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## The resilience of nurses in the emergency department of Sanglah Hospital during the pandemic of COVID-19 in Bali, Indonesia

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### ABSTRACT

**Background and purpose:** COVID-19 pandemic has a major impact on the health care system, including nurses. The rapid increase in the number of patients, lack of knowledge of the disease, and the high risk of being exposed to the virus, are some challenges faced by nurses in hospitals. During this situation, nurses need to build resilience to provide good services for patients as well as to protect themselves from COVID-19 infection. This study aims to explore resilience of the emergency room (ER) nurses at Sanglah Hospital Denpasar during the early stage of COVID-19 pandemic.

**Methods:** A qualitative study with a phenomenological approach was conducted in the ER of Sanglah Hospital Denpasar, from October to November 2020. Data were collected through in-depth interviews that involved six nurses. The information collected include nurses' experiences in dealing with pandemics, nurses' knowledge about COVID-19, challenges and obstacles to nursing services during the COVID-19 outbreak, efforts to protect themselves, family and closest relatives, as well as management responses regarding the protection of health workers, especially among nurses. Data were analyzed by Interpretive Phenomenological Analysis (IPA) and presented narratively.

**Results:** Nurses have the internal strength to deal with increased workloads and working conditions that were considered difficult during the pandemic situation. Nurses' resilience is also formed by external supports such as from co-working partners, family, and organizations. The challenges and obstacles faced in maintaining resilience are the implementation of services, amidst the uncertainty of the status of COVID-19 patients and the stigma among health workers, as they were suspected as virus carriers. Efforts to strengthen resilience are conducted by increasing capacity, taking care of oneself, and setting work schedules.

**Conclusion:** The resilience of nurses consists of the resilience to face increased workloads and difficult working conditions during a pandemic. This resilience comes from internal and external strengths such as friends and organizations. In difficult situations, nurses are still able to think of concrete steps to protect themselves and their families. However, challenges and obstacles need to be overcome to improve the quality of patient care during a pandemic.

**Keywords:** resilience, emergency room nurses, qualitative study, the COVID-19 pandemic

## INTRODUCTION

Novel Corona Virus or known as COVID-19 is a communicable disease that has become a global problem. This virus was first discovered in the City of Wuhan, China in September 2019 and spread rapidly throughout the world. The increase in transmission of COVID-19 infection is caused by the high mobility of the population from one country to another.<sup>1</sup> The large number of people in the world who have been infected and the severity suffered by infected patients lead the World Health Organization to declare the COVID-19 outbreak a global pandemic on March 11, 2020.<sup>2,3</sup>

Indonesia as one of the world's tourist destinations also experienced similar situations. Rapid transmission and an increase in the number of confirmed cases of COVID-19 were inevitable. To overcome this problem, the Government of the Republic of Indonesia through the Minister of Health of the Republic of Indonesia on February 4, 2020, issued a decision regarding Novel Coronavirus Infection (2019-nCoV infection) as a disease that causes outbreaks.<sup>4</sup>

The COVID-19 pandemic has caused many hospitals throughout the world to experience difficulties both in terms of management and infrastructure in providing services because the number of patients has increased in a short time. Moreover, COVID-19 is a deadly infectious disease with the time from the start of the disease to becoming severe occurring in one week. Patients can experience acute respiratory system failure and require special facilities and infrastructure such as ICU, special isolation rooms, oxygen or ventilators. Meanwhile in Indonesia, since positive cases of COVID-19 have increased drastically, many regional hospitals have been overwhelmed by the surge in patients infected with the coronavirus. Medicine and oxygen are very scarce, even though many people need them. Not a few patients are then unable to receive treatment in hospital and end up self-isolating.

Since the COVID-19 outbreak was declared a pandemic, Sanglah Hospital as a tertiary referral hospital in Bali began treating patients infected with COVID-19.<sup>4</sup> In early March 2020, Sanglah Hospital had treated 12 patients under surveillance related to COVID-19, two of the 12 patients is a nurse at Sanglah Hospital who had treated patients under supervision at Sanglah Hospital.<sup>5</sup> The increasing number of patients and demands for fast service can be under pressure working situations among nurses. These pressures can lead to an overload of work and burnout among nurses.<sup>6,7</sup> In dealing with these pressures and workloads, nurses' resilience is essential to overcome several problems related to their work.<sup>8-10</sup> Resilience is the ability to cope with and adapt to severe events or major problems that occur in life.<sup>11-13</sup> Resilience is an important concept for nurses because this profession gets a lot of pressure such as emergency patients, critical patients, shortage of medical personnel, and emotional exhaustion.<sup>14,15</sup>

It is known that the screening process or initial examination of emergency patients and patients who experience illness outside of working hours is carried out in the emergency unit. Nurses, especially worked in an emergency room, most often receive COVID-19 patients and general patients who have not been detected as patients infected with COVID-19, which has an impact on increasing nurses' anxiety about being exposed to this virus. In addition, there were also changes in patient handling protocols, an unexpected increase in the number of patients, the changing flow of patients in the emergency unit, as well as the uncertainty of patients

who came whether the patient was infected with COVID-19 or not, which could increase the risk of infection for emergency room nurses.<sup>16,17</sup>

In several countries, no research has been found regarding the resilience of emergency room (ER) nurses in facing the COVID-19 pandemic. More research has been conducted on nurses' knowledge, perceptions, and experiences about the pandemic.<sup>13,18</sup> Studies regarding the resilience of ER nurses in dealing with the COVID-19 pandemic in Indonesia and Bali have not been conducted. Information about resilience among nurses is essential to provide optimal care for patients during a pandemic situation. This study aims to explore the resilience of ER nurses during the COVID-19 period, how nurses build resilience, and the challenges, and obstacles overcome by the nurses.

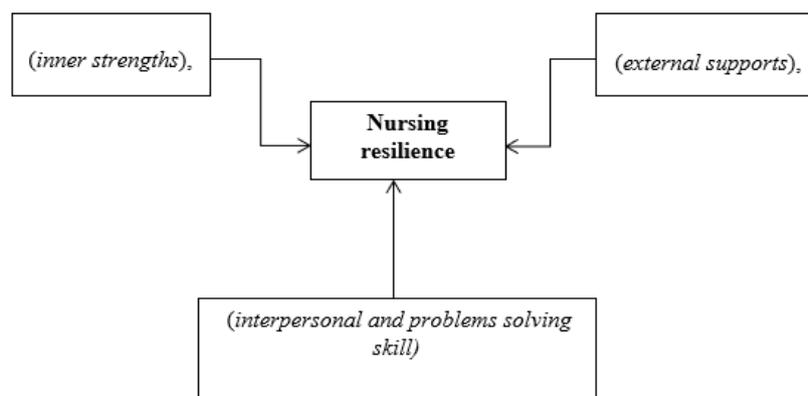
## METHOD

This study uses a qualitative research design with a phenomenological approach. The informants of this study were selected using a purposive sampling technique, especially involving emergency unit nurses at Sanglah Hospital who provided direct services to patients during the COVID-19 pandemic. Data collection was conducted from October to November 2020, when the new normal era had begun. In this study, the researcher acted as the main instrument who conducted in-depth interviews with informants assisted by writing instruments, interview guides, and voice recorders as data collection tools. To reduce this bias, the researcher positioned herself neutrally as a researcher and conveyed to the informant that there was no other intention or sponsor for this study.

The researcher conducted a trial run of the questions asked to the informant, so that the informant could clearly understand the intent of the questions asked, and the results of the trial were consulted again with the supervisor. This research uses the Grotberg's concept<sup>6</sup> which can be seen in Figure 1.1. A person's resilience comes from personal strengths (inner strengths), environmental support (external support), and problem-solving and decision-making skills (interpersonal and problem solving skills).<sup>6</sup> The questions posed to the informants were emphasized in the early phase of COVID-19 in Bali when the occupancy of beds in the emergency unit by COVID-19 patients began to increase. Information extracted from informants included knowledge of nurses about COVID-19, challenges, and obstacles to nursing services in a state of the COVID-19 outbreak, self-protection to prevent virus transmission from patients, efforts to protect the family and closest relatives, as well as management responses regarding the protection of health workers, especially nurses.

Data collection was divided into two options considering the COVID-19 pandemic situation which found several obstacles in conducting interviews with informants, (1) Interviews were conducted directly with informants during break times, by making a time contract and the informant's consent, (2) Interviews were conducted via WhatsApp or video call outside working hours, with the informant's consent and readiness to be interviewed. In this study, data saturation or no new information was obtained on the 6<sup>th</sup> informant so the number of informants was six people (Table 1). The credibility of the research data was obtained through peer debriefing, which is discussing with colleagues to get input regarding the data collected, starting from the interim results to the final results of data acquisition to equalize the results of data interpretation, as well as

comparing the research results obtained with research related to nurses' resilience in dealing with epidemics and disasters.



**Figure 1.1. Conceptual framework of research on nurse resilience during the COVID-19 pandemic**

The interview data were analyzed using the Interpretive Phenomenological Analysis (IPA) technique. The results of the interviews were transcribed. Data analysis was conducted by reading the transcript of the interview results repeatedly, then giving the code for each informant statement that was considered important. The process was continued by making coding related to the research objectives and concepts. Furthermore, words that had the same meaning were grouped into several groups as sub-themes and themes. The themes that emerged were then analyzed to understand the resilience experiences of ER nurses at Sanglah Hospital Denpasar in providing services during the COVID-19 pandemic and presented narratively.

Before conducting the interview, the researcher provided information about the research to the informants and asked for written informed consent. This research has been approved by the Ethics Committee of the Faculty of Medicine, Udayana University/Sanglah Hospital on August 24, 2020, with the ethical license number 1719/UN14.2.2.VII.14/LT/2020.

## RESULT

### Informants' characteristics

The informants in this study consisted of six emergency unit nurses at Sanglah Hospital who provided direct services to patients during the COVID-19 pandemic with an age range from 28 years to 40 years, and duration of work between two years to 19 years. The characteristics of research informants who were successfully interviewed are shown in Table 1.

**Table 1. Informants' characteristics**

Informants' code	Age (years)	Gender	Education	Duration of work (years)
WS1	40	Female	Nursing Diploma	19
PD2	32	Female	Bachelor of nursing	10
WR3	30	Male	Bachelor of nursing	2
WE4	36	Male	Nursing Diploma	9
MD5	34	Female	Nursing Diploma	8
KS6	28	Male	Bachelor of nursing	3

### Research themes

The themes of this research consist of the perception of the Sanglah Hospital ER nurses towards the COVID-19 pandemic, the formation of resilience as well as strategies used to strengthen resilience, and challenges and obstacles in maintaining resilience in dealing with the COVID-19 pandemic. The summary of coding, sub themes and the research themes is presented in Table 2.

### The perception of the Sanglah Hospital ER nurses towards the COVID-19 pandemic

The theme of the perception of the ER Nurses of Sanglah Hospital towards the COVID-19 Pandemic consists of two sub-themes, namely in terms of etiology which believes that COVID is an infectious disease. While the second sub-theme in terms of perception where emergency room nurses feel at high risk of infection because they work as health workers.

#### a. Believing that COVID-19 is a contagious disease

The sub-theme of believing that COVID-19 is an easily transmitted disease is the informant's interpretation of various information obtained from various trusted sources. COVID-19 is believed to be an infectious disease, which is transmitted very quickly, as evidenced by what only occurred in China, but within a few weeks it had spread to several countries in the world. COVID-19 is believed to be a new type of infectious disease, and its transmission is very fast, which is only from one area but spreads very quickly throughout the world. The following is an excerpt from the interview situation.

*"...of course it is an infectious disease, this disease is very contagious, the proof is that from only occurring in China, in a matter of weeks it has spread to several countries in the world" (WS1)*

Table 2. Research themes

Coding	Sub Theme	Theme
An infectious disease Very quickly contagious Counts of several weeks have spread A new type of infectious disease The spread is very fast	Believing that COVID-19 is a contagious disease	The perception of the Sanglah Hospital Emergency Room nurses towards the COVID-19 pandemic
Staff are at risk of contracting the virus Risk of infection We don't know yet whether the patient who came for treatment was infected with COVID-19 For example, if you are infected, you can also infect other people	Feeling high risk of contracting as a health worker	
Work according to procedures, be disciplined with the rules for preventing transmission At first he wasn't sure, but over time he believed there was an outbreak because there were infected patients who came for treatment Shocked by the outbreak There was a feeling of fear at the start of the outbreak Must be ready to face it We can definitely do service It's the nurse's duty We will try our best	Self-awareness and self-confidence	Formation of resilience as well as strategies used to strengthen resilience
There are friends, family, superiors who support the task Mutual encouragement between fellow nurses in the ER The family prays for the best, supports the tasks that must be done Government attention Provided incentives for treating COVID-19 patients	External support from friends, family, and organizations	
Caused by the SARS-Cov2 virus The method of transmission is through droplets, direct contact, or contact with objects that have been splashed with droplets from infected patients Follow the latest training on handling COVID-19 patients Online seminars during the pandemic	Improving knowledge	
Continue to carry out duties and obligations as a nurse well in the midst of the pandemic Protect yourself and those closest to you from getting infected	Balancing work as a nurse	Challenge and Obstacle
The nurse died and was not allowed to be buried in her area Nurses tasked with caring for COVID patients are prohibited from going home Many health workers are infected	Community stigma	
PPE is in short supply, reused systems Masks are sterilized after use	Availability of personal protective equipment (PPE)	
Many patients The amount of power is not increased The flow changes quickly, you have to adapt quickly	Nurses' workload	

### b. Feeling high risk of contracting as a health worker

The sub-theme of feeling at high risk of infection as a health worker is an expression of the concerns of ER nurses because they work in hospitals that deal with patients every day whose COVID status cannot be ascertained at the beginning of providing services. Working in the ER as the frontline patient entry point, which receives patients who are not yet known whether they have been infected with COVID-19 or not, is believed by informants to be able to increase the risk of contracting COVID-19. This is as expressed by informants.

*"Yes, we are definitely at high risk of getting infected, right, because we are on duty at the front entrance, of course we don't know yet, if there are patients who come for treatment, whether they are infected with COVID or not.. if we get infected, we could also transmit it to other people, right, the spread will be even wider" (PD2)*

### Formation of nurses' resilience and strategies used to strengthen resilience

The meaning of nurses' resilience in facing the COVID-19 pandemic is translated into a description of nurses' responses to the occurrence of the COVID-19 pandemic, which includes how nurses feel and behave, as well as external factors that influence nurses' resilience and strategies used to strengthen resilience.

The results of data analysis showed that there were three sub-themes, namely carrying out tasks well because of self-awareness and self-confidence, feeling supported by external support from friends, family, and organizations, and improving knowledge

#### a. Self-awareness and self-confidence

The informant's statement revealed that one of the self-awareness to avoid the transmission of this disease is to apply a healthy lifestyle and use the correct personal protective equipment (PPE). In addition, it is important to prevent or reduce contact with infected patients.

*"We can prevent ourselves from getting infected with this virus, we're still trying, although we still have the possibility that we can get it too because we are indeed at risk. healthy lifestyle, diligently washing hands, eating healthy... the most important thing is that as long as we go to patients we must wear the right PPE...(KS6)*

Another of informant's statement, knowing the current situation can help increase awareness and self-strength in taking care of oneself and health and implementing health protocols correctly to prevent the SARS-Cov2 virus exposure. The emergency unit nurses should be confident in dealing with the COVID-19 pandemic. In addition, they realize that their duties as nurses are to help patients and in accordance with human values. The following is the informant's statement:

*"The most important thing, in my opinion, is to have confidence in our abilities, yes, we can definitely face this pandemic. And it's our duty to help the patient..." (WE4)*

*"...if I still believe that we are able to provide good service to patients, yes, of course we will try, especially now*

*that the COVID patient become our concern. We've also faced outbreaks several times, in the past, it was avian influenza, but it's not like the case now, ...". (WS1)*

## **b. Feeling supported by friends, family, and organizations**

The resilience of emergency unit nurses also comes from the support of family, colleagues, and supervisors at work, especially nurses who work together in the emergency unit. They encourage each other and try to help each other in performing their duties. At the hospital, nurses communicate and remind each other to continue to be enthusiastic and comply with health protocols. They provide clear information to families regarding COVID-19 so that the family understands and supports them to continue their duties at the hospital. None of the family members suggested informants to change their place of work or leave during the pandemic and their supervisors often accompanied and provided for the needs of nurses while on duty. In addition, the support and attention from their supervisors are also good for increasing the confidence and self-strength among nurses in dealing with COVID-19 by providing PPE and changing patient flow.

The following is the informant's statement:

*"If we're here, we'll encourage each other like that... we'll definitely have time to joke around, encourage friends who want to take care of each other, and pray together so that it's safe to control during duties..."(PD2)*

*"...my family always supports us, the main thing is that we are asked to keep working hard because this is our job. But yes, we are reminded to be careful and vigilant, because the risk is high when dealing with COVID patients. Then... our supervisors often visit here, often give us food and vitamins so that we stay healthy... we keep our spirits up even though we are tired..."(WS1)*

## **c. Improving knowledge**

Our research found various strategies used to strengthen nurses' resilience, including increasing the knowledge of nurses in the emergency unit through training or seminars on handling COVID-19 patients by presenting competent resource persons and continuing to work following internal and external regulations related to procedures for handling COVID-19 patients that have been determined by Sanglah Hospital. The following is the informant's statement.

*"Participating in seminars or training on handling COVID patients, since the pandemic began a lot of online training or seminars, which use the zoom, so it's easier to get updated information..."(MD5)*

## **Challenges and obstacles to maintaining resilience in dealing with the COVID-19 pandemic**

Our research identified various challenges and obstacles experienced by the emergency unit nurses at Sanglah Hospital in maintaining resilience during the COVID-19 pandemic. The results of interviews with informants obtained several sub-themes related to challenges and obstacles originating from internal and external aspects.

### a. Balancing work as a nurse

The challenges faced include maintaining a good balance of work as a nurse amid a pandemic and the demands of the responsibility to take care of themselves and their family to prevent the COVID-19 transmission. Nurses said the situation was challenging because patients who came to access services could not be confirmed as being infected with COVID-19 due to the absence of a COVID-19 test mechanism before providing health services.

The following is a quote from the informant:

*"Well... this is the challenge, we have to be able to take care of our family too so that they were also safe at home. Sometimes we don't know, for example, if we are infected but our condition is good, surely there are no symptoms, right? Well.. we have to be able to stay disciplined by implementing the health protocol, remember to wash our hands properly, take care of our condition to stay healthy, and wear the right masks, for example, don't let our family or people close to us get infected." (MD5)*

### b. Community stigma

Another challenge that was perceived by the informants was the stigma in the community who think that nurses on duty in hospitals who handled COVID-19 patients have a higher risk of transmitting the SARS-cov2 virus. However, this did not affect the spirit of the informants to continue to provide the best service. The sub-theme of getting stigma from the community regarding health workers as carriers of the COVID-19 virus describes the difficult conditions faced by health workers outside of their assignments in hospitals. This is considered a concern for nurses to get a sense of security in the environment outside the workplace. The following is the informant's statement:

*"In the beginning, it was crowded, there was a stigma in society that we health workers were called carriers of the COVID virus, until there was a case of a nurse who died due to being infected with COVID-19, and her body was refused by residents to be buried in their original area... but with so we even feel embarrassed to prove that it's not totally true..." (WE4)*

### c. Availability of personal protective equipment (PPE)

The obstacles experienced by emergency unit nurses in maintaining resilience during the initial phase of the COVID-19 pandemic, such as the difficulty of obtaining PPE, the high workload, and the rapidly changing flow of patient care in the emergency department. The difficulty in getting masks, especially N95 masks, which were the biggest need at the time, lead to a superior recommendation to sterilize N95 masks so they could be reused up to three times. Informants also stated that they were overwhelmed and even lacked rest during work due to the high workload, and also changes in flow that required informants to adapt quickly.

*"That, the problem with PPE is limited, which was right at the beginning of the outbreak. The surgical masks are also limited. Sometimes, I don't change the mask. Moreover, the N95 mask is difficult to get. We are only given one for each person, then after using it, it is immediately sterilized, and filled in with the name first so that it doesn't get mixed up with the others. The next day, when you take care, you can use it again." (MD5)*

#### d. Nurses' workload

The statements from informants stated about their obstacles in maintaining their resilience, it was found that they felt overwhelmed in adjusting to the pandemic situation, especially during the early phase. Therefore, the public's fear of contracting COVID-19 has led to increased access to services, high workload of nurses, and the rapidly changing flow of patient services in the ER. Informants felt overwhelmed and even lacked rest during work due to the high workload and changes in flow that required informants to adapt quickly. The following is the informant's statement:

*"I feel like we're a bit overwhelmed, especially at the beginning. People are starting to panic, as soon as there is a complaint of a cold, hot cough, they will go straight to the emergency room, they are afraid... that they might get COVID. So it's a bit of a hassle for us, the number of patients who come is not comparable to those of us looking after them. Sometimes I don't have time to rest, the workload is really heavy." (WR3)*

The various challenges and obstacles experienced by informants in maintaining their resilience can certainly spur the enthusiasm of ER nurses to be able to overcome these challenges and obstacles as a form of their resilience to the COVID-19 pandemic.

## DISCUSSION

Believing COVID-19 as a contagious disease is an understanding that occurs in emergency nurses, where they believe that COVID-19 can spread very quickly and easily. Transmission of this virus is believed to be through direct contact with infected people, through droplets or through contact with objects contaminated by patients. The sudden increase in the number of patients is unexpected and unavoidable situation.<sup>10</sup> Difficult situations are exacerbated by the fear of infection and even the risk of death. Nevertheless, emergency unit nurses are still trying to deal with the unexpected increase in the number of patients.<sup>15</sup>

Research on the resilience experience of ER nurses regarding the situation of infectious disease outbreaks in the context of emergencies conducted in Hong Kong during the SARS outbreak, stated that emerging infectious diseases were considered an urgent challenge for public health. Government policies on infectious diseases that placed nurses at the forefront of the health care system caused nurses' anxiety due to lack of knowledge about emerging infectious diseases, the severity of infectious diseases, the complexity of the outbreak situation, and the level of response to the situation. They built resilience among nurses by sharing knowledge, and increasing their confidence that they were able to carry out their professional duties.<sup>18</sup>

Referring to the theoretical concept proposed by Grotberg (1995), feeling at high risk of infection is in the characteristics of resilience inner strengths or self-strength. Nurses respond to the conditions faced appropriately, feeling vulnerable to infection because in reality they are in a condition as a nursing service provider on the front line. However, over time they finally try to accept the conditions they are currently facing and immediately rise from the conditions that are considered difficult.<sup>6</sup>

In this study, it was found that the resilience of emergency unit nurses at Sanglah Hospital was good. They are still able to perform nursing services despite facing difficult situations. One of the most interesting things

and should be grateful for is that from the beginning of the pandemic until the researchers conducted this study, none of the emergency unit nurses who were in charge of providing direct services to patients were exposed to COVID-19. They can still protect themselves, friends, and family from contracting the SARS Cov-2 virus. The emergency unit nurses did not experience the rejection or fear of the health workers in charge of handling COVID-19 patients.

The resilience of emergency unit nurses certainly cannot be separated from the awareness of the nurses themselves, the support from their professional friends, especially those who both work in the emergency, and the support from the nurse's supervisors. Various forms of resilience, both from themselves and from outside themselves/the environment, as well as the ability to make decisions and solve problems, lead to strengthening and maintaining the resilience among nurses.<sup>9</sup> The awareness and strength of the informants formed their resilience in dealing with the COVID-19 pandemic. High self-awareness and self-efficacy can encourage individuals to comply with health protocols and manage healthy living behaviors to adapt to a pandemic situation.<sup>17</sup>

Awareness of duties and responsibilities, knowledge of the COVID-19 pandemic, and support from friends, family, and supervisors are forms of resilience that play an important role in providing services to patients. In addition, research conducted by Ang (2019), found that a person's resilience is formed from the knowledge he has about the event, the response to an event, and the support from the closest people.<sup>16</sup> This is in line with the research conducted by Praghlapati (2020) on the formation of resilience, which states that the knowledge about phenomena faced and the support from the surrounding people have a significant influence on someone's resilience.<sup>9</sup>

From the data obtained, the informants believe that by working according to existing regulations, they can continue to provide good service during this pandemic. Referring to the results of Praghlapati (2020), it was stated that a nurse who has good knowledge tends to be better at handling patients compared to nurses who have low knowledge.<sup>9</sup> In addition, the implementation of COVID-19 patient care services requires continuous monitoring so that its implementation achieves the desired goals. The monitoring process is very necessary as a process of monitoring implementation and finding obstacles that occur.

Various challenges faced by the emergency unit nurses at Sanglah Hospital in maintaining resilience in dealing with the COVID-19 pandemic were similar to the findings of research conducted by Cabello (2020). This research found that individuals who have high resilience will be more likely to deal with challenges and pressures during duties.<sup>10</sup> Resilience is a dynamic process that can positively adapt to the challenges and is an important concept for nurses because this profession faces the most challenges.<sup>12</sup>

Stigma from society regarding health workers as carriers of the COVID-19 virus describes the difficult conditions faced by health workers outside of their assignments at the hospital. The stigma received, such as being expelled from the home environment because known to work at the hospital, and the refusal of the nurse's body to be buried in the neighborhood where they live. This is considered a concern for nurses to get a sense of security in the environment outside the workplace. This condition is thought to occur because the public easily believes in inaccurate information and responds with excessive action. Nurses feel that the government needs to play a role in providing correct information about COVID-19 so that the public does not take action based on assumptions and harm others.

The limited availability of masks to be purchased and difficulty in obtaining masks, especially N95 masks, which were the greatest need at that time, resulted in recommendations from superiors to sterilize N95 masks and be able to be reused up to three times. A study conducted by Pashar, et al (2020) stated that nurses experience stress while having a long use of PPE is also a challenge for nurses while handling the COVID-19 patients, especially nurses who cannot open PPE carelessly and must endure thirst and hunger for several hours. Although the challenges faced while caring for COVID-19 patients are quite difficult, appreciation and satisfaction when seeing patients recover become motivation and encouragement for officers to continue to provide optimal services in dealing with the COVID-19 pandemic crisis.<sup>19</sup>

Informants feel overwhelmed and even lack rest while working due to the high workload and changes in the flow that require informants to adapt quickly. There is a relationship between work commitment, management implementation, and quality of health services. The implementation of management will run well if supported by a high work commitment between members so that it can improve the quality of health services.

The various challenges and obstacles experienced by informants in maintaining their resilience can certainly spur the spirit of ER nurses to be able to overcome these challenges and obstacles as a form of their resilience in facing the COVID-19 pandemic. In addition, the challenges and obstacles conveyed by informants to researchers can be used as consideration by hospital management in handling the outbreak, so that the quality of service can be improved.

The results of this study explain that in maintaining resilience in dealing with the COVID-19 pandemic, nurses in the ER of Sanglah Hospital still experience challenges such as protecting themselves and their families and those around the nurses so that they do not get infected amidst the outbreak of the COVID-19 pandemic. In addition, the stigma in society that views nurses who treat COVID-19 patients as carriers of the SARS-Cov2 virus creates a challenge for nurses to prove that this view is completely wrong.

To overcome all the challenges and obstacles faced by ER nurses, the hospital management should implement strategies such as increasing the capacity or skills of nursing staff. Another strategy is to conduct training in handling COVID-19 patients for all staff, especially staff on duty in the ER so that their abilities, especially those directly involved in the service, are evenly distributed.

This research was carried out during the escalation of the first phase of the COVID-19 case at Sanglah Hospital which had an impact on the limitations of researchers in the data collection process. Informants only come from nurses and not from hospital management. Thus, this study cannot describe the overall toughness of nurses.

## CONCLUSION

The resilience of emergency unit nurses at Sanglah Hospital in dealing with the COVID-19 pandemic shows that nurses are still able to adapt to the difficult situation, and can think of concrete steps to protect themselves and their families. Emergency unit nurses are certainly expected to be able to maintain their resilience in providing services to patients, especially during a pandemic and hospital management should increase the capacity or skills of nursing staff to improve the quality of patient care during a pandemic. In

addition, the resilience of emergency unit nurses at Sanglah Hospital can be used as a consideration in determining policies in handling outbreaks and can be used as a basis for the development of public health science, especially regarding the handling of patients during an outbreak or pandemic situation.

## AUTHOR CONTRIBUTION

HK organizes research, collects and analyzes data, and writes the manuscript. DL and DY developed research and design concepts, assisted in data analysis, provided suggestions, and input, and review the manuscripts.

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## CONFLICT OF INTEREST

The authors stated that there was no conflict of interest in this study.

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