



## The Effectiveness of a Health Education Booklet on Improving Family Knowledge About Relapse Schizophrenia Patients in Dadok Tunggul Hitam Community Health Center

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### ABSTRACT

WHO (2024-2025) As many as 1 in 8 people worldwide live with a mental disorder, equivalent to over 1 billion people (data as of September 2025). The 2023 Indonesian Health Survey (SKI) revealed that approximately 20% of the Indonesian population (approximately 54 million people) experienced mental and emotional disorders (symptoms of anxiety and depression).

This study employed a quantitative method with a quasi-experimental design with a one-group pretest-posttest design, this research was conducted in the Dadok Tunggul Hitam Health Center Area which was carried out from September 2025 to January 2025. This research used purposive sampling technique. Data analysis used univariate and bivariate analysis using paired t-test statistical tests with a 95% confidence level  $\alpha = 0.05$ . The results of this study obtained an average value of family knowledge before providing health education, namely 12.75 with a standard deviation of 2.006 and the average knowledge of respondent families after providing health education was 14.42 with a standard deviation of 1.881. There is an effectiveness of a health education booklet on increasing family knowledge with the results of the statistical test  $p\text{-value} = 0.00$ . Through the leadership of the Dadok Tunggul Hitam Health Center, it is hoped that health education can be provided by conducting regular home visits once every three months to the homes of families of schizophrenia patients to evaluate the treatment process for patients with mental disorders and reduce the risk of relapse.

## INTRODUCTION

Mental disorders are a global mental health problem that impact the quality of life of individuals, families, and communities. Mental disorders involve cognitive distortions or negative thought patterns (Amin, dkk, 2025). Relapse in mental health patients is the return of signs and symptoms of a mental health disorder after a period of improvement (remission) or stability, resulting in a decline in psychological, social, and adaptive functioning. Relapse indicates that the mental health disorder is chronic, recurring, and requires long-term treatment (Stuart, G. W., & Sundeen, S. J. (2021).

The impact of untreated schizophrenia relapse can trigger relapses, such as: suicide attempts, depression, behavioral disorders (self-harming behavior), alcohol addiction, physical, psychological or sexual abuse, panic attacks, hallucinations, and destroying objects around them (Prabowo, 2017). The knowledge that families need to have to prevent relapses in schizophrenia patients at home includes providing attention and affection to patients, supervising medication intake, helping patients to always interact with the environment, providing positive activities to fill time at home, not letting patients be alone, giving praise if patients do positive things, not criticizing patients if they make mistakes, keeping patients away from situations that cause patients to feel helpless and taking patients for regular check-ups to health services. Family health education is expected to be a means of family empowerment, both when patients are being treated and after returning home, so that the role of the family can prevent relapses of schizophrenia experienced by patients (Keliat, 2018).

The family is the patient's closest environment. With a therapeutic and supportive family, the patient's recovery period can be maintained as long as possible. Many Indonesians still have limited knowledge and understanding of mental disorders. Their ignorance of mental health issues leads them to act impulsively, which negatively impacts those with mental disorders (Yancen, 2018). Booklets are an effective health education medium for families of schizophrenia patients because they contain written and visual information that can be read repeatedly, thus helping to improve family understanding in patient care and preventing relapse (Pratiwi, N. L., & Hidayati, A. (2019).

WHO (2024-2025) As many as 1 in 8 people worldwide live with a mental disorder, equivalent to over 1 billion people (data as of September 2025). Trend: Anxiety and depressive disorders dominate, with a significant 40% increase in anxiety disorders among young people (15-24 years old). Mental and Emotional Problems (2023): The 2023 Indonesian Health Survey (SKI) revealed that approximately 20% of the Indonesian population (approximately 54 million people) experienced mental and emotional disorders (symptoms of anxiety and depression). Severe Mental Disorders (Schizophrenia): The prevalence of schizophrenia in Indonesia reached 1.7 per 1,000 people. Adolescent Mental Health: More than a third (34.9%) of Indonesian adolescents have mental health problems, and 1 in 20 adolescents (5.5%) has been diagnosed with a mental disorder. Generation Z Mental Health (1997-2012): 60% of Gen Z experienced

mental health problems, significantly higher than millennials (40%) and Gen X (24%). Depression: The national prevalence of depression in 2023 was 1.4%, with the highest rate in the 15-24 age group (2%) (WHO, 2025).

Prof. HB. Saanin Mental Hospital, Padang, has recorded a high relapse rate among patients with mental disorders. A 2023 study showed that 52.5% of respondents (ODGJ) experienced relapses due to non-compliance with medication and lack of family support (RSJ. Prof. HB. Saánin Padang, 2023).

Yosep et al. (2018) reported that in Indonesia, 49% of people with mental disorders experienced rehospitalization after being discharged for 1 year, while the figure for non-schizophrenic patients was 28%. It was also reported that within 6 months after hospitalization, 30%-40% of patients experienced a relapse, while after 3-5 years after hospitalization, 65%-75% of patients experienced a relapse.

Research by Pertiwi,dkk. (2024) on the influence of health promotion media booklets on increasing the knowledge of companions of schizophrenia sufferers, shows that The research result there was an effect of booklet health promotion media on increasing the knowledge of companions with schizophrenia at Lampung Mental Hospital (p-value = 0.000). Suggestions need to be monitored and evaluated on the implementation of health education using booklet media for assistants with schizophrenia in the Lampung Provincial Hospital. This is done so that the knowledge of companions with schizophrenia about the management of schizophrenics in the community becomes better, in the end it will have an impact on community participation to increase their role in the management of schizophrenics in the community.

An initial survey conducted on September 29, 2025, at the Dadok Tunggul Hitam Community Health Center, interviewed 10 families of patients caring for their relatives with schizophrenia. Seven families reported that the patient frequently relapsed at least once every three months. The patient felt cured and refused to take medication. Sometimes the family forgot to remind the patient to take medication. The family knew that if the patient went berserk, it was a sign of relapse and was taken to a mental hospital immediately because it could harm the patient, family, and environment. Sometimes the family discontinued treatment for economic reasons and took the client for spiritual healing.

Based on the description above, the researcher has conducted research on "The Effectiveness of a Health Education Booklet on Improving Family Knowledge about Relapse Schizophrenia Patients in Dadok Tunggul Hitam Health Center in 2025"

## METHODOLOGY

This study employed a quantitative method with a quasi-experimental design with a one-group pretest-posttest design (Notoatmodjo, 2018). This research was conducted in the Dadok Tunggul Hitam Health Center Area in 2025 which was carried out from September 2025 to January 2025. With a population of 22 families of schizophrenia patients with a sample of 12 people. The research period was from September 2025 to January 2026.

## RESULT

### 1. Sample distribution families of schizophrenia patients

**Table 1. Sample distribution families of schizophrenia patients**

Families of schizophrenia patients	Frequency (n)	Percentage (%)
Male	4	33,3%
Female	8	66,7%

Based on Table 1. the largest proportion of the sample families of schizophrenia patients was female (66,7%).

### 2. Univariate Analysis

#### a. Average Family Knowledge Before Health Education Booklets in Dadok Tunggul Hitam Community Health Center in 2025

**Tabel 2.1 Average Family Knowledge Before Health Education Booklets in Dadok Tunggul Hitam Community Health Center in 2025**

Variabel	Mean	Std. Deviation	Min	Max
Pre	12.75	2.006	10	17

Table 2.1 shows that the average value of respondents' family knowledge before health education booklets was 12.75 with a standard deviation of 2.006. The maximum knowledge value was 17 and the minimum value was 10 in families of schizophrenia patients.

#### b. Average Family Knowledge After Health Education Booklets in Dadok Tunggul Hitam Community Health Center in 2025

**Tabel 2.2 Average Family Knowledge After Health Education Booklets in Dadok Tunggul Hitam Community Health Center in 2025**

Variabel	Mean	Std. Deviation	Min	Max
Post	14.42	1.881	12	18

Table 2.2 shows that the average value of respondents' family knowledge after health education booklets was 14.42 with a standard deviation of 1.881. The maximum knowledge value was 18 and the minimum value was 12 in families of schizophrenia patients.

### 3. Bivariate Analysis

#### a. The Effectiveness of a Health Education Booklet on Improving Family Knowledge about Relapse Schizophrenia Patients in Dadok Tunggul Hitam Health Center in 2025"

**Tabel 3.1 The Effectiveness of a Health Education Booklet on Improving Family Knowledge about Relapse Schizophrenia Patients in Dadok Tunggul Hitam Health Center in 2025"**

Variable	Mean	SD	SE	P-Value
Pre	12.75	2.006	0.759	0.000
Post	14.42	1.881	0.543	

Table 3.1 shows a difference between the respondents' family knowledge before and after being given health education booklets with an average value of 12.75 with a standard deviation of 2.006 to an average value of 14.42 with a standard deviation of 1.881. The results of the statistical test obtained a p-value of 0.000 ( $p < 0.05$ ) which means there is a difference Effectiveness of a Health Education Booklet on Improving Family Knowledge about Relapse Schizophrenia Patients in Dadok Tunggul Hitam Health Center in 2025.

### DISCUSSIONS

Relapse is the reappearance of signs and symptoms of a disease after they have subsided. Relapse is a common problem in patients with mental disorders, particularly in schizophrenia. Schizophrenia patients experience repeated relapses. Many factors influence or cause relapse, such as parenting styles, medication adherence, and the patient's socioeconomic factors. Non-adherence is associated with the therapy/treatment program, patient characteristics, the environment, and providers. Social stressors are associated with the social environment, education, employment, economics, access to services, and interpersonal interaction problems (Rahmawati, 2020).

Relapse prevention in mental health care is crucial for utilizing the family as a valuable approach in relapse prevention. Caring for people with mental disorders can be a burden for their families, while lack of family support can lead to relapse. Relapse prevention can be done, including maintaining patients within the family environment, mobilizing existing health service facilities in the community, especially the role of family support, maintaining the health of family members who experience schizophrenia, providing care and support to patients. Families and communities can play a role in preventing relapse in schizophrenia patients, such as accepting them back and not acting discriminatory towards them. Families need to provide support, which is a perception of assistance in the form of attention, appreciation, information, advice, or material received after schizophrenia patients post-treatment from other family members in order to carry out functions or tasks within a family (Ilhowe, et al., 2017).

Factors that influence the occurrence of relapse in schizophrenia patients include genetic factors, brain structure and function (neuroanatomy), psychosocial factors, environmental factors, attitudes or behaviors, having a

family member with a history of schizophrenia diagnosis. Complications of pregnancy or childbirth, such as malnutrition or exposure to toxic substances and viruses that can affect brain development, the use of psychoactive or psychotropic drugs during adolescence or young adulthood. The environment and family have a large role in preventing relapse in patients with mental disorders, therefore the family's understanding of the condition and the willingness of the family and environment to accept the patient and treat him/her humanely and fairly are fundamental in regarding the patient's relapse. The family is a very important factor in the process of healing mental disorders (Simanjutak, 2018).

According to researchers' analysis, patients with mental disorders are vulnerable to relapse. This is due to a lack of attention from families in caring for them at home. Once they return home, patients with mental disorders often feel healthy and refuse to take medication. This makes them vulnerable to relapse. Therefore, patients with mental disorders should have regular consultations once a month or when their medication runs out. Booklets are a very important medium for families with mental disorders in providing health education.

## **CONCLUSIONS**

Based on the results of the study "The Effectiveness of a Health Education Booklet on Improving Family Knowledge about Relapse Schizophrenia Patients in Dadok Tunggul Hitam Health Center in 2025," the following conclusions can be drawn: The average family knowledge of respondents before health education booklets was 12.75 with a standard deviation of 2.006, The average family knowledge of respondents after health education booklets was 14.42 with a standard deviation of 1.881, Health education booklets significantly increased family knowledge, with a statistical test result of  $p\text{-value} = 0.000$ .

## **RECOMMENDATIONS**

Based on the findings, health education booklets should be utilized as part of routine mental health services to improve family knowledge regarding relapse in schizophrenia patients. Future studies are recommended to assess long-term behavioral and clinical outcomes, as well as to conduct multi-site research and comparisons with alternative educational media to strengthen the generalizability of the results.

## **FURTHER STUDY**

Further research is recommended to develop health education interventions using booklets, evaluating not only improvements in family knowledge but also long-term changes in caregiving behaviors, attitudes, and relapse rates in schizophrenia patients. Furthermore, multi-site research and the use of alternative educational media are needed to increase the generalizability of results and the effectiveness of health education programs in primary healthcare settings.

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