl J, Keller H. The effect of blue dishware versus white dishware on food intake and eating challenges among residents living with dementia: a crossover trial. *BMC Res Notes*. 2020;13(1):353. doi:10.1186/s13104-020-05195-y
14. Murphy JL, Holmes J, Brooks C. Nutrition, and dementia care: developing an evidence-based model for nutritional care in nursing homes. *BMC Geriatr*. 2017;17(1):55. doi:10.1186/s12877-017-0443-2
15. Palese A, Gonella S, Grassetti L, et al. What nursing home environment can maximise eating Independence among residents with cognitive impairment? Findings from a secondary analysis. *Geriatr Nurs*. 2020;41(6):709–716. doi:10.1016/j.gerinurse.2020.03.020
16. Slaughter SE, Morrison-Koechl JM, Chaudhury H, Lengyel CO, Carrier N, Keller HH. The association of eating challenges with energy intake is moderated by the mealtime environment in residential care homes. *Int Psychogeriatr*. 2020;32(7):863–873. doi:10.1017/S1041610219001959

17. Jung D, Lee K, De Gagne JC, et al. Eating difficulties among older adults with dementia in long-term care facilities: a scoping review. *Int J Environ Res Public Health*. 2021;18(19):10109. doi:10.3390/ijerph181910109
18. Vázquez Parra JC, Martell Espericueta CM. El respeto de la autonomía como elemento fundamental en el tratamiento ético de los trastornos de la conducta alimentaria [Respect for autonomy as a fundamental element in the ethical treatment of eating disorders]. *Rev Latinoamericana de Bioética*. 2020;20(1). 93–105. 10.18359/rbi.4369
19. Liu W, Tripp-Reimer T, Williams K, Shaw C. Facilitators and barriers to optimizing eating performance among cognitively impaired older adults: a qualitative study of nursing assistants' perspectives. *Dementia*. 2020;19(6):2090–2113. doi:10.1177/1471301218815053
20. Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *Int J Qual Health Care*. 2007;19(6):349–357. doi:10.1093/intqhc/mzm042
21. Hennink MM, Kaiser BN, Weber MB. What influences saturation? estimating sample sizes in focus group research. *Qual Health Res*. 2019;29(10):1483–1496. doi:10.1177/1049732318821692
22. Silveira Donaduzzi DS, Colomé Beck CL, Heck Weiller T, Nunes da Silva Fernandes M, Viero V. Grupo focal y análisis de contenido en investigación cualitativa [Focal group and content analysis in qualitative research]. *Index de Enfermería*. 2015;241–2:71–75. 10.4321/S1132-12962015000100016
23. Bravo XR, Osorio B. Criterios de calidad y rigor en la metodología cualitativa [Quality and rigor criteria in qualitative methodology]. *Gac Pedagog*. 2017;36:62–74.
24. Hamiduzzaman M, Kuot A, Greenhill J, Strivens E, Isaac V. Towards personalized care: factors associated with the quality of life of residents with dementia in Australian rural aged care homes. *PLoS One*. 2020;15(5):e0233450. doi:10.1371/journal.pone.0233450
25. Spencer JC, Damanik R, Ho MH, et al. Review of food intake difficulty assessment tools for people with dementia. *West J Nurs Res*. 2021;43(12):1132–1145. doi:10.1177/0193945920979668
26. Chang CC, Roberts BL. Strategies for feeding patients with dementia. *Am J Nurs*. 2011;111(4):36–46. doi:10.1097/01.NAJ.0000396553.01996.5e
27. Hum A, Tay RY, Wong YKY, et al. Advanced dementia: an integrated homecare programme. *BMJ Support Palliat Care*. 2020;10(4):e40. doi:10.1136/bmjspcare-2019-001798
28. Di Muzio M, Rosa F, Moriconi A. Nutrition in dementia: a challenge for nurses. *Prog Nutr*. 2018;20(1):5–11.
29. Sadarangani T, Chong S, Park S, et al. A qualitative analysis of the delivery of person-centered nutrition to Asian Americans with dementia in the adult. *Day Health Care Setting J Appl Gerontol*. 2021;40(2):179–188. doi:10.1177/0733464820910030
30. Liu W, Williams K, Batchelor-Murphy M, Perkhounkova Y, Hein M. Eating performance in relation to intake of solid and liquid food in nursing home residents with dementia: a secondary behavioral analysis of mealtime videos. *Int. J Nurs Stud*. 2019;96:18–26. doi:10.1016/j.ijnurstu.2018.12.010
31. Berkman C, Ahronheim JC, Vitale CA. Speech-language pathologists' views about aspiration risk and comfort feeding in advanced dementia. *Am J Hosp Palliat Care*. 2019;36(11):993–998. doi:10.1177/1049909119849003
32. Anantapong K, Davies N, Chan J, McInerney D, Sampson EL. Mapping and understanding the decision-making process for providing nutrition and hydration to people living with dementia: a systematic review. *BMC Geriatr*. 2020;20(1):520. doi:10.1186/s12877-020-01931-y

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