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Breaking the chains of isolation: A systematic review on family psychoeducation as a catalyst for social function improvement in schizophrenia

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Abstract

Background: As a catalyst by accelerating social recovery through family empowerment, enabling long term functional improvement and triggering synergistic effects with other therapies, family psychoeducation (FPE) has been effective in reducing relapse rates and improving social functioning among individuals with schizophrenia.
Purpose: To evaluate how FPE affected schizophrenic patients' social functioning and social isolation, especially in culturally diverse settings.
Method: A systematic review of 10 articles (2015–2024) from PubMed, Sage Journals, and ScienceDirect was conducted. The studies encompassed randomized controlled trials, quasi-experimental approaches, and case series. Critical appraisal using JBI tools assessed risk of bias, with a focus on outcomes such as treatment adherence, social functioning, and hospitalization rates. FPE interventions improved treatment adherence, social functioning, and reduced social isolation in patients with schizophrenia.
Results: FPE is effective in enhancing social functioning and mitigating isolation in schizophrenia, particularly when culturally adapted and integrated with multimodal therapies.
Conclusion: While clinical symptom outcomes varied, FPE's role in empowering families and enhancing community-based care is critical.

Keywords: Family Psychoeducation; Schizophrenia; Social Functioning; Social Isolation; Systematic Review.

INTRODUCTION

Schizophrenia is a severe psychiatric disorder that affects approximately 1% of the global population. It is a complex condition characterized by positive symptoms, such as hallucinations and delusions, negative symptoms such as social withdrawal and lack of motivation, reduced emotional expression and cognitive impairment that significantly impact on daily functioning and quality of life (Bennett, Kuykendall, Harvey, & Lucksted, 2023; Hernández-Ascanio, Perula-de Torres, Rich-Ruiz, González-Santos, Mielgo-Ayuso, González-Bernal, & Conde-Moya, 2023; Pelizza, Federico, Leuci, Quattrone, Palmisano, Pupo, & Menchetti, 2025). Poor social functioning is associated with anxiety, depression, increased risk of suicide, premature death, decreased quality of life, and increased burden of family caregiving (Ali, Tiles-Sar, Simons, Osicka, Habtewold, & Van der Meer, 2024; Alsadoun, Alotaibi, Alanazi, Almohsen, Almarhoum, & Mahboub, 2023). Social isolation is described as an objective lack of social interactions and low participation in community activities, whereas loneliness is the subjective sense of being cut off from others. Social isolation has been associated to impaired cognitive function in the general population (Green, Wynn, Eisenberger, Horan, Lee, McCleery, &

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Reddy, 2024; Yu, Sun, Li, Chien, Ku, & Chen, 2024). The occurrence of severe symptoms and social functioning impairment, accompanied by a significant incidence of inadequate therapeutic collaboration, need for sustainable community-based care approaches, such as post-hospitalization home care services. This intervention is considered to have the potential to reduce caregiver burden, improve patient quality of life, and prevent relapse (Bellido-Zanin, Vázquez-Morejón, Pérez-San-Gregorio, & Martín-Rodríguez, 2017; Kang, Wu, Li, Jiang, Gao, Yu, & He, 2016; Moghadam, Seyedolshohadayi, Rezvani, Modaresi, & Saed, 2022).

Protective factors for schizophrenia with social isolation have been found, primarily encompassing psychosocial and psychological interventions, including family intervention, family psychoeducation, cognitive behavioral therapy, and metacognitive therapy (Ochoa, Espinosa, López-Carrilero, Martinez, Barrera, Birulés, & Crosas, 2024; Segura, Prohens, Gassó, Rodríguez, Garcia-Rizo, Moreno-Izco, & García-Portilla, 2023; Ventriglio, Ricci, Magnifico, Chumakov, Torales, Watson, & Bellomo, 2020). Many families are directly involved in patient care but lack the knowledge and skills to cope. Knowledge and support correlate positively with family independence in the care of hebephrenic schizophrenia patients, although perceptions and attitudes also exhibit a favourable link (Ferliana, Damayanti, Aisyah, Huda, & Ernawati, 2020; Pérez-García, Sempere-Pérez, Rodado-Martínez, López, Llor-Esteban, & Jiménez-Barbero, 2020). Pharmacological treatment is the main approach, psychosocial interventions such as Family Psychoeducational Interventions (FPIs) have been scientifically proven to reduce relapse and improve patient adherence to treatment (Gowda & Isaac, 2022). Psychoeducation originated from engagement with the families of individuals diagnosed with schizophrenia. Particularly noted for his idea of expressed emotion, developed via the observation of familial interactions (Öksüz, Karaca, Özaltın, & Ateş, 2017; Verdolini, Amoretti, Mezquida, Cuesta, Pina-Camacho, García-Rizo, & Bernardo, 2021).

The effectiveness of family-based patient interventions in healthcare needs to be carefully evaluated; hospital administration could improve these initiatives (Mayoral, Berrozpe, de la Higuera, Martinez-Jambrina, de Dios Luna, & Torres-Gonzalez, 2015; Vita, Barlati, Cavallaro, Mucci, Riva, Rocca, & Galderisi, 2024). There are many barriers to family psychoeducation in the mental health system, such as stigma, time and money problems for the family, not enough staff training, and gaps in agency infrastructure, together with insufficient resources or focus at the state mental health authority level (Karaçar & Bademli, 2022). Cultural adaptation is necessary for psychoeducational interventions to be more pertinent and positively received (Vázquez Morejón, León Rubio, & Vázquez-Morejón, 2018). Psychoeducational Family Interventions are effective not only in schizophrenia but also in bipolar I disorder care, but widespread implementation requires addressing organizational barriers like workload allocation and time constraints, as demonstrated by successful implementation in Italy (Fiorillo, Del Vecchio, Luciano, Sampogna, Sbordone, Catapano, & Maj, 2016; Sampogna, Luciano, Vecchio, Malangone, De Rosa, Giallonardo, & Fiorillo, 2018). The intervention's effectiveness was assessed by measuring enhancements in patients' social functioning and the alleviation of family burden (Ata & Doğan, 2018; Vázquez-Reyes, Angeles Perez-San-Gregorio, Martín-Rodríguez, & Vázquez-Morejón, 2022; Widiyawati, Yusuf, Devy, & Widayanti, 2020).

RESEARCH METHOD

To ensure methodological rigor, the review adhered to established guidelines for systematic reviews, including the PRISMA 2020 framework, and incorporated a structured approach to address potential biases and synthesize evidence cohesively. The review was guided by a clearly defined research question framed using the PICO (Population, Intervention, Comparison, Outcome) framework. The PICO frameworks helped narrow the scope, ensuring the review focused on interventions directly addressing the dual challenges of schizophrenia and social isolation.

To capture a wide range of relevant studies, a comprehensive search was conducted using three major databases: PubMed, SageJournals, and ScienceDirect. Sensitivity (capturing all pertinent research) and specificity (removing irrelevant ones) were carefully considered while choosing keywords: Core terms: “Schizophrenia” OR “Psychosis” combined with “Social Isolation” OR “Social

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Withdrawal" to target the population. Intervention terms "Family Psychoeducation" OR "Family Intervention" was used to identify FPE studies. Outcome terms "Social Functioning" OR "Social Cognition" was used to focus on social recovery metrics. Exclusion criteria filtered out non-English articles, qualitative studies, and research on non-schizophrenia populations.

RESEARCH RESULTS

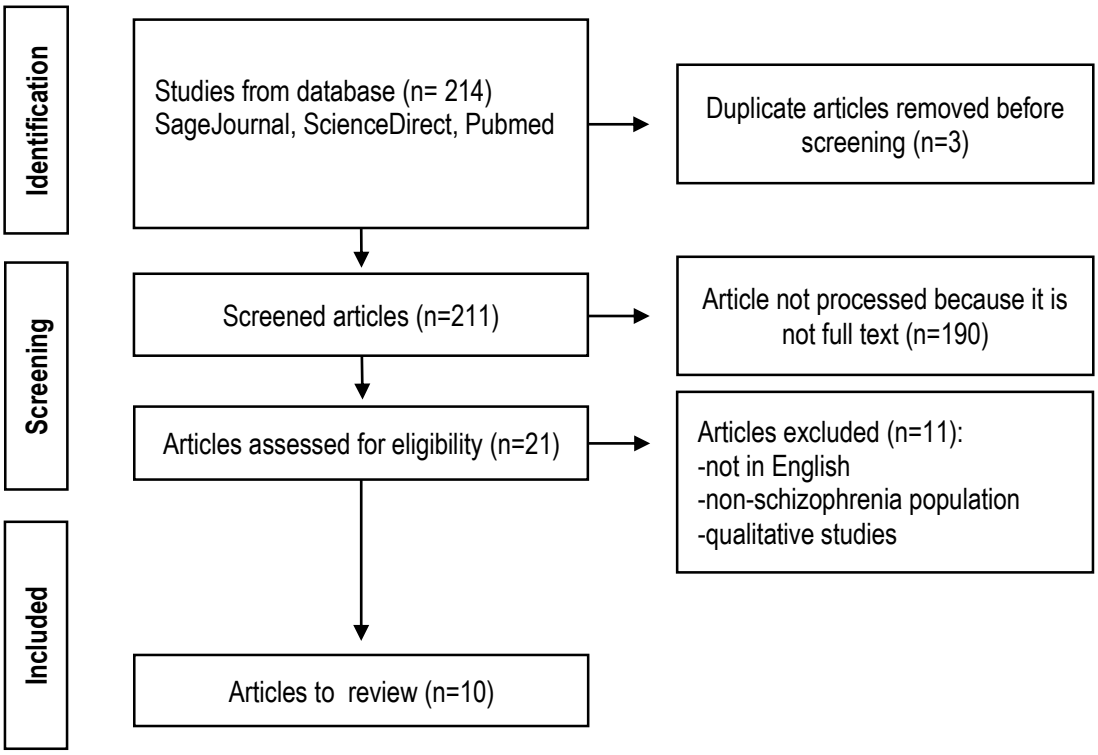


Figure 1. Prisma Flow DiagramTable

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Table Summary of the Reviewed Articles

(Author, Year) (Country)	Purpose	Method	Results
(Veltro et al., 2024) (Italy)	To evaluate the effectiveness of the Falloon Psychoeducational Family Intervention (PFI), originally developed for the management of schizophrenia, afterwards adapted for early psychosis, in terms of adherence to the treatment, low relapse rate, improvement social functioning and stress management.	Case series: observational study	13 subjects were recruited; 10 males and 3 females, all singles, with a DUP inferior to one year. At the end of the intervention, significant improvements in treatment adherence, absence of drop-outs and relapses, statistically significant improvements in clinical symptoms, social functioning and stress management were found.
(Iuso et al., 2023) (Italy)	To improve the outcomes of illness in patients affected by psychosis. It has benefits in treatment adherence and leads to a reduction in relapses, higher levels of patient insight, and lower levels of stress within the family and among caregivers.	Quasi experiment	Treatment adherence improved much more in the FFP group over time at any follow-up: +43.1% at T1, +24.0% at T2, and +41.6% at T3. Other characteristics, including psychopathology and the clinical stability of the subject, did not change over time.
(Iswanti et al., 2024) (Indonesia)	To investigate the impact of integrative empowerment intervention on enhancing the family's ability to care for and prevent relapse in patients with schizophrenia.	Quasi experiment with pre-test and post-test control group.	There was a significant change in the family's ability to care for patients with schizophrenia before and after the integrative empowerment intervention ($p<.001$), while there was no change in the control group's ability to care for patients with schizophrenia ($p>.05$). Integrative empowerment had a significant impact on increasing the family's ability to care for and prevent relapse in patients with schizophrenia ($p<.001$).
(Chien et al., 2016) (Hongkong)	To test the effects of guided problem-solving-based manual-guided self-learning programme for family caregivers of adults with recent-onset psychosis over a 6-month period of follow-up, when compared with those in usual family support service.	RCT	One hundred and eleven (96%) caregivers completed the 6-month follow-up (two post-tests); 55 of them (95%) completed ≥4 modules and attended ≥2 review sessions (i.e., 75% of the intervention). The family participants' mean age was about 38 years and over 64% of them were female and patient's parent or spouse. Multivariate analyses of variance

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(Author, Year) (Country)	Purpose	Method	Results
			indicated that the manual-guided self-learning group reported significantly greater improvements than the usual care group in family burden [F(1,110) = 6.21, p = 0.006] and caregiving experience [F(1,110) = 6.88, p = 0.0004], and patients' psychotic symptoms [F(1,110) = 6.25, p = 0.0003], functioning [F(1,110) = 7.01, p = 0.0005] and number of hospitalisations [F(1,110) = 5.71, p = 0.005] over 6-month follow-up.
(Rami et al., 2018) (Egypt)	To evaluate for outpatients suffering from schizophrenia.	RCT	Demonstrate the feasibility of implementing family therapy interventions in different cultural settings with relatively minor modifications.
(Mayoral et al., 2015) (Spanish)	To evaluate the efficacy and implementation of a single family psychoeducational intervention in 'real' conditions for people diagnosed with schizophrenia.	Multicenter RCT	A total of 71 patients finished the study (34 family intervention group and 37 control group). Patients who received family intervention reduced the risk of hospitalisation by 40% (p = .4018; 95% CI: 0.1833–0.6204). Symptomatology improved significantly at 12 months (p = .4018; 95% CI: 0.1833–0.6204), but not at 18 months (p = .4018; 95% CI: 0.1833–0.6204). Social disability was significantly reduced in the family intervention group at 12 months and 18 months.
(Li et al., 2020) (China)	To explore an efficient new therapy that combined repetitive transcranial magnetic stimulation (rTMS) and family intervention in addition to risperidone to improve schizophrenia.	RCT	There were no significant differences in sex, age, education, cognitive function, or PANSS scores between the four groups at baseline (p's > 0.05). (2) There was a significant decrease in the PANSS scores and an increase in the MCCB scores after 12 weeks of treatment in all groups (time effect p's < 0.001). (3) The improvements in positive symptoms and negative symptoms were more obvious in the combined group than in other groups (p's < 0.05). (4) The combined group showed the superior effect in cognition function after 12 weeks. (5) And, interestingly, a remarkable synergistic effect between rTMS and family intervention therapy was observed.

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(Author, Year) (Country)	Purpose	Method	Results
(Khalil et al., 2019) (Egypt)	To study the effect of a culturally adapted, structured family intervention on symptom severity, medication attitudes and knowledge, social functioning and quality of life in patients with schizophrenia.	RCT	There was a no significant difference between BFPEP and STU at baseline on all measures. There was a significant difference ($p < .05$) between pre- and post-treatment scores for BFPEP on all measures, a significant difference ($p < .05$) between pre- and post-treatment scores for STU on all measures (favouring pre-treatment scores) and a significant difference ($p < .05$) favouring BFPEP over STU on all measures post-treatment.
(Ran et al., 2015) (China)	To explore the 14-year effect of psychoeducational family intervention for patients with schizophrenia in a Chinese rural area.	Cluster RCT (CRCT)	There were no significant differences of marital status, mean scores of PANSS positive symptoms, negative symptoms, general mental health, and total scores among the psychoeducational family intervention, medication, and control groups in 2008. The psychoeducational family intervention group had a significantly higher rate of antipsychotic medication and a higher level of work ability than other two groups. The control group had a significantly higher rate of never-treated (26.0%) than psychoeducational family intervention group (6.5%).
(Öksüz et al., 2017) (Turkey)	To determine the effects of the psychoeducation received by the family members of the patients with first-episode schizophrenia on the expressed emotion (EE) and the family functioning of the family members.	Quasi experiment with control group.	EE criticism/hostility and over involvement-protecting-intervention levels of the family members have decreased at the end of the psychoeducation ($p < 0.05$). Family functioning has changed too at the end of the psychoeducation ($p < 0.05$), and assessed as more healthy.

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DISCUSSION

Family Psychoeducation (FPE) has been shown to help individuals with schizophrenia maintain community functioning, adhere to treatment, and reduce relapse risk. Evidence indicates that FPE significantly improves medication adherence—for example, adherence rates reached 78.3% in rural China (Ran, Chan, Guo, & Xiang, 2015; Zhou, Ning, Rosenheck, Sun, Zhang, Ou, & He, 2016). In Spain, the intervention reduced social disability by 40%, and although improvements in PANSS scores were reported, the findings were not entirely consistent. FPE has also been linked to fewer hospital admissions; in Spain, hospitalization rates declined by 40% among participants (Chien, Yip, Liu, & McMaster, 2016), and in Italy, no relapses or rehospitalizations were observed (Veltro, Pontarelli, Latte, Pontarelli, Nicchiniello, & Zappone, 2024). Pharmacological treatments such as repetitive transcranial magnetic stimulation (rTMS) also show enhanced effectiveness when combined with FPE (Li, Yuan, Kang, Pang, Liu, Zhu, & Song, 2020).

Cultural adaptation plays a critical role in successful implementation, especially in low-resource settings. Programs incorporating local languages, religious narratives, and clear scientific explanations of schizophrenia report higher engagement and retention (Khalil, ELNahas, Ramy, Abdel Aziz, Elkholy, & El-Ghamry, 2019). However, persistent barriers—including societal stigma, limited mental health services, and caregiver burden—continue to hinder progress (Iswanti, Nursalam, Fitryasari, Sarfika, & Saifudin, 2024).

Overall, the evidence demonstrates that FPE effectively improves social functioning, reduces isolation, and increases community reintegration for adults with schizophrenia, consistent with broader findings on culturally adapted psychotherapeutic approaches such as CBT for psychosis (Demily & Franck, 2016). Its synergistic effect with biological interventions like rTMS underscores the multifaceted nature of schizophrenia recovery (Li et al., 2020; Rami, Hussien, Rabie, Sabry, Missiry, & Ghamry, 2018). Significant reductions in relapse and hospitalization also yield considerable economic benefits by decreasing reliance on costly inpatient care (Haddaway, Page, Pritchard, & McGuinness, 2022; Iuso, Severo, Trotta, Ventriglio, Fiore, Bellomo, & Petito, 2023). By equipping families with skills to identify early warning signs and manage stressors, FPE supports community stability and aligns with goals of deinstitutionalization and community-based mental health care.

Despite its benefits, the review highlights several implementation challenges, including methodological inconsistencies, limited long-term evidence, narrow population focus, contextual barriers, and potential publication bias.

CONCLUSION

Family Psychoeducation (FPE) is a powerful tool for individuals with schizophrenia to improve social functioning and reduce isolation. It increases treatment adherence, social engagement, and community reintegration, and reduces hospitalizations due to relapses by 40%. FPE also aids in neurocognition and psychosocial resiliency, and minimizes inpatient expenditures. Future research should focus on long-term, standardized, culturally sensitive RCTs, economic evaluations, and digital delivery models for more accessible and scalable solutions.

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