

Home-Based Educational Strategies for Informal Caregivers of People with Psychosis: A Scoping Review

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Abstract

Introduction. According to the World Health Organization, the burden of mental disorders is steadily increasing, with significant health and socioeconomic impacts worldwide. People living with psychosis often face challenges in daily functioning, employment, and social interactions, which frequently leads them to live with their families. In this context, informal caregivers play a crucial role in supporting the therapeutic and rehabilitative process. The aim of this study is to explore and map the current literature on home-based educational strategies for informal caregivers of people with psychosis.

Materials and Methods. A scoping review was conducted following Arksey and O'Malley's framework and the PCC approach. Searches were performed in major biomedical databases between April and June 2024. Eligible studies involved caregivers of individuals with psychosis, were written in English, Spanish, or French, and reported nurse-led educational interventions, outcomes, or experiences related to mental health care. Screening and analysis were independently performed by two reviewers.

Results. Educational strategies targeting caregivers offer significant clinical and health benefits for individuals with psychosis, including reduced relapse rates and disability, improved treatment adherence, greater knowledge, and enhanced quality of life. Caregivers who often experience knowledge gaps benefit from educational interventions

that support skill development, alleviate caregiver burden, and promote their own well-being. Key facilitators of these interventions include the use of supportive materials, a calm and respectful environment, active listening, a transcultural approach, and clearly defined strategies. Major barriers include stigma, misinformation, and financial hardship experienced by families.

Discussion. Through health education, nurses play a key role in enhancing the health and well-being of the entire family unit. Raising community awareness and promoting health promotion and disease prevention initiatives are essential strategies to reduce morbidity and mortality rates.

Keywords: Psychosis, Caregivers, Health Education, Education, Home Care

Introduction

Mental disorders, syndromes characterized by clinically significant abnormalities in cognitive functions, emotional regulation, or behavior, cause considerable difficulties in daily activities (ADLs), as well as at social and occupational levels, affecting individuals of both genders and all age groups (Chaudhury et al., 2006; Iliou et al., 2024; WHO, Mental Health, 2022). The onset of psychosis, often related to exposure to various risk factors and traumatic/stressful experiences, occurs mainly in late adolescence and early adulthood, around the age of 20 (Brasso et al., 2021; Hua et al., 2021; NIMH, Understanding Psychosis, 2023). According to the World Health Organization, mental disorders are increasing worldwide, with significant public health, social, and economic consequences (World Health Organization, 2025). In 2021, anxiety and depressive disorders were the most prevalent mental health conditions, affecting an estimated 359.2 million and 332.4 million people, respectively, and representing 63.1% of all mental disorders worldwide (Zhang et al., 2026). Mental disorders currently rank as the fifth leading cause of global disability-adjusted life years, rising from twelfth place in 1990; anxiety disorders, depressive disorders, and schizophrenia are among the main contributors (Santomauro et al., 2026).

Informal caregivers (ICs) are family members who provide ongoing care and support to relatives affected by illness or disability without receiving financial compensation (Istituto Superiore di Sanità, 2021), may experience

psychological stress, or burden, resulting from the physical and emotional overload of daily responsibilities, social pressures, and financial difficulties (Gutiérrez-Maldonado et al., 2005). Therefore, it is essential to support, inform, and involve them in the care process, considering the overall well-being of the family unit (Bucci et al., 2016; McFarlane, 2016).

Therapeutic outcomes often depend not only on the nurse's knowledge and skills but also on their ability for introspection and self-awareness (Stuart, 2012). Communication skills, such as active listening and the appropriate use of verbal and non-verbal language, are fundamental for delivering effective and truly person-centred nursing care (Varcarolis, 2010). To achieve better health outcomes, the caregiver's involvement is essential; therefore, it is crucial to consider them as an integral part of the care process, on an equal footing with the patient (Tasseron-Dries et al., 2023). Home psychiatric care is a feasible and cost-effective alternative to hospitalization (Waldmann et al., 2025). Community psychiatric nurses play a key role in assessing both mental and physical health needs, thereby supporting holistic care and facilitating access to specialized services when appropriate (Litvin & Bliss, 2024; St John et al., 2020). Their role involves assessing psychopathology and developing interventions that include educating patients about medications, mental disorders, and coping skills to help them remain within the community (Hellwig, 1993). Although the importance of home-based care in psychiatric treatment is widely recognized, the existing literature remains heterogeneous in identifying which

interventions are most effective in improving patient health outcomes and enhancing caregiver competencies, while simultaneously reducing caregiver burden. The aim of this scoping review is to map the literature on currently accessible educational strategies for ICs of individuals with psychosis at home educational interventions, interventions aimed at reducing caregiver burden, and multidisciplinary interventions in home care for ICs, evaluating their effectiveness in terms of clinical and health outcomes for both patients and caregivers.

This review aims to address the following research questions:

- (RQ1) What educational strategies are available for ICs of individuals with psychosis in home settings?
- (RQ2) What clinical and health outcomes are expected for the individual with psychosis?
- (RQ3) What health outcomes are expected for the ICs?
- (RQ4) What are the main barriers and facilitators in the implementation of these interventions?
- (RQ5) What are the implications for nursing practice?

Methods

Study design

This study was designed as a scoping review, conducted in accordance with the Joanna Briggs Institute (JBI) methodology for scoping reviews (Peters et al., 2020a), and reported according to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) provided as Supplementary File 1 (Tricco et al., 2018).

Eligibility criteria

The inclusion criteria comprised studies involving caregivers of individuals with psychosis, written in English, Spanish, or French. Meta-analyses, literature reviews, observational studies, experimental studies, qualitative studies, and editorials are considered eligible. Eligible studies included those in which nurses delivered one or more educational interventions, as well as

those reporting clinical and/or health outcomes for individuals with psychosis and/or their caregivers. Studies exploring experiences and expectations regarding mental health services were also considered. Conversely, studies focusing on organic or substance-induced psychoses, those not addressing the specific research questions, and study protocols were excluded from the review. The search covered the period from 2014 to 2024 to ensure the inclusion of studies reflecting the most recent knowledge and technological advancements in the field

Search strategies

A systematic literature search was conducted between April and June 2024 using major biomedical databases, including PubMed, CINAHL, Embase, and PsycInfo. The search strategy is reported in the Supplementary File 2. Search strings were developed with the support of the University Library System, University of Milan, Milan, Italy, including the terms “psychosis,” “caregiver,” “health education,” “education,” and “home care” and their synonyms.

The search included various study designs: meta-analyses, literature reviews, observational studies, experimental studies, qualitative studies, and editorials. Search strategies were developed according to the Joanna Briggs Institute guidelines (Peters et al., 2020b), using the Population, Concept, and Context framework as a reference.

Study selection process

Following the JBI guidelines, the study selection process was conducted by two authors (ER and SA). Titles and abstracts were independently screened to identify potentially relevant studies. The full texts of eligible articles were then assessed according to the inclusion criteria. Any disagreements regarding study inclusion were resolved through discussion with a third author (SU).

Data Extraction

An Excel-based data extraction table, which included predefined variables for extraction, was prepared before conducting the review.

The table was compiled independently by the two reviewers and includes details such as title/authors/year of publication/country, applied methodology, objective, population/sample characteristics, interventions/data collection tools, outcomes, and keywords.

Summary of Results

Extracted data were synthesized and presented through a narrative review. Tables and graphs were used to represent the information.

Risk of Bias

Scoping reviews are designed to provide an overview of the available evidence, without necessarily conducting a methodological quality assessment or a risk of bias evaluation. Therefore, the sources included in this review were not subjected to a rigorous critical analysis of bias risk (Tricco et al., 2018).

Results

Selection of source of evidence

The initial search yielded 379 records. After removing 164 duplicates, 215 articles remained for screening. Title and abstract screening led to the exclusion of 179 articles: 163 due to irrelevant outcomes, 10 due to non-eligible populations, and 6 due to inappropriate study designs.

A total of 36 full-text articles were assessed for eligibility. Of these, 31 met the inclusion criteria. 3 articles were excluded for not addressing the research questions, and 2 were excluded due to an ineligible population. An additional 3 articles relevant to the research questions were identified through a supplementary search, assessed for eligibility, and included in the review. The screening process is illustrated in the PRISMA Flow Diagram (Page et al., 2021) Figure 1.

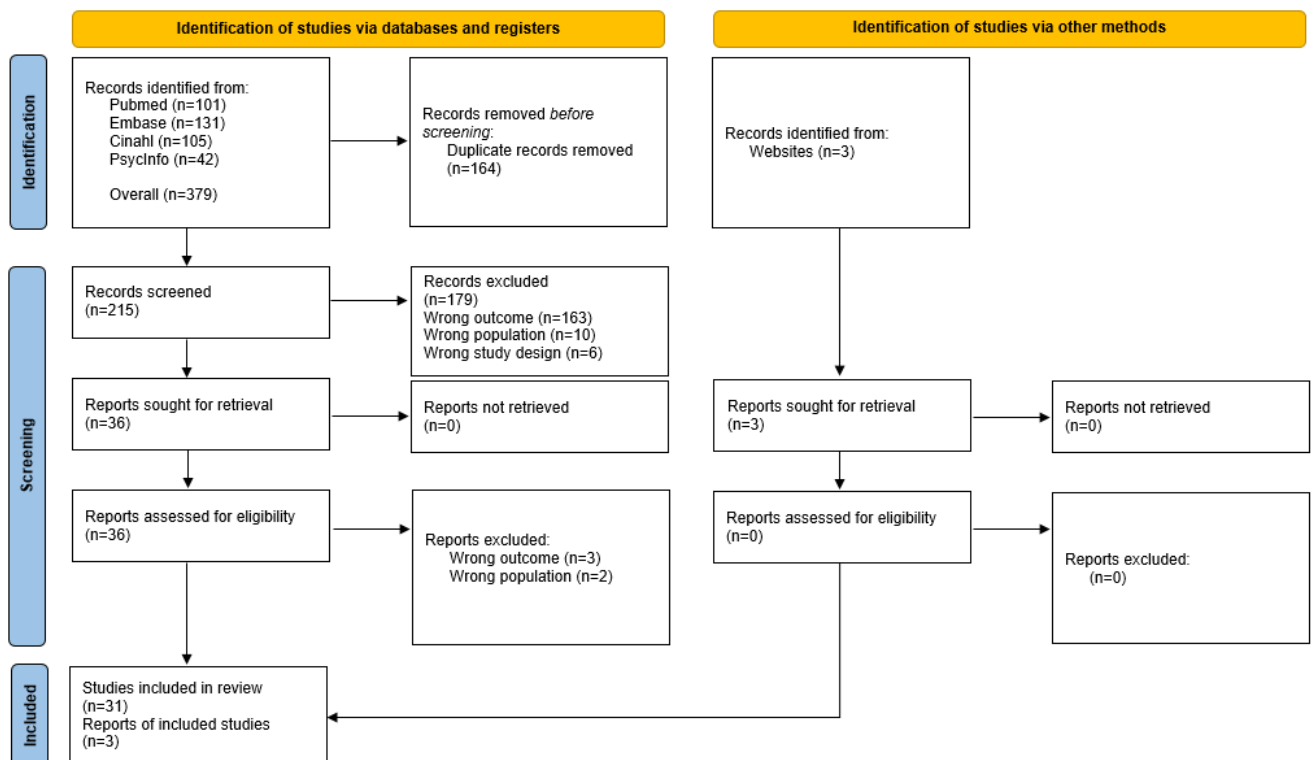


Figure 1. PRISMA Flowchart of the study.

Characteristics of the included studies

The 34 selected articles comprised the following study designs: 1 meta-analysis (3%), 3 literature

reviews (9%), 10 observational studies (29%), 9 qualitative studies (27%), 10 experimental studies (29%), and 1 editorial (3%). All studies were published as journal articles, with 6 appearing in

nursing journals (18%) and 28 in journals related to other healthcare disciplines (82%).

A total of 23.5% of the articles were published between 2013 and 2018, while the remaining 76.5% were published between 2019 and 2024. The studies were conducted in the following geographic areas, as shown in Figure 2: 15 studies in Europe (44%), 14 studies in Asia (41%), 2 studies in the Middle East (6%), 2 studies in North America (6%), and 1 study in Africa (3%).

Based on the World Bank income classification (Metreau et al., 2024), 22 studies were conducted in high-income countries (64%), 7 in upper-middle-income countries (21%), and 5 in lower-middle-income countries (15%). The characteristics of the included documents are reported in Table 1.

A summary of the findings addressing the research questions is provided in Supplementary File 3.

RQ1: What educational strategies are available for ICs of individuals with psychosis in home settings?

The educational strategies were grouped according to the intervention model used.

Family Psychoeducation

Across the included studies, home-based psychoeducational interventions were primarily aimed at reducing environmental stress and improving family functioning by strengthening communication, problem-solving, and coping skills, while also addressing caregiver anxiety and burden. These interventions supported adherence to therapeutic and rehabilitative pathways through education on the disorder, available services, and strategies to create a supportive family environment (Gomis et al., 2017a; Kidd SA et al., 2018a; Kumar D et al., 2019a; Lyles et al., 2023a). Several programs also sought to reduce stigma, dispel false beliefs, and address maladaptive family dynamics, including high levels of emotional involvement and expressed emotion, using home visits, group sessions, manuals, illustrations, role-play, and quizzes (Cechnicki A et al., 2023; Davtian & Scelles, 2014; Kidd SA et al., 2018a; Kumar D et al., 2019a; Lyles et al., 2023a). Overall, the most frequently adopted strategies in home-based sessions included psychoeducation, emotional support, coping-skills training, and guidance to

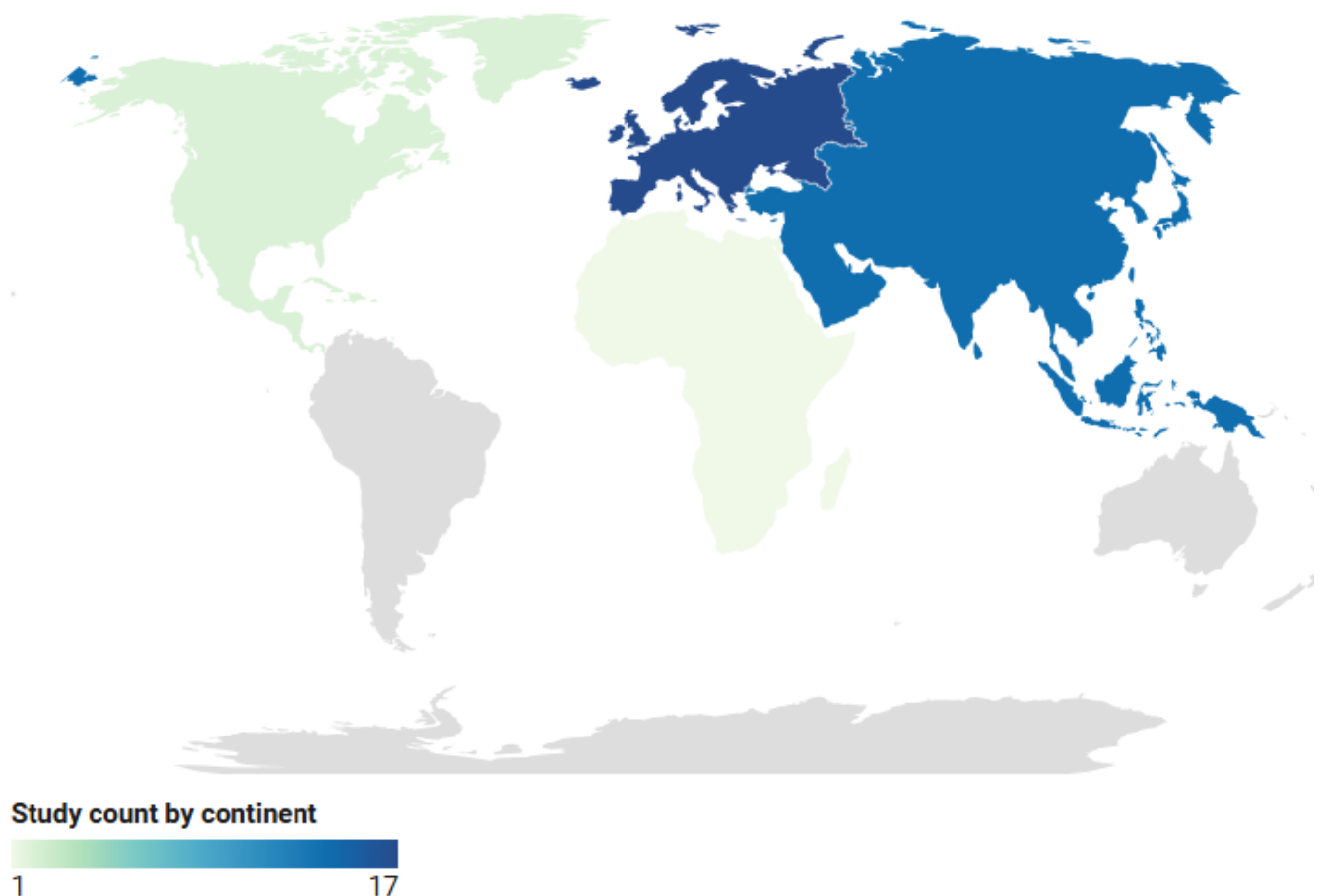


Figure 2. Geographical Distribution of the Included Studies.

Table 1. Characteristics of studies included.

Included articles (n= 34)				
	N	%	Notes	Authors
Year of publication				
(from 2013 to 2018)	8	23,5%		Alka et al.; Davtian and Lamotte; Davtian and Scelles; Gomis et al.; Grácio et al.; Kidd et al; Lavis et al.; Malakouti et al.
(from 2019 to 2024)	26	76,5%		Alston et al.; Bademli et al; Barranha et al.; Basavaraju et al.; Budiarto et al.; Cechnicki et al.; Chen et al.; Chuttoo et al.; Ferentinos et al.; Hode et al.; Ilmy et al.; Iswanti et al. (2023); Iswanti et al. (2024); Kim and Park; Kumar et al.; Lyles et al.; Mathew and Mathias; Moreno-Alonso et al.; O'Neill et al.; Onwumere et al.; Oyelade et al.; Peng et al.; Tessier et al.; Tramier et al.; Widiyawati et al.; Yasuma et al.
Geographic area				
Africa	1	3%		Oyelade et al.
Asia	14	41%		Alka et al.; Basavaraju et al.; Budiarto et al.; Chen et al.; Ilmy et al.; Iswanti et al. (2023); Iswanti et al. (2024); Kim and Park; Kumar et al.; Lyles et al.; Mathew and Mathias; Peng et al.; Widiyawati et al.; Yasuma et al.
Europe	15	44%		Barranha et al.; Cechnicki et al.; Chuttoo et al.; Davtian and Lamotte; Davtian and Scelles; Ferentinos et al.; Gomis et al.; Hode et al.; Lavis et al.; Moreno-Alonso et al.; O'Neill et al.; Onwumere et al.; Tessier et al.; Tramier et al.
Middle East	2	6%		Bademli et al; Malakouti et al.
North America	2	6%		Alston et al.; Kidd et al.
Country's economy				
Low middle income	5	15%		Alka et al.; Basavaraju et al.; Kumar et al.; Mathew and Mathias; Oyelade et al.
High middle income	7	21%		Budiarto et al.; Ilmy et al.; Iswanti et al. (2023); Iswanti et al. (2024); Lyles et al.; Malakouti et al.; Widiyawati et al.
High income	22	64%		Alston et al.; Bademli et al; Barranha et al.; Cechnicki et al.; Chen et al.; Chuttoo et al.; Davtian and Lamotte; Davtian and Scelles; Ferentinos et al.; Gomis et al.; Grácio et al.; Hode et al.; Kidd et al.; Kim and Park; Lavis et al.; Moreno-Alonso et al.; O'Neill et al.; Onwumere et al.; Peng et al.; Tessier et al.; Tramier et al.; Yasuma et al.
Field of the journal				
Nursing	6	18%		Alka et al.; Alston et al.; Ilmy et al.; Iswanti et al. (2023); Iswanti et al. (2024); Kim and Park.
Others	28	82%	Medicine, Psychiatry, Psychology, Public health	Bademli et al.; Barranha et al.; Basavaraju et al.; Budiarto et al.; Cechnicki et al.; Chen et al.; Chuttoo et al.; Davtian and Lamotte; Davtian and Scelles; Ferentinos et al.; Gomis et al.; Grácio et al.; Hode et al.; Kidd et al.; Kumar et al.; Lavis et al.; Lyles et al.; Malakouti et al.; Mathew and Mathias; Moreno-Alonso et al.; O'Neill et al.; Onwumere et al.; Oyelade et al.; Peng et al.; Tessier et al.; Tramier et al.; Widiyawati et al.; Yasuma et al.
Type of publication				
Newspaper article	34	100%		Alka et al.; Alston et al.; Bademli et al.; Barranha et al.; Basavaraju et al.; Budiarto et al.; Cechnicki et al.; Chen et al.; Chuttoo et al.; Davtian and Lamotte; Davtian and Scelles; Ferentinos et al.; Gomis et al.; Grácio et al.; Hode et al.; Ilmy et al.; Iswanti et al. (2023); Iswanti et al. (2024); Kidd et al.; Kim and Park; Kumar et al.; Lavis et al.; Lyles et al.; Malakouti et al.; Mathew and Mathias; Moreno-Alonso et al.; O'Neill et al.; Onwumere et al.; Oyelade et al.; Peng et al.; Tessier et al.; Tramier et al.; Widiyawati et al.; Yasuma et al.
Study design				
Meta-analysis	1	3%	3%	Kim and Park
Literature reviews	3	9%	9%	Gomis et al.; Iswanti et al. (2023); Lyles et al.
Observational	10	29%	29%	Alka et al.; Alston et al.; Barranha et al.; Basavaraju et al.; Cechnicki et al.; Chuttoo et al.; Davtian and Lamotte; Davtian and Scelles; Hode et al.; Widiyawati et al.
Qualitative	9	27%		Chen et al.; Ferentinos et al.; Ilmy et al.; Lavis et al.; Mathew and Mathias; O'Neill et al.; Oyelade et al.; Peng et al.; Tramier et al.
Experimental design	10	29%		Bademli et al.; Budiarto et al.; Grácio et al.; Iswanti et al. (2024); Kidd et al.; Kumar et al.; Malakouti et al.; Moreno-Alonso et al.; Tessier et al.; Yasuma et al.
Development and validation of measurement tools, Letters, Editorial	1	3%		Onwumere et al.

help families manage emotional involvement more effectively (Davtian & Scelles, 2014; Kidd SA et al., 2018a; Kumar D et al., 2019a).

Cognitive Behavioral Therapy (CBT)

According to Gomis et al., CBT is the most recommended treatment in guidelines for psychotic disorders (Gomis et al., 2017a). The “Culturally Adapted CBT for Psychosis” (CaCBTp), applied in Pakistan using the Kingdon and Turkington model, integrated family involvement with the treatment of anxiety and depression, as well as strategies to manage symptoms and improve coping mechanisms (Lyles et al., 2023a).

Cognitive Rehabilitation

Cognitive rehabilitation aimed to enhance cognitive functions such as memory, attention, and reasoning (Lyles et al., 2023a). The program by Kumar et al. proposed progressively more complex exercises (Kumar D et al., 2019a). The “Cognitive Adaptation Training” (CAT) by Kidd et al. provided caregivers with a manual containing support materials, worksheets, and explanatory DVDs to improve disorder management and collaboration with healthcare professionals (Kidd SA et al., 2018a). This intervention was compared to independent reading of the book *Complete Family Guide to Schizophrenia* by Mueser and Gingerich (Kidd SA et al., 2018a), which explores practical strategies for quality of life and relapse prevention, and was also used in another study (Davtian & Scelles, 2014).

Community-Based Support Interventions

In South Asia, interventions were based on structured needs assessments, psychoeducation, self-care strategies, and reducing social stigma (Lyles et al., 2023a). In the United Kingdom, Community Mental Health Teams (CMHTs) operated in community settings to provide integrated support (Cechnicki A et al., 2023).

Family Empowerment

Iswanti et al. define family empowerment as a process to enhance autonomy and the ability to achieve personal and social goals. The intervention focused on increasing cultural

sensitivity and using strategies such as narrative therapy and self-learning, emphasizing the needs for independence, acceptance of the disorder, and social inclusion (Iswanti DI et al., 2024a). In a more recent study by the same researcher, an integrated holistic model focused on the interaction between family and community dynamics, promoting stress management and coping with daily challenges (Lavis A et al., 2015).

Combined Interventions

The reviewed studies showed that multidisciplinary home-based services such as Early Intervention Services (EIS) and Crisis Resolution Home Teams (CRHTs) combined family and individual interventions during relapse, integrating pharmacological treatment with psychological and psychosocial approaches, including cognitive behavioural therapy and social skills training, to manage crises and improve social functioning (Malakouti et al., 2016a; Yasuma et al., 2024a). Psychoeducation emerged as the intervention model most frequently integrated with other approaches, such as CBT, psychosocial interventions, and nursing care (Alston M et al., 2019a; Basavaraju V et al., 2022a; Budiarto et al., 2019a; Chen et al., 2019; Iswanti DI et al., 2024a; Mathew & Mathias, 2024). Within this framework, nurses played a relevant role through home visits, during which they provided education to patients and caregivers, monitored symptoms and treatment side effects, and ensured emergency support when needed (Ilmy et al., 2022). In addition, evidence from a meta-analysis supported the effectiveness of family-focused emotional support and problem-solving strategies, delivered through approaches such as family-to-family support, narrative practice, film therapy, psychoeducation, emotional regulation, and peer-assisted education (Widiyawati W et al., 2020).

RQ2: What clinical and health outcomes are expected for the individual with psychosis?

The clinical outcomes identified from the document analysis were: reduction in relapses and hospitalizations, decrease in symptomatology, improvement in recognizing relapses, symptom management, and increased awareness of the disorder, greater adherence to the therapeutic-rehabilitative treatment, and

reduction in suicide attempts. The results will be analyzed in detail below.

The retrospective study by Chuttoo et al. highlighted a reduction in relapses and in the use of acute care services after the intervention, including a decrease in time spent in acute care and home treatment services (35). Other studies also reported a reduction in relapses and hospitalization rates, including a decrease in relapse rates at 12 months (Budiarto et al., 2019b; Gomis et al., 2017b; Tessier et al., 2023a). In the randomized clinical trial by Malakouti et al., home visits were associated with lower relapse and rehospitalization rates compared with telephone follow-up and outpatient care (Malakouti et al., 2016b).

In the study by Yasuma et al., rehospitalization rates at six months were reported among participants receiving brief family psychoeducational intervention and in the control group (Yasuma et al., 2024b). A descriptive study found no statistically significant association between pharmacological treatment and hospitalization reduction (Alston M et al., 2019b).

Regarding symptomatology, Basavaraju et al. documented a reduction in symptoms, including improvements in clinical severity among individuals with schizophrenia (Basavaraju V et al., 2022b). The study by Kumar et al. examined the effectiveness of cognitive rehabilitation: both home-based and clinical groups reported significant cognitive improvements measured through the NIMHANS Neuropsychological Battery (National Institute of Mental Health and Neurosciences Neuropsychological Battery), but no statistically significant differences were found in positive and negative symptoms evaluated with the SAPS (Scale for the Assessment of Positive Symptoms) and SANS (Scale for the Assessment of Negative Symptoms scales) (Kumar D et al., 2019b).

Improved awareness of the disorder, assessed using the Scale for the Assessment of Insight (SAI), was reported in a systematic review and a meta-analysis (Kim SH & Park S, 2023a; Lyles et al., 2023a). A retrospective study reported greater adherence to therapeutic-rehabilitative treatment, as shown by improved Life Skills Profile (LSP) questionnaire scores (Hode et al., 2024a). This improvement was also confirmed in literature reviews (Gomis et al., 2017b; Iswanti DI et al., 2024b). However, other studies did not

find significant differences (Chuttoo et al., 2019a; Kidd SA et al., 2018b; Tessier et al., 2023a).

Regarding suicide attempts, Hode et al. reported a reduction one year after the educational intervention (Hode et al., 2024b).

The identified health outcomes included reduced disability, greater satisfaction with care, and improved quality of life (considering social inclusion, stigma reduction, employment status, income, and social functioning).

Educational interventions demonstrated effectiveness in reducing disability, as reported in pilot studies (Basavaraju V et al., 2022b); improved adaptive functioning was also reported after the intervention, as measured by the Multnomah Community Ability Scale (MCAS) (32). Similar findings were reported in the literature reviews by Gomis et al. and Lyles et al. (Gomis et al., 2017b; Lyles et al., 2023b)

Quality of life, assessed in multiple studies, showed mixed results. Some studies found no significant post-intervention differences in quality of life and well-being measures (Kidd SA et al., 2018b; Malakouti et al., 2016b). However, one study reported improvements in specific domains of quality of life, particularly among individuals over 48 years of age and women (Moreno-Alonso et al., 2023a). Similar improvements in quality of life and overall functioning were also reported in the literature reviews and meta-analyses by Kim et al. and Lyles et al. (Kim SH & Park S, 2023a; Lyles et al., 2023b).

Educational interventions significantly improved participants' social inclusion and social functioning (Gomis et al., 2017b; Iswanti DI et al., 2024b; Lyles et al., 2023b). Satisfaction with received care was higher in home-based settings, as reported by Malakouti et al. (Malakouti et al., 2016b). High levels of satisfaction with received care were also reported in the study by Moreno-Alonso et al., based on participant surveys (Moreno-Alonso et al., 2023a). Similar findings were also reported in literature reviews and meta-analyses (Gomis et al., 2017b; Kim SH & Park S, 2023a; Lyles et al., 2023b).

RQ3: What are the expected health outcomes for the ICs?

Caregivers benefited in terms of health following the implementation of educational strategies, including acquiring knowledge, developing new skills and strategies, reducing

perceived burden, and improving quality of life.

Iswanti and Nursalam reported that the empowerment intervention improved caregivers' ability to prevent relapses compared with the control group. Caregivers in the intervention group also showed greater involvement in supporting medication adherence, meeting activities of daily living needs, enhancing productive skills, and facilitating patients' social interactions (Iswanti DI et al., 2024a).

Home-based and family educational interventions increased caregivers' knowledge about the disorder, although these improvements were not always maintained over time (Davtian & Scelles, 2014; Kidd SA et al., 2018a; Malakouti et al., 2016a; Widiyawati W et al., 2020). Psychoeducational interventions also effectively addressed feelings of exhaustion and personal invasion and reduced predisposing factors for burden, such as high emotional expressiveness and social stigma (Chen et al., 2019; Chuttoo et al., 2019b). However, the risk of burden was higher when caregivers were seen solely as "auxiliaries" in patient care, disregarding their own family needs (Davtian et al., 2017). Significant improvements were also reported in family burden, as measured by the BAS scale and the IEQ questionnaire, while a relatively low burden emerged among caregivers who had received community support interventions and among those caring for patients with mild conditions compared to severe disorders (Basavaraju V et al., 2022a; Kumar D et al., 2019a; O'Neill et al., 2022; Tessier et al., 2023b). Nevertheless, some findings were less consistent, as one observational study found no statistically significant differences in the CORE scale, and one clinical trial showed a decrease in burden over time in the intervention group without statistically significant differences between groups (Budiarto et al., 2019a).

Psychoeducation also reduced anxiety and improved psychological well-being, with reductions in ZBI and CES-D scores and an increase in caregivers' spiritual well-being (Davtian & Scelles, 2014; Ilmy et al., 2022; Lyles et al., 2023a). Improvements in quality of life and family relationships were also confirmed by systematic reviews and other studies (Chuttoo et al., 2019b; Davtian et al., 2017; Iswanti DI et al., 2023; Lavis A et al., 2015). However, not all studies reported significant differences, particularly with regard to quality of life, psychological well-being, or therapeutic alliance with professionals (Davtian & Scelles, 2014; Kidd SA et al., 2018a).

Finally, family interventions were found to reduce burden and improve knowledge about the disorder, coping strategies, mental health, and overall well-being, although no significant differences emerged in family relationships or perceived social support (Peng MM et al., 2022).

RQ4: What are the main barriers and facilitators in the implementation of these interventions?

Training sessions promoted knowledge-sharing within a supportive setting, allowing families to express their needs (Davtian & Scelles, 2014). However, the complexity of family issues can hinder healthcare professionals from implementing therapeutic approaches (Iswanti DI et al., 2023). Caregivers faced difficulties in collaborating with mental health services when excluded from care plans, despite their ability to identify warning signs of deterioration (Mathew & Mathias, 2024; O'Neill et al., 2022). Additionally, the use of language evoking guilt or reinforcing stereotypes created further challenges (Davtian et al., 2017; Kidd SA et al., 2018a).

During exacerbations, home-based treatment appeared to be preferred because of its perceived benefits on quality of life compared with hospitalization (Lavis A et al., 2015). It also facilitated adherence among individuals with difficulties accessing hospital facilities, while weekly planning was supported by the structured tasks assigned by professionals (Mathew & Mathias, 2024).

Kidd et al., comparing cognitive training (CAT) with the Mueser and Gingerich Guide, highlighted caregivers' struggles in implementing interventions independently and emphasized the need for professional supervision, clear strategies, and support materials (Kidd SA et al., 2018a). Other studies also used educational tools such as guide manuals (Kidd SA et al., 2018a; Tessier et al., 2023b), informational brochures (Malakouti et al., 2016a), illustrations (Yasuma et al., 2024a), and DVDs (Kidd SA et al., 2018a).

Barriers to therapeutic adherence included a lack of understanding of follow-up importance, absence of a caregiver, loss of trust in the treatment process, social stigma, false beliefs, and financial difficulties (Basavaraju V et al., 2022a; Budiarto et al., 2019a; Chen et al., 2019; Lyles et al., 2023a; Mathew & Mathias, 2024). Alston et al.'s study found that family involvement improved adherence to pharmacological therapy

($p=0.0177$) but did not increase compliance with rehabilitation treatments. Telemedicine was found to be less effective than in-person treatment, while living in rural areas did not affect dropout rates (Alston M et al., 2019a). However, families often sought guidance from shamans or religious leaders, sometimes resorting to violence or physical restraint (Ilmy et al., 2022; Mathew & Mathias, 2024).

Social stigma limited individuals' potential in achieving their goals (Widiyawati W et al., 2020) and led some to refuse medication, particularly if perceived as ineffective (Mathew & Mathias, 2024; Peng MM et al., 2022). To enhance understanding and family involvement, cultural adaptations were necessary, such as the use of idiomatic expressions and religious references (Lyles et al., 2023a).

RQ5: What are the implications for nursing practice?

Only a limited number of studies specifically addressed the role of nurses, who were primarily involved as part of multidisciplinary teams delivering interventions or mental health services (Budiarto et al., 2019a; Kumar D et al., 2019a; Tessier et al., 2023b; Yasuma et al., 2024a). Their contribution included strengthening relationships with caregivers and improving understanding of psychoeducational topics in multifamily groups (Davtian & Scelles, 2014). In CRHTs, nurses collaborated with psychiatrists, often acting as case managers to assess eligibility for home care and, in most cases, delivering the intervention independently (Basavaraju V et al., 2022a; Lavis A et al., 2015). Other studies also described autonomous nurse-led interventions, sometimes integrating nursing care and psychoeducation (Ilmy et al., 2022; Kidd SA et al., 2018a). Nurse case managers further supported individuals through home visits, and access to emergency telephone support contributed to positive outcomes (Widiyawati W et al., 2020). Foster Homes still presented difficulties related to professional relationships, daily management, and the integration between private and professional life (Gomis et al., 2017a; Tramier et al., 2021), while family-based programs emphasized both individual well-being and intrafamily dynamics (Davtian et al., 2017). Some families reported benefits of rehabilitation, whereas others highlighted the

need for greater funding and support (Hode et al., 2024a; Kurtz & Mueser, 2008).

Mind Map of Results

Figure 3 presents a comprehensive conceptual map illustrating the relationship between home-based educational interventions for caregivers and the main domains identified in the literature. The map summarizes the different educational strategies, the associated barriers and facilitators, the expected outcomes for caregivers and individuals with psychosis, and the implications for clinical practice.

Discussion

Home-based and Foster Home educational interventions may help reduce exacerbations in individuals with psychosis (Gomis et al., 2017a; Kim SH & Park S, 2023b), highlighting a lower risk of hospitalization compared to patients followed on an outpatient basis or through telephone follow-up (Malakouti et al., 2016a). Psychoeducation may help reduce exacerbations in individuals with psychosis (Gomis et al., 2017a; Tessier et al., 2023b) and it remains, to date, one of the best interventions for reducing relapse rates and improving health outcomes. However, family psychoeducation appears to be a relevant educational strategy, although the evidence does not allow firm conclusions regarding its superiority over home-based psychoeducation (McFarlane, 2016). Combined approaches, such as social skills training associated with cognitive-behavioral therapy (CBT), Early Intervention Services (EIS), and Crisis Resolution Home Treatment teams (CRHTs), or psychoeducation integrated with psychosocial interventions, also reduce hospitalizations, acute service access, and length of stay as reported in other studies (Bird et al., 2013; Chuttoo et al., 2019b; Gomis et al., 2017a). However, some studies suggest that cognitive-behavioral therapy did not lead to benefits (Marshall & Rathbone, 2011). Psychoeducation combined with CBT may represent a promising strategy, with some evidence suggesting a reduction in suicide attempts. (Chuttoo et al., 2019b; Hode et al., 2024a) as reported in other studies (Jeong et al., 2023; Zhao et al., 2015). Family support is crucial in reducing exacerbations and improving treatment adherence (Iswanti DI et al., 2023;

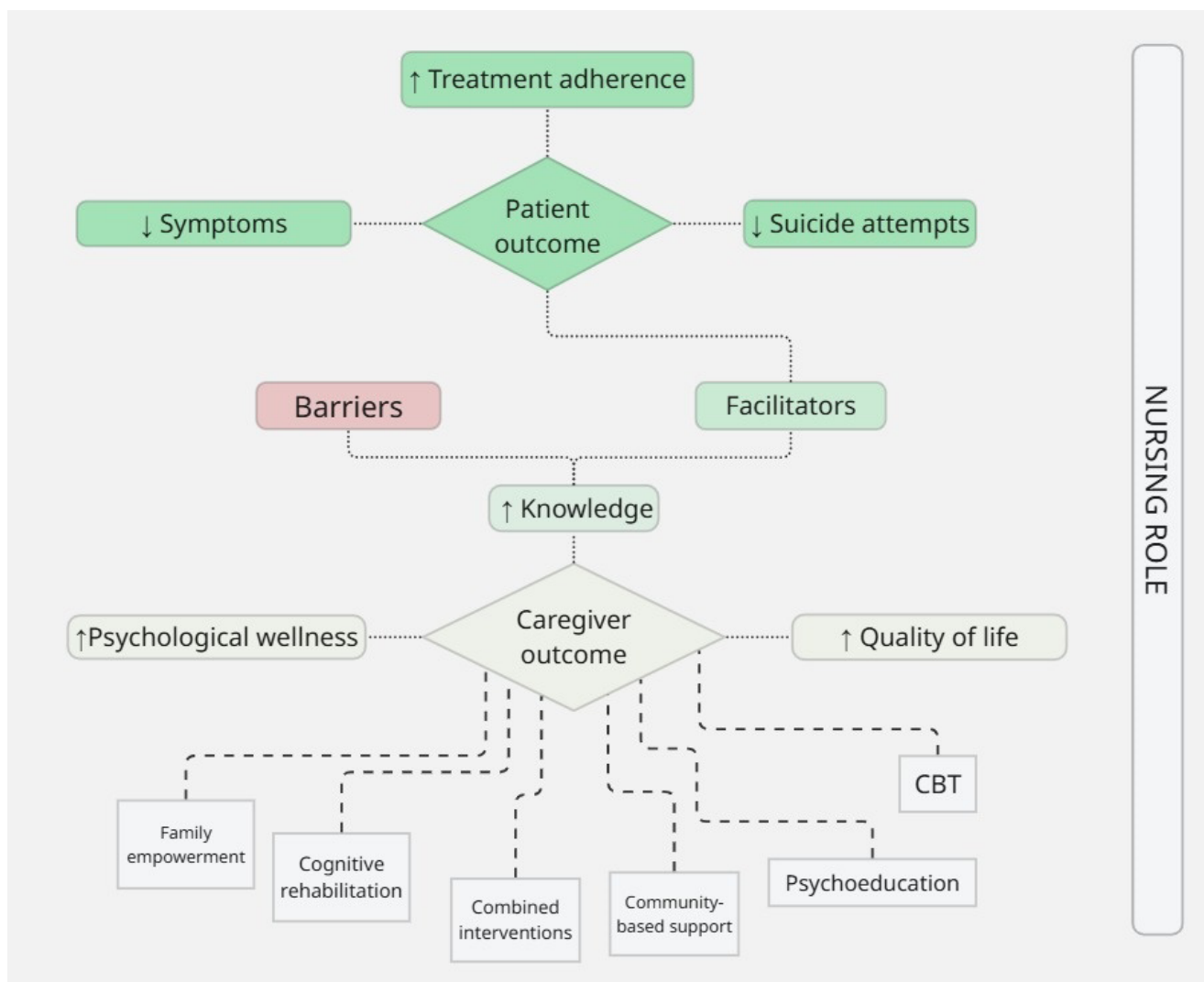


Figure 3. Mind map of caregiver-focused nursing strategies in individuals with psychosis.

Lyles et al., 2023a; Widiyawati W et al., 2020). In relation to this aspect, several interventions appeared to be associated with positive outcomes, including CRHTs, EHS social skills training, the community-based RISE intervention, and family empowerment interventions based on narrative therapy (Gomis et al., 2017a; Hode et al., 2024a; Iswanti DI et al., 2023). However, the outcomes associated with CRHTs may vary according to the patient's clinical profile (Sampogna et al., 2023). Moreover, EHS has shown beneficial effects, particularly on social functioning and negative symptoms in psychosis, although the evidence is not equally strong across all outcomes (Turner et al., 2018). The RISE protocol appears to be a promising intervention, although further studies are needed before drawing firm conclusions about its effectiveness (Asher et al., 2022). Combined interventions, including psychoeducation with social skills training or nursing care, CBT, community-

based interventions, and family empowerment with self-learning, may contribute to reducing positive symptoms (Gomis et al., 2017a; Iswanti DI et al., 2023; Lyles et al., 2023a; Malakouti et al., 2016a). Among these, cognitive rehabilitation also reduces cognitive symptoms (Gomis et al., 2017a; Kumar D et al., 2019a), and family interventions and CBT also improve illness awareness (Kim SH & Park S, 2023b; Lyles et al., 2023a).

The included studies suggest that individuals with psychosis may experience difficulties in daily activities, social relationships, and occupational functioning (Alston M et al., 2019a; Barranha et al., 2021). Several interventions were associated with reductions in disability, including community-based interventions, psychoeducation, cognitive rehabilitation, and self-learning, and programs in Foster Homes (Basavaraju V et al., 2022a; Gomis et al., 2017a; Iswanti DI et al., 2023; Kidd SA et al., 2018a; Lyles

et al., 2023a). Social skills training EHS and home care also improve social functioning (Gomis et al., 2017a; Lyles et al., 2023a) according by international literature (Kurtz & Mueser, 2008; Turner et al., 2018) Interventions like ODA, CRHTs, and psychoeducation improve quality of life from an emotional, physical, and social standpoint (Gomis et al., 2017a; Kim SH & Park S, 2023b; Lyles et al., 2023a; Moreno-Alonso et al., 2023b), and the latter increases care satisfaction (Gomis et al., 2017a; Lyles et al., 2023a; Moreno-Alonso et al., 2023b).

Single or combined psychoeducation with nursing care, family empowerment, and narrative therapy improves caregiver skills (Iswanti DI et al., 2023, 2024a; Kim SH & Park S, 2023b; Malakouti et al., 2016a; Tessier et al., 2023b; Yasuma et al., 2024a), who show gaps in knowledge about the illness, crisis management, and follow-up (Ilmy et al., 2022; O'Neill et al., 2022; Oyelade OO & Nkosi-Mafutha NG, 2022; Tramier et al., 2021). However, after acquiring knowledge, the caregiver might become excessively vigilant about symptoms of exacerbation (Lavis A et al., 2015) as already confirmed by other authors (Frias et al., 2020; Sefasi et al., 2008). Other risk factors for burden include the severity of patient symptoms, financial sacrifices, changes in family relationships, stigma, and social isolation (Cechnicki A et al., 2023; Chen et al., 2019; Ilmy et al., 2022; Mathew & Mathias, 2024; O'Neill et al., 2022; Oyelade OO & Nkosi-Mafutha NG, 2022; Peng MM et al., 2022). Cognitive adaptation training (CAT), community-based interventions, self-learning programs, and yoga reduce burden, but family psychoeducation also reduces predispositional risk factors (social stigma, stress, emotional expression) and the risk of mental disorders in the caregiver (Basavaraju V et al., 2022a; Cechnicki A et al., 2023; Iswanti DI et al., 2023; Kidd SA et al., 2018a; Kim SH & Park S, 2023b; Lyles et al., 2023a; Tessier et al., 2023b). Furthermore, the combined intervention of nursing care with psychoeducation also improves caregiver self-esteem and encourages feelings of hope and motivation (Budiarto et al., 2019a).

According to the findings of this review, family caregivers play a central role in the treatment of people with psychosis and schizophrenia and should be considered partners in care, not merely informal supporters. This is consistent with clinical guidelines and systematic reviews that identify family involvement and family

interventions as evidence-based aspects of mental health care (Eassom et al., 2014; NICE, 2015). For people with psychosis and schizophrenia, educational support for family caregivers should start at an early stage, be maintained over time, and be responsive to the particular needs of each family. This approach is supported by clinical guidelines and by recent evidence highlighting the importance of nurse-led, individualized psychoeducational interventions (Kuipers et al., 2025; NICE, 2015). Home-based psychiatric nursing and nurse case management appear to play a key role in the care of people with psychosis and schizophrenia, as they support continuity of care, symptom monitoring, family education, crisis support, and community-based management (Malakouti et al., 2016a). Although multidisciplinary care remains the preferred model in psychosis and schizophrenia, evidence suggests that nurses can also act autonomously in specific areas, including family psychoeducation, home-based follow-up, symptom monitoring, and case management (Malakouti et al., 2016a; NICE, 2015).

However, follow-up is hindered by a lack of coping strategies among caregivers, poor awareness of the importance of monitoring (Basavaraju V et al., 2022a; Hode et al., 2024a), and difficulties in accessing technology in rural areas (Alston M et al., 2019a; Kidd SA et al., 2018a). Telemedicine, although useful in overcoming distances, appears less effective than in-person visits, possibly due to reduced engagement with professionals (Alston M et al., 2019a). Educational interventions were frequently delivered by multidisciplinary teams in the included studies. Therefore, only selected examples of these teams are described to illustrate their role in the interventions (Chuttoo et al., 2019b; Gomis et al., 2017a; Lavis A et al., 2015; Moreno-Alonso et al., 2023b; Tessier et al., 2023b), rather than by a single operator (Budiarto et al., 2019a; Malakouti et al., 2016a; Yasuma et al., 2024a), due to the contribution of various competencies that ensure a comprehensive and integrated perspective in the therapeutic-rehabilitative plan and the possibility of offering the service to a larger number of users while ensuring quality. Additionally, seeking collaboration with local organizations can increase the outreach impact (Cechnicki A et al., 2023; Lyles et al., 2023a).

Further studies could investigate whether

specific nursing interventions may be effective in improving caregivers' quality of life and examine the durability of the benefits associated with the interventions identified.

This scoping review provides a broad overview of the available evidence and helps identify key gaps in the literature. A strength of this review is the inclusion of heterogeneous study designs, interventions, and outcomes, which allowed a wide exploration of the available evidence on educational interventions, clinical and health outcomes, and the role of nurses and multidisciplinary teams.

However, some limitations should be acknowledged. No critical appraisal was conducted to assess the methodological quality of the included studies. In addition, grey literature was not included, which may have limited the comprehensiveness of the review. Finally, no protocol was registered or published, which may have reduced the transparency and reproducibility of the review process.

Conclusions

This scoping review highlights that home-based strategies for informal caregivers of patients with psychosis may improve health outcomes for both caregivers and patients. Research studies have been conducted in different countries with diverse sociocultural and economic contexts, limiting the possibilities for comparing the applicability of educational strategies.

At present, psychoeducation appears to be a promising intervention for achieving this goal. Moreover, psychoeducation combined with other approaches, including nursing care, appears to improve symptom management, treatment adherence, and quality of life in patients with psychosis, while also enhancing caregivers' skills and abilities.

Nursing plays an important role through therapeutic education, monitoring, and case management, and is essential in supporting both patients and their family members. This review also identified important barriers to implementation, including stigma, financial burden, limited access to services, insufficient support from professionals, and the need for individualized interventions.

Given the heterogeneity of the available evidence, these findings should be interpreted

with caution. Finally, home-based interventions represent a relevant and promising area for mental health care.

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