Review

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Domiciliary intervention in psychosis: a systematic review

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Background. This theoretical study reviews the main findings and research on home-based treatment for psychosis. The principal purpose was to analyze the various types of home-based service and make recommendations for a service that would meet the needs of both first-episode and resistant patients. We compare the Early Intervention Service, which aims to reduce the range of untreated psychosis (DUP) with other types of home-care and similar interventions that have already been implemented: crisis resolution home teams (CRHTs), Open Dialogue Approach (ODA), social skills training (SST) and foster homes.

Method. We searched electronic bibliographic databases including PubMed, PsycINFO, and Discovery for relevant publications appearing between 2005 and 2015. Ninety-three publications were deemed eligible for inclusion; 9 of these were systematic reviews and the rest were scientific papers or books.

Discussion. We describe in this review the most widely used home-based interventions, including individual and family therapy. Multidisciplinary teams carry out all the interventions discussed. There does not appear to be a form of psychotherapy, which is effective in treating resistant patients.

Conclusions. Home-based interventions improve adherence to treatment, everyday living and social skills and also have a beneficial impact on family conflicts and other social conflicts. As a whole result, the number of incomes is reduced, patients' quality of life and autonomy are increased and inclusion and community living are improved.

Keywords: Psychotic Disorder, Schizophrenia, Home Intervention, Resistant Patients, Family Therapy

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Intervención domiciliaria en psicosis: una revisión sistemática

Introducción. En el presente estudio teórico se revisan las principales investigaciones sobre las intervenciones domiciliarias en psicosis. El objetivo principal es analizar los diferentes tipos de servicios domiciliarios y proponer recomendaciones para la creación de un servicio que satisfaga las necesidades tanto para pacientes con un primer episodio psicótico como para pacientes resistentes a tratamiento psicológico y farmacológico. Se compara la intervención precoz de la psicosis (*Early Intervention Services*) con otras tipologías de intervención domiciliaria o semejantes y los beneficios de éstas: Intervenciones en crisis (*CRHTs: Crisis Resolution Home Teams*), *Open Dialogue Approach* (*ODA*), Entrenamiento de Habilidades Sociales (*EHS*) y *Foster Homes* (o *Boarding Homes*).

Método. Se han realizado búsquedas en bases de datos electrónicas incluyendo *PubMed*, *PsycINFO* y *Discovery* de publicaciones relevantes que aparecen entre 2005 y 2015. Noventa y tres publicaciones se consideraron elegibles para su inclusión; 9 de ellas eran revisiones sistemáticas y el resto eran trabajos científicos o libros.

Discusión. En esta revisión se describen las intervenciones domiciliarias más ampliamente utilizadas, incluyendo la terapia individual y familiar, realizadas desde una perspectiva multidisciplinar. Además, se discute la inexistencia del abordaje de pacientes resistentes a tratamiento psicoterapéutico.

Conclusiones. Las intervenciones domiciliarias mejoran la adherencia al tratamiento, las actividades de la vida diaria, las habilidades sociales y tienen un efecto beneficioso sobre los conflictos familiares y sociales. Consecuentemente, el número de ingresos se reduce, la calidad de vida y la autonomía de los pacientes incrementan y la inclusión y la vida en comunidad mejoran.

Palabras clave: Trastorno Psicótico, Esquizofrenia, Intervención Domiciliaria, Pacientes resistentes, Terapia familiar

BACKGROUND

Several countries have been using home-based interventions for patients with psychotic spectrum disorder[1] for several decades. These interventions include: early intervention services for psychosis[2], crisis/emergency intervention units for patients with psychosis[3] and, more recently, Open Dialogue, proposed by Seikkula's Finnish team[4].

Schizophrenia is classified as a severe mental illness (SMI) based on its positive and negative symptoms[1] and can affect all or most of the areas of functioning at both patient and family level, so it has been suggested that early, multidisciplinary interventions offer the best chance of preventing cases to become chronic. Almost all people with schizophrenia experience fluctuations in symptoms during the course of their disease, with periods of isolation, hospitalization, improvement, relapse and deterioration. Symptoms can result in serious functional problems and impair patients' ability to live independently[5].

It is now many years since the move to deinstitutionalize patients with mental illnesses[6] and treat them through outpatient services, thus allowing them to be part of the community.

America and Europe began to introduce home-based services in the 1960s. These services included the early intervention service in psychosis[7], a model which was disseminated and also implemented in countries such as Australia[8,9]. In the most recent systematic review[9], Marshall and Rathbone argue that although there is evidence that patients in the prodromal stages of schizophrenia may benefit from early intervention, there is no guarantee that this will prevent relapse in the following years. In addition, recent studies show that the percentage of mental health patients at high risk of transition to psychosis and thus suffering a severe mental disorder is 18% in the first year after the first contact with mental health services and 23% in the following three years. These percentages may decrease or relent the course of the disease if a combined treatment is applied (psychological and pharmacological)[10].

A review of the literature on home-based interventions suggest that they are not confined to early intervention services for psychosis, but are also used in other contexts:

a) *Crisis Resolution Home Teams (CRHTs)* are based on a recognition that patients suffering from schizophrenia tend to experience crises when they are exposed to stressors[11]. CRHTs-are intended to prevent hospitalization or reduce the duration of unavoidable hospital stays[3,12]. Their interventions involve both the patient and his family[13,14].

b) *Open dialogue (OD).* The principle behind OD is that psychotic patients should be treated in their homes, by a multidisciplinary team, and that treatment should involve both the patient and his family. All kinds of interventions and decisions are made within this context using a therapeutic dialogue[15,16] and treatment plans are based on the experiences of the individual patient[17].

c) *Combined treatment for schizophrenia at the household level, based on social skills training (SST).* Elvira, Pulido and Cabrera[18] noted that this type of home-based intervention produced improvements in patients' basic and instrumental everyday living skills, adherence to treatment and symptoms.

All the authors who have reported on home-based interventions have claimed that the monitorization and treatment of the patients in their normal situation represents a viable alternative to outpatient treatment or institutionalization.

Apart from the proposed home-based setting, there are other important types of interventions that are recommended by institutions such as the American Psychiatric Association (APA) or the National Institute for Health and Care Excellence (NICE) for the treatment of a psychotic spectrum[19]: cognitive-behavioral therapy, assertive community treatment, family psychoeducation, brief family intervention, programs to improve self regulation of symptoms, cognitive rehabilitation, sheltered employment programs and social skills training[5]. However, these interventions either do not include family-level treatment -which is a very important factor in the disease process and in reducing relapse[20]- or focus on a single technique (for example, SST). Most importantly, they do not consider patients who are resistant to psychological treatment and thus become chronic.

A wide variety of factors may be taken into account in definitions of resistance to psychotherapeutic treatment; for the purpose of this study we define as resistant those patients who relapse twice or more during two consecutive years[21].

Based on the literature discussed above the aims of this study were:

1. To describe all home-based early intervention services for psychosis done before this review.

2. To analyze the effectiveness of home-based psychotherapeutic interventions for treating patients with psychotic spectrum disorder.

3. To determine which treatments are effective in a home-based individual and family intervention.

METHODS

The current search was carried out between September 2015 and December 2015.

Search strategy

The following electronic bibliographic databases were searched: PubMed, PsycINFO and Discovery. The search covered the period from 2005 to 2015.

Search phrases were as follows: 'home care' AND 'psychosis'; 'home services' AND 'psychosis'; 'open dialogue' AND 'psychosis'; 'early intervention service' AND 'psychosis' OR 'crisis intervention home treatment' AND 'psychosis'.

The inclusion criteria were:

i) Sample consisting of adult patients diagnosed with psychotic spectrum (schizophrenia) disorder according to the DSM-V[1].

ii) Dealt with at least one of the following types of intervention: early intervention services, crisis intervention home, foster home, open dialogue, community care or integral psychotherapeutic work.

iii) Dealt with individual intervention and/or family intervention.

iv) Sample included patients with first psychotic episodes and treatment-resistant patients.

Based on these criteria 92 publications were deemed eligible for inclusion; 4 were systematic reviews and the rest were scientific papers or books.

Data extraction

We extracted the following variables from all publications:

a) Type of multidisciplinary work carried out (nursing, psychiatry, psychology, occupational work, social work...);

b) Type of medical or psychological treatment (pharmacological or cognitive-behavioral therapy, social skills training, psychoeducation etc.);

c) Family expressed emotion (EE);

d) Quality of life;

e) Adherence to pharmacological treatment;

f) Number of relapses and readmissions.

RESULTS

The results are presented below and are organized according to the objectives set out above.

Early intervention services for psychosis

The model of care known as early intervention services for psychosis emerged in the 1960s as a result of observations that the period between the first psychotic episode and the beginning of an effective treatment was too large[2,8]. This period is commonly referred to as the duration of untreated psychosis (DUP)[2,8,22]. The principal objective of early intervention services for psychosis was to reduce DUP and thus improve long-term prognosis[8]. It has been reported that intervening in the 3-5 years after the first manifestation of the disorder (the critical period) reduces the psychological, medical and social deterioration caused by the disease[23].

Although it emerged in the 1960s, it was not until the 1980s that the focus would turn to the early stages of psychotic illness and the notion of early diagnosis would become a realistic proposition[23].

Moreover, it has been shown to be effective in many developed countries (Australia, USA, Canada and New Zealand among others) and for many years it has been recommended in the National Service Framework for Mental Health[24] and in the guide to prevention and management of schizophrenia used in England and Wales[25].

The latest systematic review[9] concluded that patients in the prodromal phase of their illness may benefit from early interventions but they also concluded that providing early interventions does not necessarily prevent subsequent relapses. A systematic review by Bird et al.[8] and National EDEN studies carried out by Birchwood et al.[2] both noted that early interventions reduced relapses and readmissions.

Early interventions are typically multidisciplinary and may include pharmacological therapy, family intervention, cognitive-behavioral therapy, social skills training and problem-solving training and crisis intervention[26].

Home-based interventions for psychosis

Apart from early intervention services, there are various types of home-based intervention programs that have been carried out to treat a psychotic spectrum disorder:

a) Crisis Resolution Home Teams (CRHTs)

Background

Crisis resolution home teams were established in 1948 providing free home care services for the UK residents with a consequent reduction in hospital admissions or the length of hospital stay[3,7,11,12]. Nevertheless, it was not until the last 10-15 years that research reporting positive outcomes became more prominent[27].

In parallel, in England, in addition to this service, also therapeutic communities, hostels and assisted flats were created. The service consists in providing assistance to patients who are experimenting a crisis in their home. The National Institute for Mental Health in England[7] states that the service is intended for adults (16-65 years) who are suffering from SMI (psychotic spectrum disorder, bipolar disorder, depression, etc.) who would otherwise need to be admitted to hospital.

Crisis intervention services exist in the UK, Amsterdam and Norway, where there have been several studies on the subject during the last decade. In Amsterdam, for example, as collected in Murphy et al. studies[3], 24 hours per day home care crisis services were established just after the Second World War.

One difference between the models of crisis care in England and Norway is that interventions in England are more intensive and last longer; Norwegian teams are more likely to refer patients to outpatient services[13].

Crisis care has also been provided sporadically in Germany[28], Netherlands, Italy, France and Norway. Outside Europe, both the United States and Australia[29].

Type of interventions

Although multidisciplinary interventions are recognized as the ideal type of intervention, the reality is very different. Several studies indicate that crisis interventions are delivered only by one professional, who sees the patients once or twice a week. In this situation, psychiatric nurses and social workers attend 95% and 76% of the patients respectively, while only 25% of the patients are visited by psychologists and 12% by psychiatrists[13,14,30,31].

Karlsson et al.[31] reported on a crisis intervention which included both individual treatment and family meetings[13,30,31]. One third of the family members considered the patient's therapy as very positive while the patients submitted to this type of intervention obtained better results than those whose families did not participate[30].

Relapse and readmission: Favorable results

Several studies have reported that crisis intervention services reduce relapse and rehospitalization[13,32,33].

In 2005 a randomized clinical trial of CRHT[34] found that only 8 weeks after the introduction of the service the ratio of mental health adults hospitalizations in the UK decreased from 59 to 22%. Another study[34] reported a 17% reduction in admissions under the Mental Health Act and a 25% reduction in voluntary admissions in the year following the introduction of the CRHT program, compared to the previous 12 months. Many studies have reported that crisis services reduce the hospitalization rates: Jethwa et al.[33] reported a 45% reduction, Glover et al.[32] a 23% reduction when a 24/7 service was available and Goud et al.[32] a 16% reduction. More recent studies[3,35], similar to what is postulated in the National Institute for Mental Health in England, concluded that in 50% of the cases, crisis intervention prevents readmissions to hospital in the 3-6 months following a crisis, and that such interventions improve satisfaction with care among patients, families and caregivers.

Although there are studies that suggest the possibility that CRHT kept patients in the community preventing them from readmissions, there were many patients that lastly would require hospitalization because of the deterioration associated to their pathology[36]. In contrast, studies carried out in Norway by Barker et al.[34] suggest that patients who receive community-based treatment can remain stable and may not require hospitalization at a later date.

Schöttle et al.[28] also found that crisis interventions were effective. They observed improvements in psychopathology, psychosocial functioning, quality of life, satisfaction with care, adherence to treatment and economic wellbeing. The intervention was also associated with a 10% reduction in involuntary hospital admissions.

b) Open Dialogue Approach (ODA)

Background and types of intervention

The Open Dialogue Approach (ODA) evolved from models of need-adapted treatment (NAT) for patients with a psychotic spectrum disorder. They were based on systemic family therapy and introduced in Finland (Turku) in the 1960s by Alanen[17,37].

ODA emerged in the 1980s under Seikkula. Although the approach is primarily intended for psychotic patients it has recently been applied to a variety of situations and treatments for multiple mental disorders[15]. ODA is based on seven pillars which are governed by two main ideas: *dialogicity* and *openness,* always taking into account the present and the unconditional and uniqueness of the other person[15,37-40].

Geekie and Read[39] and Seikkula[40], claimed that psychotic reactions should be considered as individuals' attempts to bring meaning to their experience and that it is difficult for individuals who have not yet found a way of understanding the experience of psychosis to cope with it.

In both NAT and the subsequent ODA, the treatment team includes a psychiatrist and the treatment is decided through a discussion in which patients, families and professionals are included; the treatment is based on a common understanding of the situation and an assessment of the changes that need to be made by the patient and the family.

As early as 2000 the use of neuroleptics to treat first-episode psychosis was being questioned and it was recommended that such patients should receive integrative treatment focused on psychosocial intervention[41].

Favourable results

Research on ODA has shown that up to 81% of the patients with early psychotic episodes had no residual psychotic symptoms at the end of the therapy and that 84% were able to resume employment or education[16].

Other studies have corroborated these findings. A study[16] which followed patients who received ODA for first-episode psychosis for five years (1992-1997) reported that after five years 35% of the patients were not taking antipsychotic drugs, 81% no longer had residual psychotic symptoms and 81% had returned to their normal role at work[16]. In a second study from 2011, it was postulated that the ratio of first psychotic episodes between 2003-2005 had decreased from 33 cases per 100,000 people a year to only two[39].

The participation of the family supports the positive results of individual interventions because in systematic studies it has been demonstrated the effectiveness of the family treatment in first psychotic episodes, illustrating in this way that the dialogue itself and the psychological skills of the families could mobilize more than conventional interventions guided by experts[42].

c) Combined treatment for schizophrenia applied at household level and based on social skills training (SST)

Background and type of intervention

A Spanish team investigated the benefits of providing patients with schizophrenia (most of whom showed symptoms of paranoia) with care based on combining community and home-based interventions (including the family)[43]. The treatment was intended to improve the social skills of patients diagnosed with severe mental disorders in order to facilitate rehabilitation and social reintegration[5].

The program described by Moriana et al.[44] was divided into four phases in individualized interventions.

Treatment was based on SST and behavioral modification. Families and supporting figures participated in the intervention, which was based on a program devised by Liberman, De-Risi and Mueser[45] in order to help patients becoming more self-sufficient in the use of antipsychotic medication. The results of this and a subsequent study[46] showed that the program increased patients' everyday living skills, improved adherence to pharmacological treatment and produced a general improvement of the symptoms.

Kopelowicz et al.[47] claimed that to be effective SST programs for schizophrenia must encourage patients to generalize what they learn to natural settings using positive reinforcement, goal setting, modeling, exercises or homework and role-playing.

Favourable results

Moriana et al.[5,19,43] concluded that a psychological intervention for schizophrenia based on the Liberman approach

of combining medication, training in everyday living skills and integrated psychological therapy (IPT)[48], which was delivered in the patient's home and via outpatient services, could reduce psychotic symptoms, increase adherence to pharmacological therapy and improve the basic and instrumental everyday living skills. Other studies have noted that the outcomes of home-based interventions are better (better adherence to medication, lower readmission rate) if the program includes psychoeducation and psychosocial interventions[49,50].

d) Other homecare services

In the city of Cali (Colombia), patients with schizophrenia who do not have any social security but do have a family support network are offered a six-month, home-based, multidimensional treatment program (psychiatric treatment, family therapy, psychoeducation and occupational therapy), which is delivered by nurses[51]. The program was designed for patients with low adherence to pharmacological and psychotherapeutic treatments that relapse frequently.

In Taiwan the use of home-based interventions is increasing because a number of studies have reported good results, particularly in relation to patient's quality of life and hospitalization rates[49,52-55]. In the Taiwanese programs, clinical symptoms are evaluated and the patient and his family receive psychoeducation about reactions to psychoactive drugs and their impact on social functioning. It is done with the aim of improving adherence to pharmacotherapy and patients and families are offered 24-hour attention if necessary. Although Chang et al.[52] did not assess relationships or social functioning, Kao and Huang[54] did; they showed that community-based care had a greater positive impact on social variables than home-based interventions, because it provided job opportunities, contact with other patients and enabled patients to enhance their social skills[54]. Huang et al.[49] concluded that home-based services had a positive impact on social functioning and increased patients' and caregivers' confidence in psychiatric services.

Foster homes

Several countries have what we will refer to as a foster home service[56]. In Missouri the service is called a boarding home (BH) service and the main goal is to reduce hospital readmissions of patients with schizophrenia[57]; the service is residential and assistance is provided 24 hours a day with basic and instrumental everyday activities and supervision. Research on foster home services has generally suggested that the results are rather poor; however, the patients referred to these services have chronic illness and worse overall functioning than patients who are treated at home or in the community. Therefore, the main focus of attention when referring patients to these services is considering a low overall functioning[57].

France has had a foster home service since 1989 and foster home care is considered a form of inpatient treatment. Although it has been criticized for the fact of being considered a service where patients become chronic and worsened, foster homes such as the Ainay-le-Chateau hospital have begun to introduce rehabilitation programs including SST, psychoeducation and techniques for adapting to the cognitive deficits that may occur as a result of SMI[58].

There has also been research on foster homes in Croatia[59], which investigated whether patients' quality of life was affected by living in a foster home. Kallert et al.[58] reported that patients admitted to foster homes showed improvements in their quality of life and physical, social and emotional functioning and also suffered fewer relapses (5 *vs* 11) than patients who were not admitted to the service.

Individual and family intervention: useful components of home-based psychotherapy

The main idea of the following lines is to answer the third and final target of this systematic review. The idea is to provide a diversity of results from studies that have reported both types of interventions (in patient's home or elsewhere) and that have been effective in the treatment of schizophrenia, considering an individual and a familiar approach. In addition, the patient and family preferences of treatment are presented, according to the studies of several researchers.

A review published in 2001[60] concluded that the following psychological interventions are effective in the treatment of schizophrenia: family-based interventions, psychoeducation, SST, cognitive-behavioral treatments and multimodal or integrated packages. They highlighted the integrated psychological therapy (IPT) model described by Roder et al.[48].

A study of a home-based SST intervention enumerates an exhaustive list of various studies, which have reported that home-based interventions produce positive results[46]. These interventions include home-based psycho-educational programs for both family and patient[61], social skills training in community settings[62], skills programs for daily living[63], combined treatment (pharmacotherapy, daily living skills and medication)[44], the medication model of Liberman[46,47],

IPT[43] and crisis intervention and home-care packages[64]. A variety of approaches could be applied to psychotic patients both in the community or at home[46].

Other techniques, already mentioned or discussed above in this review, are presented below due to their importance or because of the empirical evidence found.

Home-based cognitive rehabilitation

A program of home-based cognitive rehabilitation combined with drug-based treatment was shown to produce improvements in psychopathology and global functioning in patients with first-episode psychosis[65]. In this study the effects of the patient's disorder on family functioning were also investigated. This study showed that cognitive training improved patients' executive functioning and hence reduced negative symptoms; Wykes et al.[66] also reported that negative symptoms were associated to poor executive functioning. Also, when comparing the results obtained in the study of Hegde et al.[65], it is concluded that if the duration of a cognitive rehabilitation program at home increased, combined with social skills training, then the cognition, symptomatology and patient's overall performance improved.

Psychoeducation

Many of the studies discussed above have included psychoeducation as part of individual or family interventions[5,10,49,53-55,58,60,67]; based on these results psychoeducation should be recognized considered the main component of a home-based intervention.

Cognitive-behavioural therapy

Cognitive-behavioral therapy has been the most frequently used type of intervention applied in schizophrenia treatment; it is used primarily to reduce persistent delusions and hallucinations[43,67,68]. Its effectiveness is controversial and it has been difficult to generalize in patient's daily life the results obtained after applying this type of therapy[69]; nevertheless it remains the most commonly recommended psychotherapeutic treatment for psychotic spectrum disorders[70].

A review[71] concluded that cognitive-behavioral therapy and SST are the two forms of psychotherapeutic intervention for which there is more positive empirical evidence. Nevertheless, cognitive behavioral therapy is the therapy most commonly associated to the fact that negative symptoms still persist six months after finishing the treatment.

Telephone follow-up

Telephone follow-up has been studied by Palmier-Claus et al.[72] for schizophrenic patients in order to attend patient's symptomatology, aiming to treat it quickly and efficiently. The service was shown to have a positive impact on hallucinations[73] and relapse[74].

Sharifi et al.[75] reported on the effects of offering patients with anxiety and depression fortnightly telephone follow-up for a period of three months after discharge from treatment.

Pharmacological treatment

It has been shown that the following interventions improve adherence to drug treatment: cognitive-behavioral therapy, family interventions (behavioral and psychoeducational techniques to enable the patient's family to help him or her manage the illness and supervise the medication intake) and community-based patient support services[68]. It should be noted, however, that it is difficult to measure adherence to pharmacological therapy accurately and objectively.

Social cognition

In recent years, social cognition has been one of the most studied processes related with psychotic mental disorders. It is proposed as a mediator between the neurocognition and the overall functioning of the patient[76]. The term 'social cognition' encompasses multiple domains including emotion recognition and social perception. Social cognition is considered crucial to understanding schizophrenia. Gil et al.[76] investigated the effects of a social cognition training program, including training in emotion recognition and social perception. In this pilot study, the experimental group, when compared with a control group, showed improvements in social perception and interpretation but not in emotion recognition.

Family intervention

Patients with schizophrenia usually fail to achieve personal and economic self-sufficiency and are often cared for by their families. For this reason, once the acute episode

is stabilized, a new functioning of family life will have to be created or maintained as a habit for life[76]. It has been shown that the role of caregivers is often assumed by mothers (52.6% of cases) although sisters (10.5%) and fathers (also 10.5%) may also act as primary caregivers. Patients with schizophrenia usually remain single because of the social dysfunction caused by the disease.

It is for this reason, the focus of a home-based treatment is important to prevent relapse since it has been shown that such interventions reduce readmissions and promote patient rehabilitation[5,8,27,67]. There are reports that suggest that the risk of relapse is higher in families with high Expressed Emotion (EE)[77,78]. Therefore, according to the caregiver's overburden and patient's coping, the intervention could be much more effective if family therapy was applied[49]. Garnica[76] claimed that families should undertake psychoeducation with a professional as otherwise they may become a source of emotional stress for the patient and thus increase the incidence of relapse. Families can also play a critical role in reducing suicidal ideation in schizophrenic patients[79] and contribute to the reduction of negative symptoms[80].

Family therapy, therefore, focuses on examining and changing the behavior dynamics of families, which are thought to play an important role in preventing the creation and maintenance of behavior problems at an interpersonal level and hence may contribute to the maintenance of symptoms of mental illness[71]. Family therapy in cases of psychosis is based on psychoeducation, coping recommendations, communication skills training, problem solving and interventions in situations of crisis[46,71]. This kind of intervention may not be limited to the family; close friends, neighbors and social community partners, who may be an important part of the patient's social network, can also be integrated into the intervention[29,81,82.]

These ideas are already being implemented in various intervention modalities. A study of early intervention for psychosis proposed that although interventions should focus on the individual patient, psychosocial interventions involving the family should also be considered, because of the potential positive impact the family can have on prognosis and risk of relapse[8]. The family context is also treated as an important factor in crisis intervention programs[82,83].

Moreover, living in a structured family environment, with the regular social interaction this implies, is thought to help prevent loss of social skills in patients with a psychotic disorder[56,57].

Multidisciplinary intervention

The results from Moriana et al.[46] confirm that it is much more effective if using therapeutic treatments integrated by several types of interventions. Delivering this kind of intervention in the patient's home is beneficial and facilitates the assimilation of the results of the treatment in his daily life.

Treatment preferences

Farrelly et al. investigated patient treatment preferences[83]. Although a minority of patients reported that they would prefer to be hospitalized in the event of a crisis or relapse, most said they would prefer another option. A home-based intervention was the most frequently favored option (67%) and was chosen because patients wanted to remain at home if possible, taking into account the impact of the intervention on their families. Many felt that being admitted to a hospital and having to deal with a new environment was an additional stressor that worsens the experience. Patients felt that being able to overcome a crisis in the community or in a familiar environment, surrounded by other people, allowed them to keep a better quality of life[84]. Other authors have corroborated these findings[35,49,57].

Final results

Most studies of home-based interventions have reported positive effects on relapse and perceived quality of life for patients; it is also the most commonly preferred option among most of the patients. For example, in Birchwood et al.[2] 1027 people consented to their study of which 75% were successfully followed up at 12 months, with almost 100% data on treatment, relapse and recovery and service use. Another example is found in a literary review of Sjølie et al.[29]. These authors collected several studies showing the effectiveness of this type of intervention in 80% of cases[85,86]. Moreover, when comparing home-based interventions with hospital treatments, there are other studies reporting higher benefits in the domiciliary treatments[87-89].

DISCUSSION

In recent years, early intervention services for psychosis have been promoted as a form of social intervention, which reduces the subsequent psychological, clinical and social impact of the disease on the patient[23]. Prognosis is better if patients receive treatment in their first psychotic episode[2,8,22]. However, this approach, although being very promising and preventive, is not applicable to resistant patients. Earlier systematic reviews

have concluded that early intervention is effective, although it does not guarantee that patients will not relapse in the following years[8,9]. Consequently, there is a need for interventions that can be applied to with patients who suffer chronic psychosis or do not receive early treatment[8].

CRHTs are one way of meeting the needs of patients with chronic psychotic illness. Thus, it is suggested that when patients are treated in a crisis situation, they are not going to be admitted into a hospital because they are not relapsing[7]. However, CRHT are able perhaps to prevent the patient deteriorating to the point where hospital admission is required[13,32,33], but are no able to guarantee the integration of the results of this intervention in the patient's daily life because of the impairment condition caused by the disease[36].

In the Results section of this review we have considered multiple studies, which have reported that home-based interventions reduce hospital readmissions[3,28,32-34]. However, the following discussion is based on the idea that all the interventions are not sufficiently longer -on the basis of the CRHTs criteria- and so they should be more intensive and prolonged[13].

ODA, focuses on the patient as a person, rather than on his pathology, and also takes into account the patient's environment (family, friends, caregivers, etc.)[17,37]. We suggest that this type of personalized intervention could be further adapted to other systems (friends, social network, neighbors...)[15,37-40]. ODA represents an innovative way of treating psychosis, because it places an emphasis on understanding psychosis[39,40,90] in a way that makes sense of the individual patient's experience[17] and uses this understanding as the basis for a personalized system intervention involving the family and the professional team[91].

Although the results show a decrease of the schizophrenia incidence if it is treated from the beginning of the disorder's onset[37], ODA not only treats first episodes but also considers the most resistant patients.

It is possible that one of the main reasons why ODA presents such good results is because of the speed with which the service can be provided; in less than 24 hours a team can be working with the patient and his family and social network.

It has been previously commented that, for just over a decade, Moriana et al.[44] are promoting SST to develop and/or enhance social skills in patients diagnosed with severe mental disorders. Following the idea of ODA, Moriana et al.[44] believe that the interventions should be individualized. Based on the work of the Spanish team, this home environment approach justifies the need for promoting social resources. Nevertheless, the principal weakness of programs based on SST is that they tend to neglect other techniques such as psychoeducation and systemic family therapy or cognitive restructuring. It is clear, however, that an important goal of SST should be to ensure that patients incorporate what they learn into all areas of their life[49,50].

Although the concept of home-based intervention has its origins in an Anglo-Saxon country, it is gradually spreading to both Western and Eastern countries. In the East, particularly in Taiwan, there is considerable interest in the effects of home-based interventions on psychotic patients' quality of life. Research on an application of home-based interventions in this country are already ongoing because of the favorable results obtained[49,52-55], not only regarding the quality of life but also, as commented in the preceding paragraph, because of the improvement of the patients' social skills[49].

Although foster home care is not strictly a home-based intervention it represents nevertheless an alternative to outpatient care. It is true is that readmissions in hospitals are being decreased[57] and that is better to derive patients to foster homes preventing from future relapses than not doing it[56]. Nevertheless, it is logical to expect difficulties to integrate these patients into the community, moreover considering that there is not a continuity follow-up after a period of residence in the foster home.

Regarding the results presented above, it is observed that, apart from a home-based setting, the interventions typologies represent also an important element when treating a psychotic spectrum. Institutions such as APA or NICE have endorsed several treatments for psychosis[19]. However, these intervention models either leave out family interventions -which have a very important role in the disease process and in reducing relapse[20]- or focus on a single technique (e.g. SST) and, most importantly, do not consider to treat those patients who are resistant to psychological therapy.

When considering the use of psychotherapeutic treatments it is perhaps more important to define the population who can benefit rather than debating the choice of technique. Having defined the context (home) and on whom the treatment is focused (patients with a first psychotic episode or resistant treatment patients, family, or both), it is important to propose afterwards which interventions will be made.

Many studies suggest that combined interventions offer greater benefits than interventions based on a single technique: e.g. cognitive rehabilitation combined with SST (im-

prove cognition, symptoms and overall functioning of the patient)[65]; psychoeducation in addition to any intervention[5,19,49,52-55,58,60,67]; CBT and SST (symptoms may be reduced)[70]; CBT and family interventions (to involve the family in ensuring adherence to drug treatment)[68]. Several authors defend combined interventions from a family approach: psychoeducation, training in communication and social skills, problem solving programs and intervention in case of crisis[43,71]; behavioral techniques, psychoeducation, problem solving programs and involvement of families with the patient's medication[68].

A good individual approach is as much important as a family therapy in order to integrate the patient in a combined intervention. The results of family interventions, which promote the integration of caregivers and patient's immediate environment into his treatment, speak for themselves[5,8,29,39,40,49,67,71,79-81,83,89].

It is extensively reported that various types of interventions can share a multidisciplinary approach, which integrates individual and family intervention: early intervention in psychosis[26], crisis intervention (CRHTs)[13,30,31], the Open Dialogue Approach (ODA)[90]; SST at home[44].

However, in practice, despite sharing the same approach, in some cases multidisciplinary interventions are not conducted by psychologists and psychiatrists, and only the nursing staff following the intervention. This is happening both in crisis interventions[13] and in other home-based interventions[51]. We suggest that patients with psychosis should receive multidimensional treatment from a multidisciplinary team. It is clear that repeated relapses in patients with a psychotic illness, lack of awareness of the disease and abandonment of psychotherapeutic and pharmacological treatments all increase the costs of care while making patients more dependent and reducing their functionality.

Research on patients' type of care preferences and the therapeutic relationship between the patient and care team suggests that a good therapeutic relationship improves adherence to treatment and that patients prefer home-based interventions, since the later helps the patients to integrate what they have learnt in their daily life, thus decreasing the possibilities of a possible relapse[49,57,67,84].

Although home-based interventions are preferred by patients and have many benefits they have also some limitations: a) possible non-cooperation from the family or caregivers with whom the patient is living[54]; b) the patient does not have a family who can support him or her financially, provide a home or participate in a home-based intervention[67].

Therefore, for an effective home-based approach, considering that such approach is beneficial for the incorporation of the results of the treatment into the patients' socio-familiar environment and community[5,43], the following suggestions should be considered: a) individual and family interventions; b) multidisciplinary interventions (psychiatrists, psychologists, nurses, social workers, etc.) lasting for a long period of time (one year, at least); c) personal post-intervention follow-up by telephone[75] (six months, at least).

We conclude that home-based interventions represent an ambitious concept whose implementation has delivered benefits in several countries; it has the potential both to improve patient care and to reduce health costs. Home-based interventions can improve adherence to treatment and improve independent living skills as well as enabling social and family conflicts at home to be addressed. As a result, the number of hospitalizations is reduced, the patients' quality of life and autonomy increases and they benefit from a better inclusion in their community.

CONCLUSIONS

- A long period home-based intervention offers the best chance to enable the patients to assimilate skills and incorporate the improvements gained in treatment.
- Home-based interventions should be coordinated by a multidisciplinary team and should involve the patient's family and other patient's relationships in their immediate environment.
- Domiciliary interventions can improve adherence to treatment, autonomy, quality of life, social skills and family relationships in their natural environment.
- The number of hospitalizations is reduced and the patients can benefit from a better inclusion in their community.
- A lack of research about resistant psychotic patients and domiciliary interventions is showed in this article so more investigation is needed.

CONFLICTS OF INTERESTS.

The author who is the first signatory of the reference manuscript, Ona Gomis Zalaya, in his name and that of all the signatory authors, declares that there is no potential conflict of interest related to the article.

REFERENCES

1. American Psychiatric Association. Diagnostic and statistical

manual of mental disorders. 5ª ed. American Psychiatric Association: Author; 2013.
2. Birchwood M, Lester H, McCarthy L, Jones P, Fowler D, Amos T, et al. The UK national evaluation of the development and impact of Early Intervention Services (the National EDEN studies): study rationale, design and baseline characteristics. Early Interv Psychiatry, 2014; 8(1):59–67.
3. Murphy S, Irving CB, Adams CE, Driver R. Crisis intervention for people with severe mental illnesses. Cochrane Database Syst Rev. 2012;5,CD001087.
4. Seikkula J, Arnkil TE, Hoffman L. Dialogical Meetings in Social Networks. London: Karnac; 2006.
5. Moriana JA, Liberman RP, Kopelowizc A, Luque B, Cangas AJ, Alós F. El entrenamiento en habilidades sociales en la esquizofrenia. Psicol Conductual. 2015;23(1):5–24.
6. IASAM. La población hospitalizada en instituciones psiquiátricas en Andalucía. Sevilla: Consejería de Salud y Consumo, Junta de Andalucía; 1987.
7. National Institute for Mental Health in England. Crisis resolution home treatment or closer to home. England: NIMHE; 2006.
8. Bird V, Premkumar P, Kendall T, Whittington C, Mitchell J, Kuipers E. Early intervention services, cognitive-behavioural therapy and family intervention in early psychosis: systematic review. Br J Psychiatry. 2010;197(5):350–6.
9. Marshall M, Rathbone J. Early intervention for psychosis. Cochrane Database Syst Rev. 2014;6:CD004718.
10. Lemos-Giráldez S, Vallina-Fernández O, Fernández-Iglesias P, Vallejo-Seco G, Fonseca-Pedrero E, Paíno-Piñeiro M, et al. Symptomatic and functional outcome in youth at ultra-high risk for psychosis: a longitudinal study. Schizophr Res. 2009;115(2-3):121–9.
11. Weissman MM, Bland RC, Canino GJ, Greenwald S, Hwu HG, Joyce PR, et al. Prevalence of suicide ideation and suicide attempts in nine countries. Psychol Med. 1999;29(1):9–17.
12. Department of Health of the UK. The NHS Plan. London: Author; 2000.
13. Hasselberg N, Gråwe RW, Johnson S, Ruud T. Treatment and outcomes of crisis resolution teams: a prospective multicentre study. BMC Psychiatry. 2011;11:183.
14. Ness O, Karlsson B, Borg M, Biong S, Hesook SK. A crisis resolution and home treatment team in Norway: a longitudinal survey study Part 1. Patient characteristics at admission and referral. Int J Ment Health Syst. 2012;6(1):18.
15. Arnkil TE, Seikkula J. Developing Dialogicity in Relational Practices: Reflecting on Experiences from Open Dialogues. Aust N Z J Fam Ther. 2015;36(1):142–54.
16. Seikkula J, Aaltonen J, Alakare B, Haarakangas K, Keränen J, Lehtinen K. Five-year experience of first-episode nonaffective psychosis in open-dialogue approach: Treatment principles, follow-up outcomes, and two case studies. Psychother Res. 2006;16(2):214–28.
17. Borchers P. "Issues like this have an impact": the need-adapted treatment of psychosis and the psychiatrist's inner dialogue. University of Jyväskylä; 2014. Available in: https://jyx.jyu.fi/dspace/handle/123456789/44396.
18. Elvira JAM, Pulido EA, Cabrera JH. Tratamiento combinado de la esquizofrenia aplicado en el ámbito domiciliario. Psicothema. 2004;16(3):436–41.
19. Moriana JA, Martínez VA. La psicología basada en la evidencia y el diseño y evaluación de tratamientos psicológicos eficaces. Revista de Psicopatología y Psicología Clínica. 2011;16(2):81-100.
20. Estepa-Zabala MB, Casín-Galván G, González-Nuñez R, Fernández-León M, León-Gómez E, Jiménez-Membrilla C. Abordaje multidisciplinar de un caso de especial dificultad: esquizofrenia paranoide y rechazo activo al tratamiento. Psychosoc Rehabil. 2001;8(1-2):44-50.
21. Nose M, Barbui C, Gray R, Tansella M. Clinical interventions for treatment non-adherence in psychosis: meta-analysis. Br J Psychiatry. 2003;183(3):197–206.
22. Penttilä M, Jääskeläinen E, Hirvonen N, Isohanni M, Miettunen J. Duration of untreated psychosis as predictor of long-term outcome in schizophrenia: systematic review and meta-analysis. Br J Psychiatry. 2014;205(2):88–94.
23. Birchwood M, McGorry P, Jackson H. Early intervention in schizophrenia. Br J Psychiatry. 1997;170:2–5.
24. Department of Health. National service framework for mental health: Modern Standards and Service Models. Department of Health: Author; 1999.
25. National Institute for Health and Clinical Excellence Psychosis and schizophrenia in adults: prevention and management. Inglaterra and Gales: NICE; 2009.
26. Craig TK, Garety P, Power P, Rahaman N, Colbert S, Fornells-Ambrojo M, et al. The Lambeth Early Onset (LEO) Team: randomised controlled trial of the effectiveness of specialised care for early psychosis. Br J Med. 2004;329:1067–70.
27. Johnson S. Crisis resolution and intensive home treatment teams. Psychiatry. 2007;6:339–42.
28. Schöttle D, Ruppelt F, Karow A, Lambert M. Home treatment -a treatment model of integrated care in Hamburg. Psychother Psychosom Med Psychol. 2015;65(3-4):140–5.
29. Sjølie H, Karlsson B, Kim HS. Crisis resolution and home treatment: structure, process, and outcome - a literature review. Int J Ment Health Nurs. 2010;17(10):881–92.
30. Biong S, Ness O, Karlsson B, Borg M, Kim HS. A crisis resolution and home treatment team in Norway: a longitudinal survey study Part 3. Changes in morbidity and clinical problems from admission to discharge. Int J Ment Health Syst. 2012;6(1):17.
31. Johnson S, Nolan F, Pilling S, Sandor A, Hoult J, McKenzie N, et al. Randomised controlled trial of acute mental health care by a crisis resolution team: the north Islington crisis study. Br Med J. 2005;331:599-604.
32. Glover G, Arts A, Babu KS. Crisis resolution/home treatment teams and psychiatric admission rates in England. Br J Psychiatry. 2006;189:441–5.
33. Jethwa K, Galappathie N, Hewson P. Effects of a crisis resolution and home treatment team on in-patient admission. Psych Bull. 2007;31:170–2.
34. Barker V, Taylor M, Kader I, Stewart K, Le Fevre P. Impact of crisis resolution and home treatment services on user experience and admission to psychiatric hospital. The Psychiatrist. 2011; 35(3):106–10.
35. Vázquez J, Salvador, L, Vázquez JL. Alternativas comunitarias a la hospitalización de agudos para pacientes psiquiátricos graves. Actas Esp Psiquiatr. 2012;40(6):323-32.
36. Tyrer P, Gordon F, Nourmand S, Lawrence M, Curran C, Southgate D, et al. Controlled comparison of two crisis resolution and home treatment teams. The Psychiatrist. 2010;34(2):50–4.
37. Aaltonen J, Seikkula J, Lehtinen K. The Comprehensive Open-Dialogue Approach in Western Lapland: I. The incidence of non-affective psychosis and prodromal states. Psychosis. 2011; 3(3):179–91.
38. Kłapciński M, Wojtynska R. Open Dialogue Approach – An Alternative to Neuroleptics or Development of Pharmacologically Cautious Treatment of Schizophrenia? J Schizophr Res. 2015; 2(2).
39. Seikkula J, Alakare B, Aaltonen J. The Comprehensive Open-Dialogue Approach in Western Lapland: II. Long-term stability

of acute psychosis outcomes in advanced community care. Psychosis. 2011;3(3):192–204.
40. Seikkula J, Laitila A. Making sense of multi-actor dialogues in family therapy and network meetings. J Marital Fam Ther. 2012; 38(4):667-87.
41. Borchers P, Seikkula J, Arnkil TE. The Need Adapted Approach in psychosis: The impact of psychosis on the treatment, and professionals. Ethical Hum Psychol Psychiatry. 2014;16:5–19.
42. Seikkula J. Inner and outer voices in the present moment of family and network therapy. J Fam Ther. 2008;30(4):478–91.
43. Borchers P, Seikkula J, Lehtinen K. Psychiatrists' inner dialogues concerning workmates during Need Adapted treatment of psychosis. Psychosis. 2013;5:60–70.
44. Moriana JA, Alarcón E, Herruzo J. Aplicación de un programa de intervención lógica en un caso de esquizofrenia. Análisis y modificación de conducta. 2006;32(146):719-42.
45. Hodgekins J, Birchwood M, Christopher R, Marshall M, Coker S, Everard L, et al. Investigating trajectories of social recovery in individuals with first episode psychosis: a latent class growth analysis. Br J Psychiatry. 2015;1-8.
46. Moriana JA, Alarcón E, Herruzo J. Tratamiento combinado de la esquizofrenia aplicado en el ámbito domiciliario. Psicothema. 2004;16(3):436-41.
47. Liberman RP, De Risi WJ, Mueser KT. Social skills training for psychiatric patients: Psychology practitioner guidebooks. New York: Pergamon Press; 1989.
48. Moriana JA, Alarcón E, Herruzo J. In-Home Psychosocial Skills Training for Patients with Schizophrenia. Psychiatric Serv. 2006; 57(2):260–2.
49. Kopelowicz A, Liberman RP, Zárate R. Recent advances in social skills training for schizophrenia. Schizophr Bull. 2006;32:12-23.
50. Roder V, Brenner HD, Hodel B, Kienzie N. Terapia integrada de la esquizofrenia. Barcelona: Ariel; 1996.
51. Huang XY, Lin MJ, Yang TC, Sun FK. Hospital-based home care for people with severe mental illness in Taiwan: a substantive grounded theory. J Clin Nurs. 2009;18(21):2956–68.
52. Agius M, Shah S, Ramkisson R, Murphy S, Zaman R. Three year outcomes of an early intervention for psychosis service as compared with treatment as usual for first psychotic episodes in a standard community mental health team – final results. J Clin Nurs. 2007;19:130–8.
53. Castaño Y, Chávez E, Piedrahita L. Aplicación del proceso de enfermería en la atención domiciliaria de personas con enfermedad mental. Enfermería Global. 2012;28:41–51.
54. Chang LR, Lin YH, Wu Chang HC, Chen YZ, Huang WL, Liu CM, et al. Psychopathology, rehospitalization and quality of life among patients with schizophrenia under home care case management in Taiwan. J Formos Med Assoc 2013;112(4):208–15.
55. Cheng JF, Huang XY, Lin MJ, Yang TC, Hsu YS. Intervening conditions of hospital-based home care for people with severe mental illness. Public Health Nurs (Boston, Mass). 2012; 29(4):320–9.
56. Kao CC, Huang HM. A comparison of the quality of life of patients with schizophrenia in daycare and homecare settings. J Nurs Res. 2014;22(2):126–35.
57. Tsai SL, Chen MB, Yin TJC. A Comparison of the Cost-Effectiveness of Hospital-Based Home Care with That of a Conventional Outpatient Follow-up for Patients With Mental Illness. J Nurs Res. 2005;13(3):165–73.
58. Kallert TW, Leisse M, Winiecki P. Comparing the effectiveness of different types of supported housing for patients with chronic schizophrenia. J Public Health. 2006;15(1):29–42.
59. Bota RG, Munro JS, Sagduyu K. Benefits of boarding home placement in patients with schizophrenia. South Med J. 2007; 100(2):145–8.
60. Petitjean F, Muller G, Dabat B. Accueil familial thérapeutique et réhabilitation psychosociale. Mise en œuvre de techniques de remédiation cognitive dans un établissement spécialisé. Ann Med Psychol. 2013;171(8):556–60.
61. Press D. Quality of life of patients with schizophrenia treated in foster home care and in outpatient treatment. Neuropsychiatr Dis Treat. 2015;11:585–95.
62. Vallina Ó, Lemos S. Tratamientos psicológicos eficaces para la esquizofrenia. Psicothema. 2001;13:345-64.
63. Montero I, Asencio A, Hemández I, Masanet MJ, Lacruz M, Bellver F, et al. Two strategies for family intervention in schizophrenia: A randomized trial in a Mediterranean environment. Schizophr Bull. 2001;27:661-70.
64. Glynn SM, Marder SR, Liberman RP, Blair K, Wirshing WC, Ross D, et al. Supplementing clinic-based skills training with manual-basad community support sessions: Effects on social adjustment 01 patients with schizophrenia. American J Psychiatry. 2002; 159:829-37.
65. Moriana JA, Alarcón E. Entrenamiento en habilidades de la vida diaria para enfermos mentales crónicos. Madrid: Fund. T. APMIB; 2000.
66. Joy CB, Adams CE, Rice K. Crisis intervention tor people with severe mental illnesses: A cochrane systematic review. Schizophr Res. 2006;3:41-53.
67. Hegde S, Rao SL, Raguram A, Gangadhar BN. Addition of home-based cognitive retraining to treatment as usual in first episode schizophrenia patients: a randomized controlled study. Indian J Soc Psychiatry. 2012;54(1):15–22.
68. Wykes T, Newton E, Landau S, Rice C, Thompson N, Frangou S. Cognitive remediation therapy (CRT) for young early onset patients with schizophrenia: An exploratory randomized controlled trial. Schizophr Res. 2007;94:221–30.
69. Burns T. Community psychiatry's achievements. Epidemiol Psychiatr Sci. 2014;23(4):337–44.
70. Farooq S, Naeem F. Tackling nonadherence in psychiatric disorders: current opinion. Neuropsychiatr Dis Treat. 2014; 10:1069-77.
71. Jauhar S, Mckenna P, Radua J, Fung E, Salvador R, Laws K. Cognitive-behavioural therapy for the symptoms of schizophrenia: systematic review and meta-analysis with examination of potential bias. Br J Psychiatry. 2014;204:20–9.
72. Turkington D, Kingdon D, Rathod S, Hammond K, Pelton J, Mehta R. Outcomes of an effectiveness trial of cognitive-behavioural intervention by mental health nurses in schizophrenia. Br J Psychiatry. 2006;189:36–40.
73. Elis O, Caponigro JM, Kring AM. Psychosocial treatments for negative symptoms in schizophrenia: Current practices and future directions. Clin Psychol Rev. 2013;33(8):914–28.
74. Palmier-Claus JE, Rogers A, Ainsworth J, Machin M, Barrowclough C, Laverty L, et al. Integrating mobile-phone based assessment for psychosis into people's everyday lives and clinical care: a qualitative study. BMC Psychiatry. 2013;13(1):34.
75. Granholm E, Ben-Zeev D, Link PC, Bradshaw KR, Holden JL. Mobile Assessment and Treatment for Schizophrenia (MATS): A Pilot Trial of An Interactive Text-Messaging Intervention for Medication Adherence, Socialization, and Auditory Hallucinations. Schizophr Bull. 2011;38(3):414–25.
76. Španiel F, Vohlídka P, Kožený J, Novák T, Hrdlizka J, Motlová L, et al. The Information Technology Aided Relapse Prevention Programme in Schizophrenia: an extension of a mirror design follow up. Int J Clin Pract. 2008;62:1943–6.
77. Gil D, Diego M, Bengochea R, Arrieta M, Lastra I, Sánchez R, et al. Efficacy of a social cognition training program for schizophrenic

patients: a pilot study. The Spanish J Psychol. 2009;12(1):184–91.
78. Garnica R. Alternativas Terapéuticas para la Esquizofrenia. Salud Ment. 2013;36(1):85–6.
79. Ballús-Creus C. Diez años de orientación familiar terapéutica en la esquizofrenia. Revista de psiquiatría de la Facultad de Medicina de la Universidad de Barcelona. 1998;25(69):172-6.
80. Leff J, Vaughn C. Expressed emotion in families: Its significance for mental illness. Londres: The Guildford Press; 1985.
81. Girón M, Fernández-Yañez A, Mañá-Alvarenga S, Molina-Habas A, Nolasco A, Gómez-Beneyto M. Efficacy and effectiveness of individual family intervention on social and clinical functioning and family burden in severe schizophrenia: A 2-year randomized controlled study. Psychol Med. 2010;40(1):73–84.
82. Doherty WJ, McDaniel SH. Family therapy. Washington, DC: American Psychological Association; New York, NY: Oxford University Press; 2010.
83. Seikkula J. Becoming dialogical: psychotherapy or a way of life. Aust N Z J Fam Ther. 2011;32(3):179–93.
84. Winnes MC, Borg M, Kim, HS. Service users' experiences with help and support from crisis resolution teams. A literature review. J Ment Health. 2010;19:75–87.
85. Farrelly S, Brown G, Rose D, Doherty E, Henderson RC, Birchwood M et al. What service users with psychotic disorders want in a mental health crisis or relapse: thematic analysis of joint crisis plans. Soc Psychiatry Psychiatr Epidemiol. 2014;49(10):1609–17.
86. Carnegie M. Effects of Hospital Based and Community Based Treatment on Quality of Life in Adult Mental Health Clients. Ment Health CATs, 24; 2011. Available in: http://commons.pacificu.edu/otmh/24.
87. Crisholm A, Ford R. Transforming Mental Health Care. Assertive Outreach and Crisis Resolution in Practice. The Sains-bury Centre of Mental Health/National Institute for Mental Health in England, London; 2004.
88. Karlsson B, Hultberg KB. Brukererfaringer med kriseintervensjon i eget hjem. (In Norwegian). J Norwegian Psychologist Association. 2007;7:900–5.
89. Bridgett C, Polak P. Social systems intervention and crisis resolution. Part 2: intervention. Adv Psychiatr Treat. 2003;9:432–8.
90. Johnson S. Crisis resolution and intensive home treatment teams. Psychiatry. 2007;6:339–42.
91. Geekie J, Read J. Making sense of madness: contesting the meaning of schizophrenia. London: Routledge; 2009.