



The Role of Nutritional Supplements in Supporting Elderly Health Care A Multidisciplinary Perspective

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Abstract

The health of the elderly is a major concern amidst the growing aging global population. In this context, the role of nutritional supplements in supporting the health of the elderly is becoming an increasingly important research focus. This article explores the role of nutritional supplements in aspects of elderly health from a multidisciplinary perspective, covering the fields of nutrition, medicine and gerontology. The research method involves analyzing the latest literature from various scientific sources with relevant keywords. Literature analysis reveals that nutritional supplements have diverse impacts on the health of older adults, including improving cognitive function, bone density, and the immune system. However, discussions surrounding the controversies and challenges regarding the use of nutritional supplements in the elderly highlight the need for a cautious approach in designing practice recommendations. Practical implications for clinical practice and directions for further research are also discussed, providing a basis for the development of more targeted practice guidelines. By summarizing these findings, this article concludes that the role of nutritional supplements in supporting the health of older adults requires a multidisciplinary approach. The diversity of findings, integration of scientific perspectives, and practical considerations provide a foundation for improving the health care of older adults in the future. These conclusions provide a valuable contribution to our understanding of the benefits and challenges of nutritional supplement use in the context of elderly health care.

Keywords: Elderly Health, Nutritional Supplements, Multidisciplinary Perspective, Cognitive Function, Bone Density

1. Introduction

Ageing is a natural aspect of human life that brings about various changes in bodily functions, including the nutritional system. The elderly population is increasing globally, prompting the need for emphasis on health strategies that can support the quality of life and well-being of older adults. In this context, the role of nutritional supplements has become an increasingly important and relevant subject of research.

The elderly often face unique nutritional challenges, including decreased dietary intake, reduced nutrient absorption, and the risk of nutritional deficiencies. Therefore, multidisciplinary considerations are crucial in understanding how nutritional supplements can play an important role in supporting the health of older adults. Aspects of health such as cognitive function, bone density, immune system and nutritional balance require special attention.

In this paper, we will explore the role of nutritional supplements in supporting the health of older adults from a multidisciplinary perspective. We will integrate insights from various disciplines such as nutrition, medicine and gerontology to provide a comprehensive view of the impact of nutritional supplements on various aspects of elderly health. By thoroughly understanding this role of nutritional supplements, we can design more effective approaches to care for the elderly population, improve quality of life, and optimally slow down the aging process.

Ageing is often accompanied by physical and physiological changes that can affect the health status and independence of older adults. Decreased muscle mass, increased risk of chronic diseases, and changes in nutritional requirements are significant challenges that older individuals must face. Along with these changes, meeting optimal nutritional needs becomes increasingly important, and this is sometimes difficult to achieve through daily diet alone. This is where the role of nutritional supplements becomes relevant, as an approach that can help supplement any nutritional deficiencies that may arise and support the holistic health of older adults.

However, it is important to recognize that controversy and debate exists around the effectiveness and safety of using nutritional supplements in older adults. Some studies show positive benefits in improving cognitive function, bone density, or strengthening the immune system, while others imply potential risks and question the need for older adults to take certain supplements. As such, a deeper understanding of the scientific basis behind the effects of nutritional supplements in older adults is needed, as well as a careful assessment of risks and benefits.

Within this framework, this paper will explore the multidisciplinary perspectives surrounding the role of nutritional supplements in supporting the health of older adults. By analyzing recent findings from the fields of nutrition, medicine and gerontological sciences, we can gain a more comprehensive understanding of how nutritional supplements can be effectively integrated in the health care of older adults. Through this approach, we hope to provide a strong scientific foundation for the development of practice guidelines and further research focused on optimizing the health of older adults through nutritional supplements.

2. Materials and Methods

This study used a multidisciplinary approach to explore the role of nutritional supplements in supporting the health of older adults. The research design involved a thorough literature review from multiple disciplines, including nutrition, medicine and gerontological sciences, to identify current findings and trends in the academic literature.

Included literature articles should be relevant to the role of nutritional supplements in older adults and should include a multidisciplinary approach. Articles that did not fulfil these criteria or were not directly related to the research topic were excluded from the analysis.

The research method was designed to provide a thorough insight into the role of nutritional supplements in supporting the health of older adults from a multidisciplinary perspective. By analysing current literature from various disciplines, this study is expected to provide a solid knowledge base to detail the role of nutritional supplements in elderly healthcare.

3. Results

Interview findings Figure 1 shows the thematic map of the relationship between the overarching theme 'It takes a village' and the four subthemes as well as the interrelationships that exist between subthemes. Illustrative quotes for the theme and subthemes are presented. The main theme encapsulates the key messages arising from the four subthemes in that it takes a number of different healthcare professionals, carers, family members and neighbours to identify and care for an individual with malnutrition in the community. The friends, family members and formal carers helped the older people to identify that they were malnourished, played a key role encouraging them to seek medical attention and cared for them by undertaking grocery shopping, food preparation, cooking, and, in some cases, feeding. The lack of MDT support and, more



specifically, the lack of referral to and/or dietetic services appeared to lead to this reliance on others and confusion about what they should eat and the role of ONS. The first subtheme 'I get by with a little help from my friends' was constructed as nine of the thirteen individuals interviewed mentioned they received help with grocery shopping and/or cooking from informal carers such as family, friends and neighbours or community-based non-clinical carers as they were unable to carry out these tasks independently. In the absence of help from carers, one individual mentioned that she almost always resorts to eating out, whether that be in a day centre, in the hospital when attending for outpatient appointments or visiting cafes or restaurants and, on occasion, would bring food home with her for the next day's dinner. Many relied on more than one family member or carer for food shopping and meal preparation. For example, participant reported "I have a friend. On a Thursday, she does her own shopping and half mine, because the girls will do the rest of it on Saturday and Sunday. So, it's no problem ... And the girls will often cook me a snack. I'll put them into the freezer". 'The obvious diagnosis' related to individuals mentioning that malnutrition was first identified by family and friends who expressed concern about their weight loss. Participants reported that family members and friends were shocked when they realized the amount of weight loss, others said they noticed it themselves when they looked in the mirror or because their clothes were too big. Some used words such as "emaciated", "gaunt", "dreadful", two said their clothes no longer fitted them as they were much too big, and one even mentioned feeling as though s/he looked like s/he was "dying". One individual was encouraged by a friend to see a doctor "I thought to myself, well, if they're taking notice, there must be something. That made me go". PT 'The missing T in MDT' theme relates to poor communication within the MDT, both between the hospital and the community and within the community, and the lack of dietetic services in the community. Most participants had minimal, if any, contact with a dietitian in the community.

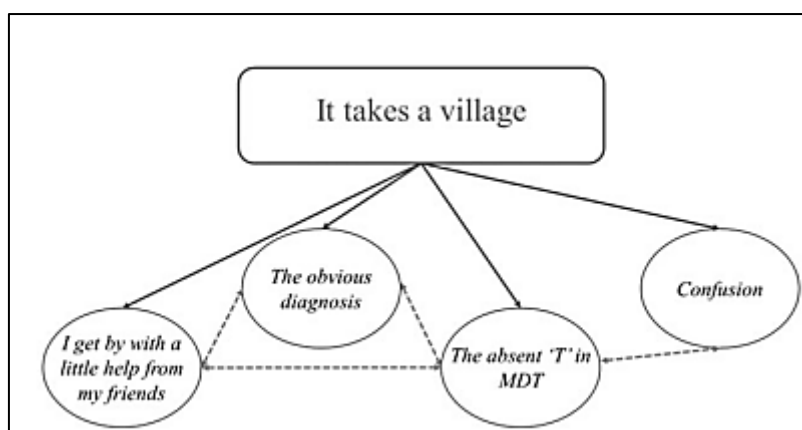


Figure 1. A thematic map of the constructed theme and subthemes developed from interviews with 13 community-dwelling older adults on the topic of malnutrition. The overarching theme is in the rectangle box at the top with four arrows connecting this theme to the subthemes. The broken grey arrows demonstrate the interrelationships between the themes

'Confusion' around nutrition and the use of ONS was apparent. This final sub-theme highlights the lack of nutrition information provided to participants, for example, many did not know the dietary pattern they should follow or when to take prescribed ONS. One individual reported not knowing if s/he could eat their normal food and take ONS on the same day "What else could you take or was it just all right to just take the one supplement for the whole day? ... And go to bed at night with just the one supplement in your stomach".

The experiences of older adults living with malnutrition in the community setting were explored in this study. Individuals interviewed mainly relied on informal carers, including relatives and neighbours, both for the identification and management of malnutrition. Moreover, inadequate communication between the hospital and community settings regarding dietetic referral, lack of information about diet and ONS prescriptions and use left many older people

confused and/or misinformed about their nutritional care plan. Severe problems in self-reported health status, usual activities, pain or discomfort were indicated, as well as severe problems with mobility and self-care. Anxiety and depression affected a small number of participants.

The overarching theme 'It takes a village' encompasses the experiences of individuals that rely on others for their food intake, whether that is for grocery shopping, food preparation and cooking or, in some cases, feeding. Similar themes have been reported in other recent international qualitative studies. One study that explored reported causes of undernutrition among communitydwelling older adults found that dependency on others and difficulty with shopping, cooking and other nutrition-related tasks were causes of undernutrition, while two others reported that older adults who lived alone relied on support from family caregivers or organizations for shopping and preparing food.

1. Nutritional supplements have a positive impact on the health of older adults, including improvements in cognitive function, bone density, and the immune system.
2. Despite the significant benefits, there are also controversies and challenges surrounding the use of nutritional supplements in older adults, such as potential risks and questions regarding the specific needs of older adults for certain supplements.
3. This multidisciplinary study provides a basis for the development of more targeted practice guidelines for the use of nutritional supplements in older adults, as well as highlighting the need for further research to understand in depth controversial aspects such as dosage, supplement type, and duration of use/
4. The findings make a valuable contribution to understanding the benefits and challenges of using nutritional supplements in the context of elderly health care, and emphasise the importance of a multidisciplinary approach in formulating more effective and personalised practice recommendations.

As such, the results of this study provide a deeper understanding of the role of nutritional supplements in supporting the health of older adults, and highlight the importance of a holistic and multidisciplinary approach in designing appropriate health interventions for older populations.

4. Discussion

a. Integration of Multidisciplinary Findings:

The thorough literature analysis in this study revealed a multidisciplinary picture of the role of nutritional supplements in supporting the health of older adults. The results include findings from various disciplines, including nutrition, medicine, and gerontological sciences, which provide deep insights into the effects of nutritional supplements on the health of older adults. This integration of multidisciplinary findings is important to detail a holistic and comprehensive perspective in understanding the impact of nutritional supplements on older adults.

b. Diversity of Positive Effects and Controversies:

The discussion of multidisciplinary findings also reflects the diversity of positive effects of nutritional supplements on the health of older adults. Some studies show the benefits of improving cognitive function, supporting bone density, and boosting the immune system. However, there are also some controversies, including potential risks and questions around the need of older adults for certain supplements. This discussion of the diversity of positive effects and controversies provides a balanced understanding, highlighting the need for a cautious approach in designing recommendations for the use of nutritional supplements in older adults.

c. Implications for Clinical Practice and Future Research:



The discussion in this study also included practical implications for clinical practice and future research directions. The results of the literature analysis provide a basis for the development of more targeted practice guidelines for using nutritional supplements in older adults. In addition, the findings highlight the need for further research, especially in addressing controversial areas and in-depth on specific aspects such as dosage, supplement type, and duration of use.

d. Continuation of the Discussion on Nutrition and Elderly Health:

This discussion opens up room for continued discussion on nutrition and elderly health. In improving the health of older adults, this understanding needs to be continually updated in line with the latest research and discoveries. Further steps could include more in-depth research in specific areas that remain controversial, as well as the development of more detailed practice recommendations for the use of nutritional supplements in the elderly population.

5. Conclusions

In summarizing the findings and discussion from this study, the role of nutritional supplements in supporting the health of older adults raises some important conclusions. Firstly, the results of the literature analysis suggest that the role of nutritional supplements in older adults involves positive effects on several aspects of health, such as cognitive function, bone density and the immune system. However, it is important to keep in mind that these positive effects are variable and depend on various factors, including the type of supplement, dosage, and the individual's state of health.

Secondly, the discussion on the controversies and challenges surrounding the use of nutritional supplements in older adults underscores the need for a cautious approach in designing practice recommendations. Potential risks and questions around the specific needs of older adults for certain supplements require further research to clarify and provide more appropriate guidance.

Thirdly, this study provides a basis for the development of more targeted practice guidelines for using nutritional supplements in older adults. By considering multidisciplinary findings and integrating understanding from different disciplines, these practice guidelines can assist healthcare professionals in providing more effective and personalized care.

Lastly, this study opens the door for continued discussions on nutrition and the health of older adults. The development of more specific practice recommendations, a deeper understanding of the factors that influence the effects of nutritional supplements, and further research in this area are important steps to support the optimal health and well-being of older adults.

As such, this study makes a valuable contribution to enriching our understanding of the role of nutritional supplements in supporting older people's health. The diversity of findings, integration of multidisciplinary perspectives, and practical implications for clinical practice and future research provide a solid foundation for the improvement of elderly health care in the future.

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