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Characteristics of the studies using realist evaluation to assess interventions that address psychosocial healthcare issues in older adults: a scoping review

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ABSTRACT

Objectives Interventions to address psychosocial healthcare issues in older adults are increasing. Realist evaluation (RE) helps us understand how these interventions work for their issues. It is significant to obtain implications for further developing such research. We aimed to identify the characteristics of studies using RE to assess interventions that address psychosocial healthcare issues in older adults by mapping relevant literature.

Design Scoping review.

Data sources MEDLINE, the Cumulative Index to Nursing and Allied Health Literature, PsycINFO, Web of Science, Cochrane Library, ICHUSHI (a Japanese database) and Google Scholar were used for searches between 5 January 2022 and 4 January 2024.

Eligibility criteria (1) Showing that most of the participants were older adults or their stakeholders; (2) stating in the research background or aim sections that the target interventions aimed at addressing older adults' psychosocial healthcare issues and (3) using RE to assess these interventions.

Data extraction Data on country of origin, type of research, study design, qualitative data collection and analysis methods, desirable items for RE and intervention aims and purposes were extracted and summarised using descriptive statistics.

Results Fifty-four studies were analysed. Most studies were conducted in the UK (54.5%). Mixed methods were used in 28 studies (51.9%), while only qualitative methods were used in 25 studies (46.2 %). Fourteen intervention aims and purposes were identified: improving dementia care, avoiding emergency admissions, preventing social isolation and promoting family involvement in the care of older adults.

Conclusion RE is useful for promoting an understanding of how interventions work for addressing psychosocial healthcare issues in older adults. RE also promotes the updating of plausible theories that lead to improving interventions. Our findings show the implications of managing time and resources to address the challenge of RE's time and resource intensiveness and carefully considering the data collection methods to reduce burdens on older adults.

STRENGTHS AND LIMITATIONS OF THIS STUDY

⇒ Evidence supporting the use of realist evaluation (RE) was provided by identifying the characteristics of relevant studies.
⇒ The methodological implications of conducting studies using RE were offered by discussing the challenges of conducting studies using RE as well as measures to address these challenges.
⇒ This study followed the five-stage framework by Arksey and O'Malley and the Preferred Reporting Items for Systematic Reviews and Meta-Analyses Extension for the Scoping Review guidelines.
⇒ The search was not updated regularly owing to time constraints.
⇒ The quality assessment of the relevant studies was not conducted.

INTRODUCTION

Healthcare needs of older adults are becoming increasingly complex.[1] In addition to biological factors (eg, cancer pain and advancing chronic diseases),[2] psychosocial factors have become salient.[3 4] Mental diseases of older adults are anticipated.[5] Widespread social isolation and loneliness among older adults are the key risk factors for mental health problems later in life.[6 7] Caregivers' abuse and ageism cause serious consequences, and around 14% of adults aged 60 years and over live with mental disorders (eg, depression).[2 8 9] Furthermore, there has been a growing need for older adults to discuss and plan where and with whom they would like to spend their end-of-life (EOL) period and which treatments they wish to receive.[10] Studies have shown that the satisfaction of older adults and their families increases significantly when their EOL wishes are met.[11] Older adults' healthcare issues include psychosocial factors and characteristics that influence an individual psychologically or socially.

Psychosocial factors include protective psychosocial resources and other risk factors. The former includes social support, social networks, coping ability and self-esteem. The latter includes vital exhaustion, depression and hopelessness.[12]

Interdisciplinary interventions to address psychosocial healthcare issues among older adults are increasing. These interventions address complex issues because they include multiple components. Some of them have used robust designs such as randomised controlled trials (RCTs).[13–15] Although RCTs are regarded as the gold standard for establishing intervention effectiveness, the effect size does not provide policymakers with information on how these interventions might be replicated in a specific context, or whether the outcomes will be reproduced.[16]

To fill this gap, realist evaluation (RE)[17] helps describe intervention outcomes and how they work.[18] RE is rooted in a paradigm that lies between positivism and interpretivism.[19] Realism explains that the real world can be understood using observed objective data and interpretations of human experiences.[17] Using both qual and/or quant methods,[19 20] RE develops, tests and refines the theory of 'what works, for whom, in what circumstance?'.[20] Realist programme theories can be described in terms of Context (pre-intervention circumstances influencing the mechanisms), Mechanism (processes and stakeholder responses) and Outcome (the main results of the interventions).[17] The context-mechanism-outcome configurations (CMOs)[17] help identify specific contexts and mechanisms leading to outcomes.[18] RE could enable decision-makers to deeply understand the intervention and how it works effectively.[21 22] Despite calls for more methodological guidance,[23] RE has been increasingly used.[24] To the best of our knowledge, literature reviews of studies using RE have focused on the healthcare system,[23] knowledge translation,[25] public health,[26] nursing interventions[27] and health promotion.[28] Most studies have originated in the UK[23 25–28] and have been qualitative.[25 27]

In some countries (eg, the UK, Australia and Canada), RE has been used to assess interventions that address older adults' psychosocial healthcare issues.[29–33] This trend may be explained by the fact that an intervention's sustainability or success for older adults is context-dependent.[34] Context is important because the action of mechanisms depends on the realities of the context.[35] From this context, it is useful to explore the characteristics of studies using RE to assess interventions that address older adults' psychosocial healthcare issues. This exploration could offer implications for promoting RE research to improve the healthcare issues of older adults. However, no literature review has been conducted to date that explores such findings. Given this gap, we aimed to clarify the characteristics of studies using RE to assess interventions that address psychosocial healthcare issues in older adults by mapping relevant studies.

METHODS

We conducted a scoping review that systematically identified and mapped the broad evidence available for a particular topic, field, concept or issue.[36] To map a wide range of studies, neither specification of settings and participants nor quality appraisal of relevant studies was conducted. The protocol for this review has not yet been registered. This review was guided by the five-stage framework as discussed ahead.[37]

Stage 1: identifying the research question

The population-concept-context framework[38] was used as follows: population as older adults or stakeholders involved in caring for older adults, concept as using RE to assess interventions that address older adults' psychosocial healthcare issues and context as all settings. Although 'older adults' were defined as those aged >65 years, the term was applied based on the pertinent definition in each country where the study was conducted. The stakeholders included families, healthcare professionals, policymakers and volunteers. We operationally defined the interventions as interdisciplinary and aimed to address older adults' psychosocial healthcare issues (eg, offering dementia-friendly care, supporting one's preferred EOL and preventing social isolation).

Stage 2: identifying the relevant studies

MEDLINE (via PubMed) was used to identify relevant studies by using keywords and Medical Subject Headings. A combination of search terms was developed by a librarian (online supplemental appendix 1) and adapted to other databases. After selecting all the relevant studies, citation tracking was performed using the reference lists of the included studies. Finally, grey literature was searched using Google Scholar. The search was limited to the articles published in English or Japanese. The English articles were searched using MEDLINE, the Cumulative Index to Nursing and Allied Health Literature (via EBSCO), PsycINFO (via EBSCO), the Cochrane Library, Web of Science and Google Scholar. The Japanese articles were searched using Igaku Chuo Zasshi (ICHUSHI) (a Japanese database). No restrictions were applied to the publication year. All searches were performed between January 2022 and January 2024. The final update was on 4 January 2024.

Stage 3: study selection

The eligibility criteria were as follows: (1) showing that most of the participants were older adults or stakeholders involved in the care of older adults, (2) stating in the research background or aim sections that the target interventions aimed to address older adults' psychosocial healthcare issues and (3) using RE to assess these interventions.

Studies using surgeries or medical treatments were excluded, as these interventions seemed to be aimed only at addressing biological healthcare issues in older adults. This exclusion lies in the limitations of identifying the

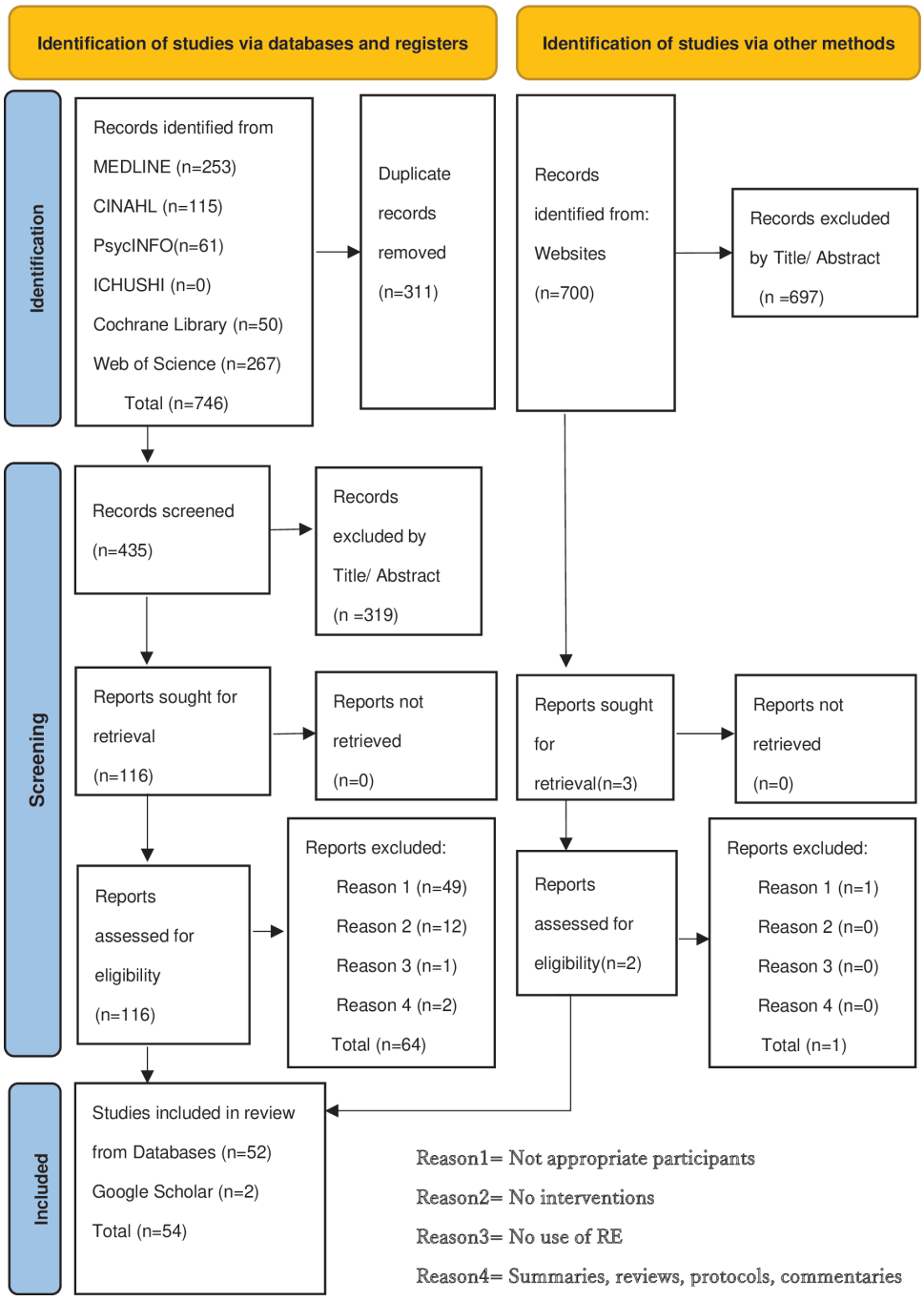

Figure 1 Preferred Reporting Items for Systematic Reviews and Meta-Analyses flow diagram of the selection process. RE, realist evaluation.

mechanism (eg, stakeholders' reactions) that RE attempts to explore during the processes of target interventions. Reviews, syntheses, protocols, commentaries and books were excluded.

EndNote (https://www.myendnoteweb.com/) was used to manage all literature. After removing duplicates, three reviewers (SM, HO and HF) screened all titles and abstracts. Next, a full-text reading of the selected articles was conducted. Disagreements between the reviewers were resolved through discussion. If necessary, an independent reviewer participated in the discussion until a consensus was reached. Finally, all reviewers agreed that the selected studies were relevant to this review.

Stage 4: charting the data

The following data were charted in tabular form (online supplemental appendix 2): author(s), publication year, title, journal, country, aims and purposes, participants and sample size, setting, study designs, data collection and analysis methods, intervention names and contents and intervention providers. We also focused on the desirable items for RE to obtain implications for developing

research in this domain. Referring to previous literature,[17 25] the presence or absence of the following two items was presented: (1) building initial programme theories (IPTs) or developing theories and (2) using a mixed methods design. Concerning the use of mixed methods, we counted the studies that used mixed methods as part of the same research project (separately from the studies included in this review). After SM charted the data using descriptive statistics, HF and HO verified the form. Furthermore, the intervention aims and purposes were extracted for coding in the next stage, as they were regarded as one of the characteristics of these studies.

Stage 5: collating, summarising and reporting the results

To clarify the characteristics of the relevant studies, the following data were summarised: country of origin, type of research, study designs used in quantitative or qualitative research, qualitative data collection and analysis methods, desirable items for RE and intervention aims and purposes. To summarise the study designs as well as qualitative data collection and analysis methods, we referred to previous literature.[39 40] To summarise the intervention aims and purposes, the intervention content was iteratively read. Thereafter, these aims and purposes were extracted and coded. Finally, the codes were integrated based on their similarities. We followed the Preferred Reporting Items for Systematic Reviews and Meta-Analyses Extension for Scoping Review guidelines.

Patient and public involvement

No patient or public involvement was observed in this review.

RESULTS

First, we extracted 746 studies from 6 databases. After removing duplicates, the titles and abstracts were screened, followed by full-text reading. This process resulted in 52 studies. Three studies were extracted using Google Scholar. The reading of each full text resulted in two studies. Ultimately, 54 studies were included (figure 1).

Table 1 Key components of the studies included

	N	(%)		N	(%)
Country of origin (n=54)			Study designs used in qualitative research (n=53)		
UK	31	(57.4)	Descriptive qualitative study	32	(60.4)
Australia	8	(14.8)	Case study	19	(35.2)
Canada	4	(7.4)	Grounded theory	1	(1.9)
The Netherlands	4	(7.4)	Ethnography	1	(1.9)
Denmark	2	(3.7)			
Others†	5	(9.3)	Qualitative data collection methods (n=53)*		
			Interviews	48	(90.6)
Type of research (n=54)			Document reviews	27	(50.9)
Mixed methods	28	(51.9)	Observations	18	(34.0)
Only qualitative methods	25	(46.2)	Focus groups	17	(32.1)
Only quantitative methods	1	(1.9)	Others‡	10	(18.9)
Study designs used in quantitative research (n=29)*			Qualitative data analysis methods (n=53)*		
Experimental design			Thematic analysis	20	(37.7)
RCTs	8	(27.6)	Content analysis	4	(7.5)
Post-test-only design	8	(27.6)	Constant comparative analysis	1	(1.9)
Pretest-post-test design	7	(24.1)	Others§	11	(20.8)
Non-RCTs	1	(3.4)	Not specified	18	(34.0)
Non-experimental design					
Prospective cohort study	4	(13.8)	Desirable items for RE (n=54)		
Descriptive study	4	(13.8)	Building IPTs or developing theories	37	(68.5)
Retrospective cohort study	1	(3.4)	Using mixed methods	28	(51.9)

*Multiple items are chosen.
†Brazil, Belgium, Finland, Norway and Sweden.
‡Expert meetings and reviews of participatory appraisals, postintervention participant feedback forms, previous studies, diaries, field notes and video replays.
§Cross-case analysis, realist analysis, framework analysis and systematic text condensation.
IPTs, initial programme theories; RCT, randomised controlled trial; RE, realist evaluation.

Table 2 Intervention aims and purposes

	N	(%)
Avoiding emergency admissions or reducing the duration of hospital stay[33 43 44 66–73]	11	(20.4)
Improving dementia care[31 43 45 46 55 57 69 74–77]	11	(20.4)
Promoting changes in organisations such as elderly care facilities* [30 33 46–48 50 51 66 78 79]	10	(18.5)
Promoting independence and care for activity of dairy living† [49 50 55 57 78 80–82]	8	(14.8)
Supporting ageing in one's preferred place‡ [41 44 67 71 83–85]	7	(13.0)
Promoting end-of-life care[31 52 67 68 73 75 86]	7	(13.0)
Promoting fall prevention[22 30 33 41 55 79]	6	(11.1)
Reducing the family care burden[45 75 77 84 87]	5	(9.3)
Improving medication management§ [32 34 88–90]	5	(9.3)
Preventing adverse events caused by social isolation and loneliness[29 55 71 91 92]	5	(9.3)
Preventing the exacerbation of chronic diseases¶ [89 93–95]	4	(7.4)
Promoting family involvement in the care of older adults[42 77 84]	3	(5.6)
Improving medical access for older adults** [96–98]	3	(5.6)
Fostering active ageing[32 92 98]	3	(5.6)

*Improving work through task shifts between healthcare professionals, promoting work efficiency using the latest technology and creating an atmosphere suitable for caring through educational interventions.
†Promoting independence of living motions (seating and transferring) and daily life care such as oral care.
‡Promoting home medical care, improving the residential environment and providing information about older adults' housing.
§Promoting appropriate use of antipsychotics and self-management of benzodiazepines.
¶Providing education about diabetes mellitus, using eHealth for self-care, and offering rehabilitation to prevent heart disease.
**Improving the care of immigrant older adults and medical access for older adults living in rural areas.

The key components (table 1) and intervention aims and purposes (table 2) of the studies are summarised.

Key components of the included studies

Most studies were conducted in the UK (57.4%). No such studies were conducted in Asian or African countries. Research using mixed methods was the most frequently performed (51.9%). The study designs used in the quantitative research were divided into experimental and non-experimental. In the former, RCTs and post-test-only designs were used in eight studies (27.6%). In the latter, prospective cohort and descriptive study designs were used in four studies (13.8%). Descriptive qualitative design was the most commonly used study design in qualitative research (60.4%). Interviews (90.1%) and thematic analyses (37.7%) were most frequently used for qualitative data collection and analysis, respectively.

Regarding the desirable items for RE, building IPTs or developing theories were included in 37 studies (68.5%). IPTs were developed in 27 studies (47.7%), whereas theories were developed in 10 studies (20.5%). Of the former, 14 studies built IPTs with a single all-encompassing statement regardless of the CMOs (eg, telecare provides improved safety 24/7 and thus enables people to continue living safely in their own homes for longer).[41] Conversely, eight studies built IPTs specifying CMOs (eg, if relatives are allowed more open visits (C), they can become care partners and become more involved in planning, implementing and delivering aspects of care (M). This may have a positive impact on reducing harm and improving the quality of care (O)).[42] Mixed methods were used in 28 studies (51.9%). Some studies used either quantitative or qualitative methods as part of the same research project (separate from the studies in this review).

Aims and purposes of interventions

Fourteen intervention aims and purposes were identified. Multiple aims and purposes were included in some interventions. 'Avoiding emergency admissions or reducing the duration of hospital stay' and 'improving dementia care' were the most frequently included.

To avoid emergency admissions or reduce the duration of hospital stay (20.4%), dementia care education was provided to care home staff,[43] and video conferences were introduced to support the staff while responding to emergencies.[44] To improve dementia care (20.4%), a health literacy kit containing important medical and welfare information understandable to people with dementia and their families was developed.[45] Furthermore, dementia-sensitive care was offered by general hospitals.[46] To promote changes in organisations, such as elderly care facilities, task shifts between healthcare staff were performed,[47] and an intentional round was adopted in response to high hospital mortality and patient complaints.[48] To promote independence and care for activities of daily living, computer-based home rehabilitation was implemented for poststroke older patients.[49] Although not more frequently included than the above-mentioned aims and purposes, those regarded as important were also identified. For instance, to prevent

adverse events caused by social isolation and loneliness, befriending services were offered to older adults living alone.[29] To promote family involvement in patient care for older adults, the time taken to visit the hospital wards was deregulated.[42]

DISCUSSION

Our review identified the characteristics of 54 studies that used RE to assess interventions addressing psychosocial healthcare issues in older adults. After considering the evidence to support the use of RE, we examined the methodological implications by discussing the challenges of RE research and measures to address these challenges, as well as other implications, from the perspectives of intervention aims and purposes and country of origin.

Evidence to support the use of RE

Our results found interventions were targeting a broad range of psychosocial healthcare issues in older adults, and using RE to assess those interventions helps to understand how they work. Lewis *et al*[50] assessed how oral care is embedded in routine community-aged care using RE. This indicated that the withdrawal of project resources triggered organisational disengagement, leading to the loss of active oral healthcare. This showed that intervention sustainability for older adults is context-dependent.[34] In identifying contextual factors and the causation of interventions, the use of RE was regarded as useful. A better understanding of these processes contributed to the improvement of interventions.[22] Furthermore, using RE promoted the updating of more plausible theories. As older adults' healthcare issues are becoming complex,[1] conventional theories may not be valid to explain how interventions work for older adults. To address this gap, the theories were updated by the iterative process of RE.[17] Handley *et al*[46] assessed dementia-friendly care using mixed methods with RE to test and refine programme theories built using a realist review. This iterativeness provides a more plausible theory on how interventions work to address the ever-changing psychosocial healthcare issues in older adults.

Methodological implications

Time and resource-intensiveness[25] were issues when conducting RE research. Conducting interventions, analyses and evaluations, while facing time and resource constraints, was challenging.[51 52] This may be explained by the fact that RE takes a step-by-step approach, along with its evaluation cycle.[17] Our results presented that the mixed methods were used in 28 studies (51.9%). This result is consistent with previous reviews of studies using RE concerning knowledge translation and nursing interventions.[25 27] Although mixed methods are more than simply collecting both quantitative and qualitative data and insights that are difficult to explore using a single method can be obtained,[53] these methods may increase time and resource-intensiveness.

To address this challenge, managing time and resources (eg, manpower and research grants) can be recommended,[51 52] especially in RE research. Given the growing complexity of psychosocial healthcare needs in older adults,[1] it may be worth considering how to use mixed methods with RE. However, a full RE is not always feasible.[54] According to the Realist And Meta-narrative Evidence Syntheses: Evolving Standards (RAMESES II) quality and reporting standards,[20] the use of mixed methods is not clearly described, although RE is usually a multimethod or mixed method. In this context, building IPTs or developing theories using only qualitative methods may be acceptable under time and resource constraints.

Collecting data from older adults can be challenging. This may be related to their vulnerability, as their condition seems susceptible, especially to long-term evaluations. Although Ofosu *et al*[55] conducted a feasibility study using RE in older adults with dementia, some participants passed away or withdrew from the intervention.

One possible way to address this challenge may be to carefully consider less burdensome data collection methods for older adults. Specifically, the circumstances under which data collection is performed should be considered. Most studies have reported negative health effects of relocation on older adults with dementia.[56] Given this context, Parker *et al*[49] conducted RE research in their participants' homes to collect data in their natural and familiar environments. Grace and Horstmanshof[45] collected data from older adults with dementia and their families. Family provides a sense of security for those with dementia. Furthermore, Rehman *et al*[57] provided simple and understandable directions to participants with dementia during their intervention. These considerations can reduce the intervention-related burden on older adults and individuals with dementia.

Other implications

The use of RE should be considered in less frequently included intervention aims and purposes. For instance, its use should be promoted to 'prevent adverse events caused by social isolation and loneliness'. Social isolation and loneliness are common among older adults.[6] The recent COVID-19 pandemic has exacerbated this issue[58] and its recurrence is expected.[59] As the structure of loneliness is multidimensional and complex,[60] using RE should be promoted to assess interventions to ease social isolation. Its use should also be considered for 'promoting family involvement in the care of older adults'. In East Asia, advance care planning involves families rather than individuals,[61] and caring for older adults is traditionally undertaken by families without using outsourced services.[62] Given the ongoing ageing in East Asia, the use of RE is desirable to assess interventions that support family involvement in caring for older adults. Meanwhile, 'avoiding emergency admission and reducing the length of hospital stays' were the most frequently included. This may be related to the long-term plan of the National Health Service,[63] which is the UK's publicly

funded healthcare system. The plan emphasises support for people to age well and is closely related to 'avoiding emergency admissions'; some interventions might have been conducted along with the plan.

Promoting the use of RE should be considered in countries other than the UK, where the ageing population is increasing. We clarified the international gap in studies using RE in this domain. Most of these studies were conducted in the UK. This result was consistent with previous reviews of RE research[23 25–28] and may be due to the development of RE in the UK. One possible reason for the low number of such studies in Asia may be the low degree of familiarity with RE. The lack of such studies in Africa may be related to less advanced ageing.[64] Given the expected population ageing in Asia and Africa,[65] promoting the use of RE should be considered in these areas. If RE is not familiar in Asia, disseminating studies on RE may raise its recognition and close international gaps.

Limitations

This review had several limitations. The search was not updated regularly owing to time constraints. Regular updates may have identified new relevant studies. The quality of each study was not assessed, because we focused on mapping a broad range of relevant studies.

CONCLUSION

We identified the characteristics of studies using RE to assess interventions that address psychosocial healthcare issues in older adults and provided some implications.

Regarding the methodological implications, management time and resources should be considered, especially when using mixed methods. Furthermore, when RE research involves older adults or people with dementia, careful consideration of the data collection methods is required to minimise the burden on the participants. Other implications are the use of RE to explore and improve interventions that aim to prevent adverse events caused by social isolation and to promote family involvement in caring for older adults. Wider use of RE globally can help to generate more granular details in studies that aim to explore and address psychosocial healthcare issues among older adults.

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REFERENCES

1 Rudnicka E, Napierała P, Podfigurna A, *et al*. The World Health Organization (WHO) approach to healthy ageing. *Maturitas* 2020;139:6–11.
2 Centers for Disease Control. Alzheimer's disease and healthy aging. Older adults and health aging. 2023. Available: https://www.cdc.gov/aging/olderadultsandhealthyaging/index.html [Accessed 21 Dec 2023].
3 Werth JL, Gordon JR, Johnson RR. Psychosocial issues near the end of life. *Aging Ment Health* 2002;6:402–12.
4 Brady M. Pre-hospital psychosocial care: changing attitudes. *J Paramedic Pract* 2012;4:516–25.
5 World Health Organization. Mental health of older adults. 2024. Available: https://www.who.int/news-room/fact-sheets/detail/mental-health-of-older-adults [Accessed 21 Dec 2023].
6 World Health Organization. Social isolation and loneliness among older people: advocacy brief. 2022. Available: https://www.who.int/publications/i/item/9789240030749 [Accessed 14 Oct 2022].
7 Teo RH, Cheng WH, Cheng LJ, *et al*. Global prevalence of social isolation among community-dwelling older adults: A systematic review and meta-analysis. *Arch Gerontol Geriatr* 2023;107:104904.
8 Yon Y, Mikton CR, Gassoumis ZD, *et al*. Elder abuse prevalence in community settings: a systematic review and meta-analysis. *Lancet Glob Health* 2017;5:e147–56.
9 Institute of Health Metrics and Evaluation. Global health data exchange (GHDx). 2021. Available: https://vizhub.healthdata.org/gbd-results/ [Accessed 21 Dec 2023].
10 National Health Service. Ambitions for palliative and end of life care: a national framework for local action 2021–2026. 2021. Available: https://www.england.nhs.uk/wp-content/uploads/2022/02/ambitions-for-palliative-and-end-of-life-care-2nd-edition.pdf [Accessed 21 Dec 2023].
11 Detering KM, Hancock AD, Reade MC, *et al*. The impact of advance care planning on end of life care in elderly patients: randomised controlled trial. *BMJ* 2010;340:c1345.

12 Thomas K, Nilsson E, Festin K, *et al*. Associations of Psychosocial Factors with Multiple Health Behaviors: A Population-Based Study of Middle-Aged Men and Women. *Int J Environ Res Public Health* 2020;17:1239.
13 Chi YC, Wu CL, Liu HT. Effect of a multi-disciplinary active aging intervention among community elders. *Medicine (Balt)* 2021;100:e28314.
14 Seah B, Espnes GA, Hong WT, *et al*. Salutogenic Healthy Ageing Programme Embracement (SHAPE)- an upstream health resource intervention for older adults living alone and with their spouses only: complex intervention development and pilot randomized controlled trial. *BMC Geriatr* 2022;22:932.
15 Leinert C, Brefka S, Braisch U, *et al*. A complex intervention to promote prevention of delirium in older adults by targeting caregiver's participation during and after hospital discharge - study protocol of the TRAnsport and DElirium in older people (TRADE) project. *BMC Geriatr* 2021;21:646.
16 Moore GF, Audrey S, Barker M, *et al*. Process evaluation of complex interventions: Medical Research Council guidance. *BMJ* 2015;350:h1258.
17 Pawson R, Tilley N. *Realistic Evaluation*. London: SAGE Publications, 1997.
18 Boumans J, Scheffelaar A, van Druten VP, *et al*. Coping Strategies Used by Older Adults to Deal with Contact Isolation in the Hospital during the COVID-19 Pandemic. *Int J Environ Res Public Health* 2021;18:7317.
19 Westhorp G, Prins E, Kusters CSL, *et al*. Realist evaluation: an overview. Report from an expert seminar with Dr. Gill Westhorp. 2011. Available: https://core.ac.uk/download/pdf/29235281.pdf [Accessed 11 Jan 2023].
20 Greenhalgh T, Greenhalgh J, Pawson R, *et al*. What is a mechanism? What is a programme mechanism? The ramesesii project. 2017. Available: https://rameseproject.org/media/RAMESES_II_What_is_a_mechanism.pdf [Accessed 21 Dec 2023].
21 Pawson R, Greenhalgh T, Harvey G, *et al*. Realist review--a new method of systematic review designed for complex policy interventions. *J Health Serv Res Policy* 2005;10 Suppl 1:21–34.
22 Haynes A, Gilchrist H, Oliveira JS, *et al*. Using Realist Evaluation to Understand Process Outcomes in a COVID-19-Impacted Yoga Intervention Trial: A Worked Example. *Int J Environ Res Public Health* 2021;18:9065.
23 Marchal B, van Belle S, van Olmen J, *et al*. Is realist evaluation keeping its promise? A review of published empirical studies in the field of health systems research. *Evaluation (Lond)* 2012;18:192–212.
24 Nurjono M, Shrestha P, Lee A, *et al*. Realist evaluation of a complex integrated care programme: protocol for a mixed methods study. *BMJ Open* 2018;8:e017111.
25 Salter KL, Kothari A. Using realist evaluation to open the black box of knowledge translation: a state-of-the-art review. *Implement Sci* 2014;9:115.
26 Lacouture A, Breton E, Guichard A, *et al*. The concept of mechanism from a realist approach: a scoping review to facilitate its operationalization in public health program evaluation. *Implement Sci* 2015;10:153.
27 Palm R, Hochmuth A. What works, for whom and under what circumstances? Using realist methodology to evaluate complex interventions in nursing: A scoping review. *Int J Nurs Stud* 2020;109:103601.
28 Malengreaux S, Doumont D, Scheen B, *et al*. Realist evaluation of health promotion interventions: a scoping review. *Health Promot Int* 2022;37:daac136.
29 Fakoya OA, McCorry NK, Donnelly M. How do befriending interventions alleviate loneliness and social isolation among older people? A realist evaluation study. *PLoS ONE* 2021;16:e0256900.
30 Francis-Coad J, Etherton-Beer C, Bulsara C, *et al*. Evaluating the impact of a falls prevention community of practice in a residential aged care setting: a realist approach. *BMC Health Serv Res* 2018;18:21.
31 Kupeli N, Sampson EL, Leavey G, *et al*. Context, mechanisms and outcomes in end-of-life care for people with advanced dementia: family carers perspective. *BMC Palliat Care* 2019;18:87.
32 Martin P, Tannenbaum C. A realist evaluation of patients' decisions to deprescribe in the EMPOWER trial. *BMJ Open* 2017;7:e015959.
33 Steven A, Wilson G, Young-Murphy L. The Implementation of an Innovative Hydration Monitoring App in Care Home Settings: A Qualitative Study. *JMIR Mhealth Uhealth* 2019;7:e9892.
34 Flynn R, Mrklas K, Campbell A, *et al*. Contextual factors and mechanisms that influence sustainability: a realist evaluation of two scaled, multi-component interventions. *BMC Health Serv Res* 2021;21:1194.
35 Berg RC, Denison EM. A realist synthesis of controlled studies to determine the effectiveness of interventions to prevent genital cutting of girls. *Paediatr Int Child Health* 2013;33:322–33.
36 Munn Z, Pollock D, Khalil H, *et al*. What are scoping reviews? Providing a formal definition of scoping reviews as a type of evidence synthesis. *JBI Evd Synth* 2022;20:950–2.
37 Arksey H, O'Malley L. Scoping studies: towards a methodological framework. *Int J Soc Res Methodol* 2005;8:19–32.
38 Peters MD, Godfrey CM, McInerney P, *et al*. *The Joanna Briggs Institute Reviewers' Manual 2015: Methodology for JBI Scoping Reviews*. Adelaide, SA, Australia: The Joanna Briggs Institute, 2015. Available: https://reben.com.br/revista/wp-content/uploads/2020/10/Scoping.pdf
39 Polit DF, Beck CT. *Nursing Research: Principles and Methods*. 7th Ed. Philadelphia: Lippincott Williams & Wilkins, 2004.
40 Thiese MS. Observational and interventional study design types; an overview. *Biochem Med (Zagreb)* 2014;24:199–210.
41 Berge MS. Telecare – where, when, why and for whom does it work? A realist evaluation of a Norwegian project. *J Rehabil Assist Technol Eng* 2017;4:205566831769373.
42 Hurst H, Griffiths J, Hunt C, *et al*. A realist evaluation of the implementation of open visiting in an acute care setting for older people. *BMC Health Serv Res* 2019;19:867.
43 Sheaff R, Sherriff I, Hennessy CH. Evaluating a dementia learning community: exploratory study and research implications. *BMC Health Serv Res* 2018;18:83.
44 Newbould L, Ariss S, Mountain G, *et al*. Exploring factors that affect the uptake and sustainability of videoconferencing for healthcare provision for older adults in care homes: a realist evaluation. *BMC Med Inform Decis Mak* 2021;21:13.
45 Grace S, Horstmanshof L. A realist evaluation of a regional Dementia Health Literacy Project. *Health Expect* 2019;22:426–34.
46 Handley M, Bunn F, Goodman C. Supporting general hospital staff to provide dementia sensitive care: A realist evaluation. *Int J Nurs Stud* 2019;96:61–71.
47 Lovink MH, Laurant MG, van Vught AJ, *et al*. Substituting physicians with nurse practitioners, physician assistants or nurses in nursing homes: a realist evaluation case study. *BMJ Open* 2019;9:e028169.
48 Leamy M, Sims S, Levenson R, *et al*. Intentional rounding: a realist evaluation using case studies in acute and care of older people hospital wards. *BMC Health Serv Res* 2023;23:1341.
49 Parker J, Mawson S, Mountain G, *et al*. Stroke patients' utilisation of extrinsic feedback from computer-based technology in the home: a multiple case study realistic evaluation. *BMC Med Inform Decis Mak* 2014;14:46.
50 Lewis A, Harvey G, Hogan M, *et al*. Can oral healthcare for older people be embedded into routine community aged care practice? A realist evaluation using normalisation process theory. *Int J Nurs Stud* 2019;94:32–41.
51 Wiechula R, Kitson A, Marcoionni D, *et al*. Improving the fundamentals of care for older people in the acute hospital setting: facilitating practice improvement using a Knowledge Translation Toolkit. *Int J Evid Based Healthc* 2009;7:283–95.
52 Tolson D, McIntosh J, Loftus L, *et al*. Developing a managed clinical network in palliative care: a realistic evaluation. *Int J Nurs Stud* 2007;44:183–95.
53 Creswell JW, Fetters MD, Ivankova NV. Designing a mixed methods study in primary care. *Ann Fam Med* 2004;2:7–12.
54 Astbury B, Leeuw FL. Unpacking Black Boxes: Mechanisms and Theory Building in Evaluation. *Am J Eval* 2010;31:363–81.
55 Ofosu EF, De Nys L, Connelly J, *et al*. A realist evaluation of the feasibility of a randomised controlled trial of a digital music and movement intervention for older people living in care homes. *BMC Geriatr* 2023;23:125.
56 Ryman FVM, Erisman JC, Darvey LM, *et al*. Health Effects of the Relocation of Patients With Dementia: A Scoping Review to Inform Medical and Policy Decision-Making. *Gerontologist* 2019;59:e674–82.
57 Rehman S, Likupe G, McFarland A, *et al*. Evaluating a brief intervention for mealtime difficulty on older adults with dementia. *Nurs Open* 2023;10:182–94.
58 Wu B. Social isolation and loneliness among older adults in the context of COVID-19: a global challenge. *Glob Health Res Policy* 2020;5:27.
59 World Health Organization. Western pacific: preparing for pandemics. 2024. Available: https://www.who.int/westernpacific/activities/preparing-for-pandemic [Accessed 10 Jan 2024].
60 Yanguas J, Pinazo-Henandis S, Tarazona-Santabalbina FJ. The complexity of loneliness. *Acta Biomed* 2018;89:302–14.
61 Cheng S-Y, Lin C-P, Chan HY-L, *et al*. Advance care planning in Asian culture. *Jpn J Clin Oncol* 2020;50:976–89.

62 Zhang Y, Harper S. The impact of son or daughter care on Chinese older adults' mental health. *Soc Sci Med* 2022;306:115104.
63 National Health Services. NHS long term plan: ageing well. 2019. Available: https://www.longtermplan.nhs.uk/areas-of-work/ageing-well/ [Accessed 14 Nov 2022].
64 World Health Organization. The global health observatory: life expectancy at birth (years). 2023. Available: https://www.who.int/data/gho/data/indicators/indicator-details/GHO/life-expectancy-at-birth-(years) [Accessed 03 Jan 2022].
65 United Nations. Department of economic and social affairs. World population ageing 2019. 2019. Available: https://www.un.org/en/development/desa/population/publications/pdf/ageing/WorldPopulationAgeing2019-Highlights.pdf [Accessed 21 Dec 2023].
66 Bailey D, Mutale GJ. Social work's contribution to integrated primary health care teams in the UK for older adults with complex needs. *J Integr Care* 2022;30:263–75.
67 Barker R, Wilson P, Butler C. How does English national end-of-life care policy impact on the experience of older people at the end of life? Findings from a realist evaluation. *Prim Health Care Res Dev* 2021;22:e57.
68 Efstathiou N, Lock A, Ahmed S, *et al*. A realist evaluation of a "single point of contact" end-of-life care service. *JHOM* 2020;34:365–77.
69 Gordon AL, Goodman C, Davies SL, *et al*. Optimal healthcare delivery to care homes in the UK: a realist evaluation of what supports effective working to improve healthcare outcomes. *Age Ageing* 2018;47:595–603.
70 Janssen MM, Vos W, Luijkx KG. Development of an evaluation tool for geriatric rehabilitation care. *BMC Geriatr* 2019;19:206.
71 Lhussier M, Dalkin S, Hetherington R. Community care for severely frail older people: Developing explanations of how, why and for whom it works. *Int J Older People Nurs* 2019;14:e12217.
72 Sheaff R, Windle K, Wistow G, *et al*. Reducing emergency bed-days for older people? Network governance lessons from the "Improving the Future for Older People" programme. *Soc Sci Med* 2014;106:59–66.
73 Wye L, Lasseter G, Percival J, *et al*. What works in 'real life' to facilitate home deaths and fewer hospital admissions for those at end of life?: results from a realist evaluation of new palliative care services in two English counties. *BMC Palliat Care* 2014;13:37.
74 Boumans J, van Boekel LC, Verbiest ME, *et al*. Exploring how residential care facilities can enhance the autonomy of people with dementia and improve informal care. *Dementia (London)* 2022;21:136–52.
75 Dalkin SM, Lhussier M, Kendall N, *et al*. Namaste care in the home setting: developing initial realist explanatory theories and uncovering unintended outcomes. *BMJ Open* 2020;10:e033046.
76 Devi R, Chadborn NH, Meyer J, *et al*. How quality improvement collaboratives work to improve healthcare in care homes: a realist evaluation. *Age Ageing* 2021;50:1371–81.
77 Thijssen M, Graff MJL, Lexis MAS, *et al*. Collaboration for Developing and Sustaining Community Dementia-Friendly Initiatives: A Realist Evaluation. *Int J Environ Res Public Health* 2023;20:4006.
78 Aagaard K, Meléndez-Torres GJ, Overgaard C. Improving oral health in nursing home residents: A process evaluation of a shared oral care intervention. *J Clin Nurs* 2020;29:3392–402.
79 Leighton PA, Darby J, Allen F, *et al*. A realist evaluation of a multifactorial falls prevention programme in care homes. *Age Ageing* 2022;51.
80 Masterson-Algar P, Burton CR, Rycroft-Malone J, *et al*. Towards a programme theory for fidelity in the evaluation of complex interventions. *J Eval Clin Pract* 2014;20:445–52.
81 Schnabel S, van Wijck F, Kidd L. Supporting stroke survivors to meet their personal rehabilitation needs in community-based arm rehabilitation: development of initial programme theories to explore what may work for whom, how and under what circumstances. *Front Neurol* 2023;14:1089547.
82 Taylor J, Barker A, Hill H, *et al*. Improving person-centered mobility care in nursing homes: a feasibility study. *Geriatr Nurs* 2015;36:98–105.
83 Harding AJE, Hean S, Parker J, *et al*. It Can't Really be Answered in an Information Pack…': A Realist Evaluation of a Telephone Housing Options Service for Older People. *Soc Policy Soc* 2020;19:361–78.
84 Sanerma P, Paavilainen E, Åstedt-Kurki P. Home care services for older persons. The views of older persons and family members: A realistic evaluation. *Int J Older People Nurs* 2020;15:e12281.
85 Sattar Z (Zeb), Wilkie S, Ling J. The impact of a refurbishment programme on older people living in sheltered housing. *HCS* 2021;24:54–64.
86 McConnell T, O'Halloran P, Donnelly M, *et al*. Factors affecting the successful implementation and sustainability of the Liverpool Care Pathway for dying patients: a realist evaluation. *BMJ Support Palliat Care* 2015;5:70–7.
87 Lawson S, Mullan J, Wong G, *et al*. Family carers' experiences of managing older relative's medications: Insights from the MEMORABLE study. *Pat Educ Couns* 2022;105:2573–80.
88 Couturier Y, Lanneville D, Lane J, *et al*. Implementation conditions leading to the scale-up of an innovation involving the optimal use of antipsychotics in long-term care centers: The Optimizing Practices, Use, Care and Services-Antipsychotics (OPUS-AP) program. *Res Soc Admin Pharm* 2022;18:2484–8.
89 Liu HM, Massi L, Laba TL, *et al*. Patients' and providers' perspectives of a polypill strategy to improve cardiovascular prevention in Australian primary health care A qualitative study set within a pragmatic randomized, controlled trial. *Circ Cardiovasc Qual Outcomes* 2015;8:301–8.
90 Silva BB, Fegadolli C. Implementation of pharmaceutical care for older adults in the brazilian public health system: a case study and realistic evaluation. *BMC Health Serv Res* 2020;20:37.
91 Day A, Phelps K, Maltby J, *et al*. A realist evaluation of loneliness interventions for older people. *Age Ageing* 2021;50:2246–53.
92 Gorenberg J, Tierney S, Wong G, *et al*. Understanding and Improving Older People's Well-Being through Social Prescribing Involving the Cultural Sector: Interviews from a Realist Evaluation. *J Appl Gerontol* 2023;42:1466–76.
93 Clark AM, Whelan HK, Barbour R, *et al*. A realist study of the mechanisms of cardiac rehabilitation. *J Adv Nurs* 2005;52:362–71.
94 Coorey G, Peiris D, Neubeck L, *et al*. A realist evaluation approach to explaining the role of context in the impact of a complex eHealth intervention for improving prevention of cardiovascular disease. *BMC Health Serv Res* 2020;20:764.
95 Pals RAS, Olesen K, Willaing I. What does theory-driven evaluation add to the analysis of self-reported outcomes of diabetes education? A comparative realist evaluation of a participatory patient education approach. *Pat Educ Couns* 2016;99:995–1001.
96 Hoens S, Smetcoren A-S, Switsers L, *et al*. Community health workers and culturally competent home care in Belgium: A realist evaluation. *Health Soc Care Community* 2022;30:e1966–76.
97 Jonsson F, Carson DB, Goicolea I, *et al*. Strengthening Community Health Systems Through Novel eHealth Initiatives? Commencing a Realist Study of the Virtual Health Rooms in Rural Northern Sweden. *Int J Health Policy Manag* 2021;11:39–48.
98 McNeil-Gauthier AL, Milot DM, Levasseur M. How environments can promote active aging: results from a case study of two municipalities in Quebec, Canada. *Can J Public Health* 2024;115:117–31.