Self-efficacy of direct care workers providing care to older people in residential aged care settings: A systematic scoping review protocol

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Abstract
Background Self-efficacy is developed through a person’s interaction with his/her physical and social environment. Self-efficacy in caring is an essential attribute of care workers to develop a positive attitude towards their clients, improve work performance, and enhance job satisfaction. Care workers’ self-efficacy may vary according to the context in which the care is being provided. Aged care is a multidimensional and challenging setting, and characteristics of aged care services are different from those of acute care services. The objective of this review is to give an overview of the self-efficacy of residential aged care workers in caring for older people and factors influencing their self-efficacy.

Methods The protocol for this review is based on the Joanna Briggs Institute Reviewer's Manual for Scoping Review. A systematic search of the literature on electronic databases MEDLINE, PsycINFO, CINAHL, AgeLine, SCOPUS, and ProQuest Dissertations and Theses Global will be carried out using predefined search terms to identify relevant studies. This review will include all primary studies irrespective of the study design. Two reviewers will independently conduct title and abstract screening, full-text screening, and data extraction. A third reviewer will resolve discrepancies, while the final decision for conflicting studies will be made by consensus within the review team. Joanna Briggs Institute critical appraisal tools will be used to assess the methodological quality of the included studies. Quantitative findings will be presented in narrative form accompanied by tabulated results and a random effects meta-analysis will be conducted to compute the pooled estimates of the impacts of various influencing factors on caring self-efficacy of the direct care workers. Qualitative research findings will be synthesised using the meta-aggregation approach.

Discussion This review aims to bring together the evidence on the caring self-efficacy of aged care workers and associated factors. This will be an important source of knowledge to policymakers and aged care providers to understand the self-efficacy of aged care workers in order to support and enhance their self-efficacy and thereby improve their caring behaviours towards their clients. Scoping Review Registration Joanna Briggs Institute Systematic Review Register with the title ‘A scoping review of factors influencing caring efficacy of direct care workers providing care to older people’ (https://joannabriggs.org/ebp/systematic_review_register)
Background

Self-efficacy in nursing care refers to “nurses’ beliefs in their abilities to express caring orientations, attitudes, and behaviours and to establish caring relationships with their clients” (1). The stronger the individual’s self-efficacy, the more active the efforts of an individual to perform a specific behaviour or skill (2, 3). Manojlovich (2003) found a greater influence of self-efficacy of care workers in their job performance than support services of an organisation, such as information, resources, and opportunities (4). While increased self-efficacy in caring may improve care workers’ performance, low self-efficacy may adversely affect how these care workers carry out their duties (4, 5). Confidence in one’s own ability is an essential element to develop a positive attitude towards the client as well as to enhance job satisfaction (6). Self-efficacy is also likely to enhance the perception of care workers towards managerial and practical aspects of nursing care, thereby developing their competence to care for the client (1, 5). As self-efficacy is found to have a significant role in caring science, it is essential to understand the self-efficacy of care workers and discuss factors that may influence their efficacy to demonstrate caring behaviours.

According to Social Cognitive Theory, an individual’s interaction with the physical and social environment determines the self-efficacy of that person (7). Human functioning is a product of the interaction of intrapersonal influences, the behaviour one engages in, and the environment they grow and live in (3, 7). Bandura (2011) stressed that the self-efficacy of a person differs depending upon the individual’s physiological state, experiences, social relationships, and other circumstances he/she is living or working in (7). Therefore, the self-efficacy of care workers can vary according to the nature of their work and clients they are caring for.

Characteristics of acute care hospitals and aged care facilities are very different (8). In hospital settings, the aim of care workers or nursing staff is to care for patients suffering from acute health conditions or chronic health conditions with acute manifestations. Patients are expected to return their place of residence following treatment. However, aged care services are provided to older people who are unable to live independently without assistance because of frailty and other age-related conditions (9). The high level of dependency on the care provider, accompanied by
increasingly deteriorating health conditions with complex and multiple diseases or disorders, make older people a unique group of care recipients. Nursing care need presented by older people in aged care is, therefore, often challenging and multidimensional, including physical, psychological, and social dimensions (8). Hence, it is imperative to comprehend the self-efficacy of aged care workers and factors that may affect their confidence to care.

A preliminary search of literature using broad search terms identified no review article on the self-efficacy of aged care workers, indicating dearth of evidence synthesis in this area. Hence, a scoping review is planned to give an understanding of the self-efficacy of care workers in caring for older residents in residential aged care settings and identify factors that may influence care workers’ self-efficacy in caring.

**Review Objectives**

The objectives of this scoping review are to:

- provide an overview of the self-efficacy of direct care workers in caring for older residents living in residential care settings.
- identify factors influencing the self-efficacy of direct care workers in providing care to older residents in residential care settings.

**Methods**

This protocol complies with the Preferred Reporting Items for Systematic reviews and Meta-Analyses for Protocols 2015 (PRISMA-P 2015) (10) (see additional file 1) and is guided by the Joanna Briggs Institute (JBI) Reviewer's Manual for Scoping Review (11). The review has been registered in JBI Systematic Review Register with the title ‘A scoping review of factors influencing caring efficacy of direct care workers providing care to older people’ (https://joannabriggs.org/ebp/systematic_review_register). This proposed review will comply with the ‘Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR)’ checklist to facilitate complete and transparent reporting of results.

**Inclusion Criteria**

Inclusion criteria specify what is intended to be discussed in the review and the basis of inclusion of studies in the review (11, 12). Clear congruency between the title, objective/s, review question/s, and inclusion criteria is required to perform a scoping review. The inclusion criteria for studies to be
included in this review are classified by the type of participants, concept or the principal focus, context, and the type of studies as recommended by JBI reviewer’s manual for scoping review (11).

**Type of participants**

Studies that include direct care workers as study participants will be considered. Direct care workers in this study refer to all nursing staff providing care directly to older people. All paid/formal direct care workers will be considered in the review.

Studies will be excluded if their participants are:

- Allied health workers
- Ancillary service providers in aged care (e.g., laundry and kitchen staff)
- Care workers in hospital settings
- Care workers providing home-based care
- Informal, unpaid caregivers, including volunteers, and
- Students

**Concept**

The key phenomenon of interest of this review is self-efficacy in caring. Self-efficacy of care workers in caring may be affected by various factors such as personal and environmental factors, including who they are caring for and where.

**Context**

Provision of aged care in residential aged care settings only will be included. Provision of home-based aged care will be excluded because studies have shown that working environment, including the experiences of nursing staff, in residential aged care was different from the home-based care (13).

**Types of studies**

The review will involve evidence from both quantitative, qualitative, and mixed-method studies on the phenomena of interest. Studies will be included if they are:

- studies written in the English language and
- any primary studies including masters or doctoral dissertations

Studies will not be excluded based on the date of publication.

This review will not include review articles, opinion pieces, book chapters or books, news articles or studies conducted to develop measures of caring self-efficacy.

**Search strategy**
An extensive search will be conducted using electronic databases – CINAHL, AgeLine, MEDLINE, PsycINFO, SCOPUS, and ProQuest Dissertations & Theses Global. The three-step search strategy will be followed based on the recommendation by JBI (11). The first step involves a limited search of few databases to analyse text words in the title and abstract and keywords and index terms that describe the article. Secondly, all databases considered for review are searched to extract relevant studies using all terms identified in the first stage. Finally, the search for additional studies will also be carried out by scanning the reference list of relevant papers after full-text review.

CINAHL and MEDLINE have been selected in this review to identify index terms and keywords for searching for relevant studies. The search strategy has been developed in consultation with the senior library research advisor and has undergone peer review before finalisation (see additional file 2). Keywords initially identified to search for studies in this review are illustrated in Table 1.

Table 1: Subject headings and keywords

| PCC Participants | Term                        | Subject heading/terms                          | Other Keywords                                      |
|------------------|-----------------------------|------------------------------------------------|-----------------------------------------------------|
| Direct care workers | Nurses                      | Assistant in nursing                           |
|                   | Nursing Assistants          | Care assistant                                |
|                   | Nursing Staff               | Support worker                                 |
|                   | Nursing Home Personnel      | Care attendant                                 |
|                   |                              | Nurse aide                                     |
|                   |                              | Care aide                                      |
|                   |                              | Nursing home aide                              |
|                   |                              | Paid carer                                     |
|                   |                              | Formal carer                                   |
|                   |                              | Care staff                                     |
|                   |                              | Care worker                                    |
|                   |                              | Efficacy                                       |
|                   |                              | Confidence                                     |
|                   |                              | Competence                                     |
|                   |                              | Nursing skill                                  |
|                   |                              | Extended care                                  |
|                   |                              | Continuing care                                |
|                   |                              | Care home                                      |
|                   |                              | Institutional care                             |
|                   |                              | Aged care                                      |
|                   |                              | Assisted care facility                         |

| Concept          | Caring efficacy             | Self-efficacy                                  |
|------------------|-----------------------------|------------------------------------------------|
|                  | Professional Competence     |                                               |
|                  | Clinical Competence         |                                               |

| Context          | Aged care                   | Nursing homes                                 |
|------------------|-----------------------------|------------------------------------------------|
|                  | Assisted Living facilities |                                               |
|                  | Assisted Living            |                                               |
|                  | Homes for the aged         |                                               |
|                  | Residential facilities     |                                               |
|                  | Residential care           |                                               |
|                  | Long term care             |                                               |

Study Selection

EndNote X9, a reference manager software programme, will be used to remove duplicates from the list of studies identified by databases included in the review. The refined list of studies will be then imported into a Covidence to help in the management of the studies in the review (14). Two reviewers will independently screen titles and abstracts based on the criteria for inclusion or exclusion of the studies for review. Any disagreements will be resolved by the third reviewer. The full text of
prospective articles will be then reviewed in detail by two reviewers separately. Any specific reasons for exclusion of full-text studies will be recorded. The third reviewer will resolve the conflict but will also arrange a joint discussion with the review team in case of difficulty in deciding on the inclusion of the study in the review. The final decision will be made by consensus within the review team. The results of the search will be presented in the PRISMA-ScR flow diagram in the final report of the review (15).

**Data extraction or Charting the results**

Data extraction will be carried out by two independent reviewers following the finalisation of the studies to be included in this review. Data should be aligned with the objectives of the scoping review. Quantitative data will be extracted from quantitative studies and the quantitative component of mixed methods studies. A draft data extraction form has been developed to record attributes and information of the studies relevant to the review objectives (Additional file 3) which is adapted from JBI Meta-Analysis of Statistics Assessment and Review Instrument (JBI-MAStARI) (16). Qualitative data will be obtained from qualitative studies and the qualitative component of mixed methods studies using ‘Joanna Briggs Institute Qualitative Assessment and Review Instrument (JBI-QARI)’ (16) (see additional file 4).

Author(s), year of publication, year of study, type of publication, source origin, research questions/objectives, study design and setting, study population and sample size, measures used, variables of interest such as sociodemographic factors, organisational factors, and the self-efficacy of the study population including other findings that relate to the review question and objectives will be extracted. Additionally, participants’ quotes and researchers’ interpretation, statements, assumptions, and ideas will be extracted from the qualitative studies. However, refinement of the data extraction form is expected while carrying out the full review. The third reviewer will assess any discrepancies and discuss these with the review team to finalise data to be discussed in the result of the review.

**Critical appraisal of studies**

Critical appraisal of the included studies will be done to assess the methodological quality of these
studies. This study will use the critical appraisal tools for different type of studies developed by the JBI (17). There are separate checklists for each type of studies including the critical appraisal checklist for qualitative research. Appropriate checklist will be used for each study depending on the type of study, for instance, checklist for analytical cross-sectional studies, checklist for cohort studies, checklist for randomised control trial, or checklist for qualitative research. The summary of the appraisal of each study will be presented. However, studies will not be excluded based on their appraisal ratings. Critical appraisal will be conducted by two reviewers independently of each other at first and any disagreements will be resolved by the third reviewer.

Data synthesis

The quantitative findings will be presented in narrative form accompanied by the tabulated or charted results from selected studies. If enough studies are available, a meta-analysis will be conducted to calculate pooled estimates of the impacts of various influencing factors on caring self-efficacy. Assuming that the effect size of studies to be included may vary, for instance, due to the characteristics of care workers such as nurses, nursing assistants etc., a random-effects meta-analysis will be performed. Similarly, considering the likelihood of use of different instruments to assess the caring self-efficacy of care workers, standardised mean difference will be considered to calculate the effect size of each studies as recommended by Borenstein et al (18).

Qualitative research findings will be synthesised using meta-aggregation approach (11). Findings will be compiled and then categorised into groups based on similarity in meaning. These categories will be aggregated to generate a set of statements that adequately correspond to the aggregation. These statements will be referred to as the findings of the review synthesized from the qualitative data of the studies included in the review. If the textual pooling is not possible, findings will be presented in the narrative form.

Discussion

Significant proportion of older people are receiving residential aged care in developed countries and the number is increasing (19). Quality of care to this population should be an important concern to their family members and aged care providers. Self-efficacy in caring has been identified as one of
the factors that determine caring behaviours of care workers to their clients and eventually the quality of care (4, 5). Identifying factors that influence the self-efficacy of aged care workers in caring could be a critical step in providing quality care to older people receiving aged care.

This scoping review aims to synthesise evidence on the caring self-efficacy of aged care workers and establish the extent of evidence on factors that influence the caring efficacy of aged care workers. The inclusion of studies for this review will not be limited by the date of publication, source, or design of the study. However, studies written in English language only will be included, which might be a potential limitation of this review. Overall, the acquired result will provide documented evidence to policymakers and aged care providers to understand the self-efficacy of direct care workers in caring for older people and aid in identifying potential ways of enhancing their self-efficacy to improve their caring behaviours towards older residents living in residential aged care settings.

Abbreviations

JBI: Joanna Briggs Institute

JBI-MAsTARI: Joanna Briggs Institute Meta-Analysis of Statistics Assessment and Review Instrument

JBI-QARI: Joanna Briggs Institute Qualitative Assessment and Review Instrument

PRISMA-P: Preferred Reporting Items for Systematic reviews and Meta-Analyses for Protocols

PRISMA-ScR: Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews

Declarations

Ethics approval and consent to participate

Not applicable because studies that are already conducted will be reviewed. It will not involve any human participants as part of the review.

Consent for publication

Not applicable

Availability of data and materials
Not applicable

**Competing interest**

The authors declare that they have no competing interests.

**Funding**

This study has received no funding.

**Authors’ contributions**

SS and YW jointly conceived and designed the study. SS developed the first draft of the protocol, where YW, JE, CW, and MAR contributed to adjustment of the protocol. SS and RA developed search strategies in support of senior library research advisors, and it was reviewed by YW, JE, CW, and MAR. All the authors provided critical comments for revision and approved the final version of the manuscript. SS will be the guarantor of this review.

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Additional files

Additional file 1: PRISMA-P

Additional file 2: PsycINFO search strategy

Additional file 3: Data extraction form for quantitative data

Additional file 4: Data extraction form for qualitative data

References

1. Coates CJ. The Caring Efficacy Scale: Nurses' self-reports of caring in practice settings. Advanced Practice Nursing Quarterly. 1997;3(1):53-9.

2. Bandura A. Self-efficacy: Toward a unifying theory of behavioral change. Psychological Review. 1977;84(2):191-215.

3. Bandura A. Human agency in social cognitive theory. American Psychologist. 1989;44(9):1175.

4. Manojlovich M. Predictors of professional nursing practice behaviors in hospital settings. Nursing Research. 2003;54(1):41-7.

5. Manojlovich M. Promoting nurses' self-efficacy: A leadership strategy to improve practice. Journal of Nursing Administration. 2005;35(5):271-8.

6. Amendolair D. Caring behaviors and job satisfaction. Journal of Nursing Administration. 2012;42(1):34-9.

7. Bandura A. On the functional properties of perceived self-efficacy revisited. Journal of Management. 2011;38(1):9-44.

8. Hare J, Pratt CC. Burnout: Differences between professional and paraprofessional nursing staff in acute care and long-term care health facilities. Journal of Applied Gerontology. 1988;7(1):60-72.

9. Productivity Commission. Caring for older Australians. Canberra: Commonwealth of
Australia; 2011.

10. Moher D, Shamseer L, Clarke M, Ghersi D, Liberati A, Petticrew M, et al. Preferred reporting items for systematic review and meta-analysis protocols (PRISMA-P) 2015 statement. Systematic Reviews. 2015;4(1):1.

11. Peters MD, Godfrey C, McInerney P, Munn Z, Tricco AC, Khalil H. Chapter 11: Scoping reviews (2020 version). 2020. In: Joanna Briggs Institute Reviewer's Manual [Internet]. The Joanna Briggs Institute. Available from: https://reviewersmanual.joannabriggs.org/

12. Prezerakos P, Galanis P, Moisoglou I. The work environment of haemodialysis nurses and its impact on patients' outcomes. International Journal of Nursing Practice. 2015;21(2):132-40.

13. Hasson H, Arnetz JE. Nursing staff competence, work strain, stress and satisfaction in elderly care: a comparison of home-based care and nursing homes. Journal of Clinical Nursing. 2008;17(4):468-81.

14. Veritas Health Innovation. Covidence systematic review software. Melbourne, Australia.

15. Peters MD, Godfrey CM, Khalil H, McInerney P, Parker D, Soares CB. Guidance for conducting systematic scoping reviews. International Journal of Evidence-Based Healthcare. 2015;13(3):141-6.

16. Godfrey CM, Harrison MB, Lang A, Macdonald M, Leung T, Swab M. Homecare safety and medication management with older adults: A scoping review of the quantitative and qualitative evidence. JBI Database of Systematic Reviews and Implementation Reports. 2013;11(7):82-130.

17. Joanna Briggs Institute. Critical appraisal tools [Available from: https://joannabriggs.org/ebp/critical_appraisal_tools.
18. Borenstein M, Hedges LV, Higgins JP, Rothstein HR. *Introduction to meta-analysis*. John Wiley & Sons; 2011.

19. Productivity Commission. *Caring for Older Australians*. Canberra: Commonwealth of Australia; 2011.

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