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VOICE FROM THE FRONTLINE: A QUALITATIVE EXPLORATION OF NURSES' VIEWS ON SCHIZOPHRENIA THERAPY ADHERENCE IN INDONESIA

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ABSTRACT

Schizophrenia is a severe chronic mental disorder characterized by symptoms that affect human thought processes, emotions, and behavior. This study aimed to explore nurses' perspectives on therapy adherence among individuals with schizophrenia in Indonesia, focusing on types of therapy programs, causes of non-adherence, consequences of non-adherence, barriers to adherence, and strategies for improving continuity of care. A qualitative phenomenological approach was employed, involving in-depth interviews with 11 nurses purposively selected from psychiatric hospitals and mental health clinics across Indonesia. Participants had at least three years of experience in schizophrenia care. Data were analyzed using the Colaizzi method to identify themes and subthemes. Five key themes emerged: (1) Types of therapy programs (nursing therapy, psychopharmacology, psychotherapy); (2) Causes of non-adherence (negative attitudes, lack of family support, drug side effects, healthcare system challenges, economic barriers); (3) Consequences of non-adherence (relapse, rehospitalization, social and familial impacts); (4) Barriers to adherence (nurse-related, doctor-related, patient-related, and family-related obstacles); and (5) Continuity of care (increasing resources, health collaboration, service integration). Nurses emphasized the need for multidisciplinary collaboration and systemic improvements to enhance adherence. The study highlights the multifaceted challenges in achieving therapy adherence among schizophrenia patients in Indonesia. Addressing these issues requires tailored interventions, stronger family and healthcare provider support, and integrated care models. These findings can inform policy and practice to reduce relapse rates and improve patient outcomes.

Kata Kunci:
Skizofrenia;
Kepatuhan Terapi;
Perspektif Perawat;
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ABSTRAK

Skizofrenia adalah gangguan mental kronis yang parah yang ditandai dengan beberapa gejala yang memengaruhi proses berpikir, emosi, dan perilaku manusia.Penelitian ini bertujuan untuk menggali pandangan perawat mengenai kepatuhan terapi pada individu dengan skizofrenia di Indonesia, dengan menyoroti jenis program terapi, penyebab ketidakpatuhan, dampak dari ketidaktaatan, hambatan dalam mempertahankan kepatuhan, serta strategi untuk meningkatkan keberlanjutan perawatan. Pendekatan kualitatif dengan desain fenomenologi digunakan melalui wawancara mendalam terhadap 11 perawat yang dipilih secara purposif dari rumah sakit jiwa dan klinik kesehatan mental di berbagai daerah Indonesia. Para partisipan memiliki pengalaman minimal tiga tahun dalam perawatan pasien skizofrenia. Analisis data dilakukan dengan metode Colaizzi untuk mengidentifikasi tema dan subtema yang muncul. Hasil penelitian mengungkap lima tema utama, yaitu: (1) Jenis program terapi (terapi keperawatan, psikofarmakologi, dan psikoterapi); (2) Faktor penyebab ketidakpatuhan (sikap negatif, kurangnya dukungan keluarga, efek samping obat, kendala dalam sistem layanan kesehatan, serta hambatan ekonomi); (3) Dampak ketidaktaatan (kekambuhan, rawat inap berulang, serta dampak sosial dan keluarga); (4) Hambatan terhadap kepatuhan (kendala yang berasal dari perawat, dokter, pasien, dan keluarga); serta (5) Keberlanjutan perawatan (peningkatan sumber daya, kolaborasi lintas profesi, dan integrasi layanan). Perawat menekankan pentingnya kolaborasi multidisipliner serta perbaikan sistem untuk meningkatkan tingkat kepatuhan terapi. Studi ini menyoroti kompleksitas tantangan dalam mencapai kepatuhan terapi bagi pasien skizofrenia di Indonesia. Untuk mengatasinya, diperlukan intervensi yang disesuaikan, dukungan yang lebih kuat dari keluarga dan tenaga kesehatan, serta model perawatan yang terintegrasi. Temuan ini diharapkan dapat menjadi dasar dalam penyusunan kebijakan dan praktik keperawatan guna menurunkan angka kekambuhan dan meningkatkan hasil pemulihan pasien.

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INTRODUCTION

Schizophrenia is a severe chronic mental disorder characterized by symptoms that affect thinking processes, emotions, and behavior, with symptoms generally appearing in late adolescence or early adulthood and persisting throughout life, affecting about 1% of the population (Brink, 2004; Greydanus et al., 2008; Khamker, 2015; Villaverde, 2007; Zielasek & Gaebel, 2015). This disorder has three main characteristics: positive symptoms such as hallucinations, delusions, disorganized speech, and chaotic or catatonic behavior that reflect an excessive enhancement of normal functions (Brink, 2004; Zielasek & Gaebel, 2015). Negative symptoms include a decrease in normal functions such as flat affect, social withdrawal, lack of motivation, and inability to experience pleasure (Greydanus et al., 2008; Khamker, 2015). Cognitive symptoms include difficulties with attention, memory, and executive function that can disrupt daily activities (Khamker, 2015; Sun et al., 2023).

The diagnosis of schizophrenia has evolved, with DSM-5 introducing several important changes to improve accuracy, requiring symptoms to persist for at least six months with at least one month of active-phase symptoms (Brink, 2004). DSM-5 also eliminates the classic subtypes of schizophrenia and focuses more on the spectrum of psychopathological dimensions (Tandon, 2012; Tandon et al., 2013). The importance of ruling out other causes of psychotic symptoms such as brain inflammation or substance abuse (Zielasek & Gaebel, 2015). Epidemiologically, schizophrenia affects approximately 1% of the global population with certain variations (Greydanus et al., 2008; Villaverde, 2007), and it usually starts in men's early twenties and women's late twenties. Early-onset schizophrenia (before 18 years) and childhood-onset schizophrenia (before 13 years) are less common but have worse results (Greydanus et al., 2008; Khamker, 2015; Villaverde, 2007).

The magnitude of the problem of schizophrenia can be seen in its prevalence both globally and in Indonesia. Schizophrenia is experienced by 0.32% of the world's population or about 24 million people in young adulthood (World Health Organization, 2022). In a systematic review by (Charlson et al., 2018), the global prevalence of schizophrenia based on age-standardized rates in 2015 was 0.28%. In Indonesia, the prevalence of schizophrenia can be determined based on data from the Basic Health Research (Riskesdas), where in 2013 the prevalence of schizophrenia was 0.17% and in 2018 it was 0.18% (Idaiani et al., 2019). The prevalence of schizophrenia in Indonesia increased from 2013 to 2018, although it is still below the global prevalence of mental disorders.

The challenge in the management of individuals with schizophrenia is the high rate of relapse. The prevalence of relapse in schizophrenia clients reaches 80% (Bernardo et al., 2020), 60% to 70% in the first few years after diagnosis (Stuart et al., 2016), 74.2% after the first episode of schizophrenia (Üçok & Kara, 2020), with relapse rates reaching 67.1% and 39.2% of them requiring hospitalization (Oyediran et al., 2019). Another study conducted in Spain predicted that relapse occurs in 31% of people with mental disorders after 1 year of treatment and increases to 43% after 2 years of treatment (Berge et al., 2016). A study in Sweden reported that 50% of individuals with schizophrenia without a previous history of relapse are predicted to experience their first relapse episode within 1.5 years, and individuals with schizophrenia who have a history of multiple relapses will relapse within less than 1 year (Jorgensen et al., 2021). individual with schizophrenia will experience a lifetime relapse rate of 57.4% (Moges et al., 2021).

Relapse in schizophrenia is a major concern due to its link to disease progression, functional decline, and increased morbidity. Key contributors include non-adherence to medication (especially oral antipsychotics, whereas long-acting injectables [LAIs] show lower relapse rates) (Hamanu et al., 2019; Kazadi et al., 2008; Rubio et al., 2020; Schoretsanitis et al., 2022; Thomas, 2013), comorbidities like substance abuse (e.g., cannabis) and metabolic syndrome (MetS), the latter tripling relapse risk (Godin et al., 2018; Kazadi et al., 2008), and prior relapse history, which accelerates future episodes (Chan et al., 2022; Jorgensen et al., 2021). Demographic factors such as younger age, male gender, and poor baseline symptoms also elevate risk (Hui et al., 2013; Rivelli et al., 2024; Sato et al., 2023), while family support may reduce it (Hamanu et al., 2019; Pothimas et al., 2020). Relapse worsens outcomes, leading to functional decline (e.g., hospitalization, unemployment) (Chan et al., 2022; Rubio et al., 2020), and potential neurobiological harm (Emsley et al., 2013). Prevention hinges on early intervention (e.g., recognizing warning signs like sleep disturbances) (Gleeson et al., 2024), continuous treatment (especially LAIs) (Schoretsanitis et al., 2022), and addressing modifiable risks like psychosocial support (Chan et al., 2022; Thomas, 2013). Effective management requires tailored, long-term strategies to mitigate relapse and improve prognosis.

Although numerous studies have highlighted demographic, clinical, and family support factors, nurses' perspectives on adherence to schizophrenia treatment remain understudied. While some literature suggests that psychiatric nurses are a key element in maintaining treatment continuity, research in Indonesia has not explored nurses' perceptions of barriers and implementation strategies. For example, a study found that nurse engagement after hospital discharge remains fragmented, and nurses' continued role in improving adherence is largely unexplored. Another gap is the lack of data on specific treatment programs (e.g., the use of long-acting injectable antipsychotics/LAIs) from nurses' perspectives, as well as how nurses assess existing family and community interventions.

The literature review also highlights the need for research interventions to improve adherence. To date, research in Indonesia has been largely descriptive or observational, making it unclear which specific interventions are most effective in the local context. Furthermore, the need for continued support after initial treatment, including care coordination and family support, has not been optimized. In short, these research gaps include the lack of qualitative data on nurses' perspectives and the lack of evidence on the implementation of continuity of care programs that actively involve nurses.

This study will bring novelty to the understanding of psychiatric nurses' perspectives on adherence to schizophrenia therapy, a perspective that has not been widely explored in Indonesia. Nurses, as mental health service providers, play an active role in medication education and monitoring, so their insights can uncover previously unidentified practical barriers and training needs. Furthermore, this study will explore how therapy programs, such as antipsychotic medication administration (oral vs. injectable), are implemented by nurses and what barriers they observe patients encounter. By highlighting these dimensions, this study is expected to yield unique findings that can guide the planning of a sustainable, home-based follow-up intervention model. Similar to previous studies on pressures, the role of psychiatric nurses is crucial in maintaining treatment continuity. The novelty of this study lies in the combined analysis of factors causing non-adherence, clinical consequences, and intervention strategies from the perspective of field practitioners (nurses) in Indonesia. This study aims to explore nurses' perspectives on therapy adherence in individuals with schizophrenia in Indonesia, focusing on the types of therapy programs, causes of non-adherence, consequences of non-adherence, barriers to adherence, and strategies to improve continuity of care with the ultimate goal of providing information for interventions to reduce relapse rates and improve patient outcomes.

This study aimed to explore nurses' perspectives on therapy adherence among individuals with schizophrenia in Indonesia, focusing on the types of therapy programs, causes of non-adherence, consequences of non-adherence, barriers to adherence, and strategies for improving continuity of care with the ultimate goal of informing interventions to reduce relapse rates and enhance patient outcomes.

METHOD

Type of Research

This qualitative research uses a phenomenological approach aimed at exploring the experiences of nurses in various regions of Indonesia regarding therapy adherence in schizophrenia patients.

Place and Time of Research

This study was conducted at several psychiatric hospitals and mental health clinics in Indonesia between June and July 2025.

Population and Sample

The research participants consisted of 11 nurses purposively selected from various psychiatric hospitals and mental health clinics across Indonesia, with the criteria: (1) having a minimum of 3 years of experience caring for schizophrenia patients, (2) working in mental health service facilities, and (3) being willing to fully participate. The selection of participants from various regions was carried out to obtain a variety of geographical and cultural perspectives.

Data Collection

Data collection was conducted through semi-structured in-depth interviews conducted online using Zoom/Google Meet platforms and face-to-face interviews, considering the dispersed locations of the participants. The interviews used a guideline divided into three parts: (1) opening questions about general

views on therapy adherence, (2) eight core questions covering knowledge about the therapy program, experiences with non-adherence, identification of adherent patients, causes and impacts of non-adherence, obstacles faced, and hopes for program improvement, and (3) closing questions. Each interview was recorded with the participants' consent and then transcribed verbatim for analysis.

Data Analysis and Processing

Data analysis was conducted manually following Colaizzi's phenomenological method, which includes seven stages: (1) transcription of interview data, (2) identification of significant statements, (3) formulation of meanings, (4) development of themes, (5) comprehensive description of the phenomenon, (6) validation of findings through member checking, and (7) preparation of thematic reports. To maintain data validity, researchers triangulated sources by comparing data from participants in various regions, triangulated methods through interviews and field notes, and conducted discussions with fellow researchers.

Ethical Clearance

This research has obtained ethical approval for research involving human subjects from the Ethics Committee of the Faculty of Medicine, University of Indonesia with approval number: KET-289/UN2.F12.D1.2.1/PPM.00.02/2024.

RESULT

Table 1 presents the demographic characteristics of the 11 nurse participants involved in the study. The majority (72.7%) were aged between 18 and 40 years, while 27.3% were aged 40–60 years. Females predominated (81.82%) compared to males (18.18%). In terms of education, most participants held a Master's degree (63.63%), followed by a Bachelor's degree or equivalent in the nursing profession (30%), and a small proportion were nursing specialists (6.37%). Regarding work experience, the largest group (63.64%) had 6–10 years of experience, while fewer participants had 0–5 years (9.09%), 11–15 years (18.18%), or 16–20 years (9.09%) of experience. These characteristics reflect a relatively young, highly educated, and experienced nursing workforce, which aligns with the study's aim to explore their perspectives on therapy adherence among individuals with schizophrenia in Indonesia. The participants' diverse backgrounds provide valuable insights into the challenges and strategies related to the continuity of care in mental health settings.

Table 1. Participant Characteristics

Description	f	(%)
Age		
18-40 years old	8	72.7
40-60 years old	3	27.3
Gender		
Male	2	18.18
Female	9	81.82
Education		
Bachelor+ Ners Profession	3	30.0
Master	7	63.63
Ners Specialist	1	6.37
Work experience		
0-5 years	1	9.09
6-10 years	7	63.64
11-15 years	2	18.18
16-20 years	1	9.09

Theme 1: Types of Therapy Programs for People with Schizophrenia

Theme 1 consists of 3 subthemes, namely (1) nursing therapy, (2) psychopharmacology, and (3) psychotherapy. Subtheme (1) nursing therapy consists of categories, namely nursing actions and nursing care, which can be seen in the following interview excerpts with several participants:

"Nursing actions of generalist nurses by nurses, …… specialist psychiatric nursing therapy carried out by specialist psychiatric nurses…" (p3)
"...receive nursing care provided while in the hospital.……." (p1)

Subtheme (2) psychopharmacology is formed from the category of drugs, which can be seen from the following statement:
"Because in addition to drugs, there are psychotherapies……..must be adhered to by people with schizophrenia…" (p1)

Theme 2: Causes of Non-Adherence with Therapy Programs
The second theme is the causes of non-adherence consisting of subthemes of negative attitudes towards treatment, lack of family support, drug side effects, health service conditions, and economic factors. The subtheme of negative attitudes towards treatment is formed from the categories of not feeling the impact of therapy, feeling healthy, boredom, and lack of motivation. The following are participant statements related to negative attitudes towards treatment:
"He doesn't do nursing action therapy because... there's no benefit, no effect..." (p3)
"..this person's motivation also has an effect, yes, there is hope for recovery
If from drug therapy... feels healthy" (p1)

Subtheme (2) lack of family support is formed from the categories of PMO, lack of support, lack of knowledge, and lack of optimization of education, as reflected in the following statements:
"there is no supervisor taking medication..." (p3)
"...family who think that if it hasn't or doesn't bother other people, it's not controlled" (p2)
"... I don't know, it has to be continued at home, that's the first thing. …Inadequate explanation…" (p2)

The category of lack of knowledge is identified by the following statement:
"…. I don't know that it must still be continued at home, that's the first…" (p1)
"the patient's or family's knowledge related to the disease" (p3)

The category of less than optimal education is shown in the following statement:
"…Inadequate explanation…" (p1)
"even not providing information so just getting a case study" (p3)

Subtheme (3) side effects of drugs are formed from five categories, namely (1) hypersalivation, (2) laziness, (3) extrapyramidal symptoms (EPS), (4) weakness, and (5) drowsiness. Here are the statements regarding the categories:
"…I feel that the drug has bad side effects such as excessive salivation, hypersalivation…" (p3)
"…He said that if I take this drug, I will feel lazy…" (p3)
"…I feel like I have EPS symptoms… I can't think when it works…" (p1)
"…For example, clozapine is a drug to relax. I feel sleepy in the morning, my body feels weak…" (p1)

Subtheme (4) health service conditions consist of 3 categories: (1) difficult access, (2) difficulty in obtaining drugs, and (3) lack of nursing human resources. Statements regarding the categories are illustrated below:
"…In health centers, health centers usually provide mental health drugs. But in areas that still, such as remote areas, they don't…" (p2)
"…Patients who far away, the drugs are most likely not available, not sufficient…" (p1)
"…The nurses are not in accordance with the number of patients in the inpatient room…" (p3)

Subtheme (5) economic factors consist of one category, namely transportation. The category regarding transportation was identified from the statement below:
"…but transportation (for control) is a small thing that is not visible…" (p2)

Theme 3: Consequences of Non-Adherence with Therapy Programs

The third theme explains the consequences of non-adherence to therapy programs. The consequences are divided into 3 categories, namely consequences for the patient's internal condition, social environment, and family.

The subtheme of consequences for the patient's internal condition consists of 3 categories, namely relapse, worsening prognosis, and rehospitalization. Participant statements are as follows:

"…It's definitely a relapse, I think…" (p3)

"…achieving recovery from this patient feels like it will be difficult, yes.. recovery in the sense that he returns to his life, is able to carry out daily activities independently, signs and symptoms are reduced…" (p2)

"…Yes, the frequency of his rehospitalization or re-hospitalization after his last return home is quite frequent and the distance is close… " (p2)

Subtheme (2) regarding consequences for the social environment consists of one category, namely threatening actions, as reflected in the following statements:

"…When he is sick, he will usually do reflexive actions ...It will definitely threaten the existence of others..." (p3)

"…Physical violence usually occurs for patients who are physically violent and then the family becomes less concerned…" (p3)

Subtheme (3) the impact on the family consists of 2 categories, namely (1) being neglected and (2) increasing the family burden. The following are statements regarding the categories:

"...people with schizophrenia was left at the intersection in the middle of the road and then his parents left ..." (p3)

"…The family will need more time to give time or attention to the patient because the patient is not yet independent…" (p2)

Theme 4: Sources and Forms of Obstacles in Efforts to Adhere with the People with Schizophrenia Program

This fourth theme is divided into 4 subthemes, namely obstacles from nurses, doctors, patients, and families. Obstacles from nurses are divided into three categories: (1) health communication barriers, (2) differences in approach, and (3) lack of nurses.

Health communication barriers appear in the statement:

"... when the operator does not transfer about the nursing therapy itself.

"For example, what nursing therapy is this that has not been continued to the afternoon service…" (p3)

The difference in approach from nurses to patients is illustrated in the following statement:

"…Not compact with colleagues, we try to motivate others, eh, they just want a cake so that the work is finished quickly, there are those like that…" (p2)

The statement regarding the category of lack of nurses is in the following statement:

"…Maybe in quantity, yes, in the number of nurses, yes.." (p1)

Sub-theme (2) Obstacles from doctors are divided into one category. Statements in this category are barriers regarding time. Statements regarding this category are as follows:

"...there is not enough time so sometimes it is like listening to patient complaints about drug side effects…" (p1) (p2)

"…the doctor does not have enough time for a detailed assessment of drug side effects so just continue… "(p2)

Subtheme (3) is a barrier from the patient. This barrier is divided into 3 categories, namely (1) restlessness (2) communication breakdown (3) patient condition. For the category of restless noise, it can be seen in the following statement:

"…The first obstacle is when the patient is restless, that's for sure..." (p3)

The category regarding communication breakdown can be seen in the following statement:

"…verbal communication breakdown when we talk, sometimes the patient doesn't understand what we're talking about..." (p3)

The category regarding the patient's condition is reflected in the statement below:

"…the patient's condition itself (...) when he went home he had been educated but his attention was still lacking so small details about when to take medication or when to check up were neglected…" (p1) (p2)

Subtheme (4) family barriers consist of three categories, namely uncooperative families, minimal family support, and socio-economic factors. Statements include:

"... then other obstacles outside of the patient... such as family support and socio-economic..." (p1)

"... then other obstacles outside of the patient... such as family support and socio-economic, then in my opinion, there are still many challenges faced in its implementation…" (p2)

"…the patient's condition itself (...) when he went home he had been educated but his attention was still lacking so small details about when to take medication or when to check up were neglected…" (p1)

Theme 5: Continuity of Care

This fifth theme consists of three subthemes, namely (1) increasing resources, (2) health collaboration, and (3) service integration. Increasing resources is divided into three categories: increasing the number of human resources, increasing capacity, and integrating health services. The category regarding the addition of human resources was identified in the following statements:

"… Increase the nursing resources maybe…" (p3)

The increase in capacity was identified from the following statement:

"…Maybe through training... "(p3)

Subtheme (2) health collaboration consists of one category, namely collaboration between health workers, as reflected in the following statements:

"…All professional health workers who provide care to patients are oriented towards the needs of their patients…" (p1)

"…In line with carrying out therapy… Will reduce the incidence of recurrence…" (p3)

Subtheme (3) service integration is divided into three categories, namely integration between health facilities, monitoring, and ongoing programs. The category of integration between health facilities is reflected in the following statements:

"…The support of friends from the PKM health center in Jiwa has a program that supports the program at the Hospital…" (p2)

"Integration of health services….we don't know where to refer or connect this therapy. There is something like health center that department of mental health, or there are mental health cadres who have cooperation in terms of sectors**…** there are stakeholders like that…"(p3)

For the monitoring category is identified with the statement below:

"…The existence of monitoring in my opinion, from the nurses themselves conducting home visits or…" (p3)

The category regarding sustainable programs can be seen in the statement below:

*"…The therapy program is sustainable from the hospital until the end…" (*p2*).*

DISCUSSION

Theme 1: Types of Therapy Programs for People with Schizophrenia

In general, standard therapy programs for schizophrenia patients consist of antipsychotic drugs, hospital care, social rehabilitation, and supportive therapy (Haram et al., 2019). The same can also be seen in the guidelines from the American Psychiatric Association (APA), where the treatment of schizophrenia

patients must include planning a therapy program, pharmacotherapy, and psychosocial interventions. Pharmacotherapy in the APA guidelines includes the administration of antipsychotics along with monitoring the effectiveness and side effects of drugs experienced by patients, and psychosocial interventions include cognitive behavioral therapy, psychoeducation, social skills training, and others (Keepers et al., 2020). The guidelines for the management of schizophrenia are in accordance with the perceptions of nurses in this study. The participants of this study broadly explained the types of therapy programs available for people with schizophrenia, namely (1) nursing therapy which includes nursing actions, (2) psychopharmacological therapy which includes antipsychotic drugs, as well as psychotherapy such as modality therapy, psychoeducation, and other psychotherapy.

"..because in addition to drugs, there is psychotherapy……..must be adhered to by people with schizophrenia "(p1)

"…then there is also psychoeducation for the patient himself and his family… " (p2)

"... there is also psychotherapy that must be adhered to by people with schizophrenia…" (p2)

The results of this study indicate that nurses understand the various components of recommended therapy, namely the administration of antipsychotics, nursing interventions, and psychosocial interventions such as psychoeducation and various forms of psychotherapy. This finding is consistent with clinical guidelines that emphasize the importance of a combination of pharmacotherapy and psychosocial therapy (behavioral psychotherapy, social skills training, etc.) in the management of schizophrenia. For example, according to Gao et al. (2025), continuity of care, which includes education, follow-up, and ongoing support, is a key quality indicator and key to successful schizophrenia management (Gao et al., 2025). However, further analysis is needed to determine whether this ideal understanding is also realized in daily practice. Indonesian literature indicates that psychosocial rehabilitation for schizophrenia patients is often not optimally implemented due to limited resources and standard guidelines (Widianingsih & Astanto, 2020). In other words, even though nurses mention all elements of therapy according to standards, field challenges (e.g., lack of skills and facilities in each psychiatric hospital) may prevent the actual implementation of these programs from being comprehensive.

Theme 2: Causes of Non-Adherence with Therapy Programs

Causes of non-adherence in patients with schizophrenia can arise from various factors. The results of this study indicate that nurses perceive these factors as: negative attitudes towards treatment such as not feeling the impact of therapy, feeling healthy, boredom, and lack of motivation; lack of family support such as no PMO, lack of support, lack of knowledge, and lack of optimization of education; side effects of drugs such as hypersalivation, laziness, extrapyramidal symptoms, weakness, and drowsiness; health service conditions such as difficult access, difficulty in obtaining drugs, and lack of nursing human resources; and economic factors. These can be seen from the following statements by nurses:

"…nursing action therapy he did not do because ... there was no benefit, no effect ..." (p3)

"... families who think that if it has not or does not disturb others are not brought under control…" (p2)

"... I don't know that it should still be continued at home, that's the first…" (p1)

"...I feel like the drug has bad side effects like salivation, hypersalivation…" (p3)

"...Like there are EPS symptoms ... can't think if it works…" (p1)

"...For example, cloazapine is a drug to relax ... sleepy in the morning, the body becomes weak…" (p1)

"...In health centers, health centers usually provide mental health drugs. But in areas that still, such as remote areas, have not…" (p2)

These findings reflect a common pattern of reasons for non-adherence found in many studies. For example, data from the Indonesian Health Survey (2023) noted that the most common reasons for non-adherence were "feeling healthy" (25.4%) and boredom/forgetting to take medication (27.5%), while side effects accounted for around 5.9% of the reasons. These figures are very similar to nurses' perceptions (patients think medication is ineffective or are bored), confirming the validity of the field findings. These factors often overlap and are rooted in underlying issues such as low health literacy and stigma. For example, the literature suggests that patients' understanding of the benefits of treatment significantly influences their attitudes. If patients "feel healthy" because they lack sufficient insight into chronic diseases, the solution is not simply to blame their attitudes, but rather to improve education. Similarly, the factor of family support ('no one reminds them about PMOs') refers to the literature that family social and emotional

support is a strong predictor of adherence. In other words, the finding of "lack of family support" aligns with previous studies that emphasize socioeconomic and cultural aspects as barriers to adherence.

The results of this study are in line with several other studies, where previous studies have shown that factors such as good insight, history of drug adherence, positive attitudes towards treatment, type of drug, non-severe psychotic symptoms, social support, self-efficacy, general health status, severity of illness, duration of illness, level of education, and health service facilities influence non-adherence (Rohmi & Rumambo Pandin, 2022). Other sources also stated that cognitive function, quality of life, severity of comorbid diseases, self-efficacy, attitude towards treatment, and insight, family/social support and nurse-patient relationship, dosage, side effects, and type of drug regimen (El-Missiry et al., 2015; Hasan, 2019; Shah, 2019; Tham et al., 2018; Yu et al., 2021; Z et al., 2019).

Theme 3: Consequences of Non-Adherence with Therapy Programs

Non-adherence to therapy programs can have a negative impact on patients with schizophrenia. Several previous studies have stated that non-adherence can cause relapse, re-admission of patients to the hospital with increased length of treatment, and can even lead to suicidal behavior (Higashi et al., 2013). In addition, other studies have also stated that non-adherence to therapy programs in schizophrenia patients can increase the risk of future non-adherence, increase the likelihood of rehospitalization, and increase the need for higher doses of medication, which can raise financial costs related to treatment (Offord et al., 2013). The results of this study showed similar findings. Participants perceived that there were at least 3 consequences of non-adherence to therapy programs, namely consequences for the patient's internal condition, social environment, and family. The consequences for the patient's internal condition include relapse, worsening prognosis, and rehospitalization. For the social environment, the impacts include threatening actions due to the effects of schizophrenia symptoms. From the family perspective, neglect can occur due to increased family burden. If non-adherence increases family burden, it is important to emphasize the need for support and resources (e.g., caregiving training) for families. Studies in the literature rarely explicitly address family burden, so these results provide contextual insight, namely that non-adherence is not only a clinical problem for patients but also a significant socioeconomic burden for families.

This is as stated in the participant's statement:

"...Yes, the frequency of his rehospitalization or re-hospitalization after his last return home is quite frequent and the distance is close..." (p2)

"...When he is sick, he will usually do reflexive actions ..... It will definitely threaten the existence of others..." (p3)

"... The family will need more time to give time or attention to the patient because the patient is not yet independent..." (p2).

Theme 4: Sources and forms of obstacles in efforts to adhere with the people with schizophrenia program

The results of this study indicate that participants perceived obstacles in implementing adherence to therapy programs as arising from: (1) obstacles from nurses in the form of health communication barriers, differences in approach, and lack of nurses; (2) obstacles from doctors including time constraints; (3) obstacles from patients originating from patient conditions such as restlessness and communication breakdowns; and (4) obstacles from families such as uncooperative families, minimal family support, and socio-economic factors. These obstacles can be seen from the following statements:

"...When the operator does not operate on the nursing therapy itself. For example, what nursing therapy is not yet to be continued to the afternoon shift..." (p3)

"*Not compact with colleagues, we try to motivate others, just tempt them with cake so that they can finish their work quickly, there are those like that"* (p2)

"...The doctor's time is lacking so sometimes it's like listening to patient complaints about the side effects of drugs..." (p1)

"... then other obstacles outside of the patient... such as family support and socio-economics, and in my opinion, there are still many challenges faced in its implementation..." (p2)

Several previous studies support these findings. A study showed that most people with schizophrenia depend on family or health professionals to remind them to take their medication, and it is

important to build a good relationship between patients and nurses in order to better understand the patient's needs (Emsley et al., 2015). Other studies also show that lack of social and family support influences the emergence of non-adherence (Hudson et al., 2004). In addition, it was also found that effective communication between good doctors and patients can increase adherence (McCabe et al., 2013). Although it is not known whether the time of interaction between the two affects it or not. This shows that the role of family and health workers such as nurses and doctors is important in ensuring patient adherence, and disruptions in these factors can hinder the achievement of adherence to therapy programs.

Theme 5: Continuity of Care

The expectations and support of nurses in efforts to improve adherence to therapy programs for people with schizophrenia based on the results of this study consist of two aspects, namely continuity of care and online service innovation to facilitate access for patients. Continuity of care includes three components, namely (1) increasing resources including increasing the number of human resources, increasing capacity, and integrating health services; (2) collaboration between health workers; and (3) integration of services such as integration between health service facilities, monitoring, and ongoing programs. Participant statements regarding this are as follows:

> *"... All professional health workers who provide care to patients are oriented towards the needs of their patients..."* (p1)
>
> *"...Integration of health services .... we don't know where to refer or connect this therapy. .... there are like health centers that are part of the psychiatry, or there are psychiatry cadres who have cooperation in terms of sectors there are stakeholders like that..."* (p3)
>
> *"...Like applications or websites that can be accessed by patients or families who use BPJS insurance or what is covered by the government so that when patients who are far away can seek treatment online..."* (p3)

Several previous research findings support this. It is stated that continuity of care can improve intervention outcomes and help prevent injuries and deaths due to accidents caused by people with schizophrenia (Macdonald et al., 2021). Nurses as patient educators and advisors must have adequate capacity to collaborate and improve adherence and other outcomes needed by patients by actively participating in determining patient care (Mahone et al., 2016). Therefore, it is important to increase the number of human resources and the capacity of nurses. Good collaboration between health workers has also been shown to improve adherence among people with schizophrenia, as well as effective integration between health facilities (Mucci et al., 2020).

CONCLUSION AND SUGGESTION

This study identified five main themes that illustrate nurses' perspectives on therapy adherence in patients with schizophrenia, including understanding the types of therapy, perceptions and characteristics of non-adherence, its causes and consequences, barriers to therapy implementation, and the importance of continuity of care and innovation in online services. The results of this study can be used as a reference for developing interventions and knowledge related to the problem of non-adherence to therapy programs in patients with schizophrenia. From this research, it is hoped that sustainable therapy programs can be developed to support patients in returning to functioning in society by ensuring adherence to therapy programs. Furthermore, further exploration is needed regarding the role of multidisciplinary healthcare workers in ensuring the achievement of treatment goals for patients with schizophrenia and preventing relapse.

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