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SUMMARY WITH CRITICAL APPRAISAL

Congregate Meal Programs for Older Adults Living in the Community: A Review of Clinical Effectiveness

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Context and Policy Issues

The population of older adults (aged 65 years and older) in Canada has been increasing steadily; growing from 8% in 1971 to 14% in 2010.[1] It is projected that in 2036, seniors would represent 23% to 25% of the total population and could be between 9.9 and 10.9 million in number.[1] The number of seniors aged 80 years and older is estimated to reach 3.3 million by 2036.[1] Health problems generally increase with age.

Under-nutrition is a concern in the elderly population and results in poorer functional status, greater health services utilization, and higher likelihood of mortality.[2] Combatting under-nutrition can be challenging, as access to sufficient and healthy foods may be difficult.[2] Difficulties may arise because of factors such inability to go grocery shopping and inability to cook due to physical disabilities.[3] It is important to address the nutritional needs of the seniors and to enable them to live independently in the community.

An alternative to long term care facilities would be the creation of non-institutional settings to provide assistance to vulnerable older adults to maintain independence, delay disease and disability, and remain living in their homes and communities.[4] It was reported that congregate nutrition sites reduce food insecurity and nutrition risk among older adults, and that one of the factors contributing to improved food intake was from the social aspect that is an integral part of congregate meal programs.[5] There is suggestion that participation in congregate meal programs improves daily nutrient intake, nutrition status, social interactions, and functionality in older adults.[6] These improvements have the potential to affect health, quality of life, and healthcare utilization.

A previous CADTH rapid response report (summary of abstracts) on interventions for malnutrition in seniors had a broader objective.[7] It found one relevant systematic review and one relevant non-randomized study. The systematic review included nine studies, which reported improvement or stabilization in nutritional status or prevention of further decline. No results were presented in the abstract of the non-randomized study. The purpose of the current report is to review the clinical effectiveness of congregate meal programs for older adults living in the community.

Research Question

What is the clinical effectiveness of congregate meal programs for older adults living in the community?

Key Findings

No relevant evidence regarding the clinical effectiveness of congregate meal programs for older adults living in the community was identified.

Methods

Literature Search Methods

A limited literature search was conducted on key resources including PubMed, the Cochrane Library, University of York Centre for Reviews and Dissemination (CRD) databases, Canadian and major international health technology agencies, as well as a focused Internet search. No filters were applied to limit the retrieval by study type. Where possible, retrieval was limited to the human population. The search was also limited to English language documents published between January 1, 2007 and December 3, 2018.

Selection Criteria and Methods

One reviewer screened citations and selected studies. In the first level of screening, titles and abstracts were reviewed and potentially relevant articles were retrieved and assessed for inclusion. The final selection of full-text articles was based on the inclusion criteria presented in Table 1.

Table 1: Selection Criteria

Population	Older adults aged ≥ 65 years who are living in the community
Intervention	Congregate dining
Comparator	Usual care, any comparator; no comparator (before/after)
Outcomes	Clinical effectiveness (i.e., decreased healthcare utilization, quality of life, independence, social and mental health outcomes
Study Designs	Health technology assessments, systematic reviews/meta-analyses, randomized controlled trials, and non-randomized studies

Exclusion Criteria

Articles were excluded if they did not meet the selection criteria outlined in Table 1, they were duplicate publications, or were published prior to 2007.

Critical Appraisal of Individual Studies

Critical appraisal was not performed as no eligible studies were identified

Summary of Evidence

Quantity of Research Available

A total of 464 citations were identified in the literature search. Following screening of titles and abstracts, 437 citations were excluded and 27 potentially relevant reports from the electronic search were retrieved for full-text review. No potentially relevant publications were retrieved from the grey literature search for full text review. Of these potentially relevant articles, 27 publications were excluded for various reasons, and no publications met the inclusion criteria and were included in this report. Appendix 1 presents the PRISMA flowchart of the study selection.

Summary of Findings

No relevant evidence regarding the clinical effectiveness of congregate meal programs for older adults living in the community was identified; therefore no summary can be provided.

Limitations

There appears to be a gap in the literature with respect to evidence on the clinical effectiveness of congregate meal programs for older adults living in the community. It is possible earlier studies reported on the clinical effectiveness of congregate meal programs; however that is beyond the scope of the current report.

Conclusions and Implications for Decision or Policy Making

No relevant studies fitting the inclusion criteria regarding the clinical effectiveness of congregate meal programs for community-dwelling older adults were identified.

Three studies, which did not satisfy our inclusion criteria as they did not report relevant outcomes, but that provided some useful insights are discussed here. One study[8] assessed the use of congregate meal program among 151 community-dwelling older African Americans. They reported that the congregate meal service use was higher among individuals living alone compared to individuals living with others. They found that although it has been found that as income decreases, nutrition risk increases, only 12% of the low-income individuals who were aware of the congregate meal service actually used the service. A second study[9] was a survey of participants of Older Americans Act nutrition program, conducted in the USA. The survey found, that of those participating in the congregate nutrition program, 75% felt that the program helped them eat healthier, 94% thought that the meal was excellent or good; 68% felt that the program helped them live at home; and 83% felt that the program made them feel better.[9] A third study[10] was a survey of 901 participants of a nationwide congregate meal program in the USA. The survey found that 58% of the participants felt it helped them remain living at home, 82% thought it made them feel better, and 74% thought that the meals improved their health. [10]

Chen and Han reported that challenges associated with the implementation of an efficient community based service center (such as congregate meals program) may include maintaining quality of the services and concerns with respect to sustainability.[11] Some of the barriers associated with lack of success with congregate meals program may include lack of knowledge regarding the availability of such services, lack of nutrition education, transportation issues, and mobility issues.[3,6] Other barriers include negative perceptions about the program, misunderstanding of the eligibility criteria, and embarrassment to use the program.[8]

It is likely that many factors contribute to the success of a congregate meal program.. One study,[12] conducted in South Korea, examined the -usefulness of having a healthy eating program at the congregate meal site. The investigators surveyed 74 elderly individuals (majority of age above 70 years) of whom 41 received the healthy eating education on reducing salt intake and 33 did not receive the education. They found that the education program had a positive effect; it influenced the individuals to reduce the salt intake. Furthermore, they also mentioned that for the congregate meal programs to succeed, the foodservice providers need to be educated on healthy eating. A study[13] conducted in USA

mentioned that successful utilization of senior center meals was dependent on leadership, particularly that of the center director.

Well-designed studies are needed to assess the effectiveness of congregate meal programs for community-dwelling seniors, with respect to outcomes such as quality of life, social and mental health, independence, and impact on healthcare utilization.

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Appendix 1: Selection of Included Studies