

Nurses' Perceptions of Covid -19 Pandemic in Pontianak City West Kalimantan Indonesia: A Qualitative Study

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Abstract— Nurses are the most substantial medical personnel in a hospital or community health center and they have the highest frequency of contacts with patients in 24 hours. They are highly active during the pandemic, which made them vulnerable to the virus. Causing the nurses to be easily stressed and fatigued which will affect their body and eventually their immune system. The nurses were also overwhelmed by the fact that their families and friends can contract the virus from them if they were infected. In addition, there's also fear of rejections and discriminations from the society towards them and their families. Objective to describe and to explore the perceptions of nurses as medical workers on the co-19 pandemic in Pontianak City, West Kalimantan. For method, this research uses a qualitative descriptive method with the phenomenological approach by interviewing five nurses who have worked with COVID-19 patients in a state-owned hospital. For the result of this study, the researchers have found six themes related to nurses' perceptions of the COVID-19 pandemic, namely 1) The impact of the COVID-19 pandemic on the lives of nurses, 2) Nurses' efforts to protect themselves from COVID-19, 3) causes that resulted to nurses exposure to the COVID-19, 4) Nurses' experience when using PPE, 5) Obstacles and challenges experienced by nurses during co-19, 6) Nurse's expectations during epidemic COVID-19.

Keywords— Perception, Nurse, Covid-19.

I. INTRODUCTION

Covid -19, is a potentially fatal disease that represents a major global public health problem. The SARS-CoV2 virus infects the lower respiratory tract and causes pneumonia in their victims, with milder symptoms compared to the SARS or MERS infections, but ultimately turned into a deadly hyperinflammatory disease and respiratory dysfunction [7]. The outbreak of the COVID 19 virus that developed in a relatively short time from 2019 began from the city of Wuhan, China, made all the countries in the world have to fight in various lines and divisions to survive together. The situation got worse when vaccines and specific treatments have yet to be discovered as they are still in the research phase. Various sectors such as economic, social, and political sectors have reached a critical phase during the pandemic and the last one holding as the most crucial sector during the pandemic is the health sector. Health workers such as doctors, nurses, and nutritionists are those who will be the first to be exposed to the virus due to their job treating the infected patients. [2], there are approximately 8744 active nurses in West Kalimantan. Meanwhile, the total number of COVID-19 positive cases in West Kalimantan has reached 118 cases with 3 confirmed

death and 11 confirmed to be cured. In total, there were 24 medical personnel in West Kalimantan who were infected by Covid-19. Seven of them were specialist doctors, four were general practitioners, and the rest are nurses [5].

Nurses are the most substantial medical personnel in a hospital or in a community health center, and they made contact with patients 24 hours a day. Their physical activity is very high where they have to treat the infected patients for 24 hours a day. There's also fear among nurses where they could have contracted the virus unknowingly. This causes the nurses to be easily stressed and exhausted and will affect their body and eventually, their immune system. A weak immune system can make a body to be more vulnerable to various disease including the COVID-19 virus. If nurses were infected with this virus, they would become the next COVID-19 carrier, endangering both their families and their surroundings.

According to Tan, et al. (2020) the results of studies done in Singapore showed that COVID-19 affects the medical and non-medical staff who worked in hospitals where they showed symptoms such as anxiety, stress, post-traumatic stress disorder (PTSD) and depression. While the study of Huang, et al (2020) in China shows that nurses experienced negative emotions such as anxiety and fear. This reaction is reasonable because nurses have responsibilities towards their profession and relatives. Nurses are also members of society, which means that if they were to be infected by the virus, they would jeopardize their families and the surrounding community.

According to Agung (2020), medical workers (doctors, nurses, & staff) are facing an uncertain situation, full of risks, and depressing making them vulnerable to psychological disturbances. COVID-19 has a significant impact on the mental condition of health workers, especially nurses. Aside from being inundated by fear of transmitting it to their families and community, nurses have also become an object of fear by society. therefore there is news showing how nurses are being rejected by their families and community when returning from work. According to Muhyidin (2020), there is a number of cases where nurses were being intimidated, before getting expelled from their apartments due to the fear of them bringing the virus to the society. Socialization related to the stigma against the patients, nurses, and families related to COVID-19 patients is needed in order to protect those who were being discriminated against.

From a preliminary survey that has been conducted, it

turns out that there are many nurses who were worried and afraid of contracting the virus because they could transmit them to their families when they got home. in addition, there is also this fear of being rejected and discriminated from the community. Looking at this phenomenon, researchers wanted to assess the nurses' perceptions of COVID-19 in West Kalimantan, Indonesia.

II. OBJECTIVES

To describe and explore the perceptions of nurses as medical workers on the co-19 pandemic in Pontianak City, West Borneo, Indonesia.

III. METHODOLOGY

This research uses a qualitative descriptive method with the phenomenological approach by interviewing five nurses who have worked with COVID-19 patients in a state-owned hospital. In-depth interviews were conducted online and lasted for approximately 30 minutes on each respondent, recorded as a video. After obtaining the data, it was then transcribed, coded, and analyzed until a theme was formed.

IV. RESULT

For the result of this study, the researchers have found six themes related to nurses 'perceptions of the COVID-19 pandemic, namely:

Kategori	Sub tema	Tema
<ul style="list-style-type: none"> - Lack of personnel - High risk of virus exposure - Keeping distance with family members - Worried that their family might be exposed to the virus - Can't meet with their friends and relatives - Decreasing of stamina - Worried, Stressed, and afraid 	The impact of the COVID-19 pandemic on the job, household, friendship, physical, and psychological of the nurses.	Impact of the COVID-19 pandemic on the lives of nurses.
<ul style="list-style-type: none"> - Always wearing Personal Protective Equipment (PPE) - Frequently took a bath - Changing clothes - Consuming nutritious foods - Consuming Vitamins and Honey - Working out - Sun bathing in the morning 	Efforts that internally and externally done by nurses in protecting themselves from COVID-19.	Nurses' efforts in protecting themselves from COVID-19.
<ul style="list-style-type: none"> - Removing PPE imprudently - Incorrect PPE's removal protocol - Unprotected direct contact - Lack of personal hygiene - Stressed and fatigued - Dishonest patients and families 	Internal and external factors that can expose health workers to the COVID-19.	Several things that cause the nurses to be exposed to COVID-19.
<ul style="list-style-type: none"> - Sultry, stuffy, and movement difficulties - Blurry sight - Difficulties on doing things - Can only last for 4-5 hours 	Various sthings experienced by nurses when wearing a PPE.	What the nurses felt when using a PPE.
<ul style="list-style-type: none"> - Fear of family's rejection if the patient died - Uncooperative family when being educated - Raging family - Unprepared patient and families - There aren't any nursing care plan yet 	Various obstacles and challenges felt by nurses while treating COVID-19 patients.	obstacles and challenges felt by nurses while treating COVID-19 patients.
<ul style="list-style-type: none"> - For government to be more efficient, wise, and provides more infrastructure - Consistent - For a faster swab result - For Nursing Professional Organization to publish a nursing guide 	Nurses' expectations on the treated patients, society, hospital management, and the government	Nurses' expectation during the pandemic.

Theme 1: Impact of the COVID-19 pandemic on the lives of nurses.

Being a nurse possesses a very high risk of exposure to the COVID-19 virus, the lives of nurses have undergone several changes in terms of profession, social, household, physical, psychological, and economic. A nurse's job during the pandemic becomes more difficult and exhausting as they have to work while worrying about being infected. in addition, their friends and family will also keep their distance due to the fear of being infected. working while being worried about getting infected physically overwhelmed the nurses, while the idea of being a carrier to the virus psychologically overwhelmed them. They were afraid that they would be rejected and

discriminated against by their family and society. This was shown in the participant's statement as follows :

“...Because the COVID-19 pandemic is a new virus, there were many ordinary room nurses who were being moved to the COVID 19 isolation room, leaving the inpatient room short of staff. ...”(R1)

‘...It affects my home, there are anxieties in receiving guests or socializing and I end up making a washbasin and a hand sanitizer in front of the house...’ (R1)

“...Pay more attention to your endurance, stamina, and health

both physically and spiritually by frequently praying to god. ...”(R2)

“...This work, in my opinion, is at high risk of exposure...”(R3)

“...My friends were afraid of meeting me, because of my work, so we only meet via social media. ...”(R3)

“...I was worried that if I was exposed, my family would also be exposed too, and the community will avoid me and my family, even to go as far as discriminating against us, it would be hard especially for my children ...”(R4)

“...It highly affected me psychologically, especially knowing that I'm medical personnel and have parents. I was afraid that my family, especially my parents, will be affected by COVID 19 because older people who have comorbidities are highly vulnerable to the virus....”(R4)

“...It stressed me out and I hope it would end soon, it saddens me seeing a dying patient. ...”(R4)

“...It highly affected my friends because we can't meet each other, and if there were any emergencies we can only meet through social media.. ... (R5)

“...My body condition tends to degrade in performance from before the outbreak. ...”(R5)

Theme 2: Nurses' efforts in protecting themselves from COVID-19.

To prevent the exposure of COVID-19, externally nurses were required to properly use and remove PPE, frequently changing clothes and took a bath before going home. It is highly recommended for the nurses to sunbathe in the morning, and remember to always use masks and wash their hands. While internally they were recommended to consume nutritious food, routinely exercise, drink honey, and vitamins. Psychologically, they were recommended to calm themselves through religious practices such as praying to God. This is in accordance with the statements of respondents as follows ::

“...To always use a PPE when meeting the patient and then clean yourself after meeting the patient, and do not forget to always clean the table chairs and doors where we work. ...”(R1)

“...Wash your hands, wear a mask when you're going anywhere, immediately took bath and wash your clothes after getting back from outside.....”(R2)

“...Take proper precautions as much as possible and be vigilant, I myself took a bath every shift. ...”(R3)

“...I always change my clothes in my own room, and I always took bath first before meeting my family. ...”(R4)

“...I ate nutritious foods, regularly exercise, sunbathe, took vitamin C, and honey every day. ...”(R5)

Theme 3: several things that cause the nurses to be exposed to COVID-19.

Nurses will be prone to the virus if they removed their personal protective equipment (PPE) not in accordance with the Standard Operating Procedures, they were not provided with proper infrastructure, they failed to maintain their personal hygiene, they were too exhausted resulting them to have weaker immunity, and then if the patients and their families were not being honest to the staff in providing information during an assessment, according to the respondent's statement as follows:

“...After meeting the patient, PPE must be removed in accordance with the protocol because the nurse can be exposed easily with improper removal of the PPE. Hygiene should be maintained constantly whenever the nurse was leaving or visiting the patient room. Every corner of the room should be regularly cleaned. These things are very important in reducing the risk of virus exposure.. ...”(R1)

“...An improper PPE removal and not in accordance with the safety protocol.....(R2)

“...When having contact with PDP Patient, the nurse often lack awareness, lack of personal hygiene, and lack of distancing.(R3)

“...Patients and families who are not being honest to the medical staff and not open during a health assessment. ...”(R4)

“...Exhaustion and stress can degrade our immunity ...”(R5)

Theme 4 : What the nurses felt when using a PPE.

There are many discomforts of using personal protective equipment (PPE) such as hot temperatures, stuffy breath due to multi-layered masks, blurred vision on the face shield, and movement difficulties due to the Hazmat suit's stiff and heavy nature. And then there's also a problem with gloves (handscoon) that troubled the nurses in performing a treatment this was expressed by respondents as follows:

“... It was hot, hard to breathe, and hard to move freely...” (R1)

“... First time using it, it felt hard to breathe and my view was a little unclear, but overtime I became used to it...” (R2)

“... I can use it for 4-5 hours maximum, it was kinda hard to breathe and it felt like I'm gonna pass out if I kept using it for long...” (R2)

“... If it's a thick handscoon, then it's pretty hard to do something...” (R3) “... Can use the PPE for 4 hours maximum, it's stuffy...” (R3)

“... Hard to move because there's a pretty hard material...” (R4)

“... It was definitely hot, even in an air conditioned room, because it's pretty sealed and had a double mask...” (R5)

Theme 5: obstacles and challenges felt by nurses while treating COVID-19 patients.

one of the challenges in treating COVID-19 patients is that nurses are worried if the patient that was being treated died because all nurses expect the patients to recover. And then, the nurses also feel hampered with the patients' families who were not ready or even refused the Safety Protocol for COVID-19 patients. Nurses were also hampered because there aren't any nursing care provided by the nursing professional organizations, this was stated by respondents as follows:

"... I always worry if the patient can't make it out alive, and then the family didn't agree for a Covid procedural burial. There was always some families who didn't want to be treated in an isolation room, or even to be buried in a Covid procedural burial..." (R1)

"... the obstacle in trying to educate a patient's family whose not cooperative..." (R2)

"... The challenge is when there's a family whose upset and doesn't want to accept the conclusion that they have Covid..." (R3)

"... Many patients and families who cannot accept the possibility that they have to pass away and receive a Covid procedural burial..." (R4)

"... there is still no nursing care that is enforced in theory that we can learn..." (R5)

Theme 6: The Nurses Expected in pandemic covid-19

The nurses expected things such as the patients' recovery, the community to not panic follow all the COVID-19 procedures and protocols such as staying at home, keeping distance, wearing a mask when leaving the house, and washing their hands before and after doing activities. Nurses also expected the nursing professional organizations to provide Nursing Care Plan in handling COVID-19 and the government to be more effective and prudent in making decisions, for example, faster results of swab checks, and sufficient number of PPE, these are in accordance with the participant's statement as follows:

"... I hope that all rooms, all colleagues in this hospital can stay solid with each other and work together in taking care of this Covid-19 problem..." (R1)

"... I hope that people keep doing the physical distancing, for those that feel unwell to stay at home as they could as possible, don't go outside unless it's very important, always use the mask when going outside and wash the hands before and after doing something..." (R2)

"... Counseling nurses to be more efficient, so that we don't have to additionally explain many things to the patients and families, just taking care of them..." (R3)

"... I hope that the government will keep taking care of the people, giving wise adjustments and providing decent facilities and infrastructures so that the people could stay healthy even when they're outside, and I hope that the swab test's results can come out quickly without any unnecessary problems..." (R4)

"... professional organizations to be more active in taking care of their working members' and then they can provide them with good guides to deal with the Covid-19..." (R5)

"... the need for clear protocol in working especially in terms of nursing, because our field is a specific field..." (R5)

V. DISCUSSION

The COVID-19 pandemic affected the nurses' lives in many ways, including profession, friendship, family, and community. The nurses knew that their job as medical staff is risky as they have to make direct contact with the patients 24 hours daily, making them highly vulnerable to the virus and the idea of transmitting it to their family terrifies them. The transmission will not stop only to their family, but also to their surrounding community. The same thing happened with other nurses who didn't have to work with COVID-19 patients, they were afraid of getting infected from the nurses who have handled COVID-19 patients. Meanwhile, the family would feel contradicted between pitying their nurse family, agreeing with the nurses to do their job, and there is also fear of contracting it from them as they returned home.

Physically, the nurses were overwhelmed with fatigue and stamina degradation due to their job treating COVID-19 patients. To counter these, they routinely consumed nutritious foods and vitamins. While psychologically, the nurses often overwhelmed with stress knowing that they were vulnerable to be infected. They were also afraid of being shunned by their family, friends, and the community. This in accordance with the results of the Pfefferbaum study (2020) which states that inadequate COVID-19 testing kits, limited treatment options, limited medical supplies, extended workloads, and family concerns, are a source of stress for medical personnel and can potentially reduce their immune system.

Nurses' efforts in protecting themselves from Covid-19, can be seen from the various activities that the nurses prepared for themselves. This includes such things as consuming nutritious food, exercising, and maintaining their mental health frequently doing religious practices. Externally the nurses have to follow the protocols established by the government such as using personal protective equipment properly, washed their hands frequently, and taking a bath before heading home. Aside from that, they were required to keep all of their clothes, used bags, tables, chairs, cellphones, and everything they touched to be sterilized. This is in accordance with the results of the study done by emphasizing that the job of nursing is complex when it comes to pandemics, again highlighting the conflict between their duties as medical professionals and their work demands and the need to protect themselves, patients, their families, and colleagues.

The nurses stated that the reasons why they were exposed to COVID-19, was mostly because of the errors done while removing a PPE. to properly perform the removal, the nurses needed a specific room where they can immediately sterilize themselves by taking a bath, washing their hands, and changing their clothes. Another reason for the exposure was due to their body condition that degraded as the result of stress and fatigue. Therefore, the nurses' and other medical workers' health conditions should be maintained and regulated

constantly by the hospital and government management. Pfefferbaum's opinion (2020) stated that dealing with the nurses' stress can be done by monitoring each and every nurse's reaction and performance, regularly changing their tasks and schedules, modifying their expectations, and creating some sort of mechanisms that can give them psychosocial support such as providing them with a counseling service in every hospital service. According to research done by Zhou, in Wuhan (2020) founded that 46.5% of nurses who worked around eight hours per day experienced fatigue and it affected their attitudes and performances in providing references to prevent further spread of the epidemic.

Nurses' experience when using a PPE can be described as follows: the nurses are only able to use PPE for five hours due to the excessive heat, their vision was blurred, it was hard to breathe in, and then, they find it difficult to perform medical procedures due to the PPE was dense and heavy. Thick gloves also made them harder to perform procedures such as doing injections, giving medicine, and holding medical items. So it is best for PPEs to be made with and light and chilly materials, using elastic yet strong gloves, as well as clearer facial shields making sure that their vision won't be blurred. It was also important to make sure that the environment to be cool with good circulation. Hospital management should manage the nurses' schedules properly so that they don't have to wear PPE for too long. And they also have to pay attention to the room's temperature, this is in accordance with Whitfield's research (2020), given the impact of COVID-19 on the medical system in Australia, the medical system will require additional resources and staff every day. The pandemic response planning section noted that there are many paramedics who were exposed and became unable to work and this will only worsen the shortage of medical workers.

One of the many obstacles and challenges felt by the nurses during the pandemic was the fact there were many families who are still unable to accept the fact that their relatives were infected by COVID-19. There's a lot of rejections coming from the patient's family when the patient was about to be quarantined to the point of violence. Therefore, it would be better for the hospital to perform counseling for the patient's family so that an understanding between the two parties can be established. If this idea were properly realized, the nurse who handles the patient would no longer need to explain to the patient's family about the procedures, and the nurses can finally focus on treating the patient. this is in accordance with Maguire's opinion, (2020) it is very important for paramedics to ensure their own personal safety and the safety of others when performing medical care. Part of this code deals with minimizing risk, with the Board recognizing that a proper practice involves risk minimalizing, encouraging the paramedics to take '... All reasonable steps to address the problem because the patient's safety is the top priority.

There are various expectations and hopes coming from the nurses working during the COVID-19 pandemic. They hope the patient to be cooperative all the time and can recover soon, there are those who expect the society to properly follow the COVID-19 protocols and regulations such as to work, study

and worship at home, to wear masks whenever leaving their houses, to always wash their hands, and to actively keep their physical distance with each other. Meanwhile for professional organizations, the nurses' expected them to pay attention to the physical and psychological needs of the nurses and to provide protocols for handling COVID-19 patients that can be used as handbooks. And then there are also expectations directed for the government and hospital management to regulate effective and efficient policies, such as speeding up the process of examination results for patients so that detections can be faster and effective intervention can be performed. Maguire, (2020) stated that the most effective approach that can be done as medical workers' management involves the requirement of strong leadership, by providing examples, doing open discussions with the workers, providing adequate information, assuring protections, and voluntariness in terms of allowing medical care workers to determine the risk level they would receive and the reallocation of workers needed. This is in accordance with the Government's efforts to suppress the spread of COVID-19 through several ways: 1) Establishment of COVID-19 Handling Task Force based on Presidential Decree No. 7 of 2020 (Keppres No. 7 of 2020, 2020; Keppres No. 9 of 2020, 2020). 2) Implementation of Large-Scale Social Restrictions (PSBB) in a number of provinces, districts, and cities affected by COVID-19, advocating a healthy lifestyle, wearing cloth masks, washing hands with soap, and others.

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