



# Nurses' experiences of emergency department triage during the COVID-19 pandemic in Indonesia

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## Abstract

**Purpose:** To explore the experiences of nurses working in emergency departments in selecting and triaging patients during the COVID-19 pandemic.

**Design:** Descriptive phenomenology was applied in this study.

**Methods:** Data were collected from nurses working at hospitals in Indonesia using snowball sampling and telephone interviews. A total of 10 emergency nurses participated, and Colaizzi's method of data analysis was applied.

**Findings:** Six themes and 10 subthemes emerged. The main themes were "extreme challenges in triage," "feeling of responsibility under uncontrolled spread and infection," "physical and psychological exhaustion," "discovering strategies under difficult circumstances," "looking for positive reinforcement," and "optimism in togetherness." Nurses had to deal with the challenge of COVID-19 in the ED triage, interestingly so, the nurses they have shown the development of professional responsibility. Nurses are also experienced in finding patient selection and triage strategies and the sense of optimism that may influence strategy and practice during the COVID-19 pandemic.

**Conclusions:** This findings identify nurses' experiences in dealing with the extreme challenges of emergency department triage as well as their associated strategies and optimism.

**Clinical relevance:** Providing support to emergency nurses, improving emergency department triage, and community empowerment are suggested as strategies to improve nursing care during the COVID-19 pandemic.

## KEYWORDS

emergency nursing, nurses' experiences, pandemic COVID-19, triage

## INTRODUCTION

Triage is a key aspect of emergency department (ED) work and consists of, the first stage of assessment required to prioritize patients based on the severity of their conditions in order to determine the order in which they receive treatment (Stanfield, 2015; Wolf et al., 2018). Due to the COVID-19 pandemic, such situations could have significant impacts on the ED environment, especially on nursing workforces. It is thus essential to understand ED nurses' triage experiences in pandemic situations, given that the triage procedure

used to screen patients plays a crucial role in identifying high-risk populations (Wang et al., 2020).

The initial assessment of a patient's clinical symptoms is the cornerstone of triage in the ED. In a pandemic situation, the screening process and triage process undergo several changes, both in terms of the arrangement of the place and the flow of patient services, with the screening process being focused on protecting against as many potential sources of infection as possible (Wang et al., 2020). A widely adopted triage protocol that was developed by the Centers for Disease Control and Prevention (CDC) of the United States explains that triage criteria

include signs and symptoms of respiratory infection identification and the investigation of travel and direct exposure history (CDC, 2020). The clinical symptoms of patients infected with COVID-19 include fever, fatigue, and respiratory symptoms, such as dry cough, occasionally accompanied by nasal congestion, runny nose, and sore throat (Huang, Wang, et al., 2020; Vetter et al., 2020). Furthermore, infection is primarily transmitted by aerosols or respiratory droplets; however, the risk of transmission from asymptomatic patients or those with few symptoms has not yet been fully quantified (Vetter et al., 2020; Wang et al., 2020).

ED nurses are frontline healthcare professionals who play a key role in the triage process. A recent study explained the details of triage nurses' activities, which include screening patients, asking questions about their epidemiological history, measuring their body temperature, and categorizing patients into high- and low-exposure-risk groups (Wang et al., 2020). These tasks require nurses to engage in prolonged contact with patients, making the nurses themselves susceptible to contracting COVID-19.

According to a previous study, during the pandemic influenza A (H1N1) outbreak, ED nurses who interacted closely with infected patients became afraid and anxious that they would be infected with the virus and pose a threat to their families (Lam & Hung, 2013), whereas another study reported that deep vigilance is applied in healthcare decision-making when there are patients with various kinds of influenza attending hospitals (Rottman et al., 2010). A recent qualitative study reported that healthcare providers face various challenges when working in COVID-19 ward, including the need to be resilient amid such difficulties, and that they felt fully responsible for their patient's well-being (Liu et al., 2020).

Indonesia was ranked 19th in cumulative cases and 17th in cumulative deaths worldwide as of December 8, 2020, with 586,842 confirmed cases, 483,497 recoveries, and 18,000 deaths (COVID-19 Rapid Response Taskforce, 2020; World Health Organization, 2020b). The number of patients with COVID-19 has been increasing rapidly, posing a big challenge to hospitals. Relatedly, the initial screening and triage of COVID-19 patients have been extremely stressful for ED triage nurses because the emerging disease has been subtle and unpredictable. However, there have been no previous studies exploring nurses' experiences in triaging patients who are suspected of having or who have been diagnosed with COVID-19. Furthermore, investigations of such experiences among ED nurses could provide valuable evidence for hospitals in managing triage procedures and helping nurses to cope with this challenging situation. Thus, this study aimed to understand the experiences of nurses working in ED in selecting and triaging patients during the COVID-19 pandemic.

## METHODS

### Design

Descriptive phenomenology was used in this study. Descriptive phenomenology constitutes philosophy and scientific method that is used to explore an individual's lived experiences. It is also focused

on the details of an event or experience (Bradshaw et al., 2017). As such, using this method to explore nurses' experiences during an emerging disease outbreak was appropriate.

### Participants and settings

Participants were recruited by contacting the person in charge of triage in a given ED. This individual assisted the researcher in recruiting the first participant. Later, the snowball sampling recruitment technique was used to identify other potential participants. This technique is commonly used when participants are difficult to find (Polit & Beck, 2017). Therefore, it was a relatively good recruitment method to use during the COVID-19 pandemic.

During the COVID-19 pandemic, the researcher collected data by conducting telephone interviews with each participant at the participant's convenience. The inclusion criteria were as follows: (a) be a registered nurse, (b) be working full-time in an ED, and (c) be able to communicate in Bahasa Indonesian. Nurses who had no direct contact with patients during the triage process were excluded. Data saturation occurs when the data from an interview consists of repeated information, such that no new information is emerging (Guest et al., 2020). In this study, the researcher stopped the data collection after the 10th participant interview. Ten emergency nurses participated in this study (Table 1).

### Data collection

Data were collected using individual in-depth interviews conducted by telephone at a time convenient for the participant being interviewed in July of 2020. All the interviews were audio-recorded. Each participant was interviewed once, followed by clarification or deepening of the data if necessary, with each interview taking about 40 min. The researcher who conducted the interviews has 12 years of work experience in ED and is experienced in conducting qualitative research. The researcher's questions remained consistent with the research objective and avoided any tendency to include the researcher's own opinions or prejudices.

Open-ended interview questions were developed based on a previous study of ED nurses working during the pandemic influenza A (H1N1) outbreak (Lam & Hung, 2013), as well as a study of the experiences of nurses treating COVID-19 patients (Sun et al., 2020). This study then sought the expert opinion and selected two ED nurses for the preinterview. The interview questions were (a) Please share your experiences with ED triage during the COVID-19 pandemic. (b) Have you experienced anything that you never previously experienced before the COVID-19 outbreak? (c) What are the difficulties that you have faced in ED triage recently? (d) Please share additional experiences/perceptions/ideas if any.

## Data analysis

Colaizzi's method of data analysis was then applied to guide the data analysis (Colaizzi, 1978). The steps used were (a) all the transcribed text was checked and repeatedly read to ensure the exactness of the transcription, (b) specific experiences and the information mentioned repeatedly were marked, (c) information about common experiences that appeared was generalized to create themes, (d) each theme relationship was investigated carefully, (e) all the topics that emerged were generalized to make the context, (f) the themes and subthemes of the triage ED nurses' experiences were formulated, and (g) the findings were returned to three participants for confirmation of their accuracy.

## Rigor

The criteria of credibility, confirmability, transferability, and dependency were used to establish rigor (Lincoln & Guba, 1985). The credibility of the findings was established by verifying the findings through discussion between participants and the researcher. The researcher also discussed the findings with nursing experts who had rich experience in qualitative research. Confirmability refers to the congruence between researcher and participant data, meaning, and interpretations (Polit & Beck, 2017). The interview results were provided to the participants to confirm their common meanings and interpretations. Transferability refers to whether the findings of a study are applicable to similar situations and can be applied in other studies (Polit & Beck, 2017). In-depth interviews that produce a reflection of the experiences of the participants can be identified as having transferability. To ensure dependency, the researcher conducted in-depth interviews with the participants, then the researcher himself also transcribed the data verbatim.

## Ethical considerations

Institutional Review Board approval of the study was granted by a University Ethics Committee (Approval No: 2048-KEPK). The

TABLE 1 Characteristics of participants (N = 10)

Characteristics		n (%)	Mean (SD)
Gender	Male	3 (30)	
	Female	7 (70)	
Age			31.50 (3.95)
Educational level	Post-bachelor degree	9 (90)	
	Diploma degree	1 (10)	
ED work experiences (years)			6.05 (2.83)
Marital status	Married	6 (60)	
	Single	4 (40)	
Position	Charge nurse	2 (20)	
	Staff nurse	8 (80)	
Residence	With family	7 (70)	
	Boarding house	3 (30)	

informed consent of the participants was also obtained before the interviews, while the principles of anonymity and confidentiality were maintained during the entire research process.

## Findings

The experiences of nurses caring for COVID-19 patients can be summarized into 6 themes and 10 subthemes (Table 2). Implicitly, the themes were reflective of the challenges and responsibilities of working during triage, the experience of finding strategies in selecting and triage patients, and the optimism to deal COVID-19 in the workplace.

### Theme 1: Extreme challenges in triage

The number of patients admitted to the ED has drastically decreased, but the work atmosphere has changed considerably. As the first health-care providers in a hospital to interact with incoming patients, the participants had to view all such patients as potentially being infected with COVID-19. Accordingly, every new patient who comes to the ED had to undergo COVID-19 screening. Unlike with patients affected by natural disasters, this screening required extensive patient health data, with the performance and accuracy of the screening greatly affecting the subsequent treatments provided and risk of transmission. However, some patients failed to disclose relevant personal health information during the screening process, and this issue made the ED triage work extremely challenging. The participants thus felt that they were working on a terrible battlefield while triaging patients.

### Workplace changed radically

Although the number of patients at any given time fluctuated substantially, the participants remained highly alert during the triage

TABLE 2 Themes and subthemes emerged

Themes	Subthemes
Extreme challenges in triage	Workplace changed radically Be diligent to obtain comprehensive information
Feeling of responsibility under uncontrolled spread and infection	Concerns regarding personal and family health High dedication in a risky environment
Physical and psychological exhaustion	Safe but uncomfortable with personal protective equipment Mental exhaustion
Discovering strategies under difficult circumstance	
Looking for positive reinforcement	Looking up evidence for care Seeking emotional support
Optimism in togetherness	Spirit of collaboration Adherence to public health policies

screening. There were uncertainties in the work environment previously unexperienced, including the implementation of screening procedures and isolation procedures for suspected COVID-19 patients. They felt, relatedly, that the workplace environment had been changed considerably because they had to remain vigilant as to whether a patient was diagnosed with COVID-19 or not. Furthermore, once a patient was suspected of having COVID-19, the patient had to be placed in an isolation room. Meanwhile, the working conditions of the nurses got worse if a patient received a red triage designation, then all the procedures had to be carried out in a very short time. Because red triage is a life-threatening condition, it required the most urgent treatment need regardless of COVID-19. The participants also had to deal with any other problems or diseases that brought patients to the ED. Furthermore, ethical dilemmas were raised when a nurse had to determine the priority in providing a patient with a life-saving intervention or ensuring their own safety.

The current situation makes it feel like we are in a war but don't know who are our enemies are. In the isolation room, we already know that a patient has been diagnosed with COVID-19, but during the triage step, we don't know which patients are infected with COVID-19.

(P10)

The number of ED patients has decreased significantly in this pandemic situation. However, we still need to be more careful in carrying out the new COVID-19 screening procedures in order to determine whether patients need to be placed in isolation or not. And we must do it for all the patients entering the emergency room. All patients were screened, even those with red triage... Even though I have worked for more than five years in triage ... at this point, I feel I need to be more thorough.

(P8)

We have a hard time dealing with patients with red triage, and it's a dilemma we feel ... because we have to perform life-saving measures first, and then sometimes ask questions about the symptoms of COVID-19 very quickly. After our intervention is complete, sometimes we just feel worried, hoping that our intervention was successful and that we as helpers will stay safe.

(P5)

### Be diligent to obtain comprehensive information

Some patients and their families do not reveal all health information. The participants thus always tried hard to obtain accurate and comprehensive information. The participants therefore spent considerable time and used effective communication strategies to

obtain the most accurate answers possible from the patients and their families. Specifically, by using therapeutic communication, repeating questions several times and engaging other nurses to ask the same thing.

Not all patients inform their conditions honestly. So, when information is obtained from a patient, I will definitely try to confirm it with the family. This requires a lot of time and a therapeutic communication strategy. In the end, they told me ... they did it because they were afraid of contracting the COVID-19 infection, and some were worried that they would be isolated in their community.

(P3)

I found it difficult to get accurate data regarding the question of whether a patient had had any contact with COVID-19 patients who were hospitalized or quarantined at home. The patient's response was always "Never, I have had no such contact." But after being asked repeatedly, including being asked by some friends, some patients finally said, "Yes, I have been in contact with a family that was treated for COVID-19"

(P8)

### Theme 2: Feeling of responsibility under uncontrolled spread and infection

Some participants discussed fear of contracting COVID-19 themselves, the risk of passing it on to patients and their families, and the risk of passing it on to their own families. However, the participants still dedicated themselves as nurses to carrying out their responsibilities in a risky environment.

### Concerns regarding personal and family health

From a personal perspective, as participants on the front lines, they felt worried about and afraid of getting infected. The participants expressed the feeling that family safety was also one of their concerns because they worked in an ED. They were fearful and worried because of social media posts conveying a lot of information about mortality and the number of confirmed cases. As ED nurses, they were very worried that they and their family members would become infected, whether directly or indirectly.

When we are on duty, we are afraid of being infected. This fear is increased when I hear or see information about the pandemic on television, especially reports about nurse colleagues being infected with COVID-19. So that causes me to always stay vigilant.

(P10)

From seeing and hearing on television about the experiences of other nurses, our colleagues, who are positive for COVID-19, I am always worried. But nursing is a duty, so I still have to be strong, in spite of me fear of contracting the disease ... Besides that, we already have a family and children, so I am worried that this infection will also affect my family.

(P7)

### High dedication in a risky environment

In the fact of uncontrolled spread and infection of the COVID-19 disease, apart from focusing on themselves, the participants showed their professionalism. In this risky situation, they were still grateful to be at the forefront and exhibited high dedication in serving their patients.

We worry about our safety. Furthermore, we have to be more careful ... We don't want to be infected and infect other patients and their families who come to the ED.

(P6)

I am still grateful to have the opportunity to be at the vanguard of serving COVID-19 patients. As much as we can, we strive to provide the best service for all patients who come to the ED, and we are grateful for being able to stay healthy and continue our work.

(P8)

### Theme 3: Physical and psychological exhaustion

The participants said that wearing personal protective equipment (PPE) is important for staying safe at work but also that wearing it for a long time is uncomfortable. The participants felt that they were working much longer hours than before. They also said that the amount of quality time with their families was reduced.

### Safe but uncomfortable with PPE

The participants realized that PPE was important for protecting them and preventing the spread of COVID-19, even though wearing it for a long time made them uncomfortable. Almost all of the participants reported sweating, feeling hot, and problems going to the toilet due to long periods spent wearing PPE.

I work using level two PPE (that is, a surgical mask, gown, gloves, eye protection/face shield, and head cap), which makes us uncomfortable. It's very hot.

(P4)

Wearing PPE keeps us safe, but it is uncomfortable. It feels hot and makes you sweat a lot ... so we eat and drink less before going on duty to minimize the need to use the toilet.

(P6)

### Mental exhaustion

The participants felt that they were working much longer hours than before, so they had sleep problems and felt alert to their personal health status. Some participants attributed their feelings of mental exhaustion to their limited social contact with their family. In addition, some participants expressed feelings of mental exhaustion due to the impression that the battle against COVID-19 was never-ending. That is, they really had no clear idea of when the end of the pandemic would come.

The workday feels longer. I also feel uneasy going to sleep, wondering whether I was safe and when this pandemic will end. When I wake up, before going to work, I always think about how my shift today will go. Because of so many mass media stories about nurses being infected with COVID-19, we are afraid and always on high alert.

(P5)

I feel psychologically disturbed. Even though I live at home, I always keep my distance, and so feel that I am becoming less close to my husband and children.

(P8)

### Theme 4: Discovering strategies under difficult circumstances

With the limitations and efforts required to protect against COVID-19, clear and assertive health education was a strategy that was deemed useful amid the difficulties faced. The associated predicament is obtaining accurate data and persuading patients to enter COVID-19 ED isolation.

To get accurate data in response to COVID-19 questions, I always use this method: I ask the same questions to patients and their families together, and if they have different answers, then I will investigate further. In that case, there may be hidden information, or they may not be telling the truth.

(P5)

I have tried to educate patients and their families in several ways. I start by giving education directly about why we isolate their families. If they cannot understand it, I always try to educate them further

by conveying the potential dangers to patients, their families, and nurses on duty if they (patients and families) do not follow the hospital rules.

(P2)

## Theme 5: Looking for positive reinforcement

The participants tried to find sources of information about COVID-19 care, started looking up evidence for care, and read the protocol repeatedly, in addition to looking for COVID-19 information updates on government websites. They explained that family and fellow ED nurses were a source of strength.

### Looking up evidence for care

The participants realized the need to find and follow the latest developments about COVID-19, and they learned from the treatment protocols implemented in their hospitals, also from the government website about COVID-19.

We read protocol books in the hospital to increase our knowledge. Our triage team shares such knowledge, especially about the protocols and experiences of each team member in the implementation of triage. We have a special WhatsApp group, and ... well ... we share information.

(P2)

Looking at government websites about COVID-19 and hospital protocols and the information shared by my superiors reduced my fears. I am more careful at work, and I always follow all applicable standards, both when wearing PPE and when conducting patient interviews.

(P3)

### Seeking emotional support

Over half of the participants reported seeking emotional support, and often they did receive such support from colleagues and supervisors. They also reported seeking support from their families, either in person or by telephone, for those living in boarding houses. From such emotional support, the participants seemed to build up an invisible sense of protection that strengthened their work abilities during the pandemic.

I have asked for support from my fellow ED staff and my family. My parents' support really strengthened me, because it so happens that my parents were also nurses. I was advised to be careful and enthusiastic at work and that I must follow the work standards in the ED.

(P9)

To overcome these situations, I always share my experiences involving COVID-19 with my co-workers and supervisors. I always phone my family, because I live in a boarding house. Humor, making myself laugh, sometimes this can make my problems more manageable.

(P3)

## Theme 6: Optimism in togetherness

Through the optimism of togetherness, the participants expected that the collaboration of all parties, including patients, healthcare workers, and the broader community, would be a force in breaking the chain of COVID-19 transmission. The participants also emphasized the view that society should improve its adherence to public health policies.

### Spirit of collaboration

The participants stated their belief that collaboration between patients, families, nurses, and the community can play an important role in controlling COVID-19 transmission. The spirit of collaboration was implicit and provided a positive force that guided the participants in moving forward during the period of dramatic changes in the ED.

Some patients are mentally down since they know they have COVID-19; we must support and assist them. Through the spirit of cooperation, I am optimistic that this pandemic will end.

(P2)

I am optimistic that this problem will be resolved through orderly and disciplined public action. For colleagues, we have to keep up our spirit and remain solidly committed to serving. In spite of this difficult situation, I believe that if we act sincerely and passionately, we will end this pandemic.

(P3)

### Adherence to public health policies

The participants expected community empowerment to improve adherence to health protocols, including discipline in wearing masks, washing hands, and maintaining physical and social distancing. These activities should be a new form of healthy behavior for the whole community.

All members of society have their strengths and important roles to play. People must be disciplined in

following health protocols and adapting to a healthy lifestyle. So what is also important here is the role of society ... to break the chain of transmission of COVID-19.

(P1)

The community is expected to obey and be disciplined in following the protocols, which includes wearing masks, washing their hands diligently, and maintaining physical distance. It is also essential to find the best information from social media, that is, to be careful in using social media. Don't create fake news about the pandemic; rather, use good judgement, and support health workers and patients who are being treated.

(P5)

## DISCUSSION

This research was conducted in the first four months since the identification of COVID-19 on March 2, 2020 in Indonesia. The findings have effectively answered the research aim of this study, which is reflected by the ED nurses' experiences in selecting and triaging patients during the COVID-19 pandemic. Implicitly, three themes were reflective of the challenges and responsibilities faced in triage work. Two themes were related to the strategies behind the selection and care of triage patients, and one was in regard to experiences nurses' optimism for their future work involving COVID-19.

The first three themes highlighted the extreme challenges experienced by nurses beyond those caused by other infectious disease outbreaks. This may be because the COVID-19 outbreak has already lasted for several months, and the world is facing further outbreaks and uncertainty. Although the themes from this study may be similar to those reported in previous research (Liu et al., 2020; Sun et al., 2020), the degree of the ED nurses' exhaustion reported in this study may differ from levels reported in other studies. Hospitals may thus need to pay greater attention to nurses' needs in terms of physical and psychological issues.

The ED nurses faced extreme challenges in the triaging of patients. Those challenges emerged because they were afraid of the high risk of infection and the unmet demand to screen and triage precisely. It is important, relatedly, to make sure that ED nurses have enough resources and sufficient understanding of symptoms to properly handle their patients. To deal with the radically changing workplace, well-designed and classified isolation rooms may be used to separate suspect cases from highly suspect cases. For example, some patients and their families were hiding their chief complaints, travel history, or close contact information during the screening process. Patients with suspected COVID-19 can be isolated in the ED before being treated in the isolation ward. Hidden data can be important for establishing a diagnosis of COVID-19, whereas if the diagnosis and management are not correct, there will be a high risk of transmission to nurses, other patients, and their families. Such

findings were also presented in a previous case report which found that patients hid their travel history and then spread COVID-19 infections (Khan et al., 2020). Such situations have increased the awareness of nurses regarding the need to be more vigilant about transmission prevention and can thus indirectly increase their safety. However, it is best to increase alertness without triggering panic (Lam et al., 2019). A study by Wei et al. (2020) reported that 6.77% of respondents hid their travel history and that increased willingness to report a travel history was found among those with a greater understanding of the benefits of reporting and its legal consequences. In contrast, a lower desire to report was due to issues of stigma and the fear of being quarantined after reporting (Wei et al., 2020).

The majority of ED nurses experienced psychological exhaustion due to being fearful, anxious, and very alert at work (Huang, Lin, et al., 2020). Such experiences were also reported in previous research on the Middle East respiratory syndrome coronavirus (MERS-CoV) (Kim, 2018), and an H1N1 outbreak (Lam & Hung, 2013). Consistent with another previous study, this study found that nurses were highly concerned about patients and their families, as well their own families (Pincha Baduge et al., 2017). With respect to family safety, nurses are forced to distance themselves from family members, even if they live in the same house physically. However, the nurses showed their high dedication to continue to work in facing the COVID-19 pandemic. Nurses' attitudes toward their duties and responsibilities are critical as they will continue to be at the front line (Arcadi et al., 2021; Fawaz et al., 2020). It is suggested that government and hospitals should respect them more and create better shift systems for them.

Wearing appropriate PPE may improve safety and reduce nurses' worries at work. Previous research highlighted the protective measures that should be provided to healthcare workers, including those at the forefront of the risks associated with this pandemic (Huang, Wang, et al., 2020; Zhang et al., 2020). Hospital management is vital to ensure the availability of PPE as well as education and routine training on PPE.

The two themes reported the strategies discovered by nurses amidst challenges. These associated challenges include the difficulty in obtaining accurate data from patients and their families when screening for COVID-19 under unusual working conditions. Furthermore, one's triage decision-making ability can be affected by environmental impacts (Wolf et al., 2018). Thus, improving the steps taken to obtain honest information may help nurses feel less stressed. The interviewed nurses were practiced in providing clear and assertive health education about COVID-19 and its treatment as well as emphasizing the benefits of providing honest information. In the midst of the difficulties they experienced, the nurses managed to develop greater effective communication with patients and families. Being necessary for the safety of the ED nurses, questions relevant to patient selection can be developed with communication applications.

The investigated ED nurses' reinforced their own positive efforts by looking up evidence-related resources and seeking emotional support. The nurses who participated in this study also reported that

togetherness with fellow ED team members and family members gave them the strength to continue working. This finding was similar to that of a previous nursing study on MERS-CoV patients in South Korea (Kim, 2018). Indonesia is known to have a strong family culture, with the spirit of "gotong royong" ("mutual cooperation") being a key value of the Indonesian nation, such that kinship is the main means by which people establish a support system. Other important issues, including rumors and misunderstandings of important information due to social media posts, have emerged and become a problem during the epidemic (Bell & Brysiewicz, 2020). Relatedly, families and communities are encouraged to become a support system for healthcare workers in fighting COVID-19, both directly and through social media.

The last theme reported that ED nurses who participated in the COVID-19 outbreak experienced optimism about their current work in dealing with COVID-19 through the support of public participation and empowerment. Indonesia is an archipelago with 34 provinces, and the best practices from one region for dealing with COVID-19 can be shared with another. Such best practices include community solidarity with mutual cooperation to help provide food for those who are isolated at home, ensuring that they undergo a 14-day quarantine, as well as a COVID-19 prevention education program for the community (World Health Organization, 2020a). Previous studies also highlighted the importance of community participation in the control of SARS outbreaks (Leung et al., 2003) and avian influenza (Di Giuseppe et al., 2008). Specifically, the need to emphasize community empowerment with a spirit of mutual cooperation is a new insight of this research.

## LIMITATIONS

This study was conducted through telephone interviews. As such, nonverbal information regarding the nurses' experiences may have been missed. Second, the interviews were conducted with nurses from only two regional hospitals in Indonesia. The findings of the study thus may not be applicable throughout the whole county.

## CONCLUSIONS AND CLINICAL IMPLICATIONS

The findings strongly indicate that nurses' experiences have the potential to influence strategy and practice in ED. It is possible to use these findings to improve patient selection and triaging strategies and help nurse practices to overcome conditions due to COVID-19 or future circumstances.

The recommendations from this study include providing support to emergency nurses, improving ED triage, and encouraging community empowerment. First, hospital management should provide physical and psychological support for ED nurses. Governments and hospitals should thus continue to ensure the availability of PPE, as well as relevant education and training updates, and also strive to create a better work system. This would include a rational shift schedule,

paying attention to nurse break times, supervision from the leadership, and refreshing rotations to low-risk COVID-19 care. Second, a clear and assertive health education strategy with support communication application tools may be useful for improving the safety of triage ED. To increase patient and family knowledge about COVID-19, as well as raise awareness of the need to provide accurate data, informational video-based can be provided in ED. Finally, government regulations for community empowerment are urgently needed in supporting COVID-19 patients and nurses who are struggling, as well as efforts to improve discipline in adhering to health protocols and prevent the transmission of COVID-19 or similar situations in the future.

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## CLINICAL RESOURCES

- Committee for Handling COVID-19 and National Economic Recovery, Indonesia. <https://covid19.go.id/>
- Indonesian Emergency and Disaster Nurses Association (IEDNA). <http://www.hipgabi.org/>
- World Health Organization. <https://www.who.int/emergencies/diseases/novel-coronavirus-2019>

## CONFLICT OF INTEREST

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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