

Family to Family Support Programs for the Caregivers of Schizophrenia Patients: A Systematic Review

ARTICLE IN PRESS

Kerime BADEMLİ¹, Zekiye ÇETİNKAYA DUMAN²

SUMMARY

Aim: This systematic review aims to analyze the family to family support programs provided for the families of the schizophrenic patients and their potential impact on caregivers.

Method: The family to family support programs described by articles in Pubmed, Ovid, Cinahl, Wiley Interscience and Cochrane databases were reviewed. The database research was conducted in English using 5 keywords. Twelve studies were identified using this approach and are included in this review.

Findings: The caregivers who participated in the family to family support programs reported a significant decrease in their burden and increase in social support and family function. Moreover, it was noted that there was an increase in life satisfaction and a decrease in the need for education of the caregivers who participated in the programs.

Results: All studies included in this review agreed that family to family support programs for the caregivers of schizophrenia patients had positive outcomes. Additionally, these studies suggested that systematic, planned and sustainable educational programs be developed for the caregivers of schizophrenic patients in order to help the caregivers cope with the challenges they encounter during the treatment procedures.

Key Words: Family to family support program, psychoeducation, schizophrenia, caregiver

INTRODUCTION

Since schizophrenia has an adverse effect on affect, thought, perception and behavior, patients often have difficulty fulfilling normal life roles and have to receive constant care and support from the family (Saunders 2003, Chien 2008). The majority of schizophrenia patients live with their families and families usually give care for the patient without any support for themselves (Schenk et al. 2008). Chronic psychiatric diseases have adverse effects on the life of the family members as well as the patient and lead to increased stress (Addington 2005, Li et al. 2007).

In order to cope with stress, families report that they use coping methods such as crying, denial, anger, withdrawal from

social life, aggressive behavior, positive thinking, getting information, receiving support from friends and neighbors and seeking social support (Huang et al. 2008). Families may not know how to cope with the difficulties they experience, and wish to cooperate with healthcare workers and participate actively in the treatment process (Addington 2005, Carter and Curlee 1999, Solomon 2000). It has been stated that the coping strategies used by families of individuals with psychiatric diseases to maintain the functionality of the family are inadequate and caregivers need professional support in order to continue giving good care (Liu et al. 2007).

While the schizophrenic patient is being treated, various family interventions are carried out. Interventions consist of fam-

Received: 17.12.2010 - Accepted: 21.02.2011

¹MSc, Department of Psychiatric Nursing, Akdeniz University, Antalya School of Health, Antalya, ²Assist Prof., Department of Psychiatric Nursing, Dokuz Eylul University, School of Nursing, Izmir, Turkey.

Kerime Bademli, e-mail: bademlikerime@hotmail.com

ily training, family support groups, special training groups for families, crisis management and counseling (Chien et al. 2008, Dixon et al. 2001, Solomon 2000, Dixon ve Lehman 1995). During these interventions, families receive information on the disease and its treatment and are taught communication and problem solving skills (Glynn et al. 2006). According to the findings of various studies, family intervention is an important and effective tool for caregivers (Pharoah et al. 2006, Pilling et al. 2002, Walz et al. 2001). In the meta-analysis conducted by Pilling *et al.* on family interventions for the caregivers of schizophrenic patients, it was concluded that family interventions decreased the recurrence of the disease and the re-admission of the patient and increased compliance with the drug regimen (Pilling et al. 2002). However, psychological training interventions may not be widely available to families and may be given only to caregivers participating in studies or who are present when the patient is admitted to the hospital (Fung and Fry 1999, Lincoln et al. 2007). In various studies, it has been found that there are several barriers to performing family interventions, including a short duration of hospitalization, having no program in place in routine clinical practice, having too few trained personnel for family interventions and an inadequate amount of time and clinical experience (Rose et al. 2004, Rummel et al. 2005).

The absence of psychological training, which is one of the family interventions, in the routine services performed by healthcare workers led to the emergence of family to family support programs (Dixon et al. 2001, Schenk et al. 2006b). A family to family support program allows emotions, thoughts and information on coping with a family member experiencing a psychiatric disease to be shared. In these programs, volunteer family members are trained by healthcare workers, and they, in turn, train other family members (Burland 1998). Caregivers participating in family support groups usually state that they have positive experiences (Wyman et al. 2008). Participating in family support groups organized for the families of individuals with chronic psychiatric disease makes the experience easier and contributes to decreasing the burden and stress experienced by the families (Cook et al. 1999). During these programs, families can interact with other families in similar situations, evaluate their own lives with a different outlook, and can share their experiences (Chien et al. 2008).

The family to family support program was a community based structured support program developed by Joyce Burland in 1990 in order to provide peer information and support for the family members (Burland 1998). When the program was first developed, it was administered to the caregivers of patients with schizophrenia, bipolar disease and major depression. Later, the target group was enlarged and caregivers of the individuals diagnosed with obsessive compulsive disorder were included in the program. The family to family support program was first termed Journey of Hope in 1997, the National Alliance on

Mental Illness (NAMI) started to support the program and it was renamed 'family to family support program'. Journey of Hope was conducted by the Health Care Organization and lasted 8 weeks for two hours/week. Journey of Hope and family to family support programs discussed subjects including information on psychiatric diseases, drugs and other treatments, developing problem solving skills, developing communication skills with the patient, sharing experiences and difficulties encountered, and social resources (Dixon et al. 2001, National Alliance For The Mentally Ill 2010).

Family to family support programs compensate for the lack of education which cannot be fully provided by the professional psychiatric service system. Family to family support programs have been incorporated into the psychiatric health-care system within the last decade and the effect on caregivers of schizophrenia patients has been evaluated by various studies. This systematic review was carried out with the aim of investigating family to family support programs and their effects. This review attempts to answer the question 'What are the family to family support programs administered to schizophrenia patients and their effects?'

METHOD

The review was performed following guidelines by the Centre for Reviews and Dissemination, 2009 (CRD) guide (Centre for Reviews and Dissemination 2009). Screening of the literature was made without any restriction in the year of publication using PUBMED, OVID, CINAHL, WILEY INTERSCIENCE and COCHRANE databases. The review was conducted in English using five keywords: "Family intervention in schizophrenia," "Family intervention and mutual support", "Family intervention and mutual aid", "Family intervention and peer support" and "Family intervention and Family to family". Studies describing family to family support/training programs administered to the caregivers of individuals diagnosed with schizophrenia and experimental and semi-experimental studies were included in the study. Support/ training programs given by healthcare workers to caregivers, qualitative studies, and descriptive studies were excluded from the review. Overall, 1791 studies (Pubmed:1034, Cinahl:135, Wiley:450, Ovid:145, Cochrane:27) were accessed. These 1791 studies were examined according to the titles and 1382 studies were deemed not relevant and were not included in this review, additionally 42 studies written in different language were excluded. The abstracts and complete texts of the remaining 409 studies were evaluated and 24 of these studies met the inclusion and exclusion criteria and were accessed. Of these 24 studies retrieved from five data bases, 12 were duplicates and were excluded. After these 12 studies were excluded, the references of the remaining 12 studies were investigated and 12 studies were included in this review.

RESULTS

The studies were carried out between 1997 and 2008. The population of the studies was composed of caregivers to schizophrenia patients. When the size of the sample in each study was evaluated, it was seen that the three studies by Pickett-Schenk *et al.* (2006, 2006, 2008) had the largest sample size ($n=232$) whereas the pilot family to family support study carried out by Dixon *et al.* (2001) had the smallest sample size ($n=37$).

Programs and Investigation Groups

Solomon *et al.* (1997) carried out a study including three groups. Two groups were intervention groups and one was a control group. The intervention was either individual family counseling or family study groups. The family counseling consisted of a psychiatrist giving individual counseling services to caregivers on issues related to the disease, drug training, problem solving training, and other services. In the family study group, trained family members and a psychiatry consultant trained caregivers for 10 weeks. During these sessions, 30 minutes were reserved for information on mental diseases and treatments and 90 minutes for coping skills and at the end of each session, homework relating to interactions with the patient was given to the caregivers. (Solomon *et al.* 1997).

Dixon *et al.* (2001) carried out a semi-experimental study, which was the pilot program for family to family support programs conducted by the National Alliance on Mental Illness. In the family to family support program, the caregiver was trained by healthcare professionals to train other caregivers. The training involved information on mental diseases, treatment, drugs and rehabilitation, communication skills and problem solving skills. The training was done in 12 weekly sessions (Dixon *et al.* 2001). In the other semi-experimental study performed by (2004), caregivers participating in the above mentioned family to family support program were evaluated (Dixon *et al.* 2004).

Chien *et al.* (2004a) carried out a randomized control study in which one group was given a family to family support program and the other group was given no intervention. The family to family support program included 12 weekly sessions, each lasting one hour. The content of the sessions was as follows: introduction, sharing emotions and concerns related to the patient, culture, effective communication, psychosocial needs, managing home care, efficient coping and problem solving. The family member who administered the training was trained by a psychiatry nurse two hours a day for three days on managing the group and planning. The psychiatry nurse and the family member led the group together (Chien *et al.* 2004). In the other randomized, control study carried out by **Chien *et al.* (2004b)**, patients were ran-

domized into three groups: two intervention groups and one control group. One of the intervention groups participated in a family to family support program consisting of 12 sessions over 6 months. A caregiver chosen by the participants led the group activities. That caregiver received leadership training for two days from the investigators. The other intervention group received training given by the two investigators. In both intervention groups, patients were invited to the three sessions about the disease and treatment and no intervention was given to the third group (Chien *et al.* 2004b). **Chien *et al.* (2005)** carried out another randomized control study in which three groups, namely a family to family support group, a family psychological training group and a control group without any intervention, were evaluated (Chien *et al.* 2005). **Chien *et al.* (2006)** performed another study with the using the same groups and investigated the rate of re-admission in order to determine the effect of family to family support groups on patients (Chien *et al.* 2006). **Chien *et al.* (2008)** performed another study in which they compared family to family support groups with the control group without any intervention. Family burden, family functioning, social support status and the rate of re-admission of patients to the hospital were evaluated (Chien *et al.* 2008). **Chien (2008)** also compared the effect of family to family support groups on caregivers of schizophrenic patients by comparing them to control groups without intervention. The functional levels of the patients whose caregivers participated in family to family support program were evaluated (Chien 2008).

Pickett-Schenk *et al.* (2006a;2006b;2008) conducted a randomized control study in which caregivers of patients diagnosed with schizophrenia, schizoaffective disorder, depression and obsessive compulsive disorder participated in the Journey of Hope Family to Family support program and the effect of participation in the program was evaluated (Pickett-Schenk *et al.* 2006a), (Pickett-Schenk *et al.* 2006b, Schenk *et al.* 2008). The results of the studies are summarized in Table 1.

The measurement tools used

In the studies included in this review, scales developed by the investigators were used, including: Family Support Services Index, Family Burden Interview Schedule, Family Assessment Device, Family Empowerment Scale, Center for Epidemiological Studies Depression Scale, General Health Questionnaire, The Family Information Needs Scale, The Caregiving Satisfaction Scale, Family Knowledge Scale and Self Efficacy Scale. In the four studies carried out by Chien *et al.*, the function of the family was evaluated using the Level of functioning scale developed for measuring the functional level of schizophrenia patients.

Chien *et al.* (Chien 2008, Chien *et al.* 2008, Chien and Chan 2004b, Chien *et al.* 2005), measured the frequency of re-admission using the Duration of Patient Re-hospitalization

form. Although the frequency of follow-up evaluations and the duration between them varied between the studies included in the analysis, usually three follow-up evaluations were made.

Results obtained from the studies

Studies regarding family to family support programs for the caregivers of schizophrenic patients were stratified into three groups, namely, 'National Alliance on Mental Illness family to family support program', 'Journey of Hope Family to Family support program' conducted in the USA and 'Family to Family Support program' carried out in China' and the results of these studies were evaluated.

In six of the studies, a family member trained by a psychiatry nurse led the support group and the psychiatry nurse attended all sessions.

It was reported that as a result of family to family support programs, caregivers had more information on the causes and treatment of mental disease, coped better with the difficulties they experienced, their negative feelings decreased, their satisfaction levels increased, their social support was enhanced and their concerns about the patient were alleviated (Chien 2008, Chien et al. 2004a, Schenk et al. 2008, Schenk et al. 2006a, Young 2001).

DISCUSSION

The effect of psychological training administered by health-care professionals has been tested and proven in many meta-analyses (Pilling et al. 2002, Walz et al. 2001). Family support programs are conducted in collaboration with experts, under the guidance of experts or under the guidance of caregivers. In support groups conducted under the guidance of caregivers, sharing of information based upon experience and intuition is present, while support groups guided by experts are founded upon sharing information based upon clinical expertise and the literature (Young 2001). The development of family to family support programs with the cooperation of experts and caregivers and maintenance of the collaboration between the experts and care givers is important.

Support supplied by peer groups has a positive effect on individuals and plays a protective role against stress and challenges (Solomon 2004). It has been found that family interventions increase the well-being of families, develop their coping skills, and are effective in protecting psychological well being (Glynn et al. 2006, Rummel and Kissling 2008). According to the meta-analysis of the interventions given to families of schizophrenia patients, peer information, help and support increases the capacity to cope with stress (Pharoah et al. 2006). In a qualitative study carried out to evaluate the efficiency of the family to family support program, caregivers who participated in the National Alliance on Mental Illness

family to family support program and finished this program were interviewed. Caregivers stated that after they participated in the program, they could solve problems more efficiently, their self-confidence increased, they behaved with more compassion to the patients, their anger and frustration was decreased, and they could cope with stress more efficiently (Lucksted et al. 2008).

Burden of caregivers and social support

In various studies, it has been reported that the prevalence of depression is two-fold higher in the family members of schizophrenia patients than in general population and that as their stress increases, depressive symptoms and burdens increase (Saunders 2003, Doornbos 2002). Giving care to a schizophrenic patient is a significant burden for the families (Schulze and Rössler 2006). Providing social support to those who give care to schizophrenic patients and developing their stress coping skills is important in order to decrease the burden experienced by the caregivers (Liu et al. 2007, Schulze ve Rössler 2006). It has been stated that efficient social support alleviates the burden of the family (Magliano et al. 2006). Family to family support programs help to increase perceived social support by enabling the caregivers of schizophrenic patients to support each other socially and emotionally. In a study evaluating the efficacy of family to family support program qualitatively, similar results were obtained and it was reported that family to family support program increases social support and decreases burden (Lucksted et al. 2008). Taking part in family to family support programs increases stress tolerance and decreases the burden of caregivers (Cook et al. 1999). Sharing of experiences in family to family support programs increases social support and coping in caregivers.

Burden

A decrease in family care burden enables the caregivers to feel stronger. A decrease in family burden enables caregivers to feel more empowered. In the study carried out by Dixon evaluating the efficacy of family to family support program, the burden scores of care givers decreased and their empowerment scores increased at the end of the program (Dixon et al. 2004). In another study evaluating the effect of family to family support programs, it was reported that caregivers were significantly more empowered after participating in the program (Dixon et al 2001). In a meta-analysis examining the effect of family interventions, it was found that caregivers taking part in a family intervention program felt empowered (Pharoah et al. 2006).

The need for information

Another aim of family to family support programs is to provide information on the causes and treatment of psychiatric

disease. It was found that caregivers of patients with chronic psychiatric disease need information on the causes and the treatment of the disease, on coping with symptoms of the disease, coping with stress, communicating with the patient, planning free time activities for the patient, solving problems and the legal rights of the patients (Gümüş 2006). It has been established that the content of the family to family support programs involves information needed by caregivers. In the study carried out by Schenk *et al.* (2006b), it was found that there was an increase in the satisfaction of the families participating in the family to family support programs and a decrease in their need for information (Schenk *et al.* 2006a). Healthcare workers sharing information with families, sharing emotions, and early intervention increases the capacity for coping (Gavois *et al.* 2006). Family to family support programs create collaboration between families and families become more involved in the treatment process and overall the satisfaction of the caregiver increases (Schenk *et al.* 2006a). Caregivers want healthcare workers to understand them and to provide more information on the disease (Doornbos 2001).

Self efficacy

Self efficacy is extent to which the individual feels that she/he has the capacity and skill to cope with various situations and succeed in certain activities (Bandura 1989b). The effect of family psychological training on the self-efficacy of caregivers was examined and it was established that psychological training increased the self- efficacy of caregivers (Solomon *et al.* 1996). Participating in family training/support groups increases the ability of caregivers to understand psychological disease and cope with disease symptoms, hence enhancing their self-confidence and self-efficacy (Dixon *et al.* 2004, Solomon *et al.* 1996).

Functionality of the caregiver and patient

It has been stated that the challenge, helplessness, hopelessness, and stress experienced by the caregivers of patients with chronic mental disease and the behavioral problems of the patient have a negative impact on the functions of the family (Saunders 2003). In a study examining the family function of schizophrenic patients, it was reported that family function was unhealthy and impaired, and that families should be made aware of and trained on intra-family interactions in addition to social support (Ebrinç *et al.* 2001). In another study of caregivers of schizophrenic patients, the factors influencing the functionality of the family were examined and it was found that the coping behavior of caregivers and perceived stress and social support affect the functionality of the family (Saunders 1999). It was also stressed that family to family support programs can favorably improve the family functionality.

In four studies carried out by Chien *et al.* (Chien 2008, Chien and Chan 2004b, Chien *et al.* 2005, Chien *et al.* 2006) the effect of family to family support program on the functionality of the patients was investigated and the functioning of the patients whose caregivers participated in family to family support program was found to be increased. Likewise, in the study conducted by Magliano *et al.*, psychological training administered to families was reported to increase the functional level of the patients (Magliano *et al.* 1998). It is observed that family to family support programs have a favorable impact on the functioning of the patients as well as the caregivers.

The frequency of readmission

It is reported that collaboration between schizophrenic patients, families and healthcare workers enhances the impact of the treatment and decreases the rate of recurrence of the disease and re-admission to the hospital (Doğan 2002, Maldonado and Urizar 2007). In a meta-analysis of the studies concerning caregivers of schizophrenia patients, it is reported that psychological training interventions decrease the rate of recurrence of the disease by 20% (Walz *et al.* 2001). In various studies, it has been determined that patient and family intervention programs increase drug compliance and decrease the recurrence of the disease (Duman *et al.* 2007). Family to family support programs have positive effects not only on the caregivers but also on the patients. An increase in the information given to the caregivers on the disease, development of their coping skills and an increase in caregiver well-being helps them cope better with the patients, decreasing the rate of re-admissions.

CONCLUSION

The limitations of this systematic review are that only studies written in English were included, and gray literature (unpublished studies) was not reviewed.

In conclusion, in all studies included in the review, it was established that family to family support programs administered to caregivers of schizophrenia patients have a favorable impact.

When the content of the family to family support programs included in the review was examined, it was established that although program content was designed to increase coping skills of caregivers, they did not examine the effect of the program on the coping ability of the of care givers. It is important to evaluate the effect of family to family support programs on the coping ability of caregivers experiencing stress.

Family to family support programs for caregivers of schizophrenic patients should be more common and families of patients with chronic schizophrenia should be involved in the treatment and rehabilitation process. In our country, there

are no systematic, planned and continuous training programs which are designed to develop the skills of caregivers of schizophrenia patients for coping with the difficulties they are confronted with in the care giving process. The development and implementation of family to family support programs in our country is necessary in order to increase the coping ability of caregivers and protect their mental health. In the implementation and maintenance of family to family support programs,

expert psychiatry nurses can play a role. One of the responsibilities of a psychiatry nurse is to determine the needs of the patients and the family, to prepare training programs and to implement them with the families and to evaluate these programs (Psychiatric Nurses Association 2010). The psychiatry nurse should participate in the implementation and planning of family to family support programs and in the process of evaluating the effect on families and follow-up.

Investigation	Method	Study group	Program	Result
Solomon B, Draine J, Mannion E, Meisel M, 1997	Experimental study (Pre test, post test Control group design)	<ul style="list-style-type: none"> • 225 caregivers of chronic psychiatry patients <p>133: Experiment group</p> <ul style="list-style-type: none"> •66 individual counselling •67 family training study group <p>92: Control group</p>	<p>Individual counselling:</p> <ul style="list-style-type: none"> • counseling was offered to caregiver by health professionals • Information was given on diseases, drug training and problem solving training and services. • Counseling lasted at least six hours including two hours of evaluation. • At least two hours was conducted face to face or by phone . <p>Family training study group</p> <ul style="list-style-type: none"> • It was led by both a trained family member and psychiatry consultant. • Training was carried out for 10 weeks, two hours each week. • In each session, training on mental diseases was given for 30 minutes and training on coping skills for 90 minutes. • At the end of each part, homework was given to caregivers on patients interaction with caregivers <p>Control groups</p> <ul style="list-style-type: none"> • No intervention was made 	<ul style="list-style-type: none"> • Increase in self efficacy score was observed in individual counseling and family study groups.. • Significant increase was found in self efficacy score of family study group. • In family training study group and counseling group, decrease in family burden and increase in coping with stress was not observed
Dixon L, Stewart B, Burland J, Delahanty J, Lucksted A, Hoffman M, 2001	Semi-experimental (pre test, post test design)	<ul style="list-style-type: none"> • 37 caregivers of chronic psychiatry patients 	<p>Family to family support program</p> <ul style="list-style-type: none"> • Other family members were trained by trained caregiver. • Training included 12 sessions. • Sessions lasted for 2-3 hours. • The content of training • mental diseases, treatment, drugs and rehabilitation • Communication skills • Problem solving skills • Program 3 was completed in 3 months. 	<p>Second and Third follow up</p> <ul style="list-style-type: none"> • After caregivers participated in family to family training group, they were significantly empowered in the community and the family. • The dissatisfaction of caregivers with the patients and their concerns about the patient were decreased.
Dixon L, Lucksted A, Stewart B, Burland J, Brown CH, Postrado L, McGuire C, Hoffman M. Scand, 2004	Semi experimental (pre test, post test design)	<ul style="list-style-type: none"> • 95 caregivers of chronic psychiatry patients 	<p>Family to family training program</p> <ul style="list-style-type: none"> • other family members were trained by the trained caregiver • Training consisted of 12 sessions. • Sessions lasted 2-3 hours. • The content of training, • psychiatric diseases, treatment, drugs and rehabilitation • communication skills, • Problem solving skills • Program was completed in 3 months. 	<ul style="list-style-type: none"> • First and second follow up were compared with third follow up • third and fourth follow up • In caregivers participating in family to family training program; • Significant decrease in subjective burden • Empowerment of family • Increase in information on psychiatric diseases • Fourth follow up • significant decrease in depression scores were observed.

Chien WT, Norman I, Thompson DR, 2004a	Randomized controlled study	<ul style="list-style-type: none"> • 48 caregivers of chronic psychiatry patients 24: Experiment group 24: Control group 	<ul style="list-style-type: none"> • family to family support program • A family member trained by psychiatry nurse trained other family members. • Family member who will give training was trained by psychiatry nurse two hours per day for 3 days on leading and planning the group • Family member who will conduct the program was chosen by other family members. • Psychiatry nurse and family member led the group together. Psychiatry nurse was more active in the first two sessions. • Program consists of overall 12 weekly sessions, each session lasting one hour. <ul style="list-style-type: none"> • 2–3 sessions, introduction and sharing of emotions • 2 sessions, sharing of emotions and concerns about the patient • 2–3 sessions, effective communication, psychosocial needs, managing home care • 2–3 sessions, effective coping, problem solving • 1–2 sessions, evaluation • Program was completed in 3 months • Control group • No intervention was performed. 	<ul style="list-style-type: none"> • Second and third follow up • in the family to family support program group, decrease in family burden and increase in family functioning was observed. • Re-admission rate of the patients whose care givers participated in family to family support program decreased, but the difference was not statistically significant • In the family to family support group, the score of family support services index increased, but the difference was not statistically significant.
Chien WT, Chan SWC, 2004b	Randomised controlled study	<ul style="list-style-type: none"> • 98 Caregivers of chronic psychiatry patients 65: Experiment group 33: Control group 	<ul style="list-style-type: none"> • Family to family support program • a family member trained by a psychiatry nurse trained other families. • Family member who will give training was trained by psychiatry nurse for two days on leading the group and planning. • Psychiatry nurse and the family led the group together • Program consists of 12 sessions one a week fro two hours <ul style="list-style-type: none"> • 2 sessions, introduction and sharing of emotions • 2-3 sessions, sharing of emotions and concerns about the patient, and culture • 3 sessions, effective communication, psychosocial needs, managing home care • 2–3 sessions, effective coping, problem solving , • 1–2 sessions, evaluation • Program was conducted every two weeks and completed in 6 months. • psychological training program • Family training was given by two psychiatry nurses for 1-2 hours weekly. Patients themselves were invited to some sessions • Program consists of 12 weekly sessions lasting one hour <ul style="list-style-type: none"> • 2 sessions, introduction and discussion of aims and targets • 2-3 sessions, schizophrenia, its treatment and impact on family life (patient and family) • 1 session, coping with stress • 1 session, information on social services, • 1 session, effective communication • 1 session, problem solving strategies • 1 session evaluation • No intervention was made in the control group 	<ul style="list-style-type: none"> • At third follow up • In the group of caregivers participating in family to family support program, compared to other groups, increase in the functioning of patients and decrease in the number of re-admissions was observed. • The score of family support services Index* did not change in all three groups at all measurements.

Chien WT, Chan S, Morrissey J, Thompson D, 2005	Randomised controlled study	<ul style="list-style-type: none"> • 98 caregivers of chronic psychiatry patients <p>65: Experiment group</p> <ul style="list-style-type: none"> • 32 family to family support group • 33 family psychological training group <p>33: Control group</p>	<ul style="list-style-type: none"> • Family to family support program A family member trained by a psychiatry nurse trained other families • Psychiatry nurse and family member led the group together • Program consisted of 12 weekly sessions each lasting one hour <ul style="list-style-type: none"> · 2 sessions, introduction and sharing of emotions · 2-3 sessions, sharing of emotions and concerns about the patient and culture · 3 sessions, effective communication, psychosocial needs, managing home care · 2-3 sessions, effective coping, problem solving · 1-2 sessions, evaluation • psychological training program • Two psychiatry nurses trained patients and families together for 1-2 hours weekly • Program consisted of 12 sessions weekly each lasting one hour • Psychiatry nurse gave family training for 1-2 hours weekly • Program consists of overall 12 sessions once a week, each sessions lasting one hour <ul style="list-style-type: none"> · 2 sessions introduction and discussion of aims and targets · 4 sessions schizophrenia, its treatment and impact on family life · 4 sessions, coping with stress, problem solving · 2 sessions, evaluation • No intervention was made in the control group. 	<ul style="list-style-type: none"> • Second follow up • in the caregivers participating in family to family support program, compared to other groups, a significant increase was observed in the functioning of the family and the patient. • Third follow up, • In the caregivers participating in family to family support group, compared to other groups, significant increase was observed in the functioning of patients
Chien WT, Chan SWC, Thompson, DR, 2006	Randomised Controlled study	<ul style="list-style-type: none"> • 96 caregivers of chronic psychiatry patients <p>65: Experiment group</p> <ul style="list-style-type: none"> • 32 family to family mutual support group a • 33 family psychological training group <p>31: Control group</p>	<ul style="list-style-type: none"> • Family to family support program • A family member trained by psychiatry nurse trained other families. • Psychiatry nurse and the family member led the group together • Program consists of overall 12 sessions weekly, each session lasting one hour <ul style="list-style-type: none"> · 2 sessions, introduction and sharing of emotions · 2-3 sessions, sharing of emotions and concerns about the patient and culture · 3 sessions, effective communication, psychosocial needs, managing home care · 2-3 session, effective coping, problem solving, · 1-2 sessions, evaluation • Psychological training program • It was conducted by two psychiatry nurses for 1-2 hours weekly. Training was given to family and the patients. • Program consists of 12 weekly sessions. • Two psychiatry nurse gave 1-2 hours training to patients weekly. Patients were invited to some sessions. <ul style="list-style-type: none"> · 2 sessions, introduction and discussion of aims and targets · 4 sessions, schizophrenia, its treatment and impact on family life (patient and family) · 4 sessions, coping with stress, problem solving · 2 sessions, evaluation • No intervention was made in the control group 	<ul style="list-style-type: none"> • Second and third follow ups, • In the caregivers participating in the family to family mutual support group, compared to other groups, a decrease in family burden and re-admissions and increase in the functioning of family was observed.

Pickett-Schenk SA, Cook JA, Steigman P, Lippincott R, Bennett C, Grey DD, 2006a	Randomised controlled study	<ul style="list-style-type: none"> • 462 Caregivers of chronic psychiatry patients 	<p>231: Experiment group</p> <p>231: Control group</p>	<p>Journey of hope family to family training program</p> <ul style="list-style-type: none"> • Experiment group, caregivers participating in Journey of Hope family to family training program • Program lasted for 8 weeks. • Sessions last one hour once a week • Program content • psychiatric diseases, treatment, drugs and rehabilitataion • Communication skills • Problem solving skills • social sources • control group caregivers who are on the waiting list of Journey of Hope program 	<ul style="list-style-type: none"> • Second and third follow up • In the caregivers participating in family to family training program, compared to control group, statistically significant decrease in depressive symptoms and improvement in psychological health was observed.
Pickett-Schenk SA, Bennett C, Cook JA, Steigman P, Lippincott R, Villagracia I, Grey D, 2006b	Randomised controlled study	<ul style="list-style-type: none"> • 462 caregivers of chronic psychiatry patients 	<p>231: Experiment group</p> <p>231: Control group</p>	<p>Journey of Hope family to family training program</p> <ul style="list-style-type: none"> • Experiment group, caregivers participating in Journey of Hope family to family training program • Program lasted for 8 weeks. • Sessions lasted two hours once a week • Program content • Psychiatric diseases, treatment, drugs and rehabilitation • Communication skills • Problem solving skills • Social sources • Control group, caregivers who are on the waiting list of Journey of Hope program 	<ul style="list-style-type: none"> • Second and third follow up • In caregivers participating in family to family training program, compared to control group, increase in the satisfaction in caregiver and significant decrease in the need for information was observed.
Pickett-Schenk SA, Lippincott RC, Bennett C, Steigman PJ, 2008	Randomised controlled Study	<ul style="list-style-type: none"> • 462 caregivers of chronic psychiatry patients 	<p>231: Experiment group</p> <p>231: Control group</p>	<p>Journey of Hope family to family training program</p> <ul style="list-style-type: none"> • Experiment group, caregivers who partycipate in Journey of Hope training program • Program lasted overall 8 weeks. • Sessions last for two hours once a week. • Program content • Psychiatric diseases, treatment, drugs and rehabilitation • Communication skills • Problem solving skills • Social sources • Control group, caregivers who are on the waiting list of Journey of Hope family to family training program 	<ul style="list-style-type: none"> • Second and third follow up • In the caregivers participating in family to family training program, compared to control group, significant increase in information level was observed. • Those participating in family to family training program, compared to control group, needed less information in order to be able to cope with the positive symptoms of the disease.
Chien WT, Thompson DR, Norman I, 2008	Randomised controlled study	<ul style="list-style-type: none"> • 76 caregivers of chronic psychiatry patients 	<p>38: Experiment group</p> <p>38: Control group</p>	<p>Family to family support group</p> <ul style="list-style-type: none"> • A family memebr trained by psychiatry nurse trained other families. • family member who will give training was trained by psychiatry nurse for 3 days on leading the group and planning. • Psychiatry nurse and the family member led the group together. • Program consists of overall 12 sessions weekly each session lasting for 2 hours. <ul style="list-style-type: none"> • 2 sessions introduction and sharing emotions • 2-3 sessions, sharing of emotions and concernms about the patient and culture • 3 sessions, effective communication, psychosocial needs, managing home care • 2-3 sessions, effective coping, problem solving • 1-2 sessions, evaluation 	<p>In the caregivers participating in family to family support program, compared to control groups, at second and third follow-up</p> <ul style="list-style-type: none"> • Decrease in family burden • Increase in family functioning • Decrease in the rate of re-admissions were observed. <p>Second follow up</p> <ul style="list-style-type: none"> • In those participating in family to family support program, increase in perceived social support was observed <p>Third follow up,</p> <ul style="list-style-type: none"> • Increase in perceived social support was seen, but the difference was not statistically significant.

Chien WT, 2008	Randomised controlled study	<ul style="list-style-type: none"> • 68 caregivers of chronic psychiatry patients <p>34: Experiment group</p> <p>34: Control group</p>	<ul style="list-style-type: none"> • Family to family support program • A family member trained by psychiatry nurse trained other family members • Family member who gave training was trained by psychiatry nurse for 3 days on supervising the group and planning. • Psychiatry nurse supervised the group together with family member. Psychiatry nurse was more active in the first two sessions. • Program consists of 12 sessions, once a week lasting for two hours <ul style="list-style-type: none"> · 2 sessions, introduction and sharing of emotions · 2-3 sessions sharing of emotions and concerns about the patient and culture · 3 sessions effective communication, psychosocial needs, supervising home care · 2-3 sessions, effective coping, problem solving · 1-2 sessions evaluation • Program consists of 18 sessions and was completed in 36 weeks with one session each week • No intervention was made to the control group. 	<p>Second follow up</p> <ul style="list-style-type: none"> • In family to family support program, compared to control group, decrease in family burden was observed <p>Second and third follow up</p> <ul style="list-style-type: none"> • In caregivers participating in family to family support program, compared to control group, increase in the functioning of patients and decrease in the duration of hospitalization was observed.
----------------	-----------------------------	--	--	---

REFERENCES

- Addington JMA (2005) Three-year outcome of family work in an early psychosis program. *Schizophr Res*, 79:107-116.
- Bandura A (1989) Social cognitive theory. In: R. Vasta (Ed.), *Annals of child development* (pp.1-60), Greenwich, CT: JAI Press.
- Burland J (1998) Family-to-family: A trauma and recovery model of family education. *New Dir Ment Health Serv*, 77: 33-41.
- Carter KOG, Curlee M (1999) The educational needs of families of mentally ill adults: the south caroline experience. *Psychiatr Serv*, 50: 520-524.
- Centre for Reviews and Dissemination (2009) *Systematic reviews. CRD Guidance for undertaking reviews in health care* Published by CRD, University of York.
- Chien WT (2008) Effectiveness of psychoeducation and mutual support group program for family caregivers of chinese people with schizophrenia. *Open Nurs J*, 2:28-39.
- Chien WT, Norman I, Thompson DR (2004a) A randomized controlled trial of a mutual support group for family caregivers of patients with schizophrenia. *Int J Nurs Stud*, 41:637-4.
- Chien WT, Chan CWS (2004b) One-year follow-up of a multiple-family group intervention for Chinese families of patients with schizophrenia. *Psychiatr Serv*, 55:1276-1284.
- Chien WT, Chan S, Morrissey J et al. (2005) Effectiveness of a mutual support group for families of patients with schizophrenia. *J Adv Nurs*, 51:595-608.
- Chien WT, Chan WC, Thompson DR (2006) Effects of mutual support group for families of Chinese people with schizophrenia: 18-month follow-up. *Br J Psychiatry*, 189:41-49.
- Chien WT, Thompson DR, Norman I (2008) Evaluation of peer-led mutual support group for chinese families of people with schizophrenia. *Am J Community Psychol*, 42: 122-134.
- Cook JA, Heller T, Pickett SA (1999) The effect of support group participation on caregiver burden among parents of adult offspring with severe mental illness. *Fam Relat*, 40:5-410.
- Dixon LB, Lehman AF (1995) Family intervention for schizophrenia. *Schizophr Bull*, 21: 631-641.
- Dixon L, Lucksted A, Stewart B et al. (2004) Outcomes of the peer-taught 12-week family-to-family education program for severe mental illness. *Acta Psychiatr Scand*, 109, 207-215.
- Dixon L, Stewart B, Burland J et al. (2001) Pilot study of the effectiveness of the family-to-family education program. *Psychiatr Serv*, 52:965-970.
- Doğan O (2002) Şizofrenik bozukluklarda psikososyal yaklaşımlar. *Anadolu Psikiyatri Dergisi*, 3:240-248.
- Doornbos M (2002) Predicting family health in families of young adults with severe mental illness. *J Fam Nurs*, 8: 241-263.
- Doornbos M (2001) Family caregiving for young adults with severe and persistent mental illness. *J Fam Nurs*, 7:328-344.
- Duman ÇZ, Aştı N, Üçok A (2007) Şizofreni Hastalarına Ve Ailelerine "Bağımsız Yaşam Becerileri Ve Topluma Yeniden Katılım Programı Uygulaması Ve İzlenmesi. *Anadolu Psikiyatri Dergisi*, 8:91-99.
- Ebrinç S, Çetin Y, Sevil M et al. (2001) Şizofren hasta ve ailelerinde aile işlevselliği, sosyal destek ve duygu dışı vurumunun incelenmesi. *Anadolu Psikiyatri Dergisi*, 2:5-14.
- Fung C, Fry A (1999) The role of community mental health nurses in educating clients and families about schizophrenia. *Australian and New Zealand J Ment Health*, 8:162-175.
- Gavois H, Paulson G, Bengt, F (2006) Mental health Professional support in families with a member suffering from severe mental illness: a grounded theory model. *Scand J Caring Sci*, 20:02-109.
- Glynn SM, Cohen AN, Dixon LB (2006) The potential impact of the recovery movement on family interventions for schizophrenia: opportunities and obstacles. *Schizophr Res*, 32: 451-463.
- Gümüş AB (2006) Şizofreni hastalarının ve yakınlarının sağlık eğitimi gereksinimleri. *Anadolu Psikiyatri Dergisi*, 7:33-42.
- Huang XY, Sun FK, Yen WJ et al. (2008) The coping experiences of carers who live with someone who has schizophrenia. *J Clin Nurs*, 17:817-826.

- Li J, Lambert CA, Lambert VA (2007) Predictors of family caregivers' burden and quality of life when providing care for a family member with schizophrenia in the people's republic of china. *Nurs Health Sci*, 9:192-198.
- Lincoln TM, Wilhelm K, Nestoriuc Y (2007) Effectiveness of psychoeducation for relapse, symptoms, knowledge, adherence and functioning in psychotic disorders:a meta-analysis. *Schizophr Res*, 96:232-245.
- Liu M, Clinton E, Lambert V (2007) Caregiver burden and coping patterns of Chinese parents of a child with mental illness. *Int J Ment Health Nurs*, 16:86-95.
- Lucksted A, Steward B, Forbes CB (2008) Benefits and changes for family to family graduates. *Am J Community Psychol*, 42:154-166.
- Magliano L, Fadden G, Madianos M et al. (1998) Burden on the families of patients with schizophrenia: Result of the BIOMED I STUDY. *Soc Psychiatry Psychiatr Epidemiol*, 33:405-412.
- Magliano L, Fiorillo A, Malangone C et al. (2006) Patient Functioning and Family burden in a controlled, real-world trial of family psychoeducation for schizophrenia. *Psychiatr Serv*, 57:1784-1791.
- Maldonado GJ, Urizar AC (2007) Effectiveness of psycho-educational intervention for reducing burden in latin american families of patients with schizophrenia. *Qual Life Res*, 16:739-747.
- National Alliance For The Mentally Ill,. Family to Family Education Program Retrieved January 2010, from: <http://www.nami.org/Template.cfm?Section=Family-to-Family&Istid=605>.
- Pharoah F, Mari J, Rathbone J et al. (2006) Family intervention for schizophrenia. *Cochrane Database of Systematic Reviews* 4.Art.No:CD000088.DOI: 10.1002/14651858.CD000088.pub2.
- Pilling S, Bebbington P, Kuipers E et al. (2002) Psychological treatments in schizophrenia: I. Meta-analysis of family intervention and cognitive behaviour therapy. *Psychol Med*, 32:763-782.
- Psychiatric Nurses Association. Ruh sağlığı ve psikiyatri hemşireleri işlevleri. 11 Retrieved:May 2010, from:www.phderneti.org
- Rose LE, Mallinson KR, Walton MB (2004) Barriers to family care in psychiatric settings. *J Nurs Scholarsh*, 36:39-47.
- Rummel CB, Hansen PW, Helbig A et al. (2005) Peer to peer psychoeducation in schizophrenia: a new approach. *J Clin. Psychiatry*, 66:1580-1585.
- Rummel CK, Kissling W (2008) Şizofrenide psiko eğitim: bu alandaki yeni gelişme ve yaklaşımlar. *Curr Opin Psychiatry, TÜRKÇE BASKI*, 4:119-124.
- Saunders J (2003) Families living with severe mental illness: A literature review. *Issues Ment Health Nurs*, 24:175-198.
- Saunders J (1999) Family functioning in families providing care for a family member with schizophrenia. *Issues Ment Health Nurs*, 20:95-113.
- Schenk PSA, Bennett C, Cook JA et al. (2006a) Changes in caregiving satisfaction and information needs among relatives of adults with mental illness: results of a randomized evaluation of a family-led education. *Am J Orthopsychiatry*, 76:545-553.
- Schenk PA, Cook JA, Steigman P et al. (2006) Psychological well-being and relationship outcomes in a randomized study of family-led education. *Arch Gen Psychiatry*, 63: 1043-1050.
- Schenk PA, Lippincott RC, Bennett C et al. (2008) Improving knowledge about mental illness through family-led education:the journey of hope. *Psychiatr Serv*, 59:49-56.
- Schulze B, Rössler W (2006) Ruhsal hastalıkta bakım verenin yükü: 2004-2005'te ölçümler, bulgular ve müdahalelerin gözden geçirilmesi. *Curr Opin Psychiatry, TÜRKÇE BASKI* 2:47-58.
- Solomon P (2004) Peer support/peer provided services underlying processes, benefits, and critical ingredients. *Psychiatr Rehabil J*, 27:392-401.
- Solomon P (2000) Interventions for families of individuals with schizophrenia maximising outcomes for their relatives. *Dis Manage Health Outcomes*, 8:211-221.
- Solomon P, Draine J, Mannion E et al. (1997) Effectiveness of two models of brief family education: retention of gains by family members of adults with serious mental illness. *Am J Orthopsychiatry*, 67:177-186.
- Solomon P, Draine J, Mannion E et al. (1996) Impact of brief family psychoeducation on self-efficacy. *Schizophr Bull*, 22: 41-50.
- Walz GP, Leucht S, Bauml J et al. (2001) The effect of family interventions on relapse and rehospitalization in schizophrenia-a meta-analysis. *Schizophr Bull*, 27:73-92.
- Wyman K, Clarke S, McKenzie P et al. (2008) The Impact of Participation in support group for careers of a person with schizophrenia: A Qualitative study. *Int J Psychosocial Rehabil*, 12: 97-109.
- Young R. Support groups for relatives of people living with a serious mental illness:An overview. *Int J Psychosocial Rehabil*, 2001; 5:56-80.