

Effectiveness Of Psychoeducation On Perceived Burden And Expressed Emotions By Family Caregivers Of Adults Living With Serious Mental Illnesses (Smis): A Systematic Review.

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Abstract

Background

The distress and burden experienced by family caregivers of adults experiencing severe mental health challenges is mainly attributed to lack of information and understanding about mental health problem, appropriate and effective coping strategies while caring for their relatives.

Purpose

The aim of this systematic review is to determine the impact of psychoeducational programs on family caregivers of adults living with serious mental health problem.

Search strategy

Three databases (PsychINFO, Medline and CINAHL) were searched systematically to identify up-to-date relevant studies consistent with the subject matter. A total of 20 studies were included in the review and recurrent themes were extracted.

Key findings

The review demonstrated that psychoeducation was found to have positive impact on family caregivers by improving their level of knowledge, reduced perceived burden, and expressed emotions. It established that psychoeducation delivered to family caregivers has the potential to promote the recovery of adults living with serious mental health problem.

Conclusion

Psychoeducation has positive outcomes on family caregivers and their relative adults living with serious mental health problem and should be delivered regularly and on time for caregivers to realize and maximize its full benefits. Factors such as time constraint, long distance to travel and stigma could act as barrier to successful implementation of psychoeducational programs to family caregivers.

Keywords: *Psychoeducation, serious mental illness, Family caregivers, Coping strategies, Recovery, Functional impairment.*

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I. Introduction

Serious mental illnesses (SMIs) are the main causes of functional impairment and morbidity not only to persons experiencing SMIs but also to their family members (family caregivers) who provide support and assistance for them (WHO, 2008; Pompili *et al.*, 2014). Vermeulen *et al* (2015) have underscored the increase in

the prevalence of stress and burden experienced by family caregivers of adults living with SMIs which is mainly attributed to lack of information and understanding about the mental health problem as well as lack of adequate coping strategies while providing care for relatives living with SMIs (Nilsen *et al.*,2014; Shereda *et al.*,2019).

Psychoeducation is an educative method used in the provision of evidence-based information to individuals living with mental disorder and their families (Xia *et al.*,2011; Sin & Norman 2013). It is employed to provide Information regarding symptoms, management, recovery, effective coping skills, treatment interventions as well as advocacy (Vreeland 2012, Higgins *et al.*, 2017). The role of psychoeducational programs as identified by Nilsen *et al.* (2014) are to improve and provide knowledge and understanding about the mental health problem and available treatment. It empowers them with skills to cope with the diagnoses. Additionally, psychoeducation influences behaviour change that could promote recovery (Vreeland 2012). As a result of participating in psychoeducation, family caregivers can have positive attitude towards relatives and provide the required level of support and supervision, thereby improving recovery (Nuralita *et al.*,2019).

The models of psychoeducational program include individual and group models provided either in the community or in-patient settings (Vreeland 2012; Nolan & Petrakis 2019).

These programs vary in duration (brief and long sessions) and format (face-to-face and online). It can be delivered by health practitioners, peer-led or co-facilitated by healthcare practitioners, individuals living with SMIs and their family members using multimodal teaching methods (Vreeland 2012; Sin& Norman 2013; Higgins *et al.*2017).

Studies have found that psychoeducation programs delivered to individuals living with SMIs have proven to be effective in reducing relapse and institutionalisation (Vieta 2005; Xia *et al.*,2011; Yesufu-Udechuku *et al.*2015).

Aim

The aim of this review is to determine the impact of psychoeducational programs on family caregivers of adults living with serious mental illnesses.

Review question

What are the impacts of psychoeducational programs on family caregivers of adults living with serious mental health problem?

Method

This section provides the search strategy, selection criteria and the findings.

Search Strategy

Relevant articles were identified by conducting an electronic search on three databases: PsychINFO, Medline and CINAHL. The keywords were combined with Boolean operator 'AND/OR'. The search term used were "Psychoeducation*" AND "mentally ill" OR "mental illness" "mental disorder" OR "mental disease"; "psychiatric disorder" OR "mental distress" AND "family" OR "family member" OR "caregivers" OR "relative" AND "adult". Appendix 1 illustrates the search string used for Medline database.

The search was limited to literature published in the last 15 years (2008 -2023). This is to obtain recent information with regards to the aim of the review. It was also limited to peer-reviewed literature written in English language. A total of eight hundred and ten (810) studies across the databases were identified including duplicates.

In addition to searching the reference list of relevant articles, a grey literature online search was conducted on Cochrane Library. A review of web-based resource of an organisation involved in mental health, The European Federation of Families of People with Mental Illness (EUFAMI) was also conducted.

Selection criteria

Selection criteria included primary studies that focused on psychoeducation for family members with adult relatives living with only schizophrenia, schizophrenia spectrum or bipolar disorder. Only primary studies were included to obtain full details about the studies. Full text of studies written in English language published in peer-reviewed journals between 2008 and 2023 were also included. There were studies relevant to the review but were not written in English language. Studies not meeting these criteria were excluded. Of 810 articles identified, 600 articles were eliminated due to duplication across the databases. Title and abstract screen eliminated 185 articles due to limited or no relevance to the aim of this review, leaving 25 for full text review. Five (5) of the articles were excluded as intervention provided was for both family caregivers and their relatives living with serious mental illness (not family caregivers focused). In total, 20 articles were included in the review. These studies were appraised using Crowe Critical Appraisal Tool (CCAT). The covidence software package was used to manage the screening and selection process. Articles were initially screened on the title and abstract while relevant articles were further screened at full text.

Review Protocol

The aims of the systematic review are to assess the effectiveness of psychoeducation delivered by mental health professionals on caregiving-related outcomes of family caregivers of adults living with serious mental illnesses as well as identifying essential factors that can promote the effectiveness of family caregivers' psychoeducational programs.

Inclusion criteria (using PICOS)

P- family caregivers of adults living with serious mental health problem.

I – psychoeducation.

C – no psychoeducation received.

O – caregiving -related outcome.

S- Quantitative studies (experimental study design such as randomised controlled trials, non-randomised trial, and quasi-experimental studies).

Outcome measures

The primary outcomes are family caregivers' knowledge, perceived burden and expressed emotion. They are reported as measured by a validated scale or indicated by the authors. Secondary outcomes are family caregivers' quality of life and psychological distress as measured by a validated scale or reported by authors.

Search criteria

The search was intended to find both published and unpublished primary studies. The search strategy from the literature review was adapted and developed to meet the PICOS to form a refined search strategy. Foremost, relevant articles were identified by conducting a comprehensive electronic search on databases such as PsychINFO, Medline, EMBASE and CINAHL. This was followed by the analysis of the keywords contained in the title, abstract and the index terms used to describe the articles retrieved during the search. A second search using all the identified keywords was conducted across all databases in combination with BOOLEAN operators 'OR' and 'AND'. The search concepts included keywords such as "psychoeducation", "serious mental illness", "family caregivers", "adult with mental health problem", "knowledge", "perceived burden" and "expressed emotion". Lastly, reference lists of identified articles were searched for additional studies. In addition to Google scholar and conference proceedings, grey literature search on Cochrane Library and Open Grey were conducted. There were no restrictions applied to publication year. Only studies in English language were included in the search.

Quality assessment

All articles that met the inclusion criteria were assessed using Cochrane Risk of Bias tool.

Data Extraction

A data extraction template was designed and piloted on one study. The extracted data included details of intervention, study method, setting, population and outcome relevant to the aim of this systematic review (Appendix 1).

Data synthesis

Data was meta-analysed using RevMan 5.4.1. Relative risk and 95% confidence interval were reported for dichotomous outcomes: standard mean differences for continuous outcomes.

Findings from search

Twenty studies were identified and selected as relevant to this review. A PRISMA flow chart (Appendix 2) summaries the search strategy. The studies included were of various designs namely, Randomised controlled trial (RCT) (12), quasi-experiment design with control (3), quasi-experiment design without control (1), dose-response design (1), prospective observational study with single-cohort design (1). The studies included were conducted in Ireland (1), Egypt (1), China (4), Greece (2), Iran (2), Spain (1), India (2), Indonesia (1), Turkey (2), Brazil (1), Italy (1), Chile (1) and Japan (1). Three themes emerged from the studies following coding frequent occurring findings. The themes include impact of psychoeducation to family caregivers, impact of psychoeducation provided for family caregivers on service users experiencing SMIs as well as implementation of family caregivers' psychoeducation in practice.

Impact of providing psychoeducation to family caregivers

Three sub-themes emerged regarding impact of providing psychoeducation to family caregivers.

a) Family caregivers' improved knowledge on aetiology and management of diagnoses.

- b) Family caregivers' burden.
- c) Family caregivers' expressed emotion.

Family caregivers' improved knowledge on aetiology and management of diagnoses

Psychoeducation programs for family caregivers have shown to be effective by improving their knowledge on aetiology and management of diagnoses of family caregivers of adults living with SMIs (So *et al.* 2006; Carra *et al.* 2007; Sota *et al.* 2008; Madigan *et al.* 2012; Kolostoumpis *et al.* 2012; Shereda *et al.* 2019; and Thimmajja & Rathinasamy, 2019).

In a pre-post-test, quasi-experiment aimed at evaluating the effect of psycho-educational nursing intervention on level of knowledge and expressed emotion of caregivers of adults with first episode psychosis by Shereda *et al.* (2019) revealed 80 percent increase in participants' level of knowledge post psychoeducation intervention. In addition to improved level of knowledge on aetiology and management, family caregivers also acquired knowledge and understanding on available treatment especially those whose relatives were experiencing first episode of SMI. Nevertheless, it could be said that their findings could be interpreted with caution as validity of finding is threatened as they had no control group to compare their results with. Hence it could be difficult to determine if psychoeducation caused the increased level of knowledge in the participants.

However, their finding was congruent with a randomised controlled trial (RCT) by Thimmajja & Rathinasamy (2019) which aimed at exploring the efficacy of psychoeducation on knowledge of schizophrenia among family caregivers. The report suggest that the intervention group's knowledge mean score increased from 22.93 before intervention to 85.90 after one month of receiving psychoeducation. The control group demonstrated an increased mean score of 14.95 to 30.01. This indicated that psychoeducation contributed remarkably to the increased knowledge of the participants.

In this RCT, it could be said that selection bias was minimised as participants were randomly assigned to groups. This could have maximised the internal validity of the findings (Polit and Beck 2019). However, it could be said that findings may not be generalised as participants were recruited from a single location. However, consistent with their findings, were earlier RCT studies Madigan *et al.*, 2012; Kolostoumpis *et al.*, 2012; and Carra *et al.*, 2007).

Sota *et al.* (2008) identified that improved level of knowledge was not dependant on the duration of psychoeducation provided. This indicates that both brief and long intervention could help to improve family caregivers' level of knowledge about the diagnoses. It is therefore understandable to speculate that information provided through brief and long psychoeducational programs have the potential to improve caregivers' level of knowledge about the mental health problems and management of their symptoms.

Conclusively, Thimmajja & Rathinasamy (2019) suggested that family caregivers' improved level of knowledge empowered them to deal with burden experienced by family caregivers of adults living with SMIs.

Family caregivers' perceived burden

Flyckt *et al.* (2013) report that family caregivers' burden relates to the physical, psychological, emotional, financial, and social challenges arising from the provision care for relatives living with SMIs. Seventeen of the studies included in this review assessed the effect of psychoeducation on family caregivers' burden. In all the seventeen studies, the most frequently reported perceived burden by the family caregivers were impact on their daily activities, social life, and their health (Cheng & Chan 2005; So *et al.* 2006; Carra *et al.*, 2007; Chien & Wong 2007; Gutierrez-Maldonado & Caqueo-Urizar 2007; Sota *et al.*, 2008; Kulhara *et al.*, 2009; Koolae & Etemadi 2010). This is consistent with the World Health Organisation global burden of disease report (2008) which established that family caregivers while struggling to balance other commitments such as work with providing care for their relatives often ignore their own emotional, physical, and mental health.

Bulut *et al.* (2016) evaluated the effectiveness of psychoeducation provided for sixty family caregivers of adults diagnosed with schizophrenia. They used quasi-experimental study with control, pre-post-test design. Participants were randomly assigned to intervention and control groups. The effectiveness of the psychoeducational program delivered was established by comparing scores of Perceived Family Burden Scale (PFBS) obtained before the intervention and three months after psychoeducational program. Their findings revealed that the mean PFBS burden scores of the intervention group reduced from 45.2 at baseline to 38.6 at three months follow-up. While the mean PFBS burden scores of the control group at baseline and three months follow-up were 45.7 and 44.5 respectively. This suggests that group psychoeducational program delivered was effective in reducing family caregivers' perceived burden (Bulut *et al.*, 2016). Additionally, psychoeducation can improve caregiver's perceived burden evidenced by the observed lower perception of burden after one week and twelve months of delivering group psychoeducation to family caregivers of adults living with schizophrenia (Chien *et al.*, 2007).

The findings of Thimmajja & Rathinasamy (2019) RCT pre-post control group design study, with a sample size of three hundred and fifty family caregivers in India, also support the outcomes of Bulut *et al.* (2016).

Thimmajja & Rathinasamy (2019) evaluated the efficacy of psychoeducation program on caregivers' perceived burden. Participants were randomly assigned to intervention and control groups; one hundred and seventy-five respectively. Two psychoeducation sessions of sixty to ninety minutes were delivered by mental health nurses. The effect of the intervention was assessed at end of one month and three months using the Burden Assessment Schedule (BAS). They reported that mean burden score of family caregivers reduced from 82.37 to 49.13 after one month and 40.86 after three months. This indicated that brief psychoeducation was equally effective in the reduction of family caregivers' perceived burden.

In furtherance, the findings of Tabeleão *et al.* (2018) also observed improvements in family caregivers' burden. Using samples from seven health care centres in Brazil, Tabeleão *et al.* (2018) conducted an RCT aimed at examining the effectiveness of a psychoeducational program on caregivers of adults living with schizophrenia, mood disorder and depression. One hundred and thirty family caregivers were randomly assigned to intervention group (sixty-six) and control group (sixty-four). Six sessions of individual home visits of psychoeducational programs were delivered to the intervention group by ten psychologists. The control group received their usual individual routine care in the outpatient clinic. The study reported a significant burden reduction of 4.8 points in the intervention group while the control group had a reduction of 1.9 points. This suggests that individual psychoeducation session could be effective in the reduction of perceived burden of family caregivers.

Nonetheless, the assessors were blinded to the study, this could have minimised expectation bias (Houser 2016, Polit & Beck 2019). However, it could be said that selection bias was introduced as this study excluded participants that did not understand the interview. We can therefore speculate that the findings from this study may not be applied to family members in that criterion. This may introduce threat to the external validity of their findings (Polit & Beck 2019). Despite the limitations to above studies, their findings were supported by some other reports on the effectiveness of psychoeducational programs for family caregivers. (Cheng & Chan 2005, So *et al.* 2006, Gutierrez-Maldonado & Caqueo-Urizar 2007, Sota *et al.* 2008, Koolae & Etemadi 2010, Madigan *et al.* 2012, Sharif *et al.* 2012, Kolostoumpis *et al.* 2012, Palli *et al.* 2015, Purba & Bukit 2016).

Contrary to the suggested evidence that supported the effectiveness of psychoeducation in the reduction of perceived family caregivers' burden, Kulhara *et al.* (2009) argued that psychoeducation provided for family caregivers of adults living with SMIs does not reduce their perceived burden.

Family caregivers' expressed emotion

Expressed emotions are a range of attitudes, emotions and behaviours expressed by family caregivers towards their relatives living with mental health problem (Nirmala *et al.* 2011, Nuralita *et al.* 2019). These mostly involve heightened emotions that can be described as very detrimental to the person living with SMI as the condition may further deteriorate as well as negatively impacting both the physical and mental health of the family caregiver (Shereda *et al.*, 2019; Öksüz *et al.*, 2017; Gonzalez-Blanch *et al.*, 2010; Koolae & Etemadi 2010, Sota *et al.*, 2008; Carra *et al.*, 2007; and So *et al.*, 2006). Expressed emotions most often manifest as hostility, criticism, and over-involvement by the family caregiver. This is attributable to the inability of the family caregiver to cope effectively with the burden of caring for relatives living with SMI (Nuralita *et al.* 2019).

Öksüz *et al.* (2017) found that psychoeducational program can have positive impact on family caregivers by reducing their expressed emotion. They aimed to determine the effects of the psychoeducation delivered to family caregivers on criticism, hostility and emotional over involvement towards their relatives diagnosed with first episode of schizophrenia. The quasi-experimental study had intervention and control groups of thirty family caregivers in each group. The experimental group received nine sessions of group psychoeducation program. Expressed emotion was assessed at the beginning and at the end of the psychoeducation program using Family Assessment Device and Expressed Emotion Scale. They observed that the level of criticism, hostility and over involvement expressed by family caregivers in intervention group decreased while these parameters increased in the control group. These findings suggest that psychoeducational program can be effective and beneficial in the reduction in expressed emotions.

Öksüz *et al.* (2017) also reported on 'communication with patient' in one of the psychoeducation sessions and established that content of information provided could have contributed to increased awareness on the management of challenging behaviours associated with mental health problems thereby resulting to reduced expressed emotion. This is supported by Petrakis *et al.* (2013) that reported increased perception and knowledge of mental health problem motivated family caregivers to change their negative attitude and behaviour towards their relatives living with SMIs. Hughes & Quinn (2013) stressed that content of information provided should contain the diverse needs of adult learners.

Furthermore, Carra *et al.* (2007) conducted a RCT on the effectiveness psychoeducation in the reduction of expressed emotion by family caregivers whose relatives were experiencing SMI for the first time. One hundred and one (101) family caregivers were randomly allocated into intervention and control group using a random number table. The doctors delivering the sessions and the family caregivers in the intervention group were blinded

to the study. The effect of the psychoeducational program delivered was assessed using the Camberwell Family Interview at the end of the intervention and after twelve months. Their findings indicated reduced expressed emotion in the intervention group from the end of session up to twelve months. However, an increase in expressed emotion was noticed at two years follow-up.

This shows that psychoeducational program provided has positive impact in the reduction of family caregivers' expressed emotion, although it did not have a long-term effect. The increased expressed emotion observed in family caregivers in the two years follow-up could be due to loss of skills learned from the psychoeducational program. Chan *et al.* (2018) purported that caregivers tend to regress in acquired skills if such skills were not regularly reinforced. This suggests that psychoeducational program provided for family caregivers can facilitate the reduction of family caregivers' expressed emotion, but it should be continuous for it to have a long-lasting effect. Hence, highlighting the need for regular psychoeducation for family caregivers (Murray-Swank & Dixon 2014, Petrakis & Laxton 2017).

Furthermore, other studies (Koolaee & Etemadi 2010; Sota *et al.*, 2008) also highlight the effectiveness of psychoeducational programs for family caregivers of adults living with SMIs in reducing expressed emotion. Conversely, Shereda *et al.* (2019) in their quasi-experimental study observed some reduction in family caregivers' expressed emotion at the post-test but the reduction was not significantly different from the pre-test ($p < .001$). This suggested that psychoeducation provided had less positive impact in the reduction of family caregivers expressed emotion. Sadath *et al.* (2015) in their systematic review found a correlation between low incomes and level of expressed emotion. Most caregivers from low financial background sometimes find it difficult to afford the cost of treatment for their relatives living with SMIs. This indicated that financial burden could influence the level of emotion expressed by family caregivers (Andren & Elmstahl 2007). Moreover, in support of the findings that showed the positive impact of psychoeducation in reduction of expressed emotion by family caregivers was a qualitative study by Nilsen *et al.* (2014). They aimed to explore patients' and family members' experiences of the psychoeducational sessions they attended. Their findings indicated that positive change of attitude from family caregivers towards adult relatives living with SMIs improved their level of functioning. This is congruent with Nuralita *et al.* (2019) that reported reduced levels of expressed emotion from family caregivers could promote positive well-being of the adults living with SMIs.

Conclusively, psychoeducational programs for family caregivers of adults living with SMIs has positive impact in the reduction of expressed emotion. To achieve long-lasting effect, regular psychoeducational program may be required to maintain skills learned. In addition, factors such as financial situation of family caregivers could play a significant role on their level of expressed emotion. Lastly, psychoeducation for family caregivers could have positive impact on their relative adults living with SMIs.

Impact of psychoeducation on service users experiencing serious mental health problems.

Four studies included in this review have shown that psychoeducational program aimed and provided for family caregivers have positive impact on their relatives living with serious mental health problems (Chien & Wong 2007, Madigan *et al.* 2012, Sharif *et al.* 2012, Bulut *et al.* 2016). Chien & Wong (2007) in their RCT, provided psychoeducation for family caregivers of adults living with schizophrenia with the aim to test the effectiveness over a twelve-month period. Eighty-four family caregivers were randomly assigned to intervention and control groups. Two post-tests were carried out: one week and twelve months after intervention. Their findings revealed significant improvement in the family functioning on the Family Assessment Device after one week of intervention. At twelve months, using the Specific Level of Functioning Scale and the Brief Psychiatric Rating Scale respectively, they observed improvement in the relatives' functioning. They also reported a reduction in their rate of rehospitalisation. The positive outcomes observed in the adult relatives living with serious mental health problems were probably due to better family support because of reduction in emotion expressed by family caregivers (Wang *et al.* 2017). The results of their study were further intensified by a later RCT study (Madigan *et al.*, 2012) aimed to establish if psychoeducation will increase knowledge and reduce burden for family caregivers of adults living with bipolar disorder. They reported allocation concealment and assessors were blinded to the study. At one-year follow-up, their secondary finding showed improvement in quality of life for adults living with bipolar disorder whose family caregivers were in the intervention group.

Similarly, Bulut *et al.* (2016) after one month of follow-up and Sharif *et al.* (2012) three months follow-up in their respective studies identified improvement in the clinical condition of adults living with schizophrenia. This showed that psychoeducation provided for family caregivers resulted in better acceptances of the mental health problem (Perlick *et al.* 2010). We can thus speculate that psychoeducation provided for family caregivers has the potential to aid the recovery of their relative adults living with SMI by improving their well-being and reduce re-hospitalisation. Therefore, supporting the need to incorporate psychoeducation for family caregivers as a routine care in healthcare settings should be prioritized (Schiffman *et al.* 2015, Petrakis & Laxton 2017, Nolan & Petrakis 2019).

Implementation of family caregivers' psychoeducation in practice.

Despite the obvious positive impacts of psychoeducation for family caregivers of adults living with Smis, its implementation is quite a challenge. All the twenty studies included in this review demonstrated that psychoeducational program for family caregivers can be delivered by members of mental health multidisciplinary team using face-to-face delivery format. However, Higgins *et al.* (2017) suggest that to reap the full benefit of psychoeducation, family caregivers and adults living with SMIs should be involved as co-facilitators. Five studies stated reasons for drop out or decline in participation (Chien *et al.*,2007; Gutie´rrez-Maldonado & Caqueo-Urı´zar. 2007; Koolae & Etemadi 2010, Madigan *et al.*2012; Palli *et al.*2015). These include stigma (Madigan *et al.*2012). Sense of stigma associated with SMIs and fear that others may know about the mental health difficulties of their adult relatives was found to have discouraged family caregivers from participating in psychoeducational programs (Haskethal *et al.*2013). Having to travel a long distance to attend face-face psychoeducational program was also reported to be a hindrance for family caregivers to participate in sessions (Gutie´rrez-Maldonado & Caqueo-Urı´zar. 2007, Koolae & Etemadi 2010). In addition, time constraint and unavailability of family caregivers to attend due to clashing time of psychoeducation with other commitments such as work was identified (Chien *et al.*2007, Koolae & Etemadi 2010, Madigan *et al.*2012, Palli *et al.*2015). This indicates that stigma, lack of accessibility and flexibility could pose as barriers in the implementation of family psychoeducation in the practice setting.

II. Limitations

This review was limited to studies on caregivers of adults living with schizophrenia and bipolar. Therefore, the findings may not be generalised for other mental health problems. Only studies published in the English language in peer reviewed journals were included; possibly introducing publication bias.

III. Conclusion

Having explored the impact of psychoeducational programs on family caregivers of adults living with serious mental health problems, it is evident that psychoeducational programs have consistently shown to improve caregivers' level of knowledge about the mental health difficulties and their management. It also has the potential to reduce perceived caregivers' burden and expressed emotion, despite heterogenous findings. In furtherance, positive impact of the psychoeducation received by family caregivers has the potential to promote the recovery of their adult relatives living with serious mental health difficulties. This review identified that any member of the mental health multidisciplinary team can deliver psychoeducation to family caregivers. Most of the psychoeducational programs provided for family caregivers were delivered in the community setting. Hence, the need to provide more psychoeducational programs in the in-patient or clinical settings especially for those whose adult relatives are experiencing first episode of severe mental health problems. To achieve a long-term impact of psychoeducation, it should be delivered regularly to family caregivers of adults living with serious mental health problem. In addition, this review revealed that different measuring tools were used to evaluate the identified caregiving related outcomes.

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