

#### **ICMHS 2022 SPECIAL EDITION**

# **RESEARCH ARTICLE**

# Exploring the pharmacist role and challenges during COVID-19 pandemic in the public healthcare setting: A qualitative study

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# **Abstract**

Background: Pharmacists working in the Public Health Center (PHC) setting are at the frontline response and often have to adapt to the COVID-19 crisis. However, there is a deficit of studies examining their roles and challenges regarding providing pharmaceutical care and how they adapt to the COVID-19 situation in Indonesia. Objective: This study aims to explore the views and experiences of pharmacists in the PHC during the COVID-19 pandemic. Methods: Four Focus Group Discussions (FGDs) involving 40 PHC pharmacists working in Surabaya were conducted in May 2021. The FGDs were audio recorded, transcribed verbatim and subsequently analysed for any emerging theme. Results: Most participants viewed that the restriction of face-to-face interaction hampered the provision of pharmaceutical care in the PHC. Protective equipment and partition screens during patient visits have challenged pharmacists to communicate effectively. Services such as direct one-on-one drug information and patient counselling were still provided, often facilitated with written aids, but for a limited time, providing opportunities for pharmacists to deliver messages through WhatsApp and telephone. Conclusion: The COVID-19 pandemic significantly impacted pharmaceutical service delivery in PHC. However, it has preserved the important role of pharmacists to ensure safe and quality services, particularly with the presence of the COVID-19 vaccination programme.

# Introduction

Coronavirus Disease 2019 (COVID-19) is an infection caused by Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) World Health Organisation (WHO) announced the coronavirus (COVID-19) outbreak as a public health emergency of worldwide concern. Then, COVID-19 was declared a global pandemic by WHO. The determination of the status of this pandemic is due to the rapid and widespread (Pangoempia et al., 2021).

The COVID-19 pandemic has impacted various aspects of life, especially in the health sector. Public Health Center (PHC) (Puskesmas) is Indonesia's primary health service facility. It is generally the first choice for people

seeking treatment because of its function as a service place closest to the community. Since the start of the COVID-19 pandemic, many PHC providers have faced the challenge of maintaining essential health services. The COVID-19 pandemic has caused changes to the health services provider at the PHC. One of the health services at the PHC affected by the COVID-19 pandemic is pharmaceutical care services (Sabarudin et al., 2021).

Pharmaceutical care services at the PHC can not be separated from the implementation of health efforts that play an essential role in improving the quality of health services for the community. Pharmaceutical care services are integrated activities that aim to identify, prevent and resolve drug problems and health-related problems (Suprihartini et al., 2022).

Pharmacists in the PHC are responsible for providing pharmaceutical services. As the most accessible healthcare professionals during a pandemic, pharmacists have shown that they can assist the public health response to COVID-19, maintain the continuity of healthcare and take on additional responsibilities to help reduce pressure on other areas of healthcare (Hayden & Parkin, 2020). However, there is a deficit of studies examining their roles and challenges regarding providing pharmaceutical care and how they adapt to such situations, particularly in countries highly devastated by COVID-19, such as Indonesia. This study aims to explore the views and experiences of pharmacists at the PHC in Surabaya City during the COVID-19 pandemic.

#### Methods

#### Design

The study used a qualitative approach with data collection in a focus group discussion. The focus group discussion participants were 40 pharmacists at the Puskesmas in Surabaya. The sampling technique used in this study is voluntary sampling, with the inclusion criteria of participants being pharmacists who practice at the PHC in Surabaya City. In contrast, the exclusion criteria are pharmacists who are not willing to participate or are not willing to continue their participation in the study.

Focus Group Discussion (FGD) participants were divided into four groups, with ten people in each group. The FGD was divided into two sessions, each conducted by two groups. In the FGD implementation, each group was guided by a facilitator. The FGD was held in May 2021.

In implementing FGD, the questions in the research sample are open-ended, so participants are free to express opinions or opinions on questions given by the facilitator. The questions asked during the FGD were about pharmacists' contributions, opportunities and challenges when providing services during the COVID-19 pandemic in 2020 and 2021.

# Assessment

The FGDs were audio recorded and transcribed verbatim. Verbatim is writing text or words, sentences, or conversations that come from recordings in the form of audio/video. All information obtained during the FGD was analysed based on the emerging themes.

#### Results

# Pharmacist challenge at PHC during the covid 19 pandemic

- Difficulty providing information
  - "...the information sometimes misrepresented because apart from being given a distance of ... at least 1 meter, and there is an additional bulkhead, and also using a mask so that conveying information is rather difficult."
- Limited time
  "during the pandemic no

"during the pandemic...not to stay in contact with patients for too long...then the time for counselling or drug delivery is limited."

Pharmacists at PHC had challenges when providing information to patients because of the use of masks and time limitations when giving counselling. Using masks during communication and restrictions on distance and time during counselling can cause errors in providing incomplete information to patients.

# Pharmacist innovation at PHC during the covid 19 pandemic

- Using WhatsApp for drug information services
   "One thing that has improved is drug information services. Because during the pandemic there was a consultation service via WA..."
- Use of writing and leaflets
   "...Counseling at the Puskesmas is assisted with
   writing or leaflets ... because of the use of masks so
   that explanations are difficult to understand."

Information from pharmacists at PHC about innovations provided in pharmaceutical services during the COVID-19 pandemic is using WhatsApp communication media for patient consultation and leaflets and writing when explaining.

# Pharmacist opportunities at PHC during the covid 19 pandemic

- Participation in tracing activities
   "So, at the beginning of this pandemic, some of us,
   including the pharmacy itself, were dispatched to
   participate in tracing the community."
- Participation in vaccination activities
   "...pharmacist assigned to the administration on
   vaccination activities because of the application
   used by many ...."

Pharmacists provide information about their opportunities in providing services at PHC during the COVID-19 pandemic, namely participating in tracing positive COVID-19 patients and participating in vaccination activities as administrative staff.

#### Discussion

The Coronavirus Disease 2019 (COVID-19) is an infection caused by the Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) spreading rapidly worldwide. Currently, the COVID-19 pandemic is a significant public health problem worldwide. Given the seriousness of the coronavirus outbreaks, health professionals with expertise in public health are essential. Pharmacists can be crucial as healthcare professionals during the pandemic (Viscari et al., 2021). Several challenges hamper the sustainability of pharmacy services delivery in the primary care setting in Indonesia, which should be considered and addressed in the future (Hermansyah et al., 2020). Pharmacists at PHC in the City of Surabaya are experiencing several emerging challenges, and pharmacists have adopted innovative opportunities and strategies to overcome them. Communication is vital to ensure the safe and effective use of medicines.

The communication of medical information or treatment plans is critical for patient adherence and the safe use of medicines (Kow & Hasan, 2021). Pharmacists at PHC in Surabaya said they had difficulty communicating with patients because of restrictions. Social and physical distancing may compromise the quality of medication counselling a pharmacist provides. This condition occurs because pharmacists think therapy's success is greatly influenced by adherence and the correct use of drugs. The informational pressure point is directed at the pharmacist's correct drug use (Athiyah et al., 2021). However, the safety of patients and staff is crucial during this period. Pharmacists who cannot relay private health messages to patients during a physical distancing consultation could utilise telehealth to deliver quality care as soon as practicable (Sum & Ow, 2021).

WhatsApp communication media and leaflets for communicating with patients is an innovation implemented by pharmacists at PHC in Surabaya. There are several advantages for pharmacists at PHC using social media. One of the advantages of using social media is providing an avenue for expanding the role of pharmacists. The use of social media also offers alternatives for patients to interact with pharmacists in a professional manner without being limited by distance and physical space (Hermansyah et al., 2019).

Whatsapp is a type of social media pharmacists use to provide drug information. Using WhatsApp communication media to provide drug information is one example of the application of telepharmacy. Telepharmacy is another innovation that has come to light because of the COVID-19 pandemic. Telepharmacy is a method in which a pharmacist uses

telecommunication technology to provide patient care services. Telepharmacy was seen as an opportunity to reduce direct contact with patients and continue providing the typical pharmacy services patients require from the comfort of their homes (Jirjees et al., 2022). Leaflets as information media in health education activities are also effective and efficient. Information can be arranged simply so that everyone who reads it can receive and understand it correctly. The use of language in leaflets is one of the advantages of media that can be adapted to the target respondents, such as using a language that is understood by everyone to using the regional language that will receive treatment (Hafidz et al., 2021).

PHC is a government health institution that is closest to the community. PHC closer to the community can do 3T (Tracing, Testing, Treatment). Pharmacists, as health workers, have an important role in this pandemic. Pharmacists are authorised to provide service on repeated prescriptions, treatment services for patients with minor complaints, and vaccination (Widayanti et al., 2022). During the pandemic, pharmacists at PHC in the city of Surabaya have the opportunity to join in tracing activities. Each pharmacist at PHC has responsibilities in each area under the PHC area. Pharmacists are responsible for tracing, contacting, finding, and monitoring people in contact with positive patients infected with COVID-19 if they are in the pharmacist's area of responsibility. Besides tracing activities, pharmacists at PHC in Surabaya also participated in implementing the COVID-19 vaccination programme at PHC. During the COVID-19 vaccination, the pharmacist at PHC worked in the administrative section by running several applications.

## **Conclusion**

The COVID-19 pandemic had a significant impact on pharmaceutical service delivery in PHC. However, it has preserved the critical role of pharmacists to ensure safe and quality services, particularly with the COVID-19 vaccination programme.

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#### Conflict of interest

The authors declare no conflict of interest.

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