Journal of Public Health and Pharmacy
2775-4952 (Online - Elektronik)
Research Articles Open Access

Breaking the Chains of '*Pasung*': The Potential Roles of Primary Health Centres and Pharmacists in an Indonesian Setting

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ARTICLE INFO

Manuscript Received: 27 Oct, 2024
Revised: 03 Feb, 2025
Accepted: 22 Feb, 2025
Date of publication: 01 Jul, 2025
Volume: 5
Issue: 2
DOI: 10.56338/jphp.v5i2.6306

KEYWORDS

Health Service;
Pharmacist;
Pasung;
Mental Health Nurse;
Primary Care;
Indonesia

ABSTRACT

Introduction: Healthcare for patients in *pasung* is often neglected. Limited data is available on the roles of Primary Health Centres (PHCs) as the main providers of primary care in Indonesia. This research aims to explore health services provided for patients in *pasung* at PHCs and to identify the roles of pharmacists.
Methods: This descriptive qualitative research used in-depth interviews with a range of stakeholders [i.e., patients in *pasung* (n=14) or the representative family caregivers (n=12), mental health nurses (n=5), pharmacists (n=5)] at 5 PHCs in Trenggalek, Indonesia from May to July 2023. Inductive thematic analysis was used to address the research questions. Ethical approval was obtained from the Research Ethics Committee of Universitas Surabaya (number 130/KE/V/2023), and participants provided written informed consent.
Results: Patients in *pasung* have generally had adequate access to PHCs with no charge for their treatments. Health services provided for patients in *pasung* at PHCs were categorised into two main themes: outpatient services (i.e., medication supply, and home-care), and referral to inpatient services. Pharmacists' roles have largely related to drug supply, while clinical pharmacy services have been very limited (e.g., providing drug information when patients obtained their medications at the pharmacy units).
Conclusion: In conclusion, findings in this study have provided a baseline for future development of mental healthcare for patients in *pasung*. Pharmacists have the potential to take up more clinical roles to ensure quality use of medicines among patients in *pasung*. Supporting policy and resources should be allocated for PHCs to expand pharmacist's services.

Publisher: Pusat Pengembangan Teknologi Informasi dan Jurnal Universitas Muhammadiyah Palu

INTRODUCTION

Seclusion and restraint are interventions used to manage people with mental disorders (PWMD) who exhibit aggression and violence in psychiatric settings (1, 2). However, this was also practiced in non-psychiatric settings, particularly in a community setting such as a home. Community confinement methods found in many countries, particularly in low- and middle-income countries where mental health services are under-resourced (3-5). Thousands of confinement cases (which is known as *pasung*) have been reported in Indonesia (6). Pasung uses one or more combinations of different methods, including mechanical restraint (such as chain shackles) and isolation/seclusion for periods of time (7-9). Due to restricted mobility and extremely poor hygiene and diet associated with restraint, many of those subjected to *pasung* have been found to be undernourished, physically wasting and ill from a range of untreated health conditions, and sometimes deceased (6, 9).

Although *pasung* has been officially banned in Indonesia since 1977, its practice has persisted (10). The Indonesian Government has claimed that Program Bebas *Pasung* (i.e., a program aims for zero case of *pasung*), which was launched in 2010, has successfully reduced rates of *pasung* as estimated by Human Rights Watch from 18,880 cases in 2010 to 12,220 cases in 2018 (10). However, these did not match with the data from The Indonesian Centre for Health Research where the number of *pasung* was only slightly decreased from 14.3% to 14.0% among PWMD (11). It is difficult to accurately estimate the number of pasung cases in Indonesia, since PWMD occurrences are often hidden by their family and not exposed to public view because their illnesses have been perceived by the community and its culture as shameful. Thus, the actual number of *pasung* might be higher than predicted (9, 12).

The continued practice of *pasung* in Indonesia indicates that there are likely complex issues present in society. A systematic review, mainly included studies in Indonesia (n=32 out of 50), reported that most of the studies were based on experiences of PWMD in *pasung* and/or their family (6). Some of the studies reported that *pasung* has been often used for PWMD with severe conditions and aggressive behaviour (13-16). Perceived risk and safety from aggression have been frequently identified as the main reason for *pasung*; this has been exacerbated with lack of knowledge and negative stigma about mental disorders (5, 14, 15, 17). Support and systems provided for PWMD have been perceived as inadequate, thus causing family members to experience stress and feel powerless as they have to manage the burden alone (8, 16-19).

In 2014, the Indonesian Government launched a national health coverage (Jaminan Kesehatan Nasional, JKN) to provide basic healthcare for the whole population (20). The scheme included a referral system with primary healthcare facilities as the gate keeper. The main public primary healthcare facilities are Puskesmas (Primary Health Centres, PHCs), which provides primary healthcare at the district level (20). Mental healthcare in Indonesia, however, is not yet a priority; shortages in personnel as well healthcare facilities have been reported (21). There are currently initiatives to provide mental healthcare in PHCs, which number more than ten thousand across Indonesia (22); this development is only in its initial stages. Hence, up-to-date data on the current mental healthcare in PHCs is of importance to provide baseline data for a successful Program Bebas Pasung.

Strengthening mental health services in PHCs with a seamless coordination with hospitals, and involving multidisciplinary professionals, would be essential. Medications are considered as the mainstay of PWMD; many cases of *pasung* were reported as the result of PWMD failing to continue their medication, thus leading to relapse and aggressive behaviour (14, 15). Based on the government standard for pharmacy services at PHCs, pharmacists are responsible for drug management and clinical pharmacy services (23), thus have the potential to contribute to the health of PWMD also in *pasung*.

This research was conducted in Trenggalek, a municipality in East Java Province, Indonesia, where since 2015, 166 *pasung* cases have been reported (24). Improved health resources have been reported in Trenggalek PHCs; by 2023, all PHCs have a pharmacist staff. This research aims to explore health services being offered by PHCs to PWMD in *pasung* as well as to identify the roles of pharmacists.

METHOD

This study used a descriptive qualitative approach (25), which utilised perspectives or experiences of individuals to generate an in-depth understanding on health services being provided for PWMD in pasung in Trenggalek.

This research was conducted in Trenggalek, a municipality in East Java Province, Indonesia, with an area of 1,261.40 km² and a total population of 751,079. Trenggalek Municipality is divided into 14 districts; public health

facilities consist of 22 PHCs and one regional public hospital (Rumah Sakit Umum Daerah, RSUD) (24). PHCs are the technical units of the Regional Health Office (under the Ministry of Health) to provide primary healthcare at the district level. In each PHC, a mental health nurse is the person in charge for mental healthcare programs (specific for PWMD); in addition, one general practitioner and one pharmacist are available to provide primary care for general patients. For PWMD referred to the regional public hospital, one psychiatrist has been available to provide mental health care since 2016. Data on PWMD in *pasung* in Trenggalek at February 2023 included: 3 currently *pasung* patients, 2 repeated *pasung* patients, 133 patients with a history of *pasung* (successfully released since 2015), 5 hospitalised patients, and 23 patients died (24).

Sample recruitment

This study was conducted from May to July 2023 at five PHCs in Trenggalek. The selection of PHCs was based on a consultation with the Chief of Regional Health Office to include PHCs which have PWMD in *pasung* under their care, i.e.: Wl PHC, Pa PHC, Ka PHC, Tu PHC and Rw PHC. To gain a comprehensive understanding on the health services provided for PWMD in *pasung* at PHCs, this study recruited a range of stakeholders:

PWMD in *pasung* or their representative family caregivers. PWMD in pasung were selected after a consultation with the District Social Welfare Officers (Tenaga Kesejahteraan Sosial Kecamatan, TKSK - as the person assigned as "pasung buddy") and the mental health nurses (as the person in charge for mental health services at PHCs). The selection was conducted by considering the maximum variation in the characteristics of PWMD in *pasung* at PHCs, including: (1) pasung status (i.e., currently pasung, repeated pasung, or history of pasung), (2) treatment status (i.e., currently on or off pharmacological treatments), and (3) family history (i.e., had family members with mental illnesses/pasung or not); where a total of 14 PWMD also in pasung were included. While it was impossible to collect data directly from the patients, their family caregivers (i.e., a family member who was directly involved or responsible for the care of PWMD in pasung) acted as the representatives (n=12; as there were two family caregivers with two PWMD with pasung)

Mental health nurses. One mental health nurse, who has been the person in charge to provide mental healthcare services in the PHC, was selected from each PHC (n=5). Pharmacists. One pharmacist, who has responsible for pharmacy services, was selected from each PHC (n=5).

Data collection

Semi-structured interviews were conducted with the family caregivers of PWMD in pasung (n=12); an interview guide was used to assist the interviews which explored two key topics: 1) access to and health services received, and 2) the role of pharmacists. The interview guide was developed and face-validated with two public health experts, a mental health nurse, and a family caregiver of PWMD in pasung. Before the interview, the primary investigator (SS) contacted each potential respondent in person with the help of a mental health nurse and/or TKSK. At that time, the researcher would provide verbal and written information regarding the nature of the study and ask for participation; if the potential respondent was willing to participate, a written informed consent was obtained and the researcher would make an appointment for an interview. Interviews were conducted at each respondent's residence using the local language (i.e., Javanese); the interview took approximately 30-60 minutes and was audio-recorded. At the end of the interviews, the primary investigator (SS) used a short questionnaire to collect data on the respondents (family caregivers)' characteristics, including: gender, age, education, occupation, and relationship with PWMD in pasung; as well as to obtain data on the patients in pasung under their care, including: gender, age, marital status, pasung status, working status and family history. The researchers also identified the patients' identification number to trace their medical records at the PHCs and the regional public hospital (for referral patients) to obtain information on the diagnosis, treatment, and adherence to treatment. Patients' adherence was assessed by comparing the total number of prescribed drugs and the remaining drugs at the date of observation.

In addition, semi-structured interviews were conducted with PHC mental health nurses (n=5) and pharmacists (n=5); the interviews were assisted with an interview guide to explore two main topics: 1) health services provided for PWMD also in pasung, and 2) the role of pharmacists. Before the interview, the primary investigator (SS) provided information regarding the nature of the study and asked for willingness to participate; if the potential respondents were willing to participate, they were asked to provide a written informed consent. While mental health nurses and pharmacists providing the interviews refused to be recorded, the primary investigator (SS) included a partner to take

notes on the interviews; the interviews lasted approximately 15-30 minutes. At the end of the interviews, data on the characteristics of the respondents were obtained using a short-questionnaire, including: age, gender, education, length of work and work experience.

Data analysis

Audio-recorded data from the interviews were transcribed verbatim by the primary investigator (SS). Transcripts were reviewed using inductive thematic analysis (26). The analysis first involved data familiarization; significant statements related to health services for PWMD with pasung and roles of pharmacists from the data were then identified and coded. The process of coding was conducted manually by cutting and pasting between transcript documents. The codes were categorised into a broader conceptual level (i.e. into themes). The initial coding was performed by SS, and the transcripts together with the emerging themes were evaluated by the other research team members (AP, YIW); if there was disagreement, the themes would be discussed among them to reach a consensus. Finally, examples of responses were selected to illustrate each theme. The final themes and quotes were discussed with the respondents as a means of 'member-checking', thus increasing the credibility of the data (25). Data analysis was conducted using the local language 'Javanese' (as the language used during the interviews); the illustrative verbatim quotes and themes were then translated into English. Characteristics of the respondents were summarised using descriptive statistics. Data saturation was achieved after 8th interviews with family caregivers; and 2nd and 3rd interviews with mental health nurses and pharmacists, respectively.

Ethical Approval

This study obtained approval from the Research Ethics Committee of Universitas Surabaya (number 130/KE/V/2023), and permission from the Trenggalek Agency of National Unity and Politics (Badan Kesatuan Bangsa dan Politik Kabupaten Trenggalek, Baskesbangpol) (number 070/120/406.030/2023 and 070/176/406.030/2023).

RESULTS

Respondent characteristics

Characteristics of the PWMD in pasung and their family caregivers

This qualitative study conducted at 5 PHCs in Trenggalek Indonesia, involving 14 PWMD also in *pasung* who were represented by their family caregivers (n=12); there were two family caregivers with two PWMD in *pasung*). Detailed characteristics of PWMD in pasung and their family caregivers can be seen in Table 1.

The family caregivers generally were the parents with varying levels of education from no schooling to high school graduates. Of the 14 PWMD in *pasung*, the majority were males (64.3%), aged of 30-60 years (92.7%), and had an elementary school level (71.4%); all of the patients were not currently working, while the majority had prior employment (78.57%); the ratio of patients currently *pasung* or repeated *pasung versus* those with a history of *pasung* were comparable 1:1. Most patients were on pharmacological treatments (11/14, 78.6%), and had good adherence to treatments (7/11, 63.6%). In addition, 64.3% of patients reported to use alternative medicines.

Table 1. Characteristics of the participated PWMD in *pasung* and their family caregivers

Characteristics	**n (%)**
PWMD in *pasung* (n=14)	
Gender	
Male	9 (64.3)
Female	5 (35.7)
Age	
30-40 years	3 (21.4)
>40-50 years	5 (35.7)
>50-60 years	5 (35.7)
>60 years	1 (7.1)
Education	
Elementary school graduate	10 (71.4)

Characteristics	n (%)
Junior high school graduate	2 (14.3)
Senior high school graduate	1 (7.1)
Bachelor degree graduate	1 (7.1)
Marital status	
Married	1 (7.1)
Widow/widower	5 (35.7)
Single	8 (57.1)
History of employment	
Yes	11 (78.6)
No, never	3 (21.4)
***Pasung* status**	
Yes (currently in *pasung* or repeated *pasung*)	7 (50.0)
No (past history of *pasung*)	7 (50.0)
Family history of *pasung*/mental illness	
Yes	2 (14.3)
No	12 (85.7)
Pharmacological treatment status	
On medications	11 (78.6)
Off medications	3 (21.4)
Diagnosis (for those who are on medications, n=11)	
Schizophrenia	9 (81.8)
Acute psychosis	1 (9.1)
No data	1 (9.1)
Adherence to pharmacological treatments (those who are on medications, n=11)	
Yes	7 (63.6)
No	4 (36.4)
Use of alternative medicines	
Yes	9 (64.3)
No	5 (35.7)
Family caregiver (n=12)	
Gender	
Male	5 (41.7)
Female	7 (58.3)
Age	
30-50 years	3 (25.0)
>50-70 years	4 (33.3)
>70 years	5 (41.7)
Education	
None	3 (25.0)
Elementary school graduate	3 (25.0)
Junior high school graduate	4 (33.3)
Senior high school graduate	2 (16.7)
Occupation	
Farmer	5 (41.7)
Self-employment	5 (41.7)
Housewife	2 (16.7)
Relationship with PWMD in *pasung*	
Parent	7 (58.3)
Sibling	1 (8.3)
Child	1 (8.3)
Other than direct family (e.g., nephew or sister/brother in-law)	3 (25.0)

Characteristics of the mental health nurses and pharmacists

The mental health nurses who participated in this research were all males, aged from 31 to 54 years, and had been working for 2-28 years. Meanwhile, the respondent pharmacists were all females with an age of 28-40 years, and had prior employment either in community pharmacy, other PHCs, or hospitals. Detailed characteristics of the mental health nurses and pharmacists can be seen in Table 2.

Table 2. Characteristics of participated mental health nurses and pharmacists

Characteristics	n
Mental health nurse	
Gender (male)	5
Age	31-54 years
Education	Diploma (3 person) Bachelor degree (2 person)
Year of graduation from nursing education	Year of 2002-2018
Duration of working at the PHC (research setting)	2-28 years
Prior employment as mental health nurse	1 person
Pharmacist	
Gender (female)	5 person
Age	28-40 years
Year of graduation from registration program (apothecary)	Year of 2006-2019
Duration of working at the PHC (research setting)	1-12 years
Prior employment (either community pharmacy, other PHC, or hospital)	5 person

Health services provided to PWMD in pasung

Health services provided for PWMD in *pasung* was no charge and followed a referral system (under JKN), with PHCs as the first-point of care. In addition to a general practitioner and a pharmacist who have provided general care at each PHC, a mental health nurse has been specifically assigned for mental health programs. The family caregivers reported that the PHCs have been easily accessed (2-3 kilometres). Based on the interviews, PHC health services for PWMD in *pasung* can be categorised into two main themes.

Theme 1: Outpatient services

Medication supply

The family caregivers of most patients with pasung reported to receive medication supply services from the local PHCs. Drug management, which was including but not limited to medication supply, at the PHCs was delivered by pharmacists. The family caregivers of two patients reported to visit the local PHC regularly to obtain the medications, as stated by the family caregiver of P1: *"The medicine is from Rw PHC. (This is done) regularly every month."; and confirmed by the Rw PHC mental health nurse: "(P1 and P14) have been well (controlled). Their family is actively (visiting the PHC) to obtain the patients' medication."* However, some patients had their medicines delivered by mental health nurses through home care services, as stated by the family caregiver of P5*: "There is Mr. B (the mental health nurse) who delivers the medicine."* The services have been usually offered for patients who have had no transportation.

When the drugs were not available at the PHC, patients were referred to the regional public hospital, as stated by the Tu PHC mental health nurse: *"If the drug stocks are out, the patient would be referred to the regional public hospital."* and Wl PHC mental health nurse*: "The drug - as prescribed by the psychiatrist at the regional hospital - is not included (in the formulary) at the PHC, hence (the patient) should go to the hospital."*

It should be noted that three patients were not on pharmacological treatments, including: one patient not currently in pasung (with controlled symptoms), and two patients currently in pasung (with uncontrolled symptoms). The latter two patients had previously received medications but their family caregivers were reluctant to access further mental health services due to lack of time/resources and/or seeing no satisfying results, as stated by the family caregiver of P8: *"Other responsibilities will be neglected if I continuously take care of the patient. As I also have to*

take care of other healthy family members, I should make a decision (to stop taking care of the patient), particularly since the patient was not getting better.", or family caregiver of P13: *"There has been no improvement in the patient's condition, especially as the mental health clinic and psychiatrist at the regional hospital are still new compared to the mental health facility I accessed before. The psychiatrist once said that the patient had recovered, yet he had not been well."*

Home care services

The family caregivers of some patients in *pasung* reported to receive home care services from mental nurses, as stated by the family caregivers of P6 and P7: *"After returning from Kr PHC and Po PHC, up to now, there is a health worker from Ka PHC who gives an injection at home and (also) provides oral medication regularly."* The mental health nurses reported that home care services usually included drug delivery services as well as monitoring the use of drugs or adherence, especially for patients prescribed injections, as stated by the Rw PHC mental health nurse: *"The priority (for providing home care) is for patients given injections because they are at a high risk for relapse and becoming aggressive."*

Some patients in *pasung* - who were referred to the regional public hospital or were not on medications - were not provided any home care services from the PHCs. Of the three patients who were not on medications, one patient was no longer in *pasung* and two patients were in *pasung* (with uncontrolled symptoms) – the family caregivers of these two patients refused home care services, as stated by the mental health nurse at Tu PHC: *"(The home care service) was provided for the patient (P7) before, but – because the respondent and other family members refused the patient's treatments, (the service) was no longer being provided.",* and the mental health nurse at Wl PHC: *"Home visits (for P13) were carried out since there was a report (of P13 pasung case) from residents and the village officer approximately 15 years ago to handle the patient's treatments. However, since 2021, (the home care service) was no longer given due to the strong rejection from the family."*

Theme 2: Referral to inpatient services

The PHCs can refer patients in pasung for inpatient services at the regional hospital. The referral was generally made when the patients were first released from pasung, as stated by the family caregiver of P8: "At the hospital, the patient was not chained"; and the family caregiver of P2: *"(The patient) was immediately hospitalised when he was released from pasung."* In addition, patients can be referred if their conditions have been severe or aggressive, as stated by the Tu PHC mental health nurse*: 'Inpatient services are used for aggressive patients – being extremely anxious and having a high risk to endanger the surrounding community.";* or the Rw PHC mental health nurse: *"The referral (for inpatient care) was made if the patient is aggressive and anxious, and (thus) cannot be handled at the PHC."*

The role of pharmacists in providing health service for PWMD in *pasung*

All family caregivers indicated that they have not recognised the pharmacist profession, as stated by the family member of P1: *"I don't know what or who a pharmacist is."* On the other hand, all pharmacist respondents stated that they have provided services to patients in *pasung,* especially in relation with drug management. Clinical pharmacy services have been limited to provide some drug information when the patients or their family members obtained medications at the pharmacy unit in the PHCs. Detailed themes and examples of quotes regarding the role of pharmacists can be seen in Table 3. In parallel, all mental health nurse respondents also perceived the role of pharmacists as being limited to the drug management, as stated by the Tu PHC mental health nurse: *"(The pharmacist's role is) supplying medications for patients with mental disorders."*

Table 3. Themes from pharmacists' interviews regarding their roles in mental health services for PWMD in *pasung*

Themes	Examples of quotes
Drug management	*"Requesting mental health medications to the Municipality (Health Office), receiving, storing, distributing or supplying of the medications, and documentation."* (Wl PHC Pharmacist)
	"Coordinating with the person in charge for mental health services (i.e., the mental health nurse) to manage the stock and procurement of mental health medications." (Pa PHC Pharmacist)
	"Limited to providing (mental health) medications." (Ka PHC Pharmacist)
	"...provision of mental health medications, management and documentation" (Rw PHC Pharmacist)
Clinical pharmacy	*"Providing drug information to the patients' family caregivers who obtain medications at the PHC."* (Pa PHC Pharmacist)
	*"Drug information related to mental health medications." (*Rw PHC Pharmacist)

Since pharmacotherapy is considered as the main stay of mental disorders, pharmacists have a potential role to optimise the use of medications to control symptoms and prevent relapse of PWMD also with *pasung*. Several pharmacist respondents expressed their willingness to develop clinical pharmacy services for PWMD also in *pasung*, as stated by Pa PHC pharmacist: *"(We) are planning to implement home pharmacy care in coordination with the person in charge for mental health services at the PHC (the realisation will be in 2024)"*; and Tu PHC pharmacist: *"(I am thinking of) providing counselling to the family caregivers and/or patients with mental illnesses aiming to improve adherence to treatment, as well as preventing drug-related problems by providing clinical pharmacy services; pharmacists will be required to collaborate with physicians, nurses, other health personnel and the person in charge for mental health care program in optimising drug therapy and preventing drug related problems (DRP)."*

DISCUSSION

This study provided insights regarding mental health care provided in Indonesian primary care settings. PWMD also in *pasung* generally have an adequate access to PHCs (as the gatekeeper to secondary/tertiary care) and obtain their medications without any cost. This finding might indicate improvements in the provision of mental healthcare in Indonesia as some prior studies reported a lack of mental healthcare access and the high cost of medications partially contributing to the practice of *pasung* in Indonesia (27, 28). This improved accessibility might be related to the introduction of JKN in 2014 where a referral system is implemented, and the role of PHCs as the first-point of care is strengthened (20). The number of PHCs in Indonesia has continuously increased from 9,731 in 2014 to 10,374 in 2022 (Statistics Indonesia (29), and it has been targeted to achieve 1 PHC per district. This present study reported that the majority of PWMD in *pasung* have a PHC close to their residences (2-3 km), but some patients have been referred to the hospital (which is further) as their medications were unavailable at the PHCs. Further evaluation on the drug use for PWMD in PHCs would be required to provide feedback for the current drug formulary (e.g., considering to include regular medications for PWMD also in *pasung*) and to maintain the stocks.

Additionally, PHCs in this study reported to provide medication delivery service for patients in *pasung* if they or their caregivers were unable to visit the PHCs. This practice, however, should be formalised with the development of a standard operating procedure (SOP) which provides a clear step-by-step instruction to ensure medication supply for PWMD in pasung; the SOP also needs to define responsibilities of each personnel involved in the service. While this service is currently delivered by a mental health nurse (as part of home care services), the involvement of a pharmacist warrants consideration. Based on the pharmacy practice standards in PHCs (23), a pharmacist is responsible for the quality of drug management and use in PHCs. To ensure medication supply for PWMD in pasung, pharmacists in PHCs should initially obtain a complete list of PWMD also in *pasung* treated under their PHCs. The pharmacist would be required to monitor whether these patients visit the PHCs to obtain their medications on schedule; if not, the pharmacist in coordination with the mental health nurse can arrange for a delivery service. While for PWMD in *pasung* who has referred to the hospital, the PHC pharmacist should work closely with the hospital pharmacist to ensure that the patients obtain their medications in timely manner. Establishing comprehensive documentation as well as a supporting information technology would be of importance to maintain continuity of care between PHCs and hospitals. Evidence has shown that PWMD often require a long-term

pharmacological treatment, and hence, adherence to treatment plays a key role to achieve adequate symptom control and prevent relapses (30, 31).

Regardless of improved access to medications via PHCs, this study indicated that there were some patients in *pasung* who currently are not on medications (despite of their uncontrolled symptoms), as their family caregivers refused to access health facilities due to lack of time/resources to take care of the patient and/or seing no satisfying progress with the treatment. In parallel, previous Indonesian studies have shown the difficulty in managing the burden for caring patients in pasung among family caregivers, thus the patients' treatment are often neglected (6, 16, 32). This situation is even more complex as prior research indicated that most family caregivers of PWMD have poor knowledge of mental disorders (16, 18, 33). Hence, they might not be aware that PWMD often requires long-term treatment to control the symptoms, and even demand to see results in a short time; if satisfying results are not seen, they might feel lack of motivation, thus leading to discontinuation of treatment for PWMD and prolonged the practice of *pasung*. In addition to the family issues, communities play an essential role in supporting the recovery of PWMD with *pasung.* Social stigma and discrimination of the affected person and their family often cause them to be isolated and seek the help of spiritual/traditional healers rather than medical treatment (16, 34, 35). Multifactorial approaches involving the family, the community and the local health facility (particularly PHCs as the front line of mental health services) would be of importance to create a secure environment and provide adequate support to overcome the use of *pasung*. Health education of family members and community should be considered to create awareness and to develop positive and empathetic attitudes towards patients with *pasung* (e.g., by clarifying misconceptions of mental illnesses, importance of medication adherence, training for home-based care). Hence, optimising the role of PHCs in mental health services (beyond supplying medications) warrants further considerations, e.g., by providing proper mental health education.

Further, this study indicated that pharmacists' roles in mental health services at PHCs have been mainly related to drug management (i.e., planning, procurement, distribution or supplying medications at the pharmacy unit). Clinical pharmacy services have been conducted in a very limited fashion, and thus, their role in this area has not yet been recognised by other health professionals (i.e., mental health nurses) as well as by the patient or carer. As pharmacotherapy is considered the mainstay of PWMD (14, 15), pharmacists have the potential roles in optimising the use of medications among PWMD also in pasung. Although this study has not evaluated the quality use of medications among PWMD in pasung (prescription review), it has indicated that non-adherence patients have been likely to have uncontrolled symptoms compared to adherence patients (2/3 patients versus 3/8 patients, respectively). Hence, PHC pharmacists can play an active role in improving patient adherence as well as to monitor the effectiveness and adverse effects of the treatment. Further, pharmacists can provide prescription review services to ensure quality use of medications and to prevent drug-related problems (DRPs). International studies have reported the potential of pharmacist-led medication review services for community-based mental healthcare patients (36). Moreover, a meta-analysis of pharmaceutical care interventions, such as medication review, has positive outcomes on the mental health domain of the SF-36 quality of life instrument (37).

In addition, PHC pharmacists may be well-placed to provide drug information or counselling to PWMD or their carers while obtaining medications at pharmacy units. Providing high quality information will improve patients' capability in shared decision making, in which patients and health professionals make health decisions together (Chong et al.). Evidence has shown that pharmacists' engagement in a shared decision-making process has been shown to promote and support psychotropic medication adherence (38-40). Supporting policy, funding, training and resources, however, should be considered when pharmacists at PHCs are expected to take on a broader role in clinical pharmacy services for PWMD.

This study has some limitations which warrant acknowledgement. As qualitative data are a product of views, experiences and perceptions of respondents it can be biased if respondents do not share their true responses (25). However, mental health services at PHCs are generally in the early stage of establishment, and thus, this study has an exploratory nature (i.e., no right or wrong answers); hence, response bias was expected to be minimal. While this study included a small sample size, it included a range of patients/carers, mental health nurses, and pharmacists; all of which are the main stakeholders in mental health care services at PHCs. Within the scope of the study, data saturation was achieved. The use of multiple data sources (i.e., triangulation) should improve the credibility of the findings (25). In addition, this study was conducted at only five PHCs in Trenggalek; however, it should be noted that, with the implementation of JKN in 2014, the Indonesian health system and the conditions of PHCs should be

more standardised. Future research should address these limitations to further refine understanding to enhance mental health care in primary settings.

CONCLUSION

PHCs have been involved in providing care for patients in *pasung* in a limited fashion (i.e., mainly medications supply with limited homecare services), thus a more standardised and patient-oriented care should be encouraged. Pharmacists have the potential to take on broader roles by providing clinical pharmacy services (e.g., prescription review, monitoring, drug information and counselling). To take on these roles, supporting policy and resources should be allocated for PHCs and pharmacists. Further research involving other stakeholders at PHCs and hospitals would be required to establish a continuity of mental healthcare with clear roles among health professionals in the team as well as between health facilities (PHCs and hospitals).

AUTHOR'S CONTRIBUTION STATEMENT

Sulisetiorini: Formal analysis, Investigation, Methodology, Writing – original draft. Yosi Irawati Wibowo: Data curation, Methodology, Writing – original draft. Bruce Sunderland: Conceptualization, Writing - review & editing. Adji Prayitno Setiadi: Conceptualization, Supervision, Writing - review & editing.

CONFLICTS OF INTEREST

The authors declare no conflict of interest.

DECLARATION OF GENERATIVE AI AND AI-ASSISTED TECHNOLOGIES IN THE WRITING PROCESS

The authors declare that they have not used any type of generative AI for the writing this manuscript.

SOURCE OF FUNDING STATEMENTS

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

ACKNOWLEDGMENTS

We sincerely thank all respondents who took part in the study as well as the staff from Trenggalek Health Office and the related PHCs for all the support and technical assistance while conducting the data collection.

ACKNOWLEDGMENTS

The authors have no additional acknowledgments to disclose. This study was completed solely with the contributions of the authors without external assistance.

BIBLIOGRAPHY

1. Hert M, Dirix N, Demunter H, Correll C. Prevalence and correlates of seclusion and restraint use in children and adolescents: a systematic review. Eur Child Adolesc Psychiatr. 2011;20:221–230. doi: 10.1007/s00787-011-0160-x.
2. Goulet M, Larue C, Dumais A. Evaluation of seclusion and restraint reduction programs in mental health: a systematic review. Aggress Violent Behav. 2017;34:139–46. doi: 10.1016/j.avb.2017.01.019.
3. Guan L, Liu J, Wu X, Chen D, Wang X, Ma N, et al. Unlocking Patients with Mental Disorders Who Were in Restraints at Home: A National Follow-Up Study of China's New Public Mental Health Initiatives. PLoS One. 2015;10(4):e0121425. https://doi.org/10.1371%2Fjournal.pone.
4. Drew N, Funk M, Tang S, Lamichhane J, Chávez E, Katontoka S, et al. Human rights violations of people with mental and psychosocial disabilities: an unresolved global crisis. Lancet. 2011;378(9803):1664–1675. doi:10.016/S0140- 6736(11)61458-X.
5. Suryani L, Lesmana C, Tiliopoulos N. Treating the untreated: applying a community-based, culturally sensitive psychiatric intervention to con fned and physically restrained mentally ill individuals in Bali. Indonesia. Europ

Arch Psychiatr Clin Neuroscience. 2011;261:140–144. doi: 10.1007/s00406-011-0238-y. Europ Arch Psychiatr Clin Neuroscience. 2011;261:140–4. doi: 10.1007/s00406-011-0238-y.
6. Hidayat M, Lawn S, Muir-Cochrane E, Oster C. The use of pasung for people with mental illness: a systematic review and narrative synthesis. Int J Ment Health Syst 2020 Dec 7;14(1):90. doi: 101186/s13033-020-00424-0 2020.
7. Asher L, Fekadu A, Teferra S, De Silva M, Pathare S, Hanlon C. Asher L, Fekadu A, Teferra S, De Silva M, Pathare S, Hanlon C. "I cry every day and night, I have my son tied in chains": Physical restraint of people with schizophrenia in community settings in Ethiopia. Globalization Health. 2017;14;37 https://doiorg/101186/s12992-017-0273-1 2017.
8. Katuuk H, Daulima N, Wardani I. Families' experience caring for mentally ill patients with re-pasung. Enfermeria Clinica. 2019;29(S2):270-274. https://doi. org/10.1016/j.enfcli.2019.04.032.
9. Broch H. The Villagers'Reactions Towards Craziness: an Indonesian Example. Transcult Psychiatr. 2001;38(3):275–305. https://doi.org/10.1177/136346150103800301.
10. Human Right Watch. Indonesia Shackling reduced but persist: Oversight Crucial to End Abuse of People with Disabilities. Jakarta: Human Right Watch; 2018. Available at: https://www.hrw. org/news/2018/10/02/indonesia-shackling-reduced-persists (Accessed 27 Sept 2023).
11. Badan Pusat Statistik (BPS) Indonesia. Statistical yearbook of Indonesia. Jakarta: BPS; 2019. Available at: https://www.bps.go.id/pub- lication/2019/07/04/daac1ba18cae1e90706ee58a/statistik-indonesia-2019. Html (Accessed 3 February 2024).
12. Hidayat M, Oster C, Muir-Cochrane E, Lawn S. Indonesia free from pasung: a policy analysis. International Journal of Mental Health Systems. 2023;17:12. https://doi.org/10.1186/s13033-023-00579-6.
13. Daulima N. Pasung dalam perspektif keluarga pasien gangguan jiwa di wilayah Jabodetabek [unpublished]. Jakarta;2011.
14. Laila N, Mahkota R, Shivalli S, Bantas K, Krianto T. Factors associated with pasung (physical restraint and confnement) of schizophrenia patients in Bogor regency, West Java Province, Indonesia. BMC Psychiatry. 2019;19(1):162. https://doi.org/10.1186/s12888-019-2138-z.
15. Minas H, Diatri H. Pasung: physical restraint and confinement of the mentally ill in the community. International journal of mental health systems. 2008;2(1):8. https://doi.org/10.1186/1752-4458-2-8.
16. Rekhoningsih W, Daulima N, Putri Y. Studi fenomenologi pengalaman keluarga dalam merawat pasien paska pasung. Medica Hospitalia: J Clin Med. 2014;2(3). https://doi.org/10.36408/mhjcm.v2i3.193.
17. Buanasari A, Daulima N, Wardani I. The experience of adolescents having mentally ill parents with pasung. Enfermeria Clinica. 2018;28(Suppl 1):83–87.
18. Yusuf A, Tristiana D. Fenomena pasung dan dukungan keluarga terhadap pasien gangguan jiwa pasca pasung. Jurnal Keperawatan Padjadjaran. 2018;5(3):309-321. https://doi.org/10.24198/jkp.v5i3.653.
19. Daulima N, Rasmawati R, Wardani I. Penurunan Kemampuan Kepala keluarga dalam memenuhi kebutuhan ekonommi keluarga: study fenomology pengalaman orang dengan gangguan jiwa pasca pasung. Jurnal Keperawatan Indonesia. 2019;22(2):139–146.
20. Agustina R, Dartanto T, Sitompul R, Susiloretni K, Suparmi S, Achadi S, et al. Universal health coverage in Indonesia: concept, progress, and challenges. Lancet. 2019;393(10166):75-102. doi: 10.1016/S0140-6736(18)31647-7.
21. Pols H. The future of mental health care in Indonesia Inside Indonesia. Inside Indonesia. 2020;141:Jul 24. https://www.insideindonesia.org/the-future-of-mental-health-care-in-indonesia#:~:text=The%0Indonesian%0government%0currently%0dedicates,much%0lower%0than%0the%0demand.
22. Badan Pusat Statistik (BPS) Indonesia. Jumlah puskesmas di Indonesia (2017 - 2022). Jakarta: BPS; 2022. Available at: https://dataindonesia.id/kesehatan/detail/ada-10292-puskesmas-di-indonesia-pada-2022#:~:text=Badan%20Pusat%20Statistik%20(BPS)%20mencatat,sebanyak%2010.374%20unit%20pada%202022 (Accessed 4 March 2024).
23. Ministry of Heatlh Republic of Indonesia (MoH-RI). Regulation Number 74 in 2016: standard for pharmacy services in Primary Health Centres. Jakarta: MoH-RI; 2016.
24. Trenggalek Social Office. Report on patient with mental disorders. Trenggalek: Trenggalek Social Office; 2022.

25. Creswell J. Research design: qualitative, quantitative, and mixed methods approaches. 4th Edition. London: SAGE Publications, Inc.; 2013.
26. Braun V, Clarke V. Using thematic analysis in psychology. Qualitative Research in Psychology. 2006;3(2):77–101. https://doi.org/10.1191/1478088706qp063oa. 2006.
27. Suharto B. Budaya pasung dan dampak yuridis sosiologis (studi tentang upaya pelepasan pasung dan pencegahan tindakan pemasungan di kabupaten wonogiri). IJMS-Indonesian J Med Science. 2014;1(2):1-10. http://ejournal.poltekkesbhaktimulia.ac.id/index.php/ijms/article/view/21.
28. Katuuk H, Daulima N, Wardani I. Families' experience caring for mentally ill patients with re-pasung. Enferm Clin. 2019;29:270-274. https://doi.org/10.1016/j.enfcli.2019.04.032.
29. Badan Pusat Statistik (BPS) Indonesia. Statistical yearbook of Indonesia 2022. Jakarta: BPS; 2022. Available at: https://webapi.bps.go.id/download.php?f=oTQDOji4JVPPbL9JTXrILJp8YxrF0kP9JZXKemxINIGMo615Th5QDcmEsCKy51+eiOeQza+bye5oHdG22pYcTqK4KrCAD5itjl/rT15n1wFkYiYBfxcdW3XOfT3Vnsvm2/XSavl+T0ahCJ8eAiyxJNxF/Vi2q82tC5UIAVsWF/eyxTcF685AywF7UiQgxqaBV574glS6J4r/k5BLsg8gNnbkcHwx00ooq2ODiZgFXEqSgl8FcpWweQGWc42b5hcJx+hGEx7HRFawrS/BK053jQ== (Accessed 31 Jan 2023).
30. Maj M, van Os J, de Hert M, Gaebel W, Galderisi S, Green M, et al. The clinical characterization of the patient with primary psychosis aimed at personalization of management. World Psychiatry. 2021;20(1):4-33. doi: 10.1002/wps.20809. 2021.
31. McIntyre R, Alda M, Baldessarini R, Bauer M, Berk M, Correll C, et al. The clinical characterization of the adult patient with bipolar disorder aimed at personalization of management. World Psychiatry. 2022;21(3):364-387. doi: 10.1002/wps.20997. 2022.
32. Dewi A, Daulima N, Wardani I. Managing family burden through combined family psychoeducation and care decision without pasung therapies. Enferm Clin. 2019;29(S2):76-80. https://doi.org/10.1016/j.enfcli.2019.04.012. 2019.
33. Suhron M, Yusuf A, Subarniati R. Assessment potential of families increasing ability to care for schizophrenia post restrain at east java, indonesia. Indian J Pub Health Res Development. 2018;9(10):369–374.
34. Tanaka C, Reyes Tuliao M, Tanaka E, Yamashita T, Matsuo H. A qualitative study on the stigma experienced by people with mental health problems and epilepsy in the Philippines. BMC Psychiatry. 2018;18 Okt:325. doi: 10.1186/s12888-018-1902-9.
35. Tay J, Chan C, Ho Z, Lal M. The ties that bind—a case report about restraining a mentally unwell family member at home for over a decade. Asian J Psychiatr. 2017;26:146–148.
36. Gisev N, Bell J, O'Reilly C, Rosen A, Chen T. An expert panel assessment of comprehensive medication reviews for clients of community mental health teams. Soc Psychiatry Psychiatr Epidemiol. 2010;45(11):1071–1079. doi: 10.1007/s00127-009-0148-8. . 2010.
37. Mohammed M, Moles R, Chen T. Impact of pharmaceutical care interventions on Health-Related Quality-of-Life outcomes: a systematic review and meta-analysis. Ann Pharmacother. 2016;50(10):862–881. doi: 10.1177/1060028016656016.
38. Chong W, Aslani P, Chen T. Shared decision-making and interprofessional collaboration in mental healthcare:a qualitative study exploring perceptions of barriers and facilitators. J Interprof Care. 2013;27(5):373–379. doi: 10.3109/13561820.2013.785503.
39. Chong W, Aslani P, Chen T. 15. Chong WW, Aslani P, Chen TF. Multiple perspectives on shared decision-making and interprofessional collaboration in mental healthcare. J Interprof Care. 2013;27(3):223–230. doi: 10.3109/13561820.2013.767225.
40. Chong W, Aslani P, Chen T. Pharmacist-patient communication on use of antidepressants:a simulated patient study in community pharmacy. Res Social Adm Pharm. 2014;10(2):419–437. doi: 10.1016/j.sapharm.2013.05.006..

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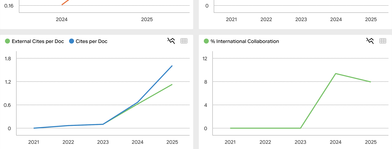

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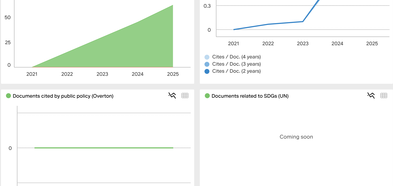

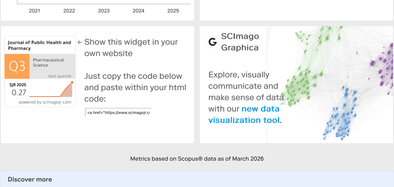

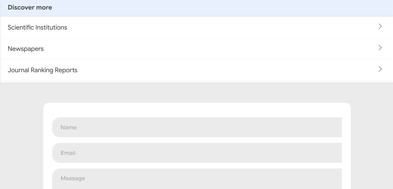

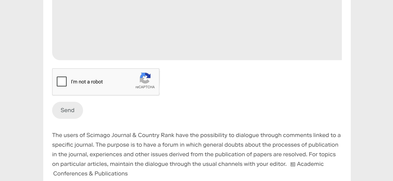

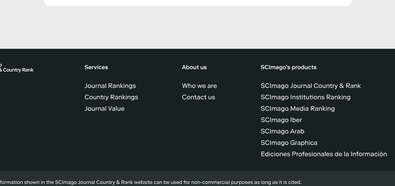

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