

Abstract

Objectives: To explore the literature through a systematic search to assess the effectiveness of mutual support groups for family caregivers of people with schizophrenia and other psychotic disorders.

Methods: This review of the research literature was based on the procedures suggested by the National Health Service Centre for Reviews and Dissemination (2001) Report Number 4 in the UK. A combined free-text and thesaurus approach was used to search relevant research studies within electronic databases, including Medline, Embase, CINAHL, OVID full-text, PsycINFO, the Cochrane Library, the British Nursing Index, the NHS National Research register, and System for Info on Grey literature for the period 1980-2007. Reference lists of all retrieved literature were also searched to identify studies that may have been missed. Twenty-five research studies were selected for inclusion in the analysis on the basis that they were either family-led or professional-facilitated support group programmes for family caregivers of people with schizophrenia or other psychotic disorders.

Results: The review identified that most studies on this group programme used qualitative, exploratory cross-sectional surveys and quasi-experimental study designs (n= 19); six were experimental studies or randomised controlled trials. There were only a few small-scale, single-centre controlled trials with the findings supporting the significant positive effects of mutual support groups on families' and patients' psychosocial well-being. A number of non-experimental studies conducted in Western countries reported benefits of group participation up to one year, such as increased knowledge about the illness, reduced burden and distress, and enhanced coping ability and social support. However, many of these studies lacked rigorous control and did not use standardised and valid instruments as outcome measures or schedule follow-up to examine the long-term effects of support groups on families and/or patients.

Conclusions: With increasing recognition of benefits from mutual support, this review highlights the dearth of evidence for the effects and active ingredients of mutual support groups. Mutual support may have significant impacts on long-term psychosocial and nursing interventions for both patients with severe mental illness and their families in community mental health care. Further research is recommended to investigate the therapeutic components and effects of mutual support groups for family caregivers of people with schizophrenia and psychotic disorders across cultures.

Keywords: Mutual support group, family caregivers, psychotic disorders, effectiveness

Conflict of Interest

None declared.

What is already known about this topic?

- Mutual support groups that emerged from the moderating effect of social support and stress-vulnerability and coping model have been increasingly used in clients with chronic physical and mental problems and their family caregivers.
- Family-led or professional-facilitated mutual support groups often have a weak evidence basis, both in terms of their content and therapeutic effects in mentally ill clients.

What this paper adds?

- The review illustrates that the results of exploratory and descriptive research and a few controlled trials provided evidence supporting the short-term significant positive effects (up to one year) of professional-facilitated or family-led mutual support groups on a few aspects of mentally ill patients' and their families' physical and mental health conditions.
- This paper also shows that there has been an increasing amount of research and recognition on the effectiveness of mutual support group intervention over the past decade on improving family caregivers' burden, social support and mental health.
- More clinical trials with standardised and valid outcome measures and longer term follow-up should be conducted to examine the benefits of mutual support groups to families of people with severe mental disorders.

1. Introduction

With the current emphasis on community care for mentally ill patients, family intervention, particularly in a group format using a diverse range of modalities, is thought to effectively satisfy the informational needs of families (Cuijpers, 1999) and enhance their coping abilities to care for their relatives with mental illness (Chien and Wong, 2007), thus reducing patient relapses (Pharoah, Mari and Streiner, 2001). Although there have been a few psychological models of commonly used family group interventions, studies seeking to explain which model is most effective have been inconsistent. Two recent systematic reviews of family intervention in schizophrenia (Barbato and D'Avanzo, 2000; Pharoah et al., 2001) suggest that some psychological models such as psycho-educational groups (Hogarty et al., 1991) and behavioural family management (Falloon et al., 1982) reduce patient relapse and readmission, but not family distress and burden. In addition, most family studies have focused on Caucasian populations; few have included Hispanics and Asians (Telles et al., 1995).

Demands for family interventions in the community have also substantially increased as a result of global changes in the organisation of mental health services (Budd and Hughes, 1997; Pearson and Ning, 1997). All family intervention programmes offer psycho-education and psychosocial support to family members, and some include the patient, although the theoretical orientation of these interventions varies considerably. Studies using these interventions have produced inconsistent or inconclusive evidence of effects in patients, other than in delaying relapse and improving drug compliance (McFarlane et al., 1995; Pharoah et al., 2001). Surprisingly, few clinical trials of family intervention have assessed family-related outcomes (Barbato and D'Avanzo, 2000), and those that have reported inconsistent findings with regard to any significant improvement in family functioning.

Mutual support and education groups for families of people with schizophrenia have recently been subjected to a few qualitative and quasi-experimental studies, which showed evidence of their apparent benefits in maintaining the psychological and social well-being of

families (Heller et al., 1997a; Pearson and Ning, 1997). There is relatively less conclusive evidence that supports an enthusiastic claim for their benefits in improving family functioning and satisfying families' psychosocial needs (Borkman, 1999). In Western and Asian communities, only a few studies have used mutual support groups as a major component of their psycho-educational programmes (Asen, 2002; Li and Arthur, 2005).

Mutual support groups are commonly used for patients with different mental health problems, such as schizophrenia and eating disorders, in Western countries (Asen, 2002). Nurses and other professionals are involved in organising and facilitating these support groups, but there has been limited evaluation of or research into professionals' perceptions and attitudes towards their involvement and their role in these groups. Chinman et al. (2002) and Fadden (1997) suggested that health professionals have recognised the value of mutual support groups as a means to overcome the main barriers to the use of family intervention in routine practice - limitations of staff and resources for individual family therapy. The results of Chien et al.'s (2005) controlled trial in Hong Kong indicate that mental health nurses can be involved as organisers and facilitators in mutual support groups after only three full days of training and a short period of supervision in practice. The nurses in their study experienced limited demand from the group participants for evening or weekend appointments, whereas most other approaches to family intervention frequently involve a heavy demand for such work (Brooker, 2001). Nevertheless, it is important and would be useful to have a better understanding of how nurses and other professionals were involved in organising and implementing mutual support groups in previous research.

In treating families caring for a relative with schizophrenia or other severe mental illness, there is also a need to review the use of mutual support group intervention as a means of family intervention (as characterised by an emphasis on mutual respect and positive actions for group

members rather than talking) and its effects on the health outcomes of patients and their family caregivers.

2. The Conceptual Basis of Mutual Support Groups

The importance of mutual support to families of people with severe mental illness has emerged from the stress-vulnerability and coping model (Lazarus and Folkman, 1984), which assumes that family adaptation and ability to cope with the immediate stress of hospitalisation and ultimately with the ongoing stress of caring for a patient with mental illness, is determined by whether or not the illness and hospitalisation are perceived as a threat to well-being or their caregiving to the ill relative is considered to be a very difficult task to be mastered. The model emphasises the moderating effect of social support for family carers in reducing social isolation due to constraints from caregiving and guilty feelings due to having a relative with schizophrenia (Turnbull et al., 1994), and enhancing emotional support and practical assistance in caregiving (Wituk et al., 2000). It is not known whether these therapeutic components can be applied to a family mutual support group for mentally ill people.

Three commonly cited theoretical frameworks provide insightful and partial explanations of how support groups work: the social relationships and empowerment model (Kurtz and Powell, 1987), social comparison theory, and principles of social learning. These frameworks may inform the essence of the design and implementation of a mutual support group for family caregivers of people with mental illness.

As suggested in the social relationship and empowerment model, mutual support groups can be an important asset in developing such new relationships in an accepting social environment, and especially important if the families have been isolated by their problems related to caring for mentally ill patients (Borkman, 1999; Maton and Salem, 1995). Zimmerman (1990) and Perkins and Zimmerman (1995) have applied this idea in an organisational case study of GROW, a self-help community mental health movement for

mentally ill populations in the United States (U.S.) and Australia. The support group participants obtained social empowerment, including the provision of a peer-based support system, opportunities of taking on meaningful roles within the group, and inculcation of a belief system that inspires members to strive for better mental health (Wituk et al., 2000).

Social comparison theory postulates that social behaviour in a group can be predicted largely on the basis of the assumption that individuals seek to maintain a sense of normalcy and accuracy about their world (Festinger, 1954; Kessler, Mickelson and Zhao, 1997). In times of uncertainty and high levels of anxiety, affiliating behaviour of supportive group participants will increase as people seek others' opinions about how they should be thinking (Davidson, Pennebaker and Dickerson, 2000). Patients who are mentally ill and undergo long-term psychiatric treatment are often highly motivated to talk to others facing similar challenges; this motivated socialisation can also apply to their families who carry the stigma of having a 'mad' or 'insane' relative.

As in some other group interventions, mutual support group members can learn new adaptive behaviours from other peer members with three major elements of social learning: clear instructions, adequate reinforcement, and the effect of good models (Bandura, 1977). A support group usually sets forth carefully considered suggestions, an action plan, or mutually agreed instructions to help the individual eliminate or live more comfortably with their life problems. Sharing of lived experience and within-group practice in caregiving can also encourage acceptance of their past, discourage denial of their present situation, and encourage coping with the existing family problems. The effort of behavioural change is usually reinforcing as the group help group members admit their problems in caregiving and approve the extinction of undesirable habits (Mankowski, Humphreys and Moos, 2001).

According to these theoretical perspectives, mutual support groups are complex entities that differ in important ways from professionally delivered help to the group participants. As

suggested by Penney (1997), familiarity with mutual support groups is a crucial skill that professionals in a managed care system need to provide the most flexible and low-cost service for their clients. Therefore, with no previous literature review on mutual support groups identified, this literature review will be important and useful in understanding the evidence of the efficacy of this group intervention for family caregivers of people with psychotic disorders in the past two decades.

3. Literature on the Effects of Mutual Support Groups for Families of People with Psychotic Disorders

A number of literature reviews which examined the effects of family interventions in people with severe mental illness have either focused primarily on a few approaches of intervention frequently used and empirically tested in mental health research, such as psycho-education programmes (Dixon, Adams and Luckstead, 2000), or examined only randomised controlled trials (Pharoah et al., 2001). There is a notable omission of alternative approaches to family intervention such as mutual support groups, given the increasing emphasis of self-help programmes and family-based interventions in mental health services in the U.S., United Kingdom (U.K.), and other developed Western countries. The aim of this literature review was to establish what is known about the effectiveness of mutual support groups for family caregivers of people suffering from severe mental illness and thus address an important question of family care: “Are mutual support groups effective in promoting health and other benefits for families of people with psychotic disorders?”

3.1. Literature search strategy

This review of the research literature was based on the procedures suggested by the National Health Service Centre for Reviews and Dissemination (2001) Report Number 4 in the U.K. Databases searched were Medline, Embase, CINAHL, OVID full text, PsycINFO, the

Cochrane Library, the British Nursing Index, the NHS National Research register, and System for Info on Grey literature. The British Journal of Psychiatry, the Schizophrenia Bulletin, Schizophrenia Research, the American Journal of Psychiatry, and other psychiatry and psychology journals available at the university libraries (i.e., both English and Chinese languages) were hand-searched and reference lists of all retrieved literature were also searched to identify studies that may have been missed. Leading researchers of current studies, as identified on the National Research Register, were contacted to ascertain if a research report or paper relating to this intervention was due for publication during this review.

A combined free-text and thesaurus approach was adopted to search electronic databases. “Population” search terms included serious mental disorder, severe mental illness, psychos*, and schizophreni*. “Intervention” search terms included peer support, mutual support, social support, self help, group therap*, family therap*, family work, and family intervention. A sample search strategy is provided in Table 1. The search strategy was restricted to English-language research articles published from 1988 to 2007, except for those imposed by the databases themselves.

Because it was expected that only a small number of research studies would be identified, only two inclusion criteria were used to guide the search strategy: (a) the intervention used should be a family-led or professional-facilitated support group programme for families of a relative with severe mental illness; and (b) both quantitative and qualitative research were selected. Systematic review and meta-analysis of this topic were also searched, but no such published article was identified. A total of 637 articles were retrieved from the electronic databases, of which one-fifth (n=131) were found to be relevant and appropriate for further review. Hand searching, tracing unpublished or in-press research reports, and screening reference lists increased the total number of articles retrieved for critical review to 150. After an examination for relevance of these retrieved articles on mutual support, 125 were excluded

mainly because they were therapist-led single or multiple family groups (n=98) with mainly didactic education or counselling and/or focused on psycho-education (n=27), instead of mutual sharing and support among family caregivers. Finally, a total of 25 studies were reviewed for this paper, consisting of six studies using an experimental or randomised controlled trial design; five using a quasi-experimental design (non-equivalent comparison groups); one using a longitudinal non-equivalent group design (two time points at 1-year interval); four using a cross-sectional comparative groups survey design (participants vs. non-participants); two using a single cohort pre-test and post-test design; three using a cross-sectional descriptive survey design; and four using a qualitative design (on perceived benefits and limitations of group participation).

3.2. Methodological quality of the studies reviewed

These 25 studies are summarised in Table 2. Most of them focus on families of patients with various types of chronic and severe mental illnesses in community mental health care. The majority of the family carers were female (mean 74.6%, median 76%, range 52% to 96%), middle aged (mean 49 to 61 years), parents or spouses (>70%), and Caucasian (>67%; a few studies did not report this), with elementary or high school education (63% in 13 studies). Ten studies indicated that the families were from the middle social class (about 36% of the total number of subjects in 25 studies); only one study reported that the families had a low household income, and two reported that 25% and 46% of the caregivers were employed.

More than half of the patients were male (average 67.8%, median 67%, range 40% to 73%) and on average had been ill for more than 11 years (11.8 years, range a few months to 35 years). The psychiatric diagnoses were mainly schizophrenia (range 42% to 100%), schizoaffective disorder, and bipolar affective disorder (range 15% to 26%); however, three studies did not report the patients' psychiatric diagnosis. Their mean age was 32 years (age range 16 to 88 years). Eight studies reported the patients' hospitalisations, ranging from 2.5 to

6 times, or zero to 31 days in the previous six months. Only four studies reported the education level and working status of the patients (mainly primary school education and unemployed).

Most of the studies used one type of data collection method, namely, a set of questionnaires or qualitative interviews; and only three studies used two methods, namely, a set of questionnaires and qualitative analysis of the group process (McCann, 1993; Winefield and Harvey, 1995), or semi-structured interviews and audio-taped recordings of group sessions (Chien, Norman and Thompson, 2006b). Approximately three-quarters (n = 19, 76%) of the studies reviewed measured a variety of families' psychosocial conditions using standardised measures such as family burden, social support, levels of stress and coping ability, community service utilisation, and knowledge of mental illness. Five measured family outcomes using self-designed or non-standardised research instruments such as parents' preferences for help-seeking and group arrangement (Medvene et al., 1995), perceived group benefits, and perceptions of information, coping, and support (Turnbull et al., 1994); and only eight measured specific patient outcomes such as relapse, psychiatric symptoms, and functioning.

Major methodological limitations of most of the studies reviewed include non-probability samples, mainly non-experimental or cross-sectional descriptive study designs, a great variety of standardised or self-designed family-related measures, and very brief descriptions of development, structure, and content of the intervention used. Only two (Chien et al., 2005; Chien et al., 2006a) included reference to a power calculation, and whether the included studies are sufficiently powered is open to question. Approximately half were conducted in the U.S. (12 studies) and only a few in the U.K. (four studies), other European countries (two studies), and Australia (two studies). Otherwise, five studies were conducted in Asia (one in Israel, one in Taiwan, and three in Hong Kong).

The withdrawal of even one participant from a study examining the effectiveness of mutual support groups can affect outcomes, due to the disruption of the group dynamic. About

half of the studies reviewed did not report the attrition rate, while reported attrition rates varied (range 11% - 40%). Only a few reasons for departure from the support groups were reported (Chien et al., 2006a, Heller et al., 1997b), including inconvenience or not having enough time to attend, inadequate leadership, lack of comfort with other group members, and not having another person to take care of the patient.

It is noteworthy that the structure and content of the mutual support groups reported in the studies reviewed varied a great deal. For example, the period of intervention varied from four 2-hour weekly sessions at a psychiatric unit to continuous, 1 to 2-hour weekly or monthly sessions affiliated to the Alliance of the Mentally Ill in the U.S.; and although a few common topics, including knowledge of the illness and its treatment, principles of managing patients' problem behaviour, and information about community resources were identified, major components and the format of the group sessions within the support group programmes were not clearly described or structured. This limits the potential for generalisation and replication of the intervention in future research and practice. It is also important to recognise that in more than half of the studies reviewed, the mutual support groups only included family members or main carers, and patients were excluded from attending the group meetings. There was no explanation of the rationale for the exclusion of patients.

In addition, only six studies used a rigorous experimental or randomised controlled trial design. Of these six studies, four (Solomon et al., 1997, in the U.S.; Chien et al., 2005 and Chien et al., 2006a, in Hong Kong; Szmukler et al., 2003, in the U.K.) can be considered as being of high quality due to their rigorous research design and comprehensive and detailed reporting of the above mentioned important information (e.g., structure and content of the group programme, attrition rate, and outcome measures used). These studies can provide stronger evidence of the effects of mutual support groups on families of mentally ill people and clear implications for future research and practice.

3.3. Key findings on the effects and active ingredients of mutual support groups

3.3.1. Six experimental studies

Six studies used an experimental design (Albramowitz and Coursey, 1989 and Solomon et al., 1997, in the U.S.; Chien et al., 2005 and Chien et al., 2006a, in Hong Kong; Montero et al., 2001, in Spain; Szmukler et al., 2003, in the U.K.) and these are summarised in Table 2. Three of these followed up the sample for six months (Chien et al., 2005; Solomon et al., 1997; Szmukler et al., 2003) and one for 18 months (Chien et al., 2006a). The outcome measures used in these studies varied, but most of them were family-related outcome measures, particularly family burden, self-efficacy, knowledge about the illness and its treatment, stress and coping ability, and social support measures. Only Montero et al. (2001), Chien et al. (2005), and Chien et al. (2006a) used a few patient outcome measures, including mental state, symptom severity, level of functioning, and medication compliance assessment.

Albramowitz and Coursey (1989) reported that the patients in the support group in their study showed a significantly greater improvement in personal distress and management of family life, reduction of anxiety, and increase of community resources utilisation when compared to those in routine community care. Solomon et al. (1997) compared the effects of a family support group with a brief individual family consultation programme and routine care, and indicated that there was only significant improvement in self-efficacy regarding knowledge of mental illness and its treatment in the mutual support group and individual consultation programme immediately after intervention, when compared with the standard care. There were no significant differences in the other family-related outcomes between groups or over a 6-month follow-up period. In the studies by Montero et al. (2001) and Szmukler et al. (2003), there were no significant differences in any measured patient and family-related outcomes between groups. Although most of the six studies reported non-significant differences in treatment effects between the mutual support group and other family treatment models over a

long follow-up period (i.e., one year or above), all of them demonstrated that mutual support groups for families of patients with schizophrenia and other severe mental illnesses can induce significant positive changes in most of the outcome measures at immediately and up to six months after intervention. For instance, two controlled trials in Hong Kong (Chien et al., 2005; Chien et al., 2006a) reported that Chinese family carers and patients in the mutual support groups indicated statistically significant improvements in families' and patients' psychosocial functioning at one week, six months, and/or 18 months after completion of the interventions when compared with their counterparts in the psycho-education and standard outpatient care groups. However, most of these six studies suggested that difficulties in engaging family carers in group participation and reducing their attrition in the group process imposed limitations on the findings of the mutual support group studies (Szmukler et al., 2003).

3.3.2. Quasi-experimental studies using a non-equivalent comparison group

The five quasi-experimental studies (Kane, DiMartino and Jimenez, 1990; McCreadie et al., 1991; Winefield and Harvey, 1995; Pickett-Schenk and Heller, 1998; Chou et al., 2002) were conducted in different countries (i.e., the U.S., U.K., Australia, and Taiwan) and compared the effects between mutual support groups and routine psychiatric care or another type of multiple family group intervention (i.e., psycho-education and professional-led education) for family members of people with schizophrenia or other severe mental illnesses. The outcome variables varied a great deal, focusing mainly on families' psychosocial conditions, such as social support, depression, and burden.

McCreadie et al. (1991) conducted the only one of these five studies, which measured patient outcomes. The study compared the effect between an education and support group (n = 31) and routine psychiatric care (n = 32) for family members of patients with schizophrenia, on patients' relapse rate in terms of number of re-hospitalisations and changes in dosage of antipsychotic medication over 18 months of follow-up. Results indicated that the re-

hospitalisation rate and medication dosage in the mutual support group were only slightly reduced after intervention and over the follow-up period, and there were no significant differences between the two groups.

Pickett-Schenk and Heller (1998) compared the effects between a professional-led and a client-led family support group for 131 families of people with mental illness in Chicago and Southern Illinois. Although there were no significant differences in coping ability and group benefit ratings between the groups, the two groups indicated that the intervention provided the participants with necessary information about the mental illness and its treatment, and improved their relationships with the patients. The researchers recommended that a joint collaboration between mental health professionals and peer family as co-leaders who can share both experience and expertise in caregiving might work best for a family support group.

A few significantly positive family-related outcomes of mutual support groups in three of the five studies reviewed included an increase in knowledge about the illness after intervention (Kane et al., 1990; Chou et al., 2002), family and peer support and positive attitudes toward the patient over a 2-month follow-up (Winefield and Harvey, 1995), and a reduction of depression and burden over a 1-month follow-up (Chou et al., 2002).

Two studies (Winefield and Harvey, 1995; Chou et al., 2002) collected qualitative data of families' feedback on mutual support group participation and its benefits using one open-ended question. Findings summarised from the written feedback indicated that most of the participants expressed satisfaction with the group experience; the perceived benefits from their group participation mainly included increased confidence from sharing with others their concerns, emotions and difficulties in caregiving, learning some effective strategies and skills to cope with caring situations, and receiving useful information about mental illness and its management.

3.3.3. Non-experimental, comparative studies – Single cohort, longitudinal non-equivalent groups, or cross-sectional, participants versus non-participants

Single cohort or non-equivalent groups were used in seven studies reviewed: Gidron, Guterman and Hartman (1990), Mannion et al. (1996), Medvene et al. (1995), and Cook, Heller and Pickett-Schenk (1999) used participants vs. non-participants; Heller, Roccoforte and Cook (1997a) used longitudinal non-equivalent groups; and Sheridan and Moore (1991) and Turnbull et al. (1994) used a single cohort. Although the research design might induce a systematic sampling bias or limit the power of their generalisation to future mutual support group studies, the findings provided more information about the perceived benefits of group participation to family caregivers of people with severe mental illness. They also provided insight into the potential therapeutic components of a mutual support group for family caregivers. Heller et al.'s (1997a) study in the US, with a longitudinal, non-equivalent groups design, indicated that support group participants were relatively more likely to have the patient living at home and experienced greater demands of caregiving. However, the group participants indicated less service utilisation than the non-participants. Heller et al. found that the group participants valued several aspects of group participation, including listening to others who shared similar problems with adequate emotional support, gaining adequate systematic information about the illness, and having opportunities to share caregiving experiences and coping strategies.

Similar perceived benefits of support group participation were reported using a self-designed questionnaire and group interviews in one cohort of 29 parents of 17 young people with schizophrenia in Ireland (Sheridan and Moore, 1991) and another cohort of 55 family members at three adult psychiatric units in the U.S. (Turnbull et al., 1994). Sheridan and Moore also indicated that the families of patients with more chronic illnesses had more concerns about the patient's prognosis, future life, and family issues in relation to caregiving. Turnbull et al. (1994) identified from the qualitative data of group interviews that the group

participants benefited from an increased supportive network and greater involvement in the treatment process.

The results of the four cross-sectional comparative studies reviewed (support group participants versus non-participants) indicated that the mutual support group participants reported lower levels of burden and more active and adaptive coping strategies for caregiving than the non-participants. Three of them conducted in the U.S. showed that family carers' burden was associated negatively with their adaptive coping ability, education level, and group attendance, and with patient functioning; on the other hand, it was associated positively with their service utilisation, depression, and unmet needs, and with the duration of patients' re-hospitalisations.

In contrast with the other three cross-sectional studies, the support group participants in Gidron et al.'s (1990) study expressed higher levels of stress due to greater concerns about difficulties in caregiving and relationships with the patient, and more guilty feelings concerning the patient's illness and care provision, when compared to non-participants.

3.3.4. Cross-sectional questionnaire surveys

A total of 757 families who participated in mutual support groups in different cities of the U.S. were surveyed by mail in the three cross-sectional descriptive studies reviewed (Heller et al., 1997b; Citron, Solomon and Draine, 1999; Pickett-Schenk, Cook and Laris, 2000), using a set of family-related outcome measures. The common group benefits identified by the family members in all of these studies were increased knowledge of the illness, its treatment and available services, and improvement of social support and coping with caregiving. Pickett-Schenk et al. (2000) suggested that such an increase of knowledge might also strengthen family members' coping with patient care. The results of Citron et al.'s (1999) study indicated that the families felt either personally more empowered or that they had a greater affiliation; and the longer the families participated in the support group, the more likely they were to experience

benefits from the group participation. In addition, the families who showed greater burden and stress were those who were parents (vs. other relatives), had a greater involvement in caregiving, and perceived more disturbing behaviour from the patient.

Heller et al. (1997b) emphasised the positive associations between perceived social support, knowledge of illness and its treatment, and relationship with the patient and other family members. Therefore, mutual support group participation encourages more social support within and outside the group, including the exchange of knowledge about the illness (informational support), assistance with and practice of effective strategies in caregiving (instrumental support), and sharing of experiences and feelings concerning patient care (emotional support) among family carers in the group, which may improve their relationships with the patient and other family members.

3.3.5. Qualitative exploratory studies

As yet, little is known about the various factors that are beneficial to the participants of mutual support groups for family carers of patients with severe mental illness. The four qualitative exploratory studies reviewed attempted to increase the understanding of the factors perceived as helpful by family carers in support group participation. Two of them were conducted in European countries, one in Hong Kong, and one in Australia; different methods of data collection were used. McCann (1993) evaluated the group progress and benefits for 21 relatives of inpatients with mental illness in a psychiatric hospital in the U.K., using the minutes of 12 monthly sessions of a support group. Chien et al. (2006b) interviewed (once or twice) a convenience sample of 30 family carers and 10 schizophrenic outpatients who had participated in a 12-session mutual support group in one of two psychiatric outpatient clinics in Hong Kong, and tape-recorded all 12 support group sessions for content analysis. Winefield, Barlow and Harvey (1998) tape-recorded 36 participants' responses during meetings of support groups for family carers of people with schizophrenia in Australia, whereas Lemmens et al.

(2003) in Belgium collected data of perceived therapeutic factors and positive experiences in a support group from 12 family carers of patients with different types of severe mental illnesses, group facilitators and group observers using a self-reported, open-ended questionnaire. From these data of formative evaluation of family support groups, a few common perceived benefits of group participation were identified, including information about the illness, its treatment, available services, and the effects of medication; respect and support from group members and professionals; and improved coping with caregiving situations.

McCann (1993) indicated that family carers emphasised their confidence in conducting the group themselves; and from group participation, they gained more hope of patient recovery and greater involvement in patient care. Winefield et al. (1998) indicated that frequent and consistent support group participation in the long term would increase family carers' sense of control in caregiving and reduce their burden of care.

Lemmens et al. (2003) found that the perceptions of important aspects of a support group might differ between family carers as participants and health professionals as facilitators or observers. The family carers indicated that the process aspects of a support group, such as experiencing communality of caring situations with other group members and gaining insight from others' experiences and coping methods for difficult situations concerning patient care, are very important and helpful to them, whereas the professionals emphasised the group structure and climate, such as enhancing group attendance, involvement and adequate support from the group, and provision of specific interventions to meet individual needs.

4. Discussion

From the 25 studies from 1985 to 2007 described in this review on mutual support groups for family members of people with schizophrenia and other psychotic disorders, there is consistent evidence of the immediate or short-term positive effects of mutual support groups on the physical and psychosocial health conditions of patients and their families (i.e, up to one

year). Most of the 19 quasi-experimental, non-experimental or qualitative studies on mutual support groups conducted in Western countries demonstrated a variety of benefits of group participation reported by the group participants, such as increased knowledge about the illness and its treatment, reduced burden and distress, and enhanced coping ability and social support. However, many of these studies lacked rigorous control and did not use standardised and valid instruments as outcome measures. Many also did not schedule follow-up investigation of the long-term effects of support groups to these families. In addition, only five studies were conducted in Asia, even though the findings of these studies reviewed indicated short- or long-term positive effects of mutual support groups for families of people with severe mental illness. Only six studies (24%) in which the support groups were facilitated by nurses reflect a need for nurses to be more involved in organising the support groups and directing families to these groups. In addition, the four qualitative studies reviewed also indicates the benefits (e.g., more knowledge about the illness, its treatment and services available and respect and support from group members) and a few therapeutic components (e.g., experiencing communality with other group members and of the support groups and gaining insight and coping methods concerning patient care) as perceived by the group participants.

Mutual support groups are informal networks of individuals who share a common experience or issue. What emerges from the studies reviewed in this paper is that they can be effective in building participants' personal skills, empowerment, and social support. Different self-help programmes and initiatives which are widely used across Canada, the U.S. and the U.K. for a wide range of sectors of the population, such as those with grief and bereavement, chronic physical diseases, and substance abuse (Carpenter, 1997; Lorig et al., 2000; Mankowski et al., 2001), have attracted a great deal of research attention. However, from the results of this literature review, few research studies hitherto have investigated the helping process and effects of mutual support groups for family members in caring for a relative with

severe mental illness. Family mutual support studies for schizophrenia and other severe mental illnesses in Western countries are replete with cross-sectional surveys, prospective cohort studies, and quasi-experimental approaches with non-equivalent groups, emphasising the apparent benefits of group participation in maintaining the psychological and social well-being of family carers (Chien et al., 2005). There exists a solid foundation of support group research in both quantitative and qualitative approaches describing some types of problems within these families that are typically addressed, such as improved access to information and community resources, and perceptions of greater social support (Winefield et al., 1998). There are more consistent research findings supporting that mutual support groups are useful to improve short-term family health needs and patients' mental conditions. However, relatively less conclusive evidence supports the enthusiastic claims of their benefits in improving family functioning and patients' mental conditions, and in satisfying families' psychosocial needs over a long follow-up period (Szmukler et al., 2003). This may explain why the recent reviews of clinical trials of family intervention for schizophrenia (Pharoah et al., 2001) do not include any study using a mutual support group.

Only two of the six experimental studies or clinical trials reviewed (Chien et al., 2005; Chien et al., 2006a) showed that mutual support groups were more effective in producing various long-term health or other benefits for family members, compared with other treatment models. Nevertheless, all of these studies demonstrated that mutual support groups could produce consistent short-term positive impacts on the family caregivers, such as knowledge about the illness and family functioning. Significant longer-term benefits (i.e., at least one year following intervention) have not been demonstrated, possibly because of methodological limitations on study design and organisation, facilitation, and progress monitoring of the intervention. For example, Szmukler et al. (2003) pointed to the difficulties in getting families to engage in the support group, with the result that the support group participants in their study

reported a low rate of group attendance (38% attended less than half of the group meetings). In addition, the duration of the support groups varied, ranging from 1.5 months to more than one year; and the content and format of the intervention, peer leadership, group facilitation by professionals, and interactions and mutual help between participants within and outside group meetings were not clearly defined. As suggested by Biegel, Elizabeth and Kennedy's (2000) reviews of family studies on severely mentally ill people, the variations and ambiguities identified in the design of the support group programmes in most of the 25 studies reviewed might also have affected findings on the effectiveness of a mutual support group in promoting family health.

The four qualitative studies reviewed attempted to explore the perceived benefits of family members who participated in a mutual support group and their feedback on the strengths and limitations of the group. In one study reviewed, Lemmens et al. (2003) acknowledged that there has been little research on the process of change in multiple family group intervention for schizophrenia and other mental illnesses. The described curative factors and mechanisms of change in the literature consist mainly of impressionistic accounts by therapists of what they believed to be the most important factors according to their clinical experience, such as generating new perspectives on illness and family roles (Stein and Wemmerus, 2001), experiencing hope and positive growth (Bae and Kung, 2000), and identification with the experience of their counterparts in other families (Bishop et al., 2002). In fact, the notion of mutual support groups and other approaches to family intervention is multi-faceted and complex (Pharoah et al., 2001). Brooker (2001) suggested that the hesitation of clinicians to use family intervention might be attributed to researchers' inadequate knowledge of the key therapeutic components within family intervention. It is noteworthy that little is known about the therapeutic components of mutual support groups, as well as other approaches to family intervention, which are perceived as beneficial to the participants themselves.

Only four of the 25 studies reviewed were conducted in a sample of Asian populations (Chien et al., 2005 and Chien et al., 2006a, 2006b, in Hong Kong; Chou et al., 2002, in Taiwan). While therapist-led psycho-education programmes are often the commonest approach to family intervention used, limited studies are reported using mutual support groups as an approach to family intervention in psychiatric patients among Caucasian populations (Xiong et al., 1994; Chou et al., 2002). Traditional single or multiple family therapies may not be accepted readily by Asian families because of their reluctance to reveal private thoughts and feelings in the presence of non-family members or close friends. Most Chinese and Asian people believe that excessive emotion such as anger endangers health and should be controlled (Meredith et al., 1994), and open expression or discussion of feelings may not be encouraged. Thus, it may be difficult to build rapport between the therapist and an Asian family in traditional family therapy. In addition, communication between family members and close relatives is important in Asian culture but takes a different form from that of Western cultures. Instead of expressing affection to each other through words and touch, Asian people tend to show their mutual concern and support by seeking to meet each other's actual needs (Hsu, 1995). Thus, they tend to value caregiving and therapies that emphasize practical assistance and problem solving rather than psychological reassurance and opportunities for expression and ventilation of feelings.

Telles et al. (1995) studied the coping behaviour with schizophrenia in a group of low-income Spanish-speaking immigrant families in the U.S. and concluded that if family intervention is to be effective, it must be culturally sensitive, as different cultures may have very different expectations and demands of family support and education. As suggested by Chien and Chan (2004), mutual support groups reported in this review might be an effective intervention for Asian families because they offer practical advice and help and provide appropriate responses to members' unmet health needs. Therefore, there is a need for formal

evaluation of short- and long-term effects of mutual support groups, which originated in the West, on families' and patients' health conditions in Asian populations.

Most of the studies reviewed focused on people with chronic mental illness in community care settings (an average of more than 15 years of illness, ranging from a few months to 35 years). The mutual support groups were often facilitated by social workers, psychiatrists, or psychologists; and recently, those support groups in a few studies (e.g., Chien et al., 2005, in Hong Kong and Chou et al., 2002, in Taiwan) were conducted by psychiatric nurses.

As indicated in recent studies (Chien and Chan, 2004; Chien et al., 2006a; Chien and Wong, 2007; Chou et al., 2002), mutual support or psycho-education groups for family caregivers of mentally ill patients can be led or facilitated by trained psychiatric nurses who have expertise in mental health care and group work. If mutual support groups are organised and facilitated by the practising nurses, who are easily accessible and with whom group members are familiar, participants will more readily join the groups (Chien and Wong, 2007). In addition, the community psychiatric nurses are often the case managers of mentally ill patients and their families in community care, so they may be the most appropriate professionals to organise the support groups and refer families and encourage them to attend. They are also experienced in facilitating and monitoring therapeutic groups in mental health care. Through the nurses' involvement and facilitation in the mutual support groups, this innovative intervention can be more easily integrated into routine clinical practice and community rehabilitation services, thus enhancing the family-centred care in mental illness.

Due to the methodological limitations of the studies identified and discussed in this review, such as non-probability samples, cross-sectional design, inadequate or only short-term follow-up, and failure to provide specific protocols and content of the intervention used, the long-term effects of mutual support groups on either the families' health condition or patients'

recovery remain inconsistent and inconclusive. Limited description of the content and process of mutual support groups in most of the study reports also reduces our understanding of the intervention used and may limit replication of evaluation of the intervention in other samples.

A few limitations of this literature review need to be considered. First, this paper only reviewed and discussed the published studies on the effectiveness of mutual support groups for family caregivers of clients with schizophrenia and other psychotic disorders. Unpublished research or evaluation reports, research dissertations, and ‘in press’ articles by health professionals and graduate students were not included. This might limit our complete and accurate understanding of the topic, thus reducing the validity of the findings. Second, the studies reviewed varied in terms of design quality and reporting of results. It was difficult and inappropriate to perform a systematic review or meta-analysis of these studies, which may produce stronger and more conclusive evidence on the effects of mutual support groups on family caregivers. Third, the study samples in this review only included the family caregivers of people with psychotic disorders. The results of these studies may not be generalised to the mutual support groups for other family caregivers across the spectrum of mental health problems. Lastly, this review only addressed the broad question of whether mutual support groups are “effective” for families of people suffering from psychotic disorders. More fine-grained crucial questions such as who benefits (or who does not) and how those benefits or positive changes come about among the family caregivers and/or their mentally ill relatives, also need to be answered. In addition, another review of the qualitative exploratory and cross-sectional survey studies identified in this paper and other relevant literature through another search in more databases is also needed to understand the potential active ingredients and/or the process of mutual support groups from the participants’ perspective, in terms of the theoretical frameworks discussed earlier in this review.

4.1. Implications for research and practice

The literature review highlights the need for more empirical evidence to be sought by evaluative research on the effectiveness of a mutual support group for family caregivers of people with severe mental illnesses, and to investigate its effects over time (e.g., at least two years of follow-up) on the health status of both families and patients. Future research should address a few important issues indicated in this review that most other studies neglected, as follows:

- a. Research should pay more attention than previous studies to treatment integrity, which is recognised to enhance the effect of an intervention and increase the power of the study and validity of the results. Randomised controlled trials can be used, with a treatment protocol to guide the intervention, to evaluate the effectiveness of a mutual support group compared to routine psychiatric care and/or other approaches to intervention.
- b. Studies should demonstrate a comprehensive follow-up of data from families and patients in order to understand the reasonably substantive effect of mutual support group intervention. In addition, future research could examine a variety of psychosocial outcomes of caregivers and patients using standardised and valid measures.
- c. Regarding its feasibility in practice, it is also important to test whether psychiatric nurses or other health professionals who have received only a brief training on facilitation of a mutual support group can produce significantly positive outcomes; or whether the effects of facilitation will be similar to those of previous studies in which group facilitators received substantially more training as cognitive-behavioural therapists (e.g., Haddock et al., 1999). It is also important to examine the attitudes and involvement of nurses in organising, facilitating, and directing families and patients to support groups.
- d. Further practice and research on support groups should very carefully consider the socio-cultural conditions, which may influence the structure and process of the group and could be one of the important factors in a successful family intervention, and adapt the intervention to meet these conditions.
- e. Finally, as with other multi-component psychosocial interventions used nowadays, it is important to conduct a concurrent and retrospective process evaluation of the group intervention process, using rigorous qualitative methods such as grounded theory or an ethnographic approach, to identify the perceived benefits, group integrity and

development, and therapeutic mechanisms of support groups from the participants' perspective, as well as any changes in the experience of individual members, and the group overall, over the course of the intervention.

5. Conclusion

An increasing recognition and acceptance of mutual support groups as a means of helping patients with chronic severe mental illness, along with their families, is part of a broader self-help movement that has progressed worldwide, particularly in the U.S., attracting people who encounter common problems to meet together for mutual help and emotional support. Theoretical models briefly discussed in the background for this literature review such as social comparison and social learning theories highlighted the important concepts applied to the potential effects of a support group. For instance, a support group can provide an appropriate social environment in which participants can associate with other family caregivers to explore a new adaptive role in caregiving and to develop a new belief system that corrects each member's understanding of the illness and problems in caregiving. These theoretical perspectives show that mutual support groups are complex entities that differ in important ways from professionally delivered help and highlight the importance and benefits of social support for family members as group participants.

From the 25 studies described in this review, there is more consistent evidence of the short-term positive effects of mutual support groups on the physical and psychosocial health conditions of patients with schizophrenia and other psychotic disorders and their families (i.e, up to one year). A number of non-experimental studies on mutual support groups conducted in Western countries demonstrated a variety of benefits of group participation reported by the group participants such as increased knowledge about the illness, reduced caregiving burden, and enhanced coping ability and social support. However, some of these studies lacked neither rigorous control nor standardised and valid instruments as outcome measures. Most of them did

not schedule or provide support on long-term follow-up investigation (e.g., two years or more) of the effects of support groups to these families. In addition, only a few studies were conducted in non-Western people, even though the findings of these Asian studies reviewed indicated positive effects of mutual support groups for families of people with severe mental illnesses. Only a few studies in which the support groups were facilitated by nurses reflect a need for nurses to be more involved in organising the support groups and directing families to these groups. The review also highlights the need for further research to examine the benefits and therapeutic mechanisms of the support group as perceived by the group participants and to describe the stages of group development and progress. This understanding of the relevant literature on mutual support groups adds to existing knowledge about family intervention for severely mentally ill people and may be drawn upon by mental health nurses and other professionals in the selection and design of appropriate intervention for families providing care to a relative with schizophrenia or another psychotic disorder. It also indicates the direction of future research in this important topic.

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Table 1. A Sample Search Strategy Used in Ovid Full Text Database (Jan 1985 –Dec 2007)

Step	Search term	Number of articles retrieved
1	schizophreni\$.tw.	25089
2	exp mental disorder/	28340
3	exp mental illness/	21086
4	(serious or severe) adj2 (mental ill\$).tw.	928
5	psychos\$.tw.	37038
6	or/1-5	60529
7	peer support.tw.	153
8	mutual support.tw.	108
9	self help.tw.	2002
10	social support.tw.	8249
11	family work.tw.	1131
12	group therap\$.tw.	1471
13	family therap\$.tw.	1302
14	family intervention\$.tw.	404
15	or/7-14	10138
16	6 and 15	304
17	limit 16 to English language	298

Table 2. Summary of Studies of Mutual Support Groups for Families of People with Severe Mental Illnesses

Study	Country	Sample	Intervention	Method	Instrument	Major Findings	Attrition
<i>Experimental studies</i>							
Albramowitz, I.A. & Coursey, R.D. (1989)	U.S.	Forty-eight families of people with schizophrenia were recruited at 4 community mental health centres in Baltimore and Washington, DC. Twenty-four in treatment group and another 24 in control group. <i>Family carers:</i> >70% female; >60% white; mean age= 51 years; 75% parent. <i>Patients:</i> 29 male and 19 female; 67% aged 25 – 35 years; illness duration=1-30 years.	<i>Treatment Group:</i> consisted of six 2-hour, weekly group sessions, 5-17 caregivers in each group and group content based on needs assessment. Its content included: introduction and discussion of current problems; information of the illness; patients' coping with symptoms, medication and environment; managing problem behaviours; community resources; and review of learning and future plans. <i>Control group:</i> routine community mental health care (its content was not specified).	Experimental, pre-test and post-test design, using questionnaire.	State-Trait Anxiety Inventory. Relatives' Stress Scale. Nine-item scale for community resources use. Generalised self-Efficacy Scale.	Treatment group indicated significant improvements on personal distress and management of home life, a reduction of anxiety, and an increase of community resources utilisation.	Not specified
Solomon, P., Draine, J., Mannion, E. & Meisel, M. (1997)	U.S.	225 of 244 family members were recruited through a network of support groups and hospital services. Sixty-six in individual family consultation group, 67 in group workshop and 92 in control group. <i>Family members:</i> 88% female; 84% white; mean age= 56 years; mainly middle class; 76% parent & 11% sibling. <i>Patients:</i> 64% schizophrenia, 21% substance abuse; mean age= 36 years; average illness duration= 12.7 years.	<i>Brief Individual Family Consultation:</i> provided education and access to services to families by mental health specialists; totally 15-hour consultation consisted of 3 phases: needs assessment and strengths, problem solving and education, and caregiving skills and access to services. <i>Family Group Workshop:</i> 10 weekly, 2-hour sessions facilitated by a trained family member and a mental health specialist; content of each session included: 30 min. for information of mental illness and its treatment and 90 min. for coping skills training. <i>Control group:</i> routine psychiatric care (its content was not specified).	Experimental, 3-group, repeated measures design (at recruitment, and immediate and 6 months after intervention), using questionnaire.	Family Burden Interview Schedule. Norbeck's Social Support Scale. Stress scale. Unresolved Grief scale (adaptive coping). Hatfield-based Self-efficacy scale.	Family Group Workshop indicated a significant improvement in self-efficacy immediately after intervention when compared with the other two groups. Both Family Workshop Group and Individual Family Consultation Group also indicated mild improvements in family burden and stress at 6 months, while the controls indicated a mild increase of these two scores. Post hoc comparisons indicated no significant differences on all the outcomes between the three groups at 6-month follow-up.	~19% during intervention; ~ 5% over 6 months' follow-up.

<p>Montero, I., Asencio, A., Hernandez, I., Masanet, M. J., Lacruz, M., Bellver, F., Iborra, M. & Ruiz, I. (2001)</p>	<p>Spain</p>	<p>87 patients with schizophrenia and their relatives referred by their psychiatrists were recruited. Forty-one in Relative Group and 46 in single-family Behavioural Family Therapy. <i>Families:</i> 49% high EE; otherwise, no other demographic information. <i>Patients:</i> 67% male; mean age 26.8 years; 89% single; 82% unemployed; average illness duration= 5.5 years.</p>	<p><i>Relative Group:</i> developed on the basis of studies of expressed emotion; 8-10 members in each group, facilitated by two therapists. It consisted of two educational sessions at the health centre and a few sessions for problem solving, control of expressed emotion and expanding social network and followed by weekly 90-minute discussion group. <i>Behavioural Family Therapy:</i> single-family programme using Falloon's behavioural management framework. It consisted of 3 modules: family education about the illness, communication skills training, and teaching & practice of problem solving techniques.</p>	<p>Experimental, equivalent control group design, using questionnaire</p>	<p>Psychiatric Assessment Scale. Severity of Symptoms (PAS) Disability Assessment Scale. Knowledge about Schizophrenia Inventory. General health Questionnaire. Camberwell Family Interview schedule. Medication compliance.</p>	<p>Both groups indicated significant improvements on psychotic symptoms, medication compliance, social adjustment, expressed emotion, and knowledge about the illness. Behavioural Group indicated greater improvements on symptoms of delusions and thought disorders, social adjustment and level of EE.</p>	<p>~40%</p>
<p>Szmukler, G., Kuipers, E., Joyce, J., Harris, T., Leese, M., Maphosa, W & Staples, E. (2003)</p>	<p>U.K.</p>	<p>Sixty-one family carers of patients with psychotic disorders (e.g., schizophrenia, schizoaffective or bipolar disorder) were recruited Thirty-eight in Family Support Programme and 23 in standard care. <i>Family carers:</i> 82% female; mean age= 54 years; 60% white & 30% black; 62% parent & 13% siblings; 46% employed. <i>Patients:</i> no demographic information specified.</p>	<p><i>One-year Family Support Programme:</i> consisted of 6 individual family sessions (patients excluded), followed by 12 bi-weekly relative groups (1.5 hours each) run by a Thorn-trained Community Psychiatric Nurse (CPN). The 6 family sessions consisted of: engagement, education about the illness and services, and development of effective coping strategies; the relative group discussion was led by one peer carer, consisting of 0.5-hour education talk in each session followed by 1-hour discussion about caregiving problems. <i>Standard care:</i> its content was not specified.</p>	<p>Randomised control trial, repeated measures design (at recruitment and immediate and 6 months after intervention), using questionnaire.</p>	<p>Clinical Interview Schedule. Experience of Caregiving Inventory. Coping with Life Events & Difficulties interview. Self Evaluation & Social Support Schedule. Contextual Severity of Caring Difficulty.</p>	<p>Both family support and standard care group indicated significant positive changes of most outcomes at the two post-tests. There were no significant differences on all outcomes between groups, at pre-test and two post-tests.</p>	<p>~30% at 6-month follow-up</p>

Chien, W.T., Chan, S., Morrissey, J. & Thompson, D. (2005)	H.K.	Ninety-six of 300 family carers of schizophrenic outpatients in two psychiatric outpatient clinics were recruited. Thirty-two in mutual support group, 33 in psycho-education group and 31 in standard care. <i>Family carers:</i> 68% male; mean age= 40.6-43.2 years, range 22–60 years; 23% parent, 20% spouse & 15% child. <i>Patients:</i> 66% male; mean age= 29.3 years, range 20-49 years; average illness duration= 2 years.	<i>Mutual support group:</i> contained 12 bi-weekly sessions, consisting of discussion, role play and rehearsals of caregiving problems and providing peer support. The groups were facilitated by a trained mental health nurse. <i>Psycho-education group:</i> contained 12 bi-weekly sessions, consisting of psychological support and education, based on McFarlane et al. (1995). <i>Standard care group:</i> received medical consultation, consultation and financial support by social worker and psychiatric nurses at outpatient department.	Randomised controlled trial, 3-group and repeated measures design (1 week prior to intervention, and 1 week and 6 months after intervention), using questionnaires.	Family Assessment Device. Family Support Services Index. Patients' Specific Level of Functioning Scale. Length of re-hospitalisation.	Mutual support group indicated significantly greater improvements on family and patients' functioning at 1 week and 6 months follow-up.	~8% and 13% at 1 week and 6 months after intervention, respectively.
Chien, W.T., Chan, S. & Thompson, D.R. (2006a)	H.K.	Ninety-six families of schizophrenic or psychotic patients were recruited. Thirty-two in mutual support group, 33 in psycho-education group and 31 in standard care. <i>Family carers:</i> 64% male; mean age= 41.6 years, range 23-58 years; mainly parent, child or spouse. <i>Patients:</i> 67% male; mean age= 27.8 years, range 20-48 years; average illness duration= 2 years.	<i>Mutual support group:</i> contained 12 biweekly, 2-hour sessions (patients excluded). It was led by on family carers and co-facilitated by one psychiatric nurse, using Wilson's (1995) principles. <i>Psycho-education group:</i> contained 12 bi-weekly, 2-hour sessions focusing on psychological support and education, modified from Anderson et al.'s (1986) programme. It was led by 2 mental health nurses. <i>Standard care:</i> received medical consultation, individual consultation and financial support at outpatient department.	Randomised controlled trial, 3-group and repeated measures design (at recruitment and 6 and 18 months after intervention), using questionnaires.	Family Burden Interview Schedule. Family Support Services Index. Specific Level of Functioning Scale. Brief Psychiatric Rating Scale. Dosage of anti-psychotic medication. Number and length of psychiatric re-hospitalisation.	Mutual Support Group indicated significantly greater improvement on patient and family functioning, and caregiver burden at both 6-month and 18-month follow-up, when compared to the other two groups. The lengths of patient re-admissions in both Mutual Support Group and Psycho-education Group significantly reduced only at 6 months after intervention, while re-admission in control group slightly increased.	~10% at 18-month follow-up.
<i>Quasi-experimental studies using a non-equivalent comparison group</i>							

<p>Kane, C.F., DiMartino, E. & Jimenez, M. (1990)</p>	<p>U.S.</p>	<p>Thirty-seven of 104 families of 49 patients with chronic schizophrenia or schizoaffective disorder were recruited. Twenty-nine in education and support group and 20 in psycho-education group. <i>Families:</i> 65% female; mean age= 49 years; 92% white, middle class; 84% parent & 14% sibling. <i>Patients:</i> mean age= 26 years; average illness duration= 6 years.</p>	<p><i>Four-Session Education and Support Groups:</i> were conducted weekly at a psychiatric unit (2 hours per session), facilitated by the researchers and graduate mental health nursing students. It consisted of non-structured sessions, in which relatives discussed the impacts of the illness on their lives and ways of coping with these problems. <i>Psycho-education Group:</i> consisted of interactive instructional activities, using Falloon's behavioural model.</p>	<p>Quasi-experimental, non-equivalent comparison groups, pre-test and post-test design, using Questionnaires.</p>	<p>Mental Illness Questionnaire. Social Support Questionnaire. Family Questionnaire (distress & coping). Symptom Distress Checklist. Intolerance of Ambiguity Measure. Client Satisfaction Questionnaire.</p>	<p>Both groups indicated significant improvements on knowledge of mental illness at post-test. Psycho-education Group indicated significantly greater improvements in depression and satisfaction with group participation at post-test.</p>	<p>Not specified.</p>
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<p>McCreadie, R.G., Phillips, K., Harvey, J.A., Waldron, G., Stewart, M. & Baird, D. (1991)</p>	<p>U.K.</p>	<p>Sixty-three of 52 patients with schizophrenia residing at home were recruited. 31 relatives (of 25 patients) in treatment group and 32 (of 27 patients) in control group. <i>Relatives:</i> 44% male; 54% parent and 33% spouse; 37% high EE. <i>Patients:</i> no demographic information specified.</p>	<p><i>Treatment Group:</i> received a package of weekly session containing: educational seminars (1-hour; information of the illness provided and led by psychiatrists), relatives' discussion group (1-1.5 hours; focused on coping skills and led by social worker), and individual family meetings at home (patient included; family problems discussed and led by social worker). <i>Control group (Non-participants):</i> received community services (details not specified).</p>	<p>Quasi-experimental, non-equivalent comparison groups, pre-test and post-test design; and follow-up for 18 months after intervention</p>	<p>Camberwell Family Interview. Amount of face-to-face contact in one week. Relapse: number of re-hospitalisation in 18 months before and after intervention and change or increase of medication.</p>	<p>Both groups indicated mild improvements in level of EE and relapse rate after intervention. There was only a slight increase of amount and dosage of medications used in both groups.</p>	<p>~ 40%</p>
<p>Winefield, H.R. & Harvey, E.J. (1995)</p>	<p>Australia</p>	<p>Thirty-six of 56 family caregivers of schizophrenic patients were recruited in Adelaide metropolitan area. Sixteen in discussion group and 15 in waiting-list controls. <i>Family carers:</i> 89% female; mean age= 58.9 years; 86% parent. <i>Patients:</i> average illness duration= 2.1 years; otherwise no other demographic information specified.</p>	<p><i>Discussion Group:</i> eight weekly family meetings consisting of: introduction; family communication and problem solving; information about the causes and nature of the illness, medication and community resources; awareness of early signs of an episode and management and guidance; sharing of caregiving experiences and how to maintain hope; and summary and follow-up. <i>Waiting-list Controls:</i> received community services (details not specified).</p>	<p>Quasi-experimental, non-equivalent groups, 1 pre-test and 2 post-tests (at recruitment and immediate & 8 weeks after intervention), using questionnaires. Open-ended questions for caregivers to comments on group participation.</p>	<p>Multidimensional Support Scale and 10 questions on taking care of own well-being. Profile of Mood States. Family Attitudes scale. Process of group meetings: audio recordings of sessions; group attendance and reasons for absence.</p>	<p>Discussion Group indicated significant greater improvements on availability and adequacy of family and peer support at immediate and 8-week after intervention, when compared to Waiting-list Controls. Over 50% of the participants expressed that they enjoyed the group participation, experienced positive changes in feelings or behaviour towards patient, and gained confidence from sharing their problems with other group members.</p>	<p>Not clearly specified. High attendance rate once they were engaged in the group indicated.</p>

Pickett-Schenk, S.A. & Heller, T. (1998)	U.S.	<p>One hundred and thirty-one families recruited from 14 support groups in Chicago and southern Illinois. Thirty-seven in four professional-led support group and 94 in 10 family-led support group.</p> <p><i>Family members:</i> 72% female; mean age= 56 years; mainly Caucasian; mainly parents (78% vs. 59%) & siblings; >3 years group participation.</p> <p><i>Patients:</i> 69% male; mean age= 35 years, average illness duration= 15 years.</p>	<p><i>Professional-led vs. Family-led Support Groups:</i> both types of groups contained 4 to 26 members (mean= 13) in each group. They met weekly or monthly, at one participant' home or mental health care centre, using an 8-step model adapted from a 12-Step Approach. The groups consisted of: sharing of information about mental illness, discussion about caregiving situations and problems, and providing psychological support.</p>	<p>Quasi-experimental, non-equivalent comparison groups design (Professional-led vs. family-led), using questionnaires.</p>	<p>Group Benefits Scale (information and relationship benefits). Five-item coping ability scale. Participants rated extent of discussion (e.g., medication, patient's illness & behaviour, & financial concerns).</p>	<p>No significant differences between two groups on provision of information about the illness and treatment and improvement of relationship with patient. Professional-led groups indicated greater improvements in rating of patients' behaviour problems and coping with emotions, whereas family-led groups showed better rating of advocacy.</p>	<p>Not specified.</p>
Chou, K.R., Liu, S.Y. & Chu, H. (2002)	Taiwan	<p>Eighty-four primary family caregivers of people with schizophrenia were recruited from community agencies, social services, visiting home health agencies, or self-referrals. Forty-two in both support group and routine care.</p> <p><i>Family carers:</i> 65% female; 65% parents; middle class.</p> <p><i>Patients:</i> average illness duration= 10 years; average BPRS score= 9.8; otherwise, no other demographic information specified.</p>	<p><i>Nurse-facilitated Support Group:</i> contained eight 1.5-hour sessions on Saturday, using Zarit et al.'s Caregiver Support Group Procedure Manual. Its content mainly included: introduction and orientation; caregivers' emotion and feelings towards caregiving; patients' reactions and behaviour problems to illness; taking care of self and doing positive things with patient; information of resources, financial issues, and service and medical needs; and review and future planning.</p> <p><i>Routine Care Group:</i> received community mental health care (its content was not specified).</p>	<p>Quasi-experimental, time series non-equivalent control group design (at baseline, immediate and one month after intervention), using questionnaires.</p>	<p>Caregiver Burden Inventory. Beck Depression Inventory. Physical Self-Maintenance Scale. Instrumental ADL. Caregiving Self-Efficacy Scale. Brief Psychiatric Rating Scale. Participants' perceived benefits questionnaire.</p>	<p>Support Group indicated significant greater improvements in depression and caregiver burden at immediate and 1-month after intervention than Routine Care. From the data of perceived benefits, the group participants indicated high level of satisfaction with support group experiences, especially for having someone listen to their concerns, helping with emotional feelings of the illness; and providing strategies in stress coping.</p>	<p>Not specified.</p>

Non-experimental, comparative studies (single cohort or participants versus non-participants)

Gidron, B., Guterman, N.B. & Hartman, H. (1990)	Israel	Fifty parents of chronically mentally ill (mainly schizophrenia) were recruited from a national voluntary organisation for family members of the mentally ill (Enosh) in 5 cities of Israel. Thirty-two participated in self-help groups. <i>Family carers:</i> 62% female; median age= 61 years, range 41-82 years; 74% European or American born. <i>Patients:</i> 60% aged 26-35 years and 20% aged >35 years; 66% having >10 years of illness.	<i>Family Support Groups:</i> consisted of emotional support and information of mental illness; legal advices and advocacy services provided by centre staff. However, no detail information of the content of the group was specified. <i>Non-participants:</i> received community mental health care (its content was not specified).	Cross-sectional, national survey, using self-report questionnaires. (Participants vs. non-participants)	Subjective Family Burden scale. Perceived intensity of stress. Perceived use of coping strategies.	Family Support Group participants indicated higher levels of knowledge of mental illness and less stressful than non-participants. They also reported more active and interactive coping patterns and more perceived burden and concerns about psychosocial issues such as difficulties in relations with spouse and guilty feelings regarding their child.	N/A
Sheridan, A. & Moore, L.M. (1991)	Ireland	Twenty-nine parents of 17 young people with schizophrenia participated in an education and support group were conveniently recruited from an adolescent team of a community psychiatric centre. <i>Parents:</i> 72% female; 16 couples and 5 single parents. <i>Patients:</i> 41% female; mean age= 19.2 years; 59% <6 months of illness.	<i>Education and support groups:</i> contained 6 weekly 1.5-hour sessions, led by peer members and health professionals of the centre. Their content included: introduction (1 session); issues about family problems, illness and its treatment and prognosis (4 sessions); social support network outside family; and future goals (1 session). A follow-up meeting was conducted to review the progress after 3 months.	Cohort study, pre-test and post-test design, using questionnaires.	Three self-designed questionnaires: 7 questions about management of the illness; 17 questions about level of knowledge of the illness; and 11 questions about group participation.	Education and Support Groups indicated a mild increase of knowledge of mental illness at immediate after intervention. The most useful parts of group participation perceived by the participants mainly included: listening to and sharing with others, having similar situation and illness, prognosis and future family issues.	Not specified.
Turnbull, J.E., Galinsky, M.J., Wilner, M.E. & Meglin, D.E. (1994)	U.S.	Fifty-five family members, who were self-referred or referred by staff and participated in a short-term family education and support group intervention, were recruited. <i>Patients & family members:</i> no demographic information specified.	<i>Family Education & Support Group:</i> contained a few 1.5 to 2-hour sessions, facilitated by one social worker. Its content included: didactic teaching (impact of hospitalisation on family, aetiology of the illness and its treatment, alliance with staff in treatment plan and rehabilitation, and family role in caregiving); and sharing of caregiving experiences and discussion about ways of coping.	Cohort study, pre-test and post-test design, using questionnaire.	Self-designed questionnaire to measure families' perceptions towards information gain, coping & support. Group interview of 4 practitioners for perceptions of	Family Support Group indicated a significant increase of the overall score and the information, coping and support domains. They also reported significant changes in all items of 'information' and 2 items of 'coping with staff relationships'. Most of them perceived the group could provide adequate support, advice and	Not specified.

					benefits of group participation to the families.	concern; these were similar to the practitioners' comments.	
Medvene, L.J., Mendoza, R., Harris, N., Lin, K.M. & Miller, M. (1995)	U.S.	<p>Twenty-eight Mexican American parents of patients with schizophrenia or schizoaffective disorder were recruited from two Spanish-speaking family support groups.</p> <p>Fourteen attended a parent support group in Los Angeles and 18 were non-participants.</p> <p><i>Parents:</i> 84% female; mean age= 61 years; low family income.</p> <p><i>Patients:</i> 61% male, mean age= 33 years, average illness duration= 6 years.</p>	<p><i>Spanish-speaking Family Support Groups:</i> contained weekly sessions facilitated by Hispanic staff at the centre. Their content focused on sharing information of their problems in caregiving.</p> <p><i>Non-participants:</i> received routine care (detail information was not specified).</p>	Cross-sectional, comparative design, using questionnaires. (Participants vs. non-participants)	<p>Cuellar's 20-item Acculturation Scale.</p> <p>Family Burden Interview schedule.</p> <p>Modified Mental Health Belief scale.</p> <p>6-item Social Support Questionnaire.</p> <p>Parents' help-seeking preferences.</p> <p>Preferences for organisational arrangement.</p> <p>Brief Psychiatric Rating Scale.</p>	<p>Family Support Group participants with higher group attendance indicated higher levels of social support, perceived burden in child care and issues in emotional health, than those with lower group attendance and the non-participants.</p> <p>They were also less likely than non-participants to endorse the moral attribution that their child's problems were due to their own faults (i.e., higher Mental Health Belief score).</p>	N/A

Mannion, E., Meisel, M., Solomon, P., & Draine, J (1996)	U.S.	<p>Two hundred and twenty-five family members of people with schizophrenia (64%) or affective disorder around East Coast area, through a network of support groups, hospital services and family programmes were recruited.</p> <p><i>Family members:</i> 88% female; 84% white; 87% sibling or child; mean age= 55 years.</p> <p><i>Patients:</i> mean age= 36 years; 50% substance use/forensic problem; average illness duration= 13 years.</p>	<p><i>Family Support Group in the National Alliance for the Mentally Ill:</i> >50% of the families participated in one of the support groups (Detail information of the support groups not specified).</p> <p><i>Non-participants:</i> received routine psychiatric care (details not specified).</p>	Cross-sectional survey, using questionnaires (with face-to-face interviews). (Participants vs. non-participants)	Carver's Adaptive Coping scale. 15-item patient functioning scale. Norbeck's Social Support Questionnaire. Family Burden Interview Schedule. Hatfield's self-efficacy scale. Pearlin & Schooler's Mastery scale. Texas Inventory of Grief.	Family Support Group participants reported less subjective burden, smaller social network, and greater utilisation of adaptive coping strategies than non-participants. However, those with a more severely mentally ill relative were less willing to join the Support Group.	Not specified.
Heller, T., Roccoforte, J.A. & Cook, J.A. (1997a)	U.S.	<p>One hundred and thirty-one participants from 12 family support groups for people with mental illness (about 50% schizophrenia) affiliated to the Alliance of the Mentally Ill or a large service agency in Chicago and two in Illinois and 59 non- participants completed a questionnaire twice over one year.</p> <p><i>Family carers:</i> >75% female; 75% white; 49% mother; mean age= 54 years.</p> <p><i>Patients:</i> 67% male; mean age= 36 years; average illness duration=10 years.</p>	<p><i>Family Support Group:</i> monthly or weekly at homes or service agencies, co-led by professionals and family members; 4 to 26 members (mean= 13) in each group; content included: time for informal airing of information and feelings; and teaching by invited guest speakers.</p> <p><i>Non-participants:</i> received routine psychiatric care (details not specified).</p>	Longitudinal, non-equivalent groups design at two time-points over 1-year intervals, using self-report questionnaire. (Participants vs. non-participants)	Family Support Services Index. Social Provisions Scale. Support group participants: referral sources, reasons for attending, and reasons for leaving group.	Family Support Group indicated a significant greater increase of willingness of having the patient living at home, level of assistance to the patient, and a decrease of service use, than non-participants at 1-year follow-up. Reasons for group participation included: receiving adequate emotional support and information, learned how to help the patient, and feel less lonely by talking with others sharing similar problems.	Not specified.

Cook, J.A., Heller, T. & Pickett-Schenk, S.A. (1999)	U.S.	One hundred and twenty parents were recruited; 86 participated in 14 National Alliance for the Mentally Ill-affiliated support groups and 34 non-participants. <i>Parents:</i> 77% mothers, mean age= 62 years, 80% Caucasian; mainly middle-class. <i>Patients:</i> 73% male; mean age= 33 years; average illness duration= 14 years; 53% schizophrenia, 52% bipolar disorder or major depression.	<i>Professional-led and Family-led Support Groups:</i> contained weekly or monthly sessions at homes or social service agencies. The group size ranged from 4 to 26 members. Their content mainly included: sharing of information and feelings and guest speakers on some topics. <i>Control Group:</i> received services from the community mental health care agencies (detail information not specified).	Cross-sectional, comparative design, using questionnaires. (Participants vs. non-participants)	Index of Depression. Social Provisions Scale. Family Support Services Index. Thresholds Family Burden Scale (brief version).	Both <i>Professional-led and Family-led</i> Support Group participants indicated significant greater reduction of caregiver burden and service utilisation than non-participants, especially in those with less depression and fewer days of patients' hospitalisation, than control group. There were no significant differences on depression, social support and family burden between the two support groups.	N/A
<i>Cross-sectional questionnaire surveys</i>							
Heller, T., Roccoforte, J.A., Hsieh, K., Cook, J.A. & Pickett-Schenk, S.A. (1997b)	U.S.	One hundred and thirty-one families of people with mental illness from 12 support groups in Chicago and Illinois. <i>Family carers:</i> 76% females; 79% white; mean age= 57 years, range 25 to 82 years. <i>Patients:</i> 68% male; mean age= 37 years, range 17-88 years; 56% schizophrenia & 15% bipolar disorder; 11% employed.	<i>Support groups:</i> met monthly or weekly, at members' homes or service agencies. The average group size was 13 members. No detail information of the group structure and content was specified.	Cross-sectional, descriptive survey, using mailed questionnaires (Group participants only).	Group benefits Scale. Family Support Services Index. Social Provisions Scale. Level of group involvement - Support Received scale, Support Provided scale & Friendship Development scale. Group structure - Role Differentiation scale.	Social supports received from and provided by the Support Groups were associated with the levels of benefit from information and community services. Improvements of family relationships were predicted by the participants' health and support received from the group. Results also indicated that group members who benefited most from the group participation were those who perceived less social support and more sharing and mutual support in group.	N/A

Citron, M., Solomon, P. & Draine, J. (1999)	.U.S.	<p>Two hundred and two family members of severely mentally ill members (61% schizophrenia & 18% bipolar disorder) of the Alliance for the Mentally Ill.</p> <p><i>Family carers:</i> 96% female; mean age= 60 years; mainly white & middle-class; 80% parent, 9% sibling & 5% spouse.</p> <p><i>Patients:</i> 67% male; mean age= 36 years; average illness duration=16 years.</p>	<p><i>Family Support Groups:</i> contained monthly sessions at the service agency led by 1 or more elected leaders (families), using a fundamental assumption that families do not 'cause' the mental illness.</p>	Cross-sectional, survey design, using mailed self-report questionnaires. (Group participants only)	<p>A scale of caregiving duties.</p> <p>Rating of disturbing behaviours.</p> <p>Length of membership and intensity of participation in support group.</p> <p>Mechanisms of Change/Helpfulness.</p> <p>Group Benefits scale.</p>	<p>Perceived benefits of group participation included: more knowledge about mental illness and its services, and feeling less alone with their concerns.</p> <p>Most helpful elements of the group included: providing more information and gaining more social support and self-understanding.</p> <p>Those who were longer term participants in group were more likely to perceive more benefits from group participation.</p>	N/A
Pickett-Schenk, S.A., Cook, J.A. & Laris, A. (2000)	U.S.	<p>Four hundred and twenty-four of 1131 participants completed the Journey of Hope programme offered by the National JOH Institute, and returned the mailed questionnaire.</p> <p><i>Family carers:</i> 79% female; 92% white; mean age= 56 years; 65% parents; 35% had received prior family education or services.</p> <p><i>Patients:</i> 67% male, mean age= 37 years; 58% schizophrenia or schizoaffective disorder & 26% bipolar disorder; average illness duration = 21 years.</p>	<p><i>The Journey of Hope (JOH) programme:</i> contained 12-week family-led education sessions, consisting of: education on mental illness and its treatment, and/or ongoing irregular support group meetings.</p>	Cross-sectional, survey design, using mailed questionnaires. (Group participants only)	<p>Client Satisfaction Questionnaire.</p> <p>JOH Outcome Survey (knowledge & morale).</p>	<p>JOH participants indicated a substantial increase of their knowledge of the illness, its services and their morale in caregiving. Study outcomes (satisfaction, knowledge, service use, and morale) were predictive of one another.</p> <p>They also indicated that the JOH could provide group participants with knowledge and support, which would strengthen their coping with patient care.</p>	N/A 47% completed both education and support group.
Exploratory qualitative studies							

Lemmens, G.M., Wauters, S., Heireman, M., Eisler, I., Lietaer, G. & Sabbe, B. (2003)	Belgium	Twelve family carers and 10 patients of different mental illnesses (e.g., major depression & schizoaffective disorder) in 2 family discussion groups of a psychiatric day clinic. <i>Carers:</i> mainly spouse and mother; otherwise, no other demographic information specified. <i>Patients:</i> 60% female; mean age= 34 years.	<i>Family Discussion Group:</i> contained 5 to 6 biweekly sessions (1.5 hours each), using a systemic multiple family therapy model. Its content focused on families' coping and problem solving, impacts of the illness on family interactions, resources and family life-cycle issues; and 4-6 family members (patient included) in each group. After 6 sessions, there were monthly peer-led meetings over 2 years.	Qualitative, exploratory study, using questionnaire. Questionnaires were completed by family members, therapists and observers.	Open-ended questions for perceptions of therapeutic factors in group, and experiences that participants considered helpful for individual, family and the group.	Therapeutic team and families diverged in their perceptions of which factors are important in the discussion group. The team members indicated that the relational climate and involvement and support from the group as more helpful. The families more emphasised on the process aspects (experience communality & gaining insight).	N/A
McCann, G. (1993)	U.K.	Twenty-one relatives or friends of mentally ill patients participated in a relative support group (>1 year) at Ashworth Special Hospital, Merseyside. <i>Relatives & Patients:</i> no demographic information was specified.	<i>Relatives' Support Group:</i> contained monthly 1.5-hour sessions facilitated by the nurses, rehabilitation staff and psychiatrist. Its content mainly included enhancing support network and the minutes of each meeting was taken by the participants by turns.	Cohort study, retrospective qualitative study, using the minutes of meetings and questionnaire.	Qualitative analysis of the minutes of 12 meetings. A self-designed questionnaire with 7 questions to evaluate the group.	From the minutes, patient care within hospital, preparation for discharge and after-care were the most predominant issues identified. Perceived benefits of group participation included: information of the illness and its treatment, maintaining hope and more involvement in patient care.	N/A
Winefield, H., Barlow, J. & Harvey, E. (1998)	Australia	Thirty-six family members of a relative with schizophrenia were recruited. Eight from extreme positions on 4 criteria: (1) length of time since patient's diagnosis; (2) amount of carer-patient contact; (3) level of psychological distress; and (4) level of rejecting attitudes to patient. <i>Family carers:</i> 19% parent & 2% spouse; otherwise, no other demographic information specified. <i>Patients:</i> no demographic information specified.	<i>Discussion-based Support Groups:</i> contained 8 sessions in 3 series. Group content mainly included: introduction and discussion about carers' worst problems; update on psychiatric models, medication and community resources; recognition of early warning signs of relapse; communication and problem solving; how carers care for themselves and maintain hope; lobbying for resources; and summary and follow-up plans.	Exploratory, qualitative design, using tape recording of group sessions.	Participants' responses to group participation, short and long-term effects, and suggestions on how groups might be selected and structured for optimal effectiveness.	Support Group participants emphasised on the importance of accurate information of the illness, respects from health professionals, and duration of caregiving experience. Their short-term needs addressed by the group included: mental health services, knowledge of medication, and patient's problem behaviour. Their long-term needs addressed by regular participation included greater sense of control in caring and less perceived caregiving burden.	N/A

Chien, W.T., Norman, I., Thompson, D.R. (2006b)	H.K.	<p>A convenience sample of 30 family carers and 10 schizophrenic outpatients participated in a 12-session mutual support group in psychiatric clinics.</p> <p><i>Carers:</i> 53% female; mean age= 39.1 years; 100% Chinese; 90% child, parent or spouse.</p> <p><i>Patients:</i> 60% female; mean age= 24.1 years; average illness duration= 2 years.</p>	<p><i>Mutual Support Group:</i> contained 12 biweekly, 2-hour sessions facilitated by a trained psychiatric nurse and a peer leader. A protocol was designed to guide the 5-phased group development: orientation; sharing of feelings and concerns; understanding about self and patient needs; adopting new caregiving roles; and preparation for future.</p>	<p>Exploratory, qualitative study design, using interviews and tape recording of group sessions.</p>	<p>Semi-structured interview (34 first and follow-up interviews) at 2 weeks after completion of intervention, and audiotape recording of 12 sessions.</p> <p>Appraisals of the group process and feelings towards the group, benefits and difficulties in group participation.</p>	<p>Three main themes from interview and group session data included: positive personal changes attributed to group participation (e.g., enhanced acceptance of caregiving role and increased knowledge of the illness); positive group characteristics (e.g., explicit group ideology and consensus and social empowerment; and inhibitors of group development (e.g., peer pressure and intense negative feelings).</p>	10%
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