ABSTRACT

Schizophrenia is a mental disorder that triggers the occurrence of impaired function in the human brain, behavior, cognitive, and emotional functions. This disorder has become a problem in the study of mental health, which must be treated comprehensively by using empirical treatment combined with rehabilitation. Hopefully, increasing the maximum level of healing and reducing recurrence rates can improve social function and quality of life. Thus, this review aims to narrate the model and effective community-based psychosocial rehabilitation center. The articles of the studies published from 2017-2021 were collected and analyzed in this literature review. The keywords used were community-based rehabilitation for schizophrenia. The results show that in addition to pharmacological therapy, six community-based psychosocial non-pharmacological therapy methods are considered effective for intervention in patients with schizophrenia. The methods are club methods in elderly schizophrenic patients, community-based methods, direct patient decision-making methods, case and club management methods, psychoeducational and social skills methods, and community care unit methods. All of the above methods analyzed showed significant effectiveness in community-based psychosocial rehabilitation treatment in developing countries.
INTRODUCTION

Schizophrenia is a mental illness that is a problem in the world of health. Schizophrenia is a problem or mental disorder that can cause impaired function in the human brain, behavior, cognitive, and emotional functions of sufferers. Schizophrenia also often occurs in developing countries and usually occurs in low economic groups. In general, patients with schizophrenia have different or varied symptoms that confuse many people, the symptoms that appear are usually hallucinations, delusions, delusions, bizarre behavior, and a general decline in abilities (Zuraida, 2017).

According to the World Health Organization (2017), about 50 million people worldwide have schizophrenia and 6.5 million in Southeast Asia. The number of people with schizophrenia in Indonesia is 0.3-1% of the total population. Meanwhile, in East Java Province in 2016, the number of people with mental disorders reached 2,369 and increased compared to 2015 with the number of sufferers 1,619. Cases of mental disorders will continue to increase if there is no concern from the community regarding their mental health and those of others around them (Rusdianah et al., 2021). In addition, people with mental disorders often get stigma and bad behavior from society. Various ways or actions of the community to respond to people with mental disorders, such as taking them to the hospital, avoiding, imprisoning, mocking, and even beating them. Actions or behaviors like this worsen and complicate the patient’s healing (Farhan, 2020).

The management of schizophrenia can be done in two ways: pharmacology and non-pharmacology. Pharmacology is giving medication according to the symptoms suffered by the patient. The non-pharmacology management is rehabilitation, one aspect of therapy that is very important for treating schizophrenic patients and even becomes support so that patients have abilities according to their interests and talents after recovery. Mental rehabilitation is all activities or actions to restore function and improve physical conditions and social relations with the surrounding community (Widianingsih and Astanto, 2020). There are various rehabilitation models, one of which is a community-based psychosocial rehabilitation model. Many countries have applied the model with various methods, so we are interested in analyzing the effectiveness of these methods.

METHOD

The method used in this paper is a literature review study. The databases used in the source search are PubMed, Science Direct, and Google Scholar. The article search collected topics on the correlation between schizophrenia and psychosocial rehabilitation. The range inclusion of the literature used was published from 2017 until 2021 in English or Indonesian language by choosing the full article journal and literature review. The search keyword is community-based rehabilitation for schizophrenia. The total number of articles used for analysis was 8 out of several that met the inclusion criteria.

LITERATURE REVIEW

Schizophrenia

Schizophrenia is a group with mental limitations (psychosis) known as positive symptoms and negative symptoms characterized by major disturbances in thoughts, emotions, and behavior of disturbed thoughts, various thoughts are not connected logically; wrong perception and attention; flat or inappropriate affect; and various motor activity disorders as well as hallucinations, illusions, and delusions.
The leading cause of schizophrenia is still unknown. However, there are several theories about schizophrenia, namely the diathesis-stress model theory, biological factors, the dopamine hypothesis related to the hyperactivity of the dopaminergic system, the serotonin hypothesis, and genetics.

**Symptoms of Schizophrenia**

According to DSM-IV-TR Schizophrenia, the characteristic symptoms are two (or more) of the following, each occurring significantly over one month (or less if successfully treated): 1) delusions, 2) hallucinations, 3) speech chaos, 4) very disorganized or catatonic behavior, and 5) negative symptoms, namely flat affect, alogia or loss of interest (Sadock, B. J., Sadock, V. A. & Ruiz, 2017).

**Schizophrenia Treatment**

The drugs used in the pharmacological therapy of schizophrenia are antipsychotic drugs. Anti-psychotic drugs are the main element in pharmacotherapeutic treatment in treating schizophrenic patients. Antipsychotic drugs are classified into two groups, typical and atypical antipsychotics. Typical antipsychotics work more effectively to treat positive symptoms. The following are typical antipsychotic drugs: Chlorpromazine, Flupenthixol, Flufenazine, and Haloperidol, Antipsychotics. This atypical or APG 2 works in overcoming both positive and negative symptoms (Andari, 2017).

Considering the functioning of social cognition is a treatment target in schizophrenia. Although classified as treatment as the main anti-psychotic drug, it was not significantly able to improve social cognition (Kucharska-Pietura, David, Masiak, & Phillips, 2005). At the same time, psychosocial treatment programs have been developed specifically to accompany psychotic drugs in restoring social cognition. One of the psychosocial therapies that can be applied in treating schizophrenia is a community-based intervention approach.
The National Institute of Clinical Excellence Guidelines in the UK emphasizes the need for community-based psychiatric interventions, such as cognitive therapy, counseling, and family interventions, in addition to standard treatment (Widianingsih and Astanto, 2020). In the last five years, in several countries, there have been many uses and, at the same time, developing community-based psychosocial therapy methods.

**Club method in elderly schizophrenic patients**

A systematic review of the effectiveness of community-based psychosocial therapy models in several countries will provide a detailed summary using the evidence already available in Amsterdam. Findings refute the ancient belief that disorders such as schizophrenia fundamentally impede adequate social interaction (Meesters et al., 2019). Today, social engagement is considered as one of the critical positive psychosocial factors in recovery-oriented practice (Jeste, Palmer, and Saks, 2018). Community-based psychosocial therapy in Amsterdam called *The New Club* for old age has the aim of fostering independence and social participation in groups in order to be able to recover personally and socially for its members. On a personal level, attending the facility, activation, and feeling welcome were rated positively. On a social level, engaging with others, experiencing a sense of community, and learning from each other’s social skills are positive contributors.

Furthermore, various environmental factors proved to be necessary. The New Club demonstrates the feasibility of creating a facility that offers an environment receptive and non-demanding social living in an older community with severe mental illness. Many parents with schizophrenia are confined to their homes due to psychological limitations (such as paranoia or anxiety) or physical limitations. Receiving and reaffirming the social climate experienced by participants in the facility challenge this self-stigmatization and can restore self-esteem and prominent identity apart from psychiatric patients (Wong, Sands, and Solomon, 2015). This process proves the importance of social relationships for psychological empowerment and positive psychosocial key in recovery-oriented practice (Christens, 2012; Jeste, D. V, Palmer, BW and Saks, 2018). However, it is essential to realize that a large group of elderly people with severe mental illness remains out of the reach of The New Club. Severe chronic psychosis (either due to positive psychotic symptoms or negative ones) can lead to climate-fighting behavior in social facilities. The physical suffering that requires attention intensive does not match the number of facility staff. Facility location is community-based; avoiding connections to health institutions mentally can strengthen the character of facilities that are not stigmatized and lower the threshold for participation (Meesters et al., 2019). Explained by Meesters et al. that *The New Club* can be implemented successfully if several organizational requirements are met, including adequate funding, qualified personnel on duty, and ongoing consultation by skilled psychiatric health workers to be ensured (Meesters et al., 2019).

**Community-based Method**

Asher et al. describe community-based psychosocial therapy (CBR) such as family support; community-based rehabilitation; and/ or self-help groups, and support should be provided for people with schizophrenia in low- and middle-income countries (Asher, Patel, and De Silva, 2017). The CBR emphasizes community engagement, which may require raising awareness or mobilizing practical support from community members. Community mobilization is the primary key to creating...
a sustainable CBR program (World Health Organization, 2010). Provide limited evidence from low- and middle-income countries supporting the feasibility and effectiveness of community-based psychosocial interventions for schizophrenia. Therefore, community-based psychosocial interventions should be provided in these settings as an adjunct service to facility-based care for persons with schizophrenia.

Recently, community-based psychosocial therapy by Asher et al., 2021 redeveloped in Ethiopia as community-based psychosocial therapy (CBR) using the Rehabilitation Intervention for people with Schizophrenia in Ethiopia (RISE) method. The method was through training lay people with little or no previous experience to provide psychosocial interventions for people with schizophrenia in low-income countries with multimodal training, including role play, fieldwork, and group discussion, contributing to early competency development. The CBR is a promising intervention to address the complex health, social and economic needs of people with schizophrenia and is recommended as an adjunct to facility-based care, including the prescription of antipsychotic drugs. The RISE CBR intervention consisted of home-based psychosocial support, awareness-raising, and community mobilization. At RISE, interventions are delivered by lay people who are trained in fundamental problem-solving and counseling skills to become CBR workers. The pilot study shows that the CBR for schizophrenia is mainly acceptable and feasible. The combination of ‘expert’ and ‘friend’ suggests that lay health workers not only ‘fill the gap’ in services but may offer something unique in terms of social relationships during the care of people with schizophrenia so that it can increase the success of psychosocial therapy for schizophrenic patients and have physical, socio-economic, and cultural closeness with the recipient.

Further developed by Chen et al. (2021) in their research entitled Metacognitive training: a valuable complement to community-based rehabilitation for schizophrenia patients in China, confirmed the superiority of the combination of MCT (metacognitive training) and CBR with a control group receiving only CBR. Moritz and Woodward developed MCT as an intervention for patients with schizophrenia (Moritz, S. and Woodward, 2010). Recent studies have confirmed that MCTs are attractive and can effectively alter patients’ delusional ideas (Moritz et al., 2013; Moritz et al., 2014; Balzan, Delfabbro, and Galletly, 2013; Vitzthum, Veekenstedt and Moritz, 2014; and Moritz and Woodward, 2007). The effectiveness of MCTs in schizophrenic patients has been carried out in several randomized controlled studies (Moritz, Andreou, et al., 2014). The primary outcome of MCT, such as a reduction in positive symptoms, would meet the requirements of community rehabilitation for chronic schizophrenic patients (Spaulding et al., n.d; Kumar, 2010). This study specifically wants to know the feasibility of MCT in community rehabilitation and for the government to adopt community services by taking MCT as a regular complementary strategy to CBR. Furthermore, this study provides preliminary evidence for the usefulness of MCT as a complementary measure for the community-based rehabilitation of schizophrenic patients (Chen et al., 2021).

**Patient-directed decision-making method**

Another development in Ethiopia by Souraya, Hanlon and Asher (2018) is community-based psychosocial therapy that provides opportunities for the involvement of people with schizophrenia in decision-making regarding their care. The study is the first to explore the involvement of people with schizophrenia in decision-making regarding
their care in a low-income country setting. However, in his research, Souraya explained that the implementation of the involvement of people with schizophrenia in decision-making regarding their care in rural Ethiopia is limited, and there is still coercion in the process of treating people with schizophrenia (Souraya et al., 2018). Involvement in decision-making is considered a fundamental component of a person-centered and recovery-oriented care model that rests on the assumption that care must respect the needs, experiences, and rights of individuals with mental health problems, in developing and high-income countries. Interventions designed to involve people with schizophrenia in treatment-related decisions have been associated with better outcomes, improved long-term medication adherence, decreased readmissions, improved social functioning, and increased satisfaction with community programs. Souraya et al. also explained that there is evidence that people with schizophrenia are interested in and can participate in decision-making, especially concerning the choice of psychotropic drugs (Souraya, Hanlon, and Asher, 2018). Thus, to increase the involvement of people with schizophrenia in rural Ethiopia, there needs to be greater empowerment of service users, wider availability of treatment options, and a facilitating policy environment.

**Psychoeducational methods and social skills**

Indonesia is a developing country in research. It has also been shown to effectively improve the quality of life of people with schizophrenia in the Yogyakarta community. Community-based psychosocial therapy in low-resource settings can effectively overcome economic, geographic, and cultural barriers to rehabilitating people with schizophrenia (Puspitosari, Wardaningsih, & Nanwani, 2019). The study was a quasi-experimental study on schizophrenic patients aged 18-56 years for 12 weeks. The two main activities used in the study as community-based psychosocial therapy are psychoeducation and social skills training. This intervention is in line with the intervention recommended by Psychopharmacological Treatment (PORT). The study explains previous research that psychoeducation can increase knowledge, reduce family burden, reduce relapse rates, and improve the quality of life and clinical symptoms of people with schizophrenia, while social skills can improve communication skills and social functioning. This is supported by the research results, where subjects who received community-based psychosocial therapy experienced a more significant improvement in quality of life than those who did not receive community-based psychosocial therapy (Puspitosari, Wardaningsih, and Nanwani, 2019).

**Community care unit method**

A study in Australia was conducted with different methods for community-based psychosocial therapy with a community care unit model of psychiatric rehabilitation. The model was a psychiatric rehabilitation model that aimed to improve the independence and community functioning of people with severe and persistent mental illness (Parker et al., 2020). This study used data from a retrospective cohort (n = 501) of all patients admitted to five Community Care Units (CCU) in Queensland, Australia, between 2005 and 2014, proving a significant predictor of improvement in mental health and social functioning due to longer duration of stay. Length of stay at CCU, lower baseline mental health and social functioning and disability, and lower pre-admission to psychiatric-related bed use. Contemporary CCU is a treatment that provides clinically oriented residential psychiatric support over a period of time that focuses on improving various
aspects of personal functioning – particularly the development of life skills and community integration – within the context of overall mental health, and providing rehabilitation support 24 hours to people with serious mental illness (Meehan et al., 2017; Parker and Siskind, 2019). At the individual level, CCU treatment followed by RCS demonstrated improved mental and functional health in 43% of patients. It can also be used in patients with poor mental and social health with longer episodes of treatment showing improvement in RCS. The group level showed an increased reduction in hospitalizations in patients before and after CCU on mental health and social functioning. While the results of this study corroborate the positive trend in readmission rates found in previous research, it is essential to recognize that system-related factors, such as access, availability, and lack of alternative services, influence service usage. Assessment of individual changes in CCU consumers revealed improvements in accommodation instability that were not detected at the group level.

**Case and club management methods**

The last study we analyzed was the study conducted in Hungary by Varga et al. in 2018. The study compared prospective changes in social cognition and functional outcomes in two groups of schizophrenic patients involved in two forms of community-based psychosocial care, namely case management and community-based clubs with a group of regular patients. Case management is important for patients and helps them develop coping mechanisms to deal with the seemingly insurmountable challenges of everyday life. This program provides various trainings for patients with the participation of family members or friends at the patient’s home. The long-term goal of CM is to develop and maintain skills to cope with the difficulties of daily living and improve the relapse index, social functioning, and the patient’s standard of living (Holloway and Carson, 1999; Thornicroft, 1991). In comparison, CC or Community-Based Club or community-based club is a daycare service formed based on the concept of the Psychosocial rehabilitation Clubhouse Model for chronic schizophrenic patients over the age of 18 years (Mckay et al., 2016). Patients have the opportunity to participate in a variety of social interactions and community programs, including various cultural programs and leisure activities. Their main goal is to help people with mental illness, usually living in social isolation; they struggle to find their way into the community. The results show that the most notable changes in social cognition function were detected in the community-based club group. The functional outcomes improved significantly in the community-based club and case management group compared to the treatment-as-usual (TAU) group. According to the findings, Varga et al. believed that community-based psychosocial care was able to facilitate functional outcomes in schizophrenia (Varga et al., 2018).

Regarding social cognition, Varga et al. found that community-based club programs can achieve the most prominent perspective changes. The results of this study suggest that this is due to a supportive social environment in which various social interactions can be practiced and new social roles can be learned, which exerts a specific enhancing effect on social cognition and helps patients find their way into society (Varga et al., 2018). Moreover, the current results clearly show that they need to engage in community-based clubs to improve patients’ social cognitive performance significantly.

**CONCLUSION**

The methods analyzed in this literature review showed significant effectiveness in community-based psychosocial rehabilitation treatment.
in developing countries, including Indonesia. Community-based psychosocial therapy is believed to improve the social functioning and quality of life of schizophrenic patients. It is also reasonably effective in developing countries or low-income communities, and this is due to the minimal resources that can be used in community-based psychosocial therapy models compared to primary home treatment. It can also reduce the level of patient care in the hospital. However, several things need to be considered in its implementation, among others, improving the quality of the assistant staff working in it and the material. This article is expected to be helpful and can be used as an insight into planning and providing community-based psychosocial therapy for schizophrenic patients.

REFERENCES


Diabetes insipidus in patients with traumatic severe brain injury

Yud180987@yahoo.com

Hypernatremia, desmopressin, ICU

JURNAL KEDOKTERAN FKUM SURABAYA

QANUN MEDIKA

In the case of being handled improperly, it can bring death.


Tidak ada data pasti tentang kejadian diabetes insipidus pada pasien dengan cedera otak traumatis hypernatremia, desmopressin, ICU. Hypernatremia, corrections are the keys to the successful treatment of severe brain injury is diabetes insipidus. There are no complications that occur in the first 2 weeks after the injury. One complication that may occur is diabetes insipidus. Diabetes insipidus in cases of trauma may not be serious, but if not handled properly, it can cause death.}


