Implementation of an innovative model of community nursing for older adults based on Buurtzorg principles: a scoping review protocol

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ABSTRACT

Objective: The objective of this review is to map the international evidence on the implementation of the Buurtzorg model of community nursing practice for the care of older adults. We will describe where and how it has been used, and what the challenges and facilitators of implementing this model of care are.

Introduction: The challenges of aging have mobilized health systems around the world to replace the current facility- and disease-centered care model with integrated patient-centered care models. The Buurtzorg model provides autonomy to nurses, who, in turn, empower patients in need-based and self-reliant care.

Inclusion criteria: We will consider both published and unpublished studies and reports exploring the process of implementing the Buurtzorg community nursing model for older adults' care internationally.

Methods: We will implement a three-step search strategy to locate both published and unpublished primary studies, theses, dissertations, book chapters, and text and opinion reports using the following databases: MEDLINE (PubMed), LILACS (BVS Portal), COCHRANE (Cochrane Library), CINAHL (EBSCO), Web of Science (Clarivate Analytics), Google Scholar (Google), Embase and Scopus (Elsevier), ProQuest Dissertations and Theses Global (ProQuest), and the official Buurtzorg website (https://www.buurtzorg.com/). We will present the search strategy in a PRISMA flow diagram. Data will be extracted using Excel spreadsheets (Redmond, Washington, USA) and then analyzed narratively. Extracted data will be quantitatively pooled in tables using descriptive statistics to synthesize the characteristics of the reports and sample, followed by a qualitative summary of how the Buurtzorg model has been used, and what the challenges and facilitators of implementing this care model are.

Keywords: Buurtzorg model; community health nursing; health services for the aged; holistic nursing; patient-centered care

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Introduction

According to the 2019 United Nations report on World Population Perspectives, in 2018, for the first time in human history, people aged 65-plus in the world surpassed the number of children under the age of five, with a projection of about 1.5 billion older adults in 2050. The report also shows that the number of people over 80 years old is growing even faster than the number of people over 65. In 2019, there were 143 million older adults and this number is expected to grow to 426 million in 2050.[1] The challenges posed by an increasingly aging population have mobilized health systems around the world to offer specialized care for this cohort. This is because

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comorbidities related to older age have a multidimensional impact on the physical, cognitive, social, and psychological capacities of these people.[2] The complexity of this context creates an urgency to replace or adapt the current care model, which is currently centered on facilities and disease. An integrated care model based on a self-managed teams of nurses and other health professionals and centered on the patient and their health is suggested as an alternative.[3]

Some integrated care models, such as those implemented in Canada and England, are provided by multidisciplinary health and social care teams directly in the community, with the main goal of reducing hospital admissions and improving the experience of the team and the patient.[4,5] However, for a model of care to be integrated, the leadership of frontline professionals and their ability to manage themselves are essential. In some countries, community care is led by nurses who play an important role in managing the care of older adults with chronic diseases at home, and in training professionals who are part of the health teams.[6] But, while the relevance of this role is unquestionable, rising levels of work-related stress, due to the growing demand for nursing care at home and overly bureaucratic work systems, lead to pervasive difficulty in retaining and recruiting nurses for community care.[7]

Buurtzorg (Dutch for ''neighborhood care'') is a model of care conceived in the Netherlands in 2006 by a nonprofit organization to deliver high quality care at low cost, safeguarding humanity over bureaucracy.[8] The model is designed to improve the team and patient experience, while promoting professional autonomy through a nurse-led, nurse-run organization of self-managed teams that provide home care to patients in their neighborhoods.[9] According to the principles of the Buurtzorg model, teams of up to 12 nurses coordinate the assessment, planning, and interventions for 50 to 60 home care patients who are older adults with complex health and social care needs due to disabilities, and/or terminal illness, chronic health conditions, and/or dementia. The guiding principles of the Buurtzorg model is underpinned by a common-sense approach and design thinking based on i) trust (fostering an environment of positive personal relationships in which patients, nurses, and other team members thrive); ii) autonomy (supporting professional, self-managing, comprehensive, and holistic nursing care); iii) creativity (enabling nurses to invent novel solutions at low cost for high-impact care, and involving patients and their formal and informal networks to foster health); iv) simplicity (replacing administration with team self-management using a simple technology-enhanced approach); and v) collaboration (creating a context for successful connections between nurses and individuals and organizations such as physicians, pharmacists and politicians).[10,11]

To overcome the challenges associated with existing community nursing models, several countries in Europe implemented the Buurtzorg model, adapting it to local contexts of nursing practice, policy, budgets, and community health care.[12–15] In Europe, the Buurtzorg model has demonstrated that nurse-led innovation and health care reform is possible, motivating countries around the world to adopt its principles. According to the 2016 Buurtzorg Study, this innovative model is active in 24 countries around the world and is developing collaborations in other countries.[8] This made us question what challenges are encountered and strategies used by local nursing teams in building and maintaining this innovative model of team management and care in countries that have implemented the Buurtzorg community nursing practice model for the care of older adults.

A preliminary search of PROSPERO, MEDLINE, and *JBI Evidence Synthesis* was conducted and no current or in-progress scoping reviews or systematic reviews on the topic were identified. In fact, a more extensive search conducted on Google Scholar identified two systematic overviews of the literature on the Buurtzorg model. However, these publications have not been peer-reviewed and do not address the experiences of the participants in countries that have implemented the Buurtzorg model.[16,17] This reinforces that international descriptions of the implementation of the Buurtzorg model in community nursing services remains limited, and there is a lack of well-documented reports on the challenges and strategies used by local nursing teams in this process.

This review will pursue the following aim: to map the international evidence on the implementation of the Buurtzorg model of community nursing practice for the care of older adults, describing where and how it has been used, and what the challenges and facilitators of implementing this model of care are. We expect that the 24 countries that have Buurtzorg collaboration will describe their implementation

process. The results will inform health and nursing leaders around the world who are interested in establishing this model of care.

Review questions

How has the Buurtzorg community nursing practice model for the care of older adults been used in participating countries, and what are the challenges and facilitators of implementing this model of care?

Inclusion criteria

Participants

This review will consider international publications including both older adults (aged 65 and over) receiving care, the health professionals delivering it as well as the caregivers, with no restrictions on other characteristics of the populations. Publications that include data from patients in other age groups in addition to the older adult age group will be retained only if specific data on the older adult cohort can be extracted separately.

Concept

Studies that describe how the Buurtzorg model has been used in participating countries, as well as what challenges and facilitators local nursing teams face when implementing this innovative care model, will be considered for inclusion. The concepts may include, but will not be limited to:

- where the Buurtzorg model has been used, such as geographic locations and demographics; characteristics of community environments, such as health policy (public or private) and local care focus (clinical/surgical/palliative/other); characteristics of the nursing care model (task-oriented, patient-centered); participation of other health professionals in teams led by nurses; the number of staff in community nursing vs. vacancy rate; number of users (number of patients for one nurse); and nurses' qualification levels;
- how the Buurtzorg model has been implemented, such as whether a pilot study was implemented; the model implementation time; stakeholders involved (eg, nurse team members, patients/caregivers, other local stakeholders); who led the implementation process; and how implementation data was collected (eg, in-depth interviews, patient and caregiver focus groups, professional focus groups, experience reports);
- what challenges were encountered when implementing the model, such as challenges related to the community environments, nursing teams, patients/caregivers, local health care system, and political policies;
- what facilitators were used for the model implementation, such as development of service integration (eg, establishment of collaborations across the care system with other health care professionals and members of the community), and caseload management, empowerment of nurses, nurses' training, and so on.

Context

This review will consider international publications describing the implementation of the Buurtzorg model of community nursing practice for the care of older adults in any geographical region. All settings (eg, urban, or rural communities) will be considered for inclusion.

Types of sources

This review aims to locate both published and unpublished primary studies, theses, dissertations, and text and opinion reports. We will consider both experimental and quasi-experimental study designs, including randomized controlled trials, non-randomized controlled trials, pre-/post-studies, and interrupted time-series studies. In addition, analytical observational studies, including prospective and retrospective cohort studies, case-control studies, and analytical cross-sectional studies will be considered for inclusion. This review will also consider descriptive observational study designs (including case series, individual case reports, descriptive cross-sectional studies for inclusion) and non-peer-reviewed reports (such as conference proceedings, publications in websites, media commercials, theses/dissertations, and book chapters).

Data from gray literature studies (such as media commercials and websites) can be important sources of information about where and how the Buurtzorg model is being implemented in the world. However, possible limitations arising from these reports, such as lack of information or unexplained variations in outcomes, will be disclosed in the final review.

During the search process, we will not apply any language restrictions. However, if during the full-text analysis, we identify publications in languages other than English, Dutch, Spanish, or Portuguese, we will contact the authors of the studies/reports and inquire

about the availability of the data in these languages. Those that are not available in English, Dutch, Spanish, or Portuguese will be excluded in this step of full-text analysis and reported in the final review.

This review will exclude study protocols (as this type of publication will not provide us with data on the implementation of the model), and reviews (since we are targeting studies that provide primary data). However, if reviews are located, we will search for the primary studies included therein and decide whether they meet the eligibility criteria for our study.

Methods

This review will be conducted in accordance with the JBI methodology for scoping reviews,[18] and in line with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR)[19,20] describing the steps of this study for identification, screening, eligibility, inclusion of studies/reports, data extraction, presentation, and analysis.

Search strategy

The first step of our three-step search strategy, conducted on December 18, 2021, was an initial limited search of MEDLINE (PubMed) to identify publications on the topic. The text words contained in the titles and abstracts of relevant studies/reports, and the index terms used to describe them were then used to develop a full search strategy for MEDLINE (PubMed; see Appendix I).

In the second step, we expanded the search strategy by including all identified keywords and index terms found in step one and adapted them for each included database, including LILACS (BVS Portal), COCHRANE (Cochrane Library), CINAHL (EBSCO), Web of Science (Clarivate Analytics), Google Scholar (Google), Embase and Scopus (Elsevier), ProQuest Dissertations and Theses Global (ProQuest) and the official Buurtzorg website (https://www.buurtzorg.com/). See Appendix I for a sample search strategy.

In the third step, we will review the reference lists of all included publications to identify potential additional studies.

Study selection

Following the search, we will collate and upload all identified publications into Rayyan (Qatar Computing Research Institute, Doha, Qatar) for initial screening of abstracts and titles, and remove duplicate citations. Further, titles and abstracts will be screened by two independent reviewers (IS and MHST) against the inclusion and exclusion criteria for the review. We will retrieve all potentially relevant studies in full and import their citation details into the reference manager Mendeley V.1.19.4 (Mendeley Ltd., Elsevier, Netherlands). The same two independent reviewers will assess in detail the full text of selected citations against the inclusion criteria. We will record and report the reasons for exclusion of full-text studies. Any disagreements that arise between the reviewers at each stage of the study selection process will be resolved through discussion or with a third reviewer (BGRBO). We will report the results of the search, study selection, and inclusion process in full in the final systematic review and present them in a PRISMA flow diagram.[21]

Data extraction

Data will be extracted from publications included in the scoping review by two independent reviewers (IS and MHST) using different sets of Excel spreadsheets developed by the reviewers (see Appendix II). We will include specific details about the populations, study methods, and outcomes of significance to the review question, such as study title, authors, study location, sample size, age, and diseases. We will modify and revise the draft data extraction tool as necessary during the process of extracting data from each included paper. We will detail modifications in the full scoping review. Any disagreements that arise between the reviewers will be resolved through discussion or with a third reviewer (BGRBO). We will contact authors of papers to request missing or additional data, where required.

Data analysis and presentation

The quantitative results will be presented in tables and/or graphs, with descriptive statistical analysis. The qualitative results will be categorized and analyzed based on their content, using descriptive content analysis.

We anticipate that the descriptive quantitative analysis will be useful for the presentation of data regarding the characteristics of community environments, of the nurses and nursing care model. The analysis of qualitative data will be useful to describe how the Buurtzorg model has been implemented.

Barriers and facilitators will be analyzed quantitatively and qualitatively.

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Appendix I: Search strategy

MEDLINE (PubMed)

Search conducted: December 18, 2021.

Query	Records retrieved
Search: (((((((``aged''[MeSH Terms]) OR (``aged, 80 and over''[MeSH Terms])) OR (``elderly''[Title/Abstract])) OR (``older adult''[Title/Abstract])) OR (``older people''[Title/Abstract])) OR (``older subject''[Title/Abstract])) OR (``older population''[Title/Abstract])) OR (``senior''[Title/Abstract]) AND (medline[Filter])) AND ((((((((((((((``buurtzorg''[Title/Abstract]) OR (``buurtzorg approach''[Title/Abstract])) OR (``buurtzorg model''[Title/Abstract])) OR (``buurtzorg nederland''[Title/Abstract])) OR (``dutch home healthcare''[Title/Abstract])) OR (``dutch home healthcare nurses''[Title/Abstract])) OR (``district nursing''[Title/Abstract])) OR (``district nursing care''[Title/Abstract])) OR (``district nursing practice''[Title/Abstract])) OR (``district nursing service''[Title/Abstract])) OR (``neighbourhood care''[Title/Abstract])) OR (``neighbor care''[Title/Abstract]))) OR (``Neighbour care''[Title/Abstract])) OR (``Neighborhood Care''[Title/Abstract]) AND (medline[Filter])) Filters: MEDLINE	159
TOTAL (No limitations)	159

Appendix II: Draft data extraction instrument

	Characteristics of the studies/reports							
N	Title of the study	Authors	What countries have implemented the model (country code)	Year of publication	Language	Study design	Design type	Setting

*Country codes according to the online browsing platform from International Organization for Standardization (ISO).[22]

	Characteristics of the sample					
N	Sample size	Age (year): Mean	Age (year): SD	Gender: % of male	Diseases	Disease duration (year): Mean

How the Buurtzorg community nursing practice model for the care of older adults has been used

Model Implementation time	Was a pilot study implemented?	Which stakeholders were involved?	Which professionals led the implementation process?	How was implementation data collected?

What are the challenges encountered with the model implementation and what are the facilitators used for its implementation?

Challenges	Facilitators