

Interventions Carried Out In Primary Health Care To Deal With Overweight And Obesity - A Scoping Review

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Protocol

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Abstract

Introduction and objectives: overweight and obesity are important public health problems which have a negative impact on the quality of life of individuals and on health systems around the world. Primary Health Care (PHC) becomes a crucial health care model for addressing the problem of overweight and obesity. This study presents the protocol of a scoping review that aims to describe the interventions related to dealing with overweight and obesity in PHC, identifying the obstacles and facilitators for their implementation.

Methods and Analysis : the scoping review protocol presented was based on the recommendations of the Prisma Extension for Scoping Reviews (PRISMA-SCR), as well as the framework proposed by Arksey and O'Malley. The research questions were elaborated by a multidisciplinary team of researchers, graduate students and professors belonging to a research group working in the area of health policy and program evaluation. In addition, two pilot studies were carried out to refine the questions and to improve the online article research and consequently the protocol. The bibliometric databases that will be used are PUBMED, EBSCO, SCOPUS, WEB OF SCIENCE; using specific keywords for each database to orientate the search for original articles written in English. Every step of the research will be carried out by two researchers working independently. The steps include: searching the selected databases with the keywords; reading the title and summary of the articles found; reading the selected articles in full and transferring the data extracted from the articles to a table; a thematic analysis of the results.

Ethics and Dissemination : the results of the scoping review will be published in a scientific journal and presented at conferences and other scientific events. It is hoped that the presentation and discussion of the findings of the scoping review proposed in this protocol can help researchers, health professionals and planners of PHC policies and programs to identify gaps in the literature, to reflect upon the experiments conducted around the world, and to explore possibilities for adapting successful interventions to varied geographical and cultural contexts.

Background

Overweight and obesity are considered serious public health problems of global proportions, affecting both developed and developing countries.^{1,2} Global obesity has almost tripled since 1975. It is estimated that more than 1.9 billion adults in the world are classified as overweight or obese.³ In 2017, the number of overweight children under 5 years of age reached more than 38 million worldwide.⁴

Obesity has a multiple and heterogeneous character; it involves not only biological, but also historical, economic, social and cultural factors that impact food choices, the foods available and the entire food production chain.⁵

Considered a complex disease, obesity is also an important risk factor for the emergence of other chronic non-communicable diseases (NCDs), such as diabetes⁶, heart disease⁷ and various types of cancers.^{8,9} As a result, the economic costs of obesity have increased considerably in recent years. According to the

Organization for Economic Cooperation and Development (OECD), the treatment of issues related to obesity accounts for 8.4% of the total expenditure on health in the countries that are part of the organization.¹⁰

As a consequence of the multifactorial etiological character of obesity, the food and nutrition actions developed within the scope of Primary Health Care (PHC) play a fundamental role. This is the preferred health care model for the development of individual and collective actions, aimed at promoting health and preventing and treating obesity, as well as the ability to provide comprehensive care for overweight people and to treat their comorbidities.^{11,12}

The prevention and treatment of obesity in PHC is addressed by actions related to food and nutritional surveillance, including monitoring and nutritional diagnosis; health promotion actions such as healthy eating and physical activity; interdisciplinary monitoring; the establishment of individual goals for patients, according to their motivation for behavioural change; and regular monitoring, both individually and in groups.

The intersectoral actions advocated in PHC also represent an important strategy to be considered for tackling overweight and obesity.⁵

Professionals working in PHC play an important role in encouraging the creation of health policies, reducing the influence of obesogenic environments and improving the care network for obese patients. They need to become politically active at all levels of government, including decision-making, in order to better cope with obesity.¹⁴

Given the fact that obesity is a worldwide epidemic, a multifactorial health problem, and given the importance of PHC in providing integrated care to deal with the problem, identifying the various actions carried out worldwide has the potential to: (i) produce insights into the potential of new actions that can be adapted to varied geographical and cultural contexts; and (ii) encourage reflections on the existing obstacles that are common to all countries.

Therefore, a scoping review on actions to deal with overweight and obesity in PHC can provide an expanded and descriptive view of these actions that can be used by researchers to improve knowledge on the topic and/or propose meta-analysis reviews to investigate some interventions more thoroughly; as well as by health professionals and policy and program planners to consider new interventions at the level of PHC.

Scoping reviews can be useful for mapping knowledge of a given research area, as well as for clarifying definitions and concepts, understanding the work processes and/or the conceptual limits of a research subject.¹⁵ In addition, they provide an overview of evidence-based practices, identifying gaps in knowledge, clarifying key concepts and reporting emerging evidence on the subject to be addressed.^{16, 17,18}

Based on the above, this study aims to describe the actions related to tackling overweight and obesity in PHC, identifying the obstacles and facilitators for their implementation. It is noteworthy that, at the time of

writing this protocol, no similar study was found during the project team's research on two of the most popular health-related search sites among researchers from around the world (Web of Science and PubMed).

Methods

The protocol described here was based on the recommendations of Prisma Extension For Scoping Reviews (PRISMA-Scr)¹⁹, and the framework proposed by Arksey and O'Malley.¹⁵

Research question identification:

A multidisciplinary team of researchers, graduate students and professors belonging to a research group working in the area of health policy and program evaluation participated in the elaboration of the protocol. Meetings were held to define the questions and the objectives of the study. The following questions were defined:

- What are the actions to deal with overweight and obesity developed in PHC?
- What are the obstacles and facilitators for implementing the actions?

A pilot study was conducted in two databases (Web of Science and Lilacs), which helped to refine the protocol. The result of the pilot study showed that in the search for articles (title and abstract), many variations were found among the findings. The research group examined the differences and decided that to better guide the search it was necessary to formulate sub-questions that complement the main questions:

- Is it possible to identify any actions taken in PHC?
- What types of actions are taken?

A second pilot study was carried out using the same databases as the first, the results of which demonstrated the applicability of the sub-questions to complement the main questions.

Eligibility criteria

The research group held meetings to define the criteria for the inclusion of the manuscripts that will be part of the scoping review.

The selected studies will be those that present actions carried out in PHC with people of all age groups. The actions may have been carried out by health professionals working in PHC, or by a team of researchers from research centres and/or universities not linked to PHC, provided that these actions have been applied in the PHC environment (Basic Health Units for example).

The first pilot study demonstrated the need for conceptual alignment on what actions would be carried out in PHC to deal with overweight and obesity. It was therefore agreed that individual and collective actions

would be considered, aimed at health promotion and the prevention and treatment of overweight, obesity and its comorbidities, such as: nutritional monitoring and diagnosis; health promotion actions such as healthy eating and physical activity; interdisciplinary and regular monitoring, both individually and in groups and intersectoral activities.

The manuscripts chosen to be part of the scoping review will be those in the original article format, published in English during the last 5 years (2014-2019).

Exclusion criteria include manuscripts such as: systematic reviews, meta-analyses, scoping reviews, evidence maps, rapid reviews, literature reviews, evidence syntheses, reviews of reviews, narrative and critical reviews, dissertations, conference abstracts, book reviews, commentaries or editorials, and unavailability of the entire article online even after contact with the author. In addition, original articles that include interventions with people who were recruited from PHC, but which were carried out at research centres or universities, will be excluded.

Information sources

The research team sought help from a librarian with experience in systematic reviews to select the databases and respective keywords.

The selected bibliometric databases were: Pubmed, Ebsco, Scopus, Web Of Science.

For each database, a group of keywords related to the research question and objectives was selected (Appendix 1).

During the pilot study for the preparation of this protocol, one database (LILACS) was eliminated for the following reasons: it presented few articles in the English language, which was a criterion for inclusion in this scoping review (most of the articles found were in Portuguese or Spanish); and most of the findings were of the dissertation or thesis type, but not the original article, another eligibility criterion for this scoping review.

Search strategies

Firstly, a data search will be carried out independently by two researchers using the selected databases and keywords. After the initial selection based on the search words, in the second step two researchers will analyse the title, abstracts and objectives of the selected articles, in order to separate those most relevant to the main questions, sub-questions and the objectives of the search. After completing this task, researchers should compare their findings and reach a consensus on the articles that will be selected for full reading. If agreement is not possible, a third researcher will be consulted to assist in the final decision.

In the next step, two researchers will (independently) read the articles in full and extract the data. Similar articles found on different databases will be excluded. In the third stage, the two researchers must address the findings in relation to the selected articles. Disagreements must be discussed in order to reach consensus. If agreement is not possible, a third researcher will be consulted to assist in the final decision.

It is important to note that during the pilot study it was decided that the researchers responsible for the search should have backgrounds in different areas of health, including a researcher with a background in nutrition.

Data Extraction Process

This refers to the process of the selected articles being independently read in full by two researchers, who in turn must extract information related to the research question and objectives of the study and use it to complete a table. The data extracted from the articles will include: author(s); title; magazine; year of publication; country of origin of the study; study objective; study population and sample size; kind of study; type of intervention, duration of intervention; intervention effectiveness; description (nutritional status, age, social strata, ethnicity, sex, other characteristics, morbidities) of the study population; location of the actions; results; facilitators of the intervention, obstacles encountered in implementing the intervention.

A pilot test of this stage will be carried out, and will consist of comparing the data extracted after reading 10% of the total selected articles. The two researchers will compare the sample data extracted, and the disagreements will be discussed to reach a consensus. Again, a third researcher will be consulted to help arrive at a consensus should an agreement not be reached by the two researchers. After adjusting the differences from the pilot test, the researchers will proceed to complete the table until they have read all the articles.

Once the data extraction from all the articles has been carried out, a third researcher will check for the presence of disagreements in completing the table for the purposes of quality control, and if necessary, make adjustments. After the completion of the data extraction from the manuscripts by the researchers, two other members of the group will compare the completed tables to verify the reliability of the data presented in the tables, and a final table will be produced that will serve as a source for analysis and discussion of the results.

Results Presentation

Results will be presented in an aggregate and visual form (eg, using tables and charts), as appropriate. For example, evidence on the interventions to tackle overweight and obesity will be represented by age groups as well as types of interventions. Also, it will be highlighted the obstacles and facilitators related to the interventions and the areas that have been under researched and may require further investigation.

The results will be qualitatively analysed using a thematic analysis²⁰. NVivo Software will be used to facilitate the extraction and organization of data²¹.

Ethical And Dissemination Aspects

Considering that the scoping review methodology aims to synthesize information from available publications, this study does not require authorization by the Ethics Committee.

The results of the scoping review will be published in a scientific journal and presented at conferences and other scientific events.

Abbreviations

PHC- Primary Health Care

PRISMA-SCR - Prisma Extension for Scoping Reviews

NCDs - Non-Communicable Diseases

OECD - Organization for Economic Cooperation and Development

Declarations

Ethics approval and consent to participate: Not applicable.

Consent for publication: Not applicable.

Availability of data and materials: Not applicable.

Competing interests: The authors declare that they have no competing interests.

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Authors' contributions: RS, VFD, JCV and RMS conceived of the study, participated in its design and carried out the pilot studies; DAN, MCMC and JT coordinated the research, gave feedback and guided the development of the protocol. All authors critically reviewed the manuscript and approved the final version submitted for publication.

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