

Alternative Recommendation for Fingerprint Registration Policies and Waiting Times on Revisit Compliance of Schizophrenia Patients at Tangerang City Hospital

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ABSTRACT

The fingerprint registration system has been implemented at Tangerang City Hospital since 2024 across all clinics to digitize outpatient services. However, applying this system to patients with mental disorders such as schizophrenia has created access barriers, including anxiety, lack of awareness, and emotional resistance. Long waiting times also reduce patient compliance with follow-up visits. This study explores the experiences of schizophrenia patients and their family caregivers regarding the fingerprint registration system, waiting times, and interactions with healthcare professionals, while developing policy recommendations based on user experiences. Using a qualitative phenomenological approach, the study conducted in-depth interviews with 20 informants—family members, healthcare professionals, registration coordinators, the Head of Medical Records, and the Head of the Yanmed Work Team—alongside non-participatory observations and focus group discussions (FGDs). Data were analyzed through content analysis. The findings reveal that schizophrenia patients faced emotional, technical, and psychological barriers during the fingerprinting process. The non-inclusive system caused stress, discomfort, and low compliance with follow-up visits. Waiting times exceeding two hours further worsened their psychological condition. Most informants recommended creating a dedicated pathway and standard operating procedures (SOPs) for mental-friendly services as alternative recommendations for fingerprint registration policies and waiting times on revisit compliance of schizophrenia patients at Tangerang City Hospital. The study concludes that reformulating policies and SOPs grounded in empathy, efficiency, and alternative identity verification is essential to ensure inclusivity for vulnerable patient groups.

Keywords: Fingerprint, Waiting Time, Schizophrenia

INTRODUCTION

Schizophrenia is a chronic mental disorder requiring long-term treatment and regular visits to health facilities to ensure adherence. The World Health Organization (2023) estimates that schizophrenia affects around 24 million people worldwide, or approximately 1 in 300 individuals (Ghaderi et al., 2019; Hembram et al., 2023; Savić, 2023; Sher & Kahn, 2019; Stepnicki et al., 2018; Stilo & Murray, 2019). One of the main challenges in treating schizophrenia is maintaining patient compliance with revisits to hospitals or clinics, which ranges from 50% to 60% and significantly increases the risk of relapse and hospitalization (Ngwa et al., 2020). In Indonesia, schizophrenia is among the most common mental disorders treated in mental health services (Puspitasari et al., 2020). According to the Ministry of Health of the Republic of Indonesia (2018), the prevalence of schizophrenia reaches 7 per 1,000 households, with treatment compliance remaining low, around 45%–55%. Barriers to healthcare access, including complex administrative systems, long queues, and transportation limitations, contribute to this issue (Cochran et al., 2022).

Based on the 2023 Indonesian Health Profile (Ministry of Health of the Republic of Indonesia), visits from patients with severe mental disorders, including schizophrenia, decreased by 14.2% nationally over the past two years, mainly due to administrative constraints and long waiting times (Nam et al., 2021). Internal data from Tangerang City Hospital in 2024 show a decline in revisits from schizophrenia patients to the psychiatric clinic, primarily due to the non-user-friendly fingerprint registration process and an average waiting time of 2.7 hours, exceeding the Ministry of Health's standard of 60 minutes (Mrisha, 2022). Findings from Village Community Conference (MMD) activities in several *Puskesmas* indicate that patients with mental disorders still face obstacles in accessing basic healthcare (Marthoenis et al., 2024). These challenges stem from the fingerprint registration system, families' difficulties in accompanying patients, and non-inclusive waiting areas. Initial observations and informal interviews revealed complaints about the fingerprint system's incompatibility with patients' mental conditions. According to Donabedian, prolonged waiting times increase stress, anxiety, and dissatisfaction, especially among vulnerable groups such as those with mental disorders (Browne-Farrell, 2025).

Two key studies support this research. Highlight the importance of reducing access barriers and simplifying administrative processes to improve treatment adherence, though their study focused on general healthcare settings (Kroenke et al., 2019). Harrison found that long waiting times heighten anxiety and reduce patient trust, affecting compliance, particularly for those with chronic conditions (Byrne et al., 2021). However, both studies overlook the specific challenges faced by mental health patients.

This study addresses that gap by examining schizophrenia patients' experiences with the fingerprint registration system and waiting times at Tangerang City Hospital. It focuses on patient-centered service design emphasizing inclusivity and empathy. The goal is to assess the effectiveness of current registration processes and waiting times in improving accessibility and satisfaction, offering *alternative recommendations for fingerprint registration policies and waiting times on revisit compliance of schizophrenia patients at Tangerang City Hospital*. The findings aim to inform strategies that enhance patient compliance, reduce stress, and create more inclusive and efficient healthcare systems for vulnerable mental health populations.

METHOD

This research used a qualitative approach with a phenomenological design to understand the lived experiences of individuals in their real-life context (Creswell, 2018). This approach was selected because the study focused on exploring the subjective experiences of schizophrenia patients in dealing with the fingerprint registration system and waiting times during the revisit process at the hospital. The phenomenological design enabled the researchers to capture the perceptions, meanings, and experiences of those who directly encountered these healthcare service challenges.

RESULTS AND DISCUSSION

The Tangerang City Regional General Hospital is located in the center of Tangerang City, on Jl. Pulau Putri Raya Modernland Housing, Kelapa Indah Village, Tangerang District.

Based on the results of data collection carried out on key, main and supporting informants, several findings were obtained in this study related to alternative policy recommendations, fingerprint registration and waiting time for compliance with revisits of schizophrenia patients at Tangerang City Hospital as follows.

Implementation of fingerprint registration

Fingerprint registration is one of the biometric technologies used in healthcare to accurately and efficiently identify patients. This system replaces conventional methods such as patient cards or identification numbers with fingerprint scanning, which is safer and harder to forge (Kamil & Sari, 2024). The implementation of this system aims to improve the accuracy of patient data recording, reduce the risk of administrative errors, and speed up the service process. The fingerprint system implemented at the Tangerang City Hospital since 2022 is only for a few polys, and in 2024 the fingerprint system will be applied to all polys. Internal data from the Tangerang City Hospital in 2024 also shows a decrease in visits to schizophrenic patients who are re-controlled to the psychiatric poly, mainly due to the fingerprint registration process that is not user-friendly and the average waiting time reaches 2.7 hours, far exceeding the mental health service standards from the Ministry of Health which sets a maximum of 60 minutes. Families of schizophrenic patients often experience difficulties in the fingerprint registration process because they have to take schizophrenic patients to the hospital and long waiting times, from registration to receiving medication. This causes patients to feel stressed, anxious, and even afraid to throw tantrums, which ultimately reduces their motivation to return to self-control (Ma et al., 2020). This is strengthened by the results of Village Community Deliberations (MMD) activities in several Puskesmas in the Tangerang City area, which shows that patients with mental disorders, including schizophrenia, still face obstacles in accessing basic health services. This obstacle is caused by the fingerprint registration system and the difficulty of families in bringing schizophrenic patients to the hospital, as well as waiting rooms that are not yet inclusive.

Based on the results of interviews, observations with informants (key, main and supporters), it is known that the implementation of fingerprint registration at the Tangerang City Hospital has been running for all BPJS patients. However, the results of the interviews show that for schizophrenic patients, this system actually poses new obstacles. Overall, the implementation of the fingerprint system actually reduces the comfort of schizophrenic patients in re-controlling, and in some cases, has an impact on the patient's absence at the next schedule. The findings from a Focus Group Discussion (FGD) with six families of schizophrenic patients corroborated the results of in-depth interviews. All participants stated that the fingerprint process is the main obstacle in the sustainability of patient re-control. Fingerprinting is considered a procedure that does not match the psychological characteristics of schizophrenic patients who are easily anxious, panicked, and have difficulty bringing patients to the hospital. Another fact found from direct observation is the accumulation of queues at the fingerprint point, which has an impact on the delay in the examination schedule of schizophrenia patients. Some patients show mild aggressive behavior or a desire to go home before the fingerprint is complete. In the absence of a fingerprint bypass mechanism or an alternative life-friendly pathway, this system lowers the quality of service and encourages patient non-compliance with

re-control. Patients with schizophrenia have a more adaptive, non-procedural, and rigid need for interaction.

Policy

There are SOPs and registration and outpatient flow at Tangerang City Hospital which are still general and apply to all patients. Based on the results of interviews with the main informant, it is known that the Tangerang City Hospital has so far not had a special policy that accommodates the needs of patients with mental disorders in the context of the digital fingerprint system and service waiting time. The system used is still general and generalizes all patients, regardless of psychological condition and adaptability to administrative procedures. An alternative policy regarding fingerprinting is needed in schizophrenic patients who are controlled to the hospital. The results of observations conducted in the registration area of the hospital show that there is no difference in the flow of services between general patients and patients with mental disorders. Registration officers also do not have special guidance when dealing with schizophrenic patients who suddenly experience an agitated noise that ends up refusing fingerprints or failing to fingerprint. In terms of policy, there is no alternative Standard Operating Procedure (SOP) for patients with special conditions such as schizophrenia. The results of the study show that until now there is no formal policy or specific system at the Tangerang City Hospital for schizophrenia patients in the context of outpatient services. The entire process still uses standard procedures for general patients, including fingerprinting and an electronic queue system. The absence of priority pathways, official manual verification, or special service SOPs are the main sources of mismatches between the system and the needs of this vulnerable patient group. That alternative policies are based only on the officer's initiative and are not part of the system. Some family informants of schizophrenia patients proposed a fast track or a special assistance system. Based on the results of the FGD, the patient's family hopes that there will be priority services for schizophrenia patients who are suddenly restless and who cannot wait for a long time, as well as a simplified manual queuing system without relying on fingerprints. The absence of special SOPs and the absence of a vulnerability-based triage system make schizophrenia patients a group that is not systemically protected in services at current hospitals. Therefore, policy intervention is needed structurally, not only based on the personal empathy of officers.

Waiting time

Waiting time in health services is defined as the duration required by patients from the first time, they come to a health facility until they receive the required medical services. In accordance with the Decree of the Minister of Health of the Republic of Indonesia Number 129/Menkes/SK/II/2008 concerning Minimum Service Standards for Hospitals, which is a maximum of 60 minutes for outpatient services. And waiting time is an important indicator in assessing the quality of hospital or health center services, as well as having an impact on patient satisfaction levels (Trisutrisno et al., 2025). Data from interviews with 16 patients' families indicated that long waiting times had a great effect on the psychological condition of patients. Most patients begin to show symptoms of anxiety, confusion, and even a desire to go home before being examined. From the results of the FGD, the patients' families expressed their aspirations for hospitals to implement manual verification, fast track psychiatric services, and

special officers who understand the communication approach to schizophrenia patients. Some suggest a dedicated waiting room and a queue system based on vulnerability categories, rather than just sequential numbers.

Field observations also show that long wait times often cause agitation, mild destructive behavior, and anxiety in patients. Observations in the pharmacy area show that the total duration from registration to medication collection reaches an average of 2.5 to 3 hours, far above the maximum standard of outpatient services recommended by the Ministry of Health (60 minutes). The conclusion of this section shows that there are already several solutions implemented to prevent long waiting times in the pharmaceutical section. Policies for schizophrenia patients have been carried out to prevent long waiting times and prevent the occurrence of complaints of restlessness due to waiting too long in the pharmacy department, but it has not been stated in the flow and SOPs.

CONCLUSION

The findings of this qualitative phenomenological study at Tangerang City Hospital showed that the fingerprint registration system was not adapted to the psychosocial conditions of schizophrenia patients, often causing anxiety, confusion, and resistance. Long waiting times between 2.5 and 3 hours exceeded patients' psychological tolerance, leading to stress and refusal to attend follow-up visits. The lack of priority pathways, empathy-based communication, and standardized procedures further increased emotional distress for both patients and caregivers. Health workers were often unprepared to handle fingerprinting failures or address the psychosocial needs of vulnerable groups. The absence of specific SOPs made services inconsistent and potentially inequitable. Therefore, hospital policies need to include alternative identification systems, quiet waiting areas, and caregiver education to ensure inclusivity. Future research should evaluate the effectiveness of mental health-friendly administrative innovations, such as digital identity options or assisted registration systems, in improving patient compliance and satisfaction.

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