INPLASY

INPLASY202680023

doi: 10.37766/inplasy2026.8.0023

Received: 5 August 2026

Published: 5 August 2026

Effectiveness of Culturally Adapted iSupport for Dementia on Informal Caregivers: A Systematic Review and Meta-Analysis

Song, J; Wei, G; Zheng, Q; Liu, Y.

Corresponding author:
Jiating Song

3214753098@qq.com

Author Affiliation:
Guangdong Provincial Hospital of Traditional Chinese Medicine Zhuhai Hospital.

ADMINISTRATIVE INFORMATION

Support - Guangdong Provincial Hospital of Chinese Medicine Scientific Research Program (YN2023HL07, YN2024HL17).

Review Stage at time of this submission - The review has not yet started.

Conflicts of interest - None declared.

INPLASY registration number: INPLASY202680023

Amendments - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 5 August 2026 and was last updated on 5 August 2026.

INTRODUCTION

Review question / Objective The objective of this systematic review and meta-analysis is to systematically evaluate the effectiveness of the culturally adapted World Health Organization iSupport for Dementia program on informal caregivers of people with dementia across different countries, and to synthesize the evidence regarding its impact on caregiver outcomes including caregiving competence, psychological burden, self-efficacy, and quality oflife.

Rationale Dementia is a progressive neurodegenerative disease that poses a significant threat to the health and quality of life of older adults. With the acceleration of global population aging, the prevalence of dementia continues to rise, placing an immense burden on family caregiving systems. Informal caregivers often experience substantial caregiving stress, decisional conflict, and negative psychological outcomes due to lack of professional guidance, which not only affects patient prognosis but also compromises caregivers' quality of life. In response to this challenge, the World Health Organization launched the iSupport for Dementia program in 2017, a structured intervention based on social learning theory and cognitive behavioral therapy, encompassing five core modules: disease knowledge, caregiving skills, self-care, and emotional management. Although the iSupport program has been culturally adapted and preliminarily validated in multiple countries, the overall effectiveness across different cultural contexts remains to be systematically synthesized. No previous meta-analysis has comprehensively evaluated the pooled effects of culturally adapted iSupport interventions on informal dementia caregivers. Therefore, this systematic review and meta-analysis is warranted to provide high-level evidence for the global implementation and optimization of the iSupport program.

Condition being studied Dementia (including Alzheimer's disease and other types of cognitive impairment).

METHODS

Search strategy A systematic search will be conducted in the following electronic databases from inception to July 2026: PubMed, Web of Science, Embase, CINAHL, PsycINFO, Cochrane Library, ProQuest, China National Knowledge Infrastructure (CNKI), WanFang Data, Chinese Biomedical Literature Database (CBM), and VIP Chinese Science and Technology Periodical Database. Both MeSH terms and free-text words will be used. The search strategy combines terms related to iSupport, dementia, caregivers, and cultural adaptation. Taking PubMed as an example, the search query will be: ("iSupport"[Title/Abstract] OR "WHO iSupport"[Title/Abstract] OR "World Health Organization iSupport"[Title/Abstract]) AND ("dementia"[MeSH] OR "Alzheimer disease"[MeSH] OR "cognitive impairment"[Title/Abstract]) AND ("caregivers"[MeSH] OR "carer"[Title/Abstract] OR "family caregiver"[Title/Abstract] OR "informal caregiver"[Title/Abstract]) AND ("cultural adaptation"[Title/Abstract] OR "cross-cultural adaptation"[Title/Abstract] OR "translation"[Title/Abstract] OR "localization"[Title/Abstract]). Additionally, reference lists of included studies and relevant reviews will be manually screened to identify additional eligible studies.

Participant or population Informal caregivers (i.e., family members, relatives, or friends who provide unpaid care) of people with dementia. Studies that include both informal caregivers and other populations (e.g., people with dementia or formal caregivers) will be included only if data for informal caregivers can be extracted separately.

Intervention The culturally adapted versions of the World Health Organization iSupport for Dementia program (including the original version and its culturally adapted derivatives). Interventions may be delivered through various formats, including online self-paced courses, in-person group training, hybrid models, printed manuals, videos, or web-based platforms.

Comparator Usual care, waitlist control, attention control, or no intervention.

Study designs to be included Randomized controlled trial.

Eligibility criteria Inclusion criteria: (1) Population: informal caregivers of people with dementia; (2) Concept: studies focusing on the cultural adaptation process of the iSupport program and/or its effectiveness evaluation in caregivers; (3) Context: studies conducted in any country or region, in any care setting (e.g., home, community, nursing homes, healthcare facilities); (4) Study types: randomized controlled trials, quasi-experimental studies, mixed-methods studies, and descriptive studies (e.g., methodological reports on cultural adaptation). Exclusion criteria: (1) studies that only mention iSupport without substantive cultural adaptation or effectiveness evaluation; (2) study protocols or conference abstracts; (3) full text unavailable or incomplete data; (4) non-English or non-Chinese publications; (5) duplicate publications.

Information sources The following electronic databases will be searched: PubMed, Web of Science, Embase, CINAHL, PsycINFO, Cochrane Library, ProQuest, CNKI, WanFang Data, CBM, and VIP. In addition, reference lists of included studies and relevant reviews will be manually screened. Grey literature will not be systematicallysearched.

Main outcome(s) The primary outcomes are: (1) Caregiving competence – measured by validated instruments such as the Caregiver Competence Scale or similar tools; (2) Psychological burden – measured by validated instruments such as the Zarit Burden Interview (ZBI) or similar tools. These outcomes will be assessed at post-intervention and at the longest available follow-up.

Additional outcome(s) Secondary outcomes include: (1) Self-efficacy – measured by validated instruments such as the General Self-Efficacy Scale or caregiver-specific self-efficacy scales; (2) Quality of life – measured by validated instruments such as the WHOQOL-BREF or SF-36; (3) Anxiety and depression – measured by validated instruments such as the Hospital Anxiety and Depression Scale (HADS) or the Beck Depression Inventory (BDI); (4) Program feasibility and acceptability – measured by attendance rates, dropout rates, satisfaction scores, or qualitativefeedback.

Data management All identified records will be imported into NoteExpress 4.1 reference management software for deduplication. Two independent reviewers will screen titles and abstracts, followed by full-text review against the eligibility criteria. Disagreements will be resolved through discussion with a third reviewer. Data extraction will be performed independently by two reviewers using a standardized data extraction

form, and cross-checked. The following information will be extracted: first author, publication year, country/region, study design, cultural adaptation strategies and content, intervention characteristics, outcome measures, and main findings. The PRISMA-ScR (for scoping review) and PRISMA 2020 (for meta-analysis) flow diagrams will be used to document the screening process.

Quality assessment / Risk of bias analysis The methodological quality and risk of bias of included studies will be assessed independently by two reviewers. For randomized controlled trials, the Cochrane Risk of Bias 2.0 (RoB 2.0) tool will be used. For quasi-experimental studies, the Risk of Bias in Non-randomized Studies of Interventions (ROBINS-I) tool will be applied. For mixed-methods and descriptive studies, the Mixed Methods Appraisal Tool (MMAT) or appropriate critical appraisal checklists will be used. Any discrepancies will be resolved by discussion or consultation with a third reviewer.

Strategy of data synthesis If sufficient homogeneity exists across studies, meta-analysis will be performed using RevMan or Stata software. Continuous outcomes will be summarized as standardized mean differences (SMD) or mean differences (MD) with 95% confidence intervals (CI), depending on whether the same measurement instruments are used. Heterogeneity will be assessed using the I^2 statistic and Cochran's Q test. An I^2 value > 50% or $P < 0.10$ will indicate substantial heterogeneity, in which case a random-effects model will be applied; otherwise, a fixed-effects model will be used. If substantial heterogeneity is present and cannot be explained by subgroup or sensitivity analyses, a narrative synthesis will be conducted instead of meta-analysis. For outcomes reported in fewer than two studies, narrative description will beprovided.

Subgroup analysis If data permit, the following subgroup analyses will be conducted: (1) by country/region (e.g., Western vs. Eastern countries); (2) by intervention delivery format (e.g., online vs. in-person vs. hybrid); (3) by intervention duration (short-term vs. long-term); (4) by cultural adaptation depth (e.g., translation only vs. comprehensive adaptation). Subgroup analyses will be performed using meta-regression or subgroup interactiontests.

Sensitivity analysis Sensitivity analyses will be conducted to test the robustness of the pooled results by: (1) excluding studies with high risk of bias; (2) excluding small-sample studies; (3) changing the effect model (fixed-effects vs. random-effects); (4) excluding studies with imputed missing data. If sufficient studies are available, publication bias will be assessed using funnel plots and Egger's test.

Language restriction Chinese/english.

Country(ies) involved China.

Keywords iSupport; Dementia; Family caregivers; Informal caregivers; Cultural adaptation; Systematic review; Meta-analysis.disabled older adults; informal caregivers; caregiver competence; network meta-analysis;.

Contributions of each author

Author 1 - Jiating Song - Drafted the manuscript.
Email: 3214753098@qq.com
Author 2 - Wei Guo.
Author 3 - Qixin Zheng.
Author 4 - Yakang Liu.