

Nutrition and Hydration in the Elderly: A Qualitative Study on Preventing Malnutrition and Dehydration

Binesha P.B.^{1,*}, Rejina P.F.², Dana Baby³

Abstract

Aging brings about multiple physiological, psychological, and social transformations that significantly influence both nutritional intake and hydration levels in older adults. This qualitative study was conducted to explore the eating habits, hydration routines, and the challenges faced by seven senior citizens. Using semi-structured interviews, the research aimed to gain an in-depth understanding of the factors that affect dietary behavior and hydration practices among the elderly. The findings revealed that aging-related physical limitations, such as reduced appetite, dental problems, and swallowing difficulties, along with cognitive decline, contributed to irregular eating and drinking patterns. Social isolation and financial constraints further exacerbated these issues by limiting access to nutritious food and adequate fluids. Despite these challenges, the study also identified several facilitators that supported better nutrition and hydration among participants, including caregiver assistance, dietary modifications, community meal programs, and institutional health initiatives. The results emphasize the importance of developing comprehensive, individualized nutritional interventions that address not only physical health but also emotional and social well-being. Furthermore, awareness campaigns and policy reforms are essential to strengthen support systems for older adults, ensuring they maintain optimal hydration and nutrition. The study provides valuable insights for healthcare providers, caregivers, and policymakers to design sustainable strategies for improving the nutritional health and quality of life of the aging population.

Keywords: Aging, nutrition, hydration, elderly care, qualitative study

INTRODUCTION

Aging is a complex and multifaceted process that presents numerous challenges, significantly impacting overall health, well-being, and quality of life. As individuals age, they encounter physiological, social, and medical changes that can affect their nutritional status and hydration levels.

Nutrition and hydration are vital in maintaining physical strength, cognitive function, and functional independence in elderly individuals. However, research indicates that malnutrition and dehydration in older adults are alarming concerns, associated with higher morbidity and mortality rates, increased hospitalizations and healthcare costs, decreased functional independence and mobility, impaired cognitive function, and increased risk of dementia [1].

Several factors contribute to poor nutrition and hydration in older adults, including physiological changes: reduced appetite, impaired taste, and difficulty swallowing (dysphagia) can hinder adequate nutrition and hydration, social factors: social isolation, lack of support, and limited access to nutritious food can exacerbate malnutrition and

*Author for Correspondence

Binesha P.B.

E-mail: monubinesha07@gmail.com

¹Nursing Tutor, Department of Obstetrics & Gynecological Nursing, P.K. Das College of Nursing, Ottapalam, Kerala, India

²Professor, Department of Obstetrics & Gynecological Nursing, P.K. Das College of Nursing, Ottapalam, Kerala, India

³Associate Professor, Department of Obstetrics & Gynecological Nursing, P.K. Das College of Nursing, Ottapalam, Kerala, India

Received Date: September 22, 2025

Accepted Date: October 28, 2025

Published Date: November 04, 2025

Citation: Binesha P.B., Rejina P.F., Dana Baby. Nutrition and Hydration in the Elderly: A Qualitative Study on Preventing Malnutrition and Dehydration. International Journal of Geriatric Nursing. 2025; 8(2): 6–12p.

dehydration, medical conditions: polypharmacy (multiple medications), chronic diseases, and disabilities can increase the risk of malnutrition and dehydration [2].

Despite the growing awareness of these issues, there is a significant gap in qualitative research exploring the real-life experiences of elderly individuals facing these challenges [3]. This study aims to bridge this gap by:

- Exploring the perspectives of elderly individuals on their experiences with nutrition and hydration challenges and identifying potential interventions: that can support adequate nutrition and hydration, improve health outcomes, and enhance quality of life. By examining the lived experiences of elderly individuals, this study seeks to provide valuable insights into the complexities of nutrition and hydration in older age, ultimately informing the development of effective interventions and support strategies.

Objectives of the Study

- To understand personal experiences and challenges related to food intake and hydration among elderly individuals.
- To identify common barriers and facilitators influencing their dietary habits.
- To explore their perceptions of nutritional needs and hydration requirements.
- To provide recommendations for healthcare professionals, caregivers, and policymakers to improve nutritional and hydration support for older adults.

Needs of the Study

The study on “Nutrition and Hydration in the Elderly: A Qualitative Study on Preventing Malnutrition and Dehydration” is crucial in the Indian scenario due to the country’s rapidly aging population. According to the World Health Organization (WHO), approximately 30% of older adults in India suffer from malnutrition, highlighting the need for effective interventions to prevent and treat this condition [4]:

- *Prevalence of Malnutrition:* Malnutrition and dehydration are significant concerns among Indian elderly, particularly in rural areas where healthcare access is limited. Studies have shown that dehydration can lead to increased mortality, poorer cognitive performance, and higher healthcare costs. Understanding the extent of malnutrition and dehydration among Indian elderly is essential to develop targeted interventions [5].
- *Importance of the Study:* This study is important for several reasons. Firstly, it can help improve health outcomes for Indian elderly by understanding their nutrition and hydration needs and developing effective interventions to prevent malnutrition and dehydration. Secondly, it can reduce healthcare costs associated with treating malnutrition and dehydration-related complications. Finally, the study can inform policy and practice, enabling healthcare professionals and policymakers to develop targeted strategies for promoting healthy aging in India.

METHODOLOGY

Study Design

This qualitative study uses a descriptive phenomenological approach to understand the real-life experiences of elderly individuals regarding nutrition and hydration [6]. A purposive sample of elderly individuals from the selective city from the Kerala included in the secondary-level care services registry who have met the criteria, such as individuals aged 65 years and older, experiencing challenges related to nutrition and hydration, communicating their experiences effectively, and living independently or in assisted living facilities, was recruited for the study.

All the elderly individuals encountered challenges related to appetite loss, difficulty swallowing, and unintentional weight loss, leading to multidisciplinary consultations and specialist care. Additionally, some individuals presented with cognitive decline and neuropsychiatric manifestations, such as

irritability, mood swings, and other behavioural disturbances. Such individuals were excluded from the study and exclusion criteria have been made, which include individuals with severe cognitive impairment or advanced dementia, tube feeding or parenteral nutrition, and terminal illness in end-of-life care. All individuals undergoing nutritional assessment had undergone a comprehensive evaluation and management plan, which involved regular monitoring of biochemical markers, nutritional status, and gastrointestinal assessments. Frequent evaluations were conducted to track their clinical condition and identify any potential adverse effects from nutritional interventions or medications.

The research protocol received ethical clearance from the institute's ethics committee. Informed consent was taken from the participants, and each consent interaction was audio recorded before the initiation and audio recording of the interview. After transcription, all audio recordings were securely erased to ensure anonymity, confidentiality, and data privacy. Interviews were performed by a registered nurse who had been involved in the care of patients during their admission period. They were trained to conduct qualitative interviews before the study. Of 7 individuals who approached and consented, were interviewed face to face. The final theme was extended family networks and societal influences. Before every interview, the investigator provided the participants with an explanation of the study objectives, reassuring them of their right to refuse participation or to end the interview any time. Interviews were conducted with the individuals guided by a semi-structured interview schedule. The interview was developed in consultation with the research team after reviewing relevant literature and opened with questions about regular caregiving activities. Various aspects of nutritional challenges, barriers, psychosocial experiences, coping strategies, concerns, societal interactions, and the ramifications were explored as the interview progressed. Appropriate trigger questions were used during the interview to explore the experiences as they were discussed. Interviews were continued and a preliminary reading analysis was undertaken to identify major themes until data saturation was achieved.

The interviews were audio-recorded, translated, and transcribed. The process of data analysis followed the inductive and interpretive methods [7]. The initial step involved the first author reading the transcripts, wherein meaningful units were identified and coded to derive the first-order codes by the first and third authors. The first-order codes were condensed and compared to develop second-order codes. The themes were then identified based on these first- and second-order codes. The analysis involved an iterative process of moving between individual segments and entire interviews, coupled with extensive discussion among the authors to ensure a comprehensive understanding of emerging themes and to achieve consensus regarding the findings. All authors reviewed and approved the final themes.

To maintain rigor and credibility, the investigation used a qualitative research framework [8]. The researchers purposefully bracketed their thoughts and feelings to reduce researcher reflexivity. Reflections on various new elucidations were presented to caregivers as part of a member-checking process to ensure the reliability of the researchers.

Table 1 presents the sociodemographic details of the seven senior citizens who participated in the study. The participants' ages ranged from 67 to 81 years, with four females and three males. Most participants (five out of seven) belonged to the Below Poverty Line (BPL) category, indicating financial vulnerability, while two participants were from the Above Poverty Line (APL) group. Common health issues among participants included hypertension, diabetes, arthritis, and congestive heart failure (CHF) – conditions frequently associated with aging and chronic illness. Regarding living situations, three participants lived with their families, one lived with a spouse, two lived alone, and one resided in an assisted living facility. These variations in living arrangements and socioeconomic backgrounds suggest that social and financial factors, as well as health status, play a crucial role in influencing dietary and hydration behaviours among elderly individuals (Table 1).

RESULT

Table 2 illustrates the themes and subthemes that emerged from the qualitative analysis of interviews conducted with elderly participants regarding their nutrition and hydration practices. Two overarching themes were identified: barriers to adequate nutrition and hydration and facilitators for better nutrition and hydration.

Table 1. Sociodemographic characteristics of the participants.

Participant	Age	Gender	Health History	Socio Economic Status	Living Situation
P1	67	Female	Hypertension	APL	Lives alone.
P2	73	Male	Diabetes	BPL	Assisted living.
P3	78	Female	Arthritis	BPL	Lives with family.
P4	81	Male	CHF, Hypertension	BPL	Lives alone.
P5	70	Female	Diabetes	APL	Lives with family.
P6	76	Male	Hypertension	BPL	Lives with spouse.
P7	80	Female	Hypertension	BPL	Lives with family.

Table 2. Themes and subthemes identified from the qualitative analysis.

First Order Codes	Second Order Codes	Themes
<ul style="list-style-type: none"> • Difficulty chewing and swallowing • Decreased appetite due to chronic illnesses • Medication side effects affecting taste and digestion • Social isolation leading to reduced food intake • Depression and its impact on appetite • Financial limitations restricting access to nutritious food • Dependence on low-cost, processed foods 	Physical Limitations Psychological and Social Factors Economic Constraints	Barriers to Adequate Nutrition and Hydration.
<ul style="list-style-type: none"> • Encouragement and assistance with meal preparation • Social mealtimes improving food intake • Texture-modified diets for swallowing difficulties • Increased fluid intake through flavored drinks and soups • Nutritional programs in assisted living facilities • Education on hydration importance for elderly individuals 	Support from Caregivers and Family Dietary Modifications and Interventions Institutional Support and Awareness	Facilitators for Better Nutrition and Hydration.

Barriers to Adequate Nutrition and Hydration

Adequate nutrition and hydration are essential for maintaining physical health, particularly among older adults. However, many individuals face barriers to accessing healthy food options and staying hydrated. As noted by a patient, “I wish I could afford to buy fresh fruits and vegetables, but they’re just too expensive” (P1). This quote highlights the economic constraints that can limit access to nutritious food, ultimately undermining overall health and well-being.

“I live alone, and cooking for one is just not worth it” (P4), “Sometimes I’ll go all day without eating a proper meal” (P7, P6, P5). Transportation issues can also limit access to grocery stores, making it difficult for older adults to purchase fresh, nutritious food. “I used to love going to the farmer’s market, but now I don’t drive, and it’s hard to get there on public transit” (P3).

Dehydration is also a concern, particularly for older adults with mobility or cognitive issues. “I have trouble getting to the bathroom, so I just don’t drink as much” (P2), “I’m always a bit dizzy, but I thought that was just part of getting older.” Some older adults may also experience diminished thirst

sensation, making it harder for them to recognize when they need to drink more. “I just don’t feel thirsty like I used to” (P1), “My doctor says I’m dehydrated, but I don’t feel like I need to drink more water” (P4). These quotes highlight the need for support systems and awareness about nutrition and hydration in older adults.

Facilitators for Better Nutrition and Hydration

Many older adults have found ways to maintain better nutrition and hydration. “I started using a meal delivery service, and it’s been a game-changer” (P1), “I get healthy meals delivered right to my door, and it’s taken a huge load off” (P6). Others have benefited from home-cooked meals prepared by family members or caregivers (P4). “My grandkids love cooking for me, and it’s great to see them in the kitchen” (P3). Some communities also offer programs that provide transportation to grocery stores or offer on-site meal preparation. “The senior center has a great meal program, and I love seeing my friends there” (P2).

Staying hydrated is also easier with the right strategies. “I keep a water bottle next to my favourite chair, and it reminds me to drink throughout the day” (P5). Some older adults have also found that using apps or alarms helps them stay on track. “My granddaughter set up an app that reminds me to drink water throughout the day, and it’s really helped” (P3). Others have benefited from the support of caregivers or family members who encourage them to drink more. “My caregiver always makes sure I have a glass of water with my medication, and it’s become a habit” (P7). These quotes highlight the importance of support systems and creative solutions in maintaining better nutrition and hydration.

DISCUSSION

This qualitative study explored the experiences and challenges of elderly individuals regarding nutrition and hydration, highlighting the complexities of preventing malnutrition and dehydration in this population [9]. Like other studies, our findings emphasize the significance of social support and caregiver involvement in ensuring adequate nutrition and hydration among the elderly [10]. The participants’ experiences underscore the need for tailored nutritional interventions that consider their unique needs, preferences, and circumstances.

- *Importance of social support:* Our study highlights the crucial role of social support in promoting nutrition and hydration among the elderly.
- *Challenges in accessing nutrition:* Participants faced challenges in accessing nutritious food, highlighting the need for accessible and affordable nutrition options.
- *Misconceptions about nutrition:* Misconceptions about nutrition and hydration were prevalent, emphasizing the need for education and awareness programs.
- *Caregiver involvement:* Caregivers play a vital role in supporting the nutritional needs of the elderly, and their involvement is essential in preventing malnutrition and dehydration [11].

CONCLUSIONS

In conclusion, our study underscores the significance of social support, accessible nutrition options, education, and caregiver involvement in promoting nutrition and hydration among the elderly. By addressing these key areas, we can work toward preventing malnutrition and dehydration, ultimately enhancing the health, well-being, and quality of life for elderly individuals. Effective interventions and support systems can help ensure that the elderly receive the nutrition they need to thrive [12, 13].

Major implications are:

- *Personalized nutrition interventions:* our findings suggest the need for personalized nutrition interventions that consider the unique needs and preferences of the elderly.
- *Education and awareness:* Education and awareness programs can help address misconceptions about nutrition and hydration, promoting healthy eating habits among the elderly.
- *Support for caregivers:* Caregivers require support and resources to effectively care for the nutritional needs of the elderly.

- *Multidisciplinary approach*: A multidisciplinary approach, involving healthcare professionals, caregivers, and community support, is essential in preventing malnutrition and dehydration among the elderly [14].

Limitations

- *Qualitative nature*: The qualitative nature of this study limits the generalizability of the findings to individual patients.
- *Contextual variations*: Contextual variations within the realm of caregiving may influence the interpretations of the findings.

Recommendations

This study emphasizes the need for tailored nutritional interventions for elderly individuals, considering their personal, social, and medical challenges. Healthcare providers should prioritize nutritional education, personalized dietary plans, and enhanced support systems to ensure adequate nutrition and hydration for aging populations. Further research with larger sample sizes and diverse demographics is recommended to strengthen these findings.

REFERENCES

1. Clegg ME, Williams EA. Optimizing nutrition in older people. *Maturitas*. 2018 Jun;112:34–38. doi: 10.1016/j.maturitas.2018.04.001. Epub 2018 Apr 4. PMID: 29704915.
2. Dent E, Wright ORL, Woo J, Hoogendijk EO. Malnutrition in older adults. *Lancet*. 2023 Mar 18;401(10380):951–966. doi: 10.1016/S0140-6736(22)02612-5. Epub 2023 Jan 27. PMID: 36716756.
3. Avgerinou C, Bhanu C, Walters K, Croker H, Liljas A, Rea J, et al. Exploring the views and dietary practices of older people at risk of malnutrition and their carers: A qualitative study. *Nutrients*. 2019 Jun 5;11(6):1281. doi: 10.3390/nu11061281. PMID: 31195731; PMCID: PMC6627873.
4. World Health Organization (WHO). Ageing and health. [cited 2025 Apr 16]. Available from: <https://www.who.int/news-room/fact-sheets/detail/ageing-and-health>.
5. Rani PMS. Nutritional Status of Elderly in India: A Review. In: Soletti AB, editor. *Contemporary Issues in Late Adulthood. Asian Perspectives on Public Health*. Singapore: Springer; 2024. https://doi.org/10.1007/978-981-97-4449-7_11.
6. Williams H. The meaning of “phenomenology”: qualitative and philosophical phenomenological research methods. *The Qualitative Report*. 2021;26(2):366–385. <https://doi.org/10.46743/2160-3715/2021.4587>.
7. Gioia DA, Corley K, Hamilton AL. Seeking qualitative rigor in inductive research: Notes on the Gioia methodology. *Organizational Research Methods*. 2013 Jan;16(1):15–31. doi: 10.1177/1094428112452151.
8. Johnson JL, Adkins D, Chauvin S. A review of the quality indicators of rigor in qualitative research. *Am J Pharm Educ*. 2020 Jan;84(1):7120. doi: 10.5688/ajpe7120. PMID: 32292186; PMCID: PMC7055404.
9. Verma M, Hontecillas R, Tubau-Juni N, Abedi V, Bassaganya-Riera J. Challenges in personalized nutrition and health. *Front Nutr*. 2018 Nov 29;5:117. doi: 10.3389/fnut.2018.00117. PMID: 30555829; PMCID: PMC6281760.
10. Kehoe L, Walton J, Flynn A. Nutritional challenges for older adults in Europe: Current status and future directions. *Proc Nutr Soc*. 2019 May;78(2):221–233. doi: 10.1017/S0029665118002744. Epub 2019 Jan 30. PMID: 30696516.
11. Leslie W, Hankey C. Aging, nutritional status and health. *Healthcare (Basel)*. 2015 Jul 30;3(3):648–658. doi: 10.3390/healthcare3030648. PMID: 27417787; PMCID: PMC4939559.
12. de Groot CP, van Staveren WA. Nutritional concerns, health and survival in old age. *Biogerontology*. 2010 Oct;11(5):597–602. doi: 10.1007/s10522-010-9284-5. Epub 2010 May 21. PMID: 20495957; PMCID: PMC2928923.
13. Dangour AD, Uauy R. Nutrition challenges for the twenty-first century. *Br J Nutr*. 2006 Aug;96 Suppl 1:S2–7. doi: 10.1079/bjn20061689. PMID: 16923243.

14. Darnton-Hill I, Margetts B, Deckelbaum R. Public health nutrition and genetics: Implications for nutrition policy and promotion. *Proc Nutr Soc.* 2004 Feb;63(1):173–85. doi: 10.1079/PNS2003330. PMID: 15070448.