SYSTEMATIC REVIEW

Recovery Nursing Care to Prevent Relapse Among Schizophrenia Patients : A Systematic Review

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ABSTRACT

Introduction: Schizophrenia is a chronic mental disorder that is often accompanied by a high risk of relapse. Relapse in patients with schizophrenia can worsen their quality of life and increase the burden on families and the health care system. Recovery-focused nursing care aims to support patient recovery in a way that focuses on improving quality of life and preventing relapse. **Methods:** This study is a systematic review of the available literature on nursing care for relapse prevention in patients with schizophrenia. Data were retrieved from several databases such as BASE, PubMed, ScienceDirect, and Issues in Mental Health Nursing, using keywords such as "schizophrenia," "relapse prevention," and "recovery nursing care." Articles that met the inclusion and exclusion criteria were comprehensively reviewed and analyzed to identify effective nursing interventions in relapse prevention in patients with schizophrenia. **Results:** The study showed that a recovery-focused nursing approach, which includes psychosocial support, family involvement programs, is effective in reducing the risk of relapse. In addition, patient education regarding therapy adherence and symptom management significantly contributed to the stability of their mental health. Some of the most successful nursing interventions are cognitive-behavioral therapy, stress management training, and patient empowerment strategies. **Conclusion:** Recovery-focused nursing care is essential in preventing relapse in patients with schizophrenia. Nursing interventions that emphasize increasing independence, coping skills, and patient and family education can help maintain the stability of the patient's condition. Further efforts are needed to strengthen the implementation of this approach in daily nursing practice so that optimal outcomes can be achieved for patients with schizophrenia.
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Keywords: Schizophrenia, Relapse prevention, Recovery nursing care, Psychosocial support, Symptom management

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INTRODUCTION

In terms of the number of schizophrenia cases in Southeast Asia in 2019, Indonesia was the most common country, followed by Vietnam, the Philippines, Thailand, Burma, Malaysia, Cambodia, and East Asia (1). According to Riskesdas 2018, there are 6.7 cases of schizophrenia for every 1000 homes in Indonesia (2). This indicates that there may be a household member experiencing schizophrenia in 6.7 out of 1,000 homes. With 11.1 and 10.4 cases of schizophrenia per 1,000 households, respectively, Bali and DI Yogyakarta had the greatest prevalence distribution of household member patients with these conditions.

It is not yet known for certain what causes the mental disorder schizophrenia experienced by a person, but several studies consider that this condition shows the existence of various combinations of physical, genetic, psychological and environmental factors. All of these components have an important role in the development process. There are several variables that assume an increase in the occurrence of schizophrenia in a person, these variables include genetic factors, difficulties experienced by a person during pregnancy and childbirth, exposure to chemicals that enter their body, viral infections, and various life experiences that causes pressure on the patient who experiences it. . In addition, the imbalance that occurs in neurotransmitters such as

serotonin and dopamine can be believed to mean that these two components have a very important role in the emergence of schizophrenia (3).

The development of schizophrenia in Indonesia is largely influenced by several factors, including environmental and genetic factors that exist in humans. Indonesian people tend to be more susceptible to the emergence of schizophrenia due to conditions in the country that are currently in crisis, such as various natural disasters, a prolonged economic crisis, and various other psycho-social problems (4). Apart from several biological factors that have been explained, such as genetic history, alcohol and tobacco consumption, and various other demographic factors such as economic problems and low levels of education, they also influence the emergence of schizophrenia in Indonesia (5).

The various signs and symptoms experienced by someone diagnosed with schizophrenia tend to be more varied, especially changes in symptoms more rapidly over time. The symptoms of schizophrenia are usually classified into positive symptoms, which include hallucinations and delusions, and negative symptoms, which include social withdrawal, lack of motivation, and changes in sleep patterns (6). Schizophrenia symptoms can be controlled with treatment (7).

Treatment can help control and reduce symptoms so that patients can live a normal life but there is no cure for schizophrenia. Medication and social rehabilitation are used to treat patients with schizophrenia(8). Anti-psychotic medications and combination therapy can be used to manage and lessen the symptoms of schizophrenia, according to Indriani (9). However, patients must receive lifelong treatment and be closely monitored so that doctors can evaluate and adjust the dosage, as most schizophrenia patients experience relapse symptoms (10).

Relapse in people with schizophrenia is the term used to describe the recurrence of symptoms following therapy or after hospitalization. According to Stuart, relapse is the reappearance of symptoms of mental disorders that had previously disappeared (11). There is no precise data on the global relapse rate of individuals with schizophrenia. It is estimated that 50% of patients who have recovered will relapse in the first year after leaving the hospital, 70% in the second year and 100% in the fifth year after leaving the hospital. In line with Rivelli et.al who stated that 80% of schizophrenia sufferers are estimated to experience a relapse within the first five years after remission (12).

There are both external and internal factors that can cause relapse. Age, heredity, gender, occupation, education, and type of schizophrenia are several internal factors that can influence a patient's risk of recurrence. Meanwhile, external factors include inadequate treatment compliance, emotional outbursts from family members, lack of family support, family tension, and social stigma (13). The other factors found to be involved in the recurrence of schizophrenia patients, namely the frequency of previous hospitalizations, the type of anti-psychotic taken previously, the duration of the illness, the type of medical medication. facilities, inadequate family support, and substance abuse(14). The prevention relapse is primary treatment goal long term management of schizophrenia (15).

Recover from schizophrenia is possible, and many individuals can achieve a meaningful life beyond the illness. Redefining one's health and well-being, guiding one's life to realize one's full potential, and rediscovering a purposeful life in one's community are all considered components of the path toward recovery (16).

Many people with schizophrenia can enjoy a fulfilling life in their community after the recovery process. Additionally, a review found that a decade after an initial schizophrenic incident, one-quarter of schizophrenics were completely free of any symptoms, and after 30 years, the number of "much improved" cases increases (17). Furthermore, another research reports that with treatment, many individuals recover to the point of living functional, rewarding lives in their communities (18).

A strong recovery in community is key to preventing relapses in individuals with schizophrenia. It's involves a combination of medication management, psycho-social interventions, and early recognition and response to symptoms (19). But in Indonesia mostly focuses on medicine and psychiatric hospitalization, both of which can be expensive, inefficient, and require long-term care. As a result, there is a need to shift towards a more holistic approach that emphasize the recovery of patients and their ability to lead meaningful lives (20).

MATERIALS AND METHODS

The methodology of this systematic review was designed to comprehensively evaluate the existing literature on recovery nursing care aimed at preventing relapse in patients with schizophrenia. A systematic approach was adopted to ensure that the review was rigorous, transparent, and reproducible. The review followed the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines, which provide a framework for conducting systematic reviews (45).

Inclusion criteria for studies considered in this review included peer-reviewed articles published between 2021 and 2023 that focused on recovery nursing interventions for patients with schizophrenia. Studies were selected based on their relevance to relapse prevention, effectiveness of nursing care, and application of recovery-oriented principles. Databases such as BASE,

PubMed, ScienceDirect, and Issues in Mental Health Nursing were searched using keywords such as "recovery nursing care," "schizophrenia," "relapse prevention," and "mental health nursing." The search strategy yielded 586 articles, of which 19 met the inclusion criteria after applying exclusion criteria. Articles were excluded based on factors such as non-peer-reviewed status, studies that focused on other mental health disorders, and those that did not specifically address nursing interventions. Data extraction was conducted using a standardized form to capture key information, including study design, sample size, intervention details, outcomes measured, and key findings. This systematic approach will provide a comprehensive understanding of how recovery nursing care can effectively prevent relapse among patients with schizophrenia. The study screening flow diagram can be seen in (Figure 1).

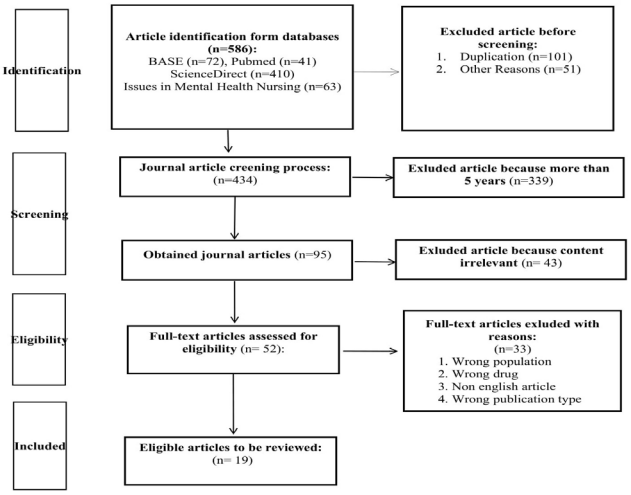

Figure 1: Flow Diagram od Study Screening

RESULTS

Results showed nineteen studies met inclusion criteria. Several themes illustrated mental health recovery services and relapse identified in globally, articles available in English or Indonesian, articles available in full text, articles published between 2021-2023, and in the form of research articles/articles original. Research articles reviewed by researchers are briefly described (Table I).

Tabel I: Summary of Articles Reviewed

No	Title	Intervention	Description of the intervention	Result
1.	Recovery-oriented nursing care based on cultural sensitivity in community psychiatric nursing	Recovery-oriented nursing care based on cultural sensitivity	This intervention clarified six categories of recovery-oriented nursing care based on cultural sensitivity	The results showed that cultural sensitivity enables recovery-oriented care even in environments where the values of recovery-oriented care are not shared enough, and recognizing the traditional mental health culture, understanding clients experiences and accepting various values of others is important
2.	Effectiveness of an Integrative Empowerment Intervention for Families on Caring and Prevention of Relapse in Schizophrenia Patients	Integrative empowerment intervention	The integrative empowerment intervention program spanned a period of 5 weeks, involving one session per week, each lasting approximately 60–90 min	There was a significant change in the family's ability to care for patients with schizophrenia before and after the integrative empowerment intervention (p<.001), while there was no change in the control group's ability to care for patients with schizophrenia (p>.05). Integrative empowerment had a significant impact on increasing the family's ability to care for and prevent relapse in patients with schizophrenia (p<.001)
3.	The effectiveness of illness management and recovery program in patients with schizophrenia	Illness management and recovery program	Illness management and recovery program consisted of 10 modules and 20 sessions of Illness Management and Recovery Program	There were significant differences in posttest and 1-month follow-up IMRS-P points between the inter- vention and control groups. There was no significant difference in posttest and 1-month follow-up SFS-P total points between the intervention and control groups. There were only significant differences for the pro-social activities' subscale of SFS-P
4.	Effect of Family Caregiver Expressed Emotion Control Program on Relapse among Patients with Schizophrenia	Family Caregiver Expressed Emotion Control Program	Three tools were used, I: Socio- demographic questionnaire for patients with schizophrenia and family caregivers. II: A caregivers' knowledge questionnaire about the schizophrenia and relapse and III: Expressed emotions scale	There was highly statistically significant correlation between total patterns of expressed emotion and total knowledge during pre/post program implementation at (P< 0.001)
5.	The Effects on Helplessness and Recovery of An Empowerment Program for Hospitalized Persons With Schizophrenia	Helplessness and Recovery of An Empowerment Program	The program used a 12-session intervention model. Each session was provided twice a week for 60 min, with a total of 6 weeks. The program consists of 12 topics in three categories: Understanding recovery from mental illness, Doing and undoing: Efforts for recovery, and Taking the best for recovery	This finding revealed that the empowering program was effective on helplessness (F = 185.218, p < .001) and recovery (F = 159.402, p < .001, F = 34.154, p < .001) of hospitalized persons with schizophrenia

CONTINUE

Tabel I: Summary of Articles Reviewed. (CONT.)

No	Title	Intervention	Description of the intervention	Result
6.	Applying the community mental health nursing model among people with schizophrenia	Community mental health nursing model	ommunity mental health nursing (CMHN) model which is designed for the intervention group based on three stages of the CMHN modules which con sisted of basic, intermediate and advanced nursing	The findings show that there was a significant difference in scores on the LSP before and after the implementation in the intervention group (19.94 ± 1.27 and 38.83 ± 9.32) with $p < .001$ and the control group (26.93 ± 12.50 and 30.89 ± 12.41) with $p = .002$. The findings also show that there was a significant difference of WPAI before and after the implementation for the intervention group (2.21±1.12 and 3.82±1.28) with $p<.05$ compared with the control group (1.91 ± 1.42 and 2.19 ± 1.58) with $p = .188$
7.	Health education for recovery of schizophrenia sufferers in an effort to improve the quality of life of sufferers in Cimahi City	Health education	Health education using film media and discussion and mentoring	Based on the assessment of their attitudes during the training in general, it can be concluded that all participants already have a positive attitude towards the recovery of schizophrenia sufferers. Participants can understand their roles and responsibilities as sufferers, family caregivers, cadres and community leaders in the recovery process of schizophrenia sufferers.
8.	Psychoeducation: A Strategy for Preventing Relapse in Patients with Schizophrenia	Psychoeducation	The intervention was a psychoeducation program delivered in 8 weekly sessions, with each session lasting 60-90 minutes. The program was delivered to a group of 5 patients attending a community center.	Psychoeducation programs for schizophrenia patients can improve their understanding of the disease and prevent relapse.
9.	The effect of cognitive behavioral group training of self care skills on self care in patients with schizophrenia	Cognitive behavioral group training	Cognitive behavioral group training consists 10 sessions (two sessions per week)	The results of repeated measures of ANOVA indicated a significant difference between the intervention and control groups in terms of descending mean score of total self-care during the test stages (p=0.001)
10.	The Application of Acceptance Commitment Therapy (ACT) and Family Psychoeducation (FPE) to Clients with Schizophrenia and Aggressive Behavior	Acceptance Commitment Therapy (ACT) and Family Psychoeducation (FPE)	Acceptance and commitment therapy was applied 7 times as well by the researchers in 4 sessions for an average of 30–45 minutes each session. The sessions consisted of 1) discussing unpleasant events or experiences, 2) discussing responses related to unpleasant experiences, 3) identifying impacts of responses and acceptance exercise, and 4) identifying the value of the clients and discussing how to commit to the therapy and to achieve the clients' goals based on their value. The intervention was not only given to the clients but also for the families	The finding showed decreased symptoms of aggressive behavior in cognitive, affective, physiological, behavioral, and social aspects and increased ability to control anger, to accept their problems, and to commit to the therapy after ACT, FPE, and TAU interventions
11.	Effect of Group Psychoeducation on Treatment Adherence, Quality of Life and Well-Being of Patients Diagnosed with Schizophrenia	Group Psychoeducation	Therapeutic approach that involves educating individuals within a group setting about mental health issues, coping mechanisms, and strategies for managing symptoms	There was a significant difference between the experimental group and the control group in terms of pretest and post-test, pretest and follow-up test scores ($p< 0.05$). The post-test and follow-up test scores of the patients in the experimental group were determined to increase their quality of life and well-being score ($p < 0.05$)
12.	The effect of assertiveness training in schizophrenic patients on functional remission and assertiveness level	Assertiveness training	Assertiveness training is thought to be more effective in small groups and it is recommended that the training curriculum be conducted between 6 and 12 sessions in total and in 2 to 3 sessions per week for 45 to 90 minutes each	Assertiveness training in schizophrenic patients was found to be effective in increasing the functional remission and assertiveness levels of patients
13.	Effects of needs-assessment-based psycho-education of schizophrenic patients' families on the severity of symptoms and relapse rate of patients	Needs-assessment-based psycho-education	Needs-assessment–based education included 10 sessions of education within about 6 months	The total PANSS score was significantly decreased in both groups with more reduction in the treatment group. Positive and negative scale scores were reduced in the treatment group, but not significantly in the control group. Response rate was higher in the treatment group and relapse rate was lower (15% vs. 27.2%, P = 0.279). In logistic regression analysis, needs-assessment–based psycho-education was associated with more treatment respons

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Tabel I: Summary of Articles Reviewed. (CONT.)

No	Title	Intervention	Description of the intervention	Result
14.	Mindfulness-Based Asmaul Husna and changes in general adaptive function response among schizophrenia: A Quasi-experimental study	Mindfulness-Based Asmaul Husna	Mindfulness-based Asmaul Husna consisted of Musyahadah-witnessing, tassawur-imagination, tafakkur-contemplation, tadabbur-reflection, and muhasabah-self-introspection was given to each participant over five days	There was a significant increase of the m-GAF score ($p < 0.001$) and a chi-square value of 177.2 after the implementation of mindfulness-based Asmaul Husna intervention. The highest mean score difference was observed at the first and second follow-ups, conducted one and two months after the interventions. The effect size calculated using Kendall's Wa indicates a significant effect (0.821)
15.	Effectiveness of a Metacognitive Intervention for Schizophrenia (MCI-S) Program for Symptom Relief and Improvement in Social Cognitive Functioning in Patients with Schizophrenia	Metacognitive Intervention	The program focused on enhancing metacognition to encourage self-awareness and step-by-step perspective expansion	Delusions decreased, and social cognition and social functioning improved in the experimental group compared to the control group
16.	Effects of a mental fitness positive psychology intervention program on inpatients with schizophrenia in South Korea: A feasibility study	Mental fitness positive psychology intervention program	Mental fitness positive psychology intervention program duration was shortened from 10 sessions at the developmental stage to eight sessions to account for patients' hospitalization period	The program effectively improved participants' self-esteem and interpersonal relationship ability
17.	Effectiveness of Recovery-Oriented cognitive therapy on Emotion Recognition and Quality of Life in Patients with Schizophrenia	Recovery-Oriented cognitive therapy	Recovery-oriented cognitive therapy was conducted in 8 sessions of 60 minutes each over four weeks, twice per week	The results indicated that recovery-oriented cognitive therapy had a significant effect on emotion recognition and quality of life in the post-test and follow-up stages
18.	The Effect Of Cognitive Therapy On Changes In Self-Esteem On Schizophrenia Patients	Cognitive Therapy	Cognitive therapy is a type of psychotherapy that focuses on identifying and challenging negative patterns of thinking, beliefs, and attitudes that contribute to emotional distress or maladaptive behaviors	The results of this study before being given cognitive therapy all respondents experienced low self-esteem of 22 respondents (100%) and after being given cognitive therapy, respondents' self-esteem became high as many as 19 respondents (86.4%) and compressed the value of $p = 0{,}000 < 0.05$.
19.	Effect of Empowerment Program on Recovery and Helplessness among Patients with Schizophrenia	Empowerment Program	Empowerment program spanned a number of eight sessions for each subgroup of the study sample, involving twice-weekly, each lasting approximately 60–90 min	Findings proved high statistically significant differences in the total scores of recovery and helplessness scales before and after program implementation

DISCUSSION

Schizophrenia is a severe mental illness that lasts for a very long time(21). Schizophrenia is a chronic and debilitating mental illness that can recur even after the initial episode is effectively treated (22)Schizophrenia is a brain condition that lasts for a very long time that impairs thinking, feeling and behavior that can recur even after the initial episode is effectively treated.

Avoiding schizophrenia Relapse is essential to this condition's long-term care. Creating a relapse prevention plan is crucial, and it could entail figuring out what triggers you, assembling a solid support network, and putting relapse prevention techniques into practice. Several strategies and interventions can help in preventing relapses are medication adherence: very important to take medication as instructed, even if symptoms have improved, as stopping medication is the most common cause of relapses (26); early intervention: while the effectiveness of early detection programs in reducing the duration of untreated psychosis is still under investigation, there is potential for these interventions to prevent or delay the onset of psychosis and schizophrenia, patients and their families should be educated about the early warning signs of relapse (27); psychosocial interventions: Family interventions, family psychoeducation, and cognitive behavioral therapy have been found to have robust benefits in reducing the risk of relapse (28); lifestyle: regular exercise, avoiding alcohol and illegal drugs, and finding positive ways to manage stress can also contribute to relapse prevention (29); having a social support system: building and maintaining a strong support network can help individuals with schizophrenia cope with the challenges of managing their condition and prevent relapses (30).

A common definition of recovery is a journey that includes discovering hope, growing resilient and self-assured, finding meaning and purpose in life, and forming wholesome connections (31). Recovery is a subjective, complex and multidimensional process with a great variability concerning its conceptualization and thus, the design of objective measures for its evaluation

(32). Recovery is a multifaceted, and individualized process that aids individuals in regaining their sense of well-being, living life to the fullest, rediscovering hope, developing resilience and self-assurance, establishing meaning and purpose in life, and regaining a meaningful existence in their community.

The recovery nursing care model stresses the individual's lived experience, choices, and self-management. It is a person-centered, holistic approach to mental health therapy. This model emphasizes the importance of establishing a therapeutic nurse-patient relationship, promoting medication adherence, and developing coping strategies and help people reach their own unique ideal state of well-being (33).

There are various nursing care models that can be applied in the community to prevent schizophrenia relapses. It's can be applied in the community include a combination of psycho-social interventions and medication adherence (34). Some effective models are: Recovery-oriented nursing care based on cultural sensitivity (37); Psycho-education (38); Social skills training (39); Coping skills training (40); Cognitive-behavioral therapy (41); Medication adherence (42); Community-based interventions (34); Empowerment intervention; Psycho-social (43); Psychological interventions (44); and Peer-led/supported interventions (43).

CONCLUSION

Community concerns about the behavior of patients, negative labeling, discriminatory treatment from the surrounding community and limited knowledge about mental health around the patient's residence are the causes of relapse in schizophrenia patients.

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