

# The Experience of Nurse Managers Implementing A Nursing Management System in COVID-19 Wards: A Descriptive Phenomenology Study

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## Abstract

**Background:** The nurse manager is one of the nurses who has authority to implement a nursing management system in a nursing organization to achieve goals based on the input, process and output stages, whether the Covid-19 pandemic has positive and negative impacts on the implementation of the nursing management system. Nursing management is a form of coordination and integration in achieving nursing care and nursing services.

**Purpose:** The purpose of this study is to explore the experience of nurse managers in implementing nursing management system in the COVID-19 wards.

**Methods:** This study used a phenomenological descriptive design and in-depth interview data collection methods. Furthermore, the implementation of this research was carried out in 10 hospitals in North Sumatera, especially Medan City, Deli Serdang Regency and Serdang Bedagai Regency. The participants involved in this study were 20 participants and used the Collaizzi data analysis method.

**Results:** This study revealed 7 themes related to the experience of nurse managers running a nursing management system in the COVID-19 treatment room ; (1) Requires extra high discipline to carry out nursing management functions, (2) There is a psychological disorder for nurse manager to carry out nursing management, (3) Requires moral and material support in carrying out their duties, (4) Performs various efforts to disseminate information on nursing care management systems, (5) Experiences more benefits in implementing nursing management in the COVID-19 ward, (6) Faces complicated obstacles in carrying out nursing management, and (7) Has high expectations in carrying out increasingly complex management functions.

**Conclusion:** From the themes above, the researcher concludes that the nursing management system in the COVID-19 treatment room involves psychological feelings, requires extra self-preparation, requires support from all parties in providing nursing care, improving nursing services to the fullest and can develop the concept of nursing management system during a pandemic.

**Keywords:** covid-19; management; nurse manager.

## Introduction

COVID-19 is spread from person to person through droplets released when an infected person coughs, sneezes, or talks. The most common signs and symptoms of COVID-10 are fever, cough and trouble breathing. The transmission system is by direct contact such as touching, coughing and mobilization in the affected area (Balkhair, 2020). Nurses are one of the most important professions in handling COVID-19 (Kirkland, 2020). Nurses provide quality and credible nursing care during a pandemic. Then Nir (2020) stated that nurses are at the forefront of fighting the COVID-19 pandemic.

Due to the COVID-19 pandemic, one of the professions affected is nursing. According to Daly et al., (2020) the role of nurse managers is very much

## OPEN ACCESS

### Jurnal Keperawatan Padjadjaran (JKP)

Volume 10(1), 73-82  
© The Author(s) 2022  
<https://doi.org/10.24198/jkp.v10i1.1962>

#### Article Info

Received : January 27, 2022  
Revised : April 18, 2022  
Accepted : April 29, 2022  
Published : April 30, 2022

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#### Citation

Sutejo, J., Setiawan, S., & Syam, B. (2022). The Experience of Nurse Managers Implementing A Nursing Management System In COVID-19 wards: A Descriptive Phenomenology Study. *Jurnal Keperawatan Padjadjaran*, 10(1), 73–82. <https://doi.org/10.24198/jkp.v10i1.1962>

#### Website

<http://jkp.fkep.unpad.ac.id/index.php/jkp>

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E-ISSN: 2442-7276  
P-ISSN: 2338-5324

**Table 1.** Demographic Characteristics and Length of Works of The Participants (n=20)

Characteristic	n	%
Age		
26-35 Year	5	20
36-45 Year	15	80
Education		
Diploma III	7	35
Bachelor	12	60
Master	1	5
Working Agencies		
Government Hospital	11	55
Private Hospital	9	45
Length to work In Covid wards		
Under 3 Month	0	0
More than 3 month	20	100

needed during the current pandemic, which is to be able to lead wisely, be strong, provide motivation, courage, and enthusiasm for work to nurses, so that nurse managers and staff will be more effective in achieving a successful nursing service, both in improving health and in using technology (Baykal et al., 2020).

Furthermore, important steps can be taken in improving nursing performance with the competence of nurse managers and influencing the nursing management system (Moghaddam et al., 2019). The implementation of nursing management by nurse managers in hospitals has shown positive results, where this statement was conveyed by Coleen Arlette Cox (2019) in her research, stating that nurse managers and staff show a close relationship in carrying out clinical and non-clinical care. The statement was also conveyed by Turkmen et al., (2020) that in nursing management, there are three important elements that nurse managers must do in planning for the COVID-19 pandemic, such as expanding care capacity, number of beds, providing competent nursing staff in sufficient numbers and ensure the completeness of materials and equipment for the needs of patients and staff. Nurse managers need to do all the management of the nursing system.

Nurse managers must play their role in accordance with COVID-19 conditions, apply and implement nursing practice skills (training on isolation wards, patient care isolation and operational standard procedure in covid-19 wards) during the pandemic (Hoffmann et al., 2020). Based on the explanation above, the researcher wants to know how to implement the nursing management system during the COVID-19 pandemic, and explore further and deeper about the experience of nurse managers in implementing a nursing management system in the COVID-19 treatment room at the North Sumatra Hospital.

## Materials and Methods

### Study design

This study used qualitative research methods with descriptive phenomenological designs. Descriptive phenomenological studies were to interpret the life experiences experienced by a person and a powerful way to understand subjective experience or gain insights into people's actions, motivations, bypass long held or challenging assumptions (Polit & Beck, 2018).

### Sample/participants

The study was conducted in 10 hospitals in North Sumatra, with 20 participants in the implementation of this study. The criteria for research participants were as follows; participants were nurse managers who served in the COVID-19 wards at a hospital in the North Sumatra region, served in isolation wards for more than 3 months and willing to be participants. In this study, the participant taking technique used was purposive sampling.

### Data collection

The study was conducted from March to July 2021. Qualitative data collection was conducted using data collection with in-depth interviews. Before interview, researcher made a contract with participants, providing informed consent and explaining the research objective, asking questions according to valid guidelines. Interviews were conducted with a time span of 50 to 60 minutes using a voice recording medium. This was done in one session, but if data had not reached saturation, the interview would be conducted again in the hope of achieving saturation. The interview was stopped if bored or off the research topic and the results of the interview were clarified with the participants. The interview was conducted to 20 people using two techniques, namely face to face interview and online using the

**Table 2.** The results of the theme of the experience of nurse managers in running a nursing management system in the COVID-19 ward

Themes	Sub-theme	Category
Carry out extra nursing management functions and high discipline	Planning	Planning PPE needs
		Application of PPE
		Apply staff
	Briefing	Ask staff
		Delegate tasks
		Give responsibility
		Coordination with the COVID-19 team
		Provide new policy information
		Provide psychological support
		Provide support with working conditions
	Staff Setting	Socialization of use and release of PPE
		Socialization of standard operating procedures
Convey discipline in the use of PPE		
Have a nurse registration certificate		
Supervision	Recruiting staff from the regular wards	
	Doing staff mutation	
	Setting shift	
	Monitoring via CCTV	
Expression of psychological feelings in caring out nursing operation an COVID-19 wards	Feel the ups and downs of being the nurse manager running nursing management	Staff performance appraisal
		Feel the ups and downs of being the head of COVID-19 room
	Feel afraid of being exposes to COVID-19 wards	Feel the ups and downs of implementation a nursing management system.
		Feel afraid of being exposed to COVID-19
	Provide challenges while on duty in COVID-19 wards	Feel scared in the COVID-19 room
Feel the weight of being the nurse manager in COVID-19 wards	Give a challenge to be the head of the COVID-19 room	
	Provide a challenge to carry out the task	
Feel stressed with a lot of work in COVID-19 wards	Feel it's getting harder to be the head of the COVID-19 room	
	Feeling stressed with a lot of work	
	Feel the stress in the COVID-19 room	
Get moral and material support while on duty	Receive training support and awards	Feel the stress of running a nursing management system
		Get training on COVID-19 wards for use and release PPE
	Standard availability	Reward to nurse
Obtain nutrition support and incentive	Standard operation procedure is the same as the regular treatment room	
	Get nutritional needs	
Make various efforts to disseminate information on COVID-19 care	Limited to explained information	Get incentive from hospitals and government.
		Doing discussion and share
		Using social media
		Access information with Google

Sutejo, J., et al. (2022)

**Cont. Table 2.** The results of the theme of the experience of nurse managers in running a nursing management system in the COVID-19 ward

Themes	Sub-theme	Category	
Feel more benefits in implementing nursing management	Get a bonus from the ministry of health	Manage more effectively	
		More focused	
	Caring out tasks easily	Works well	
		Maximize service	
		Easy care service	
		Provide satisfaction to patients	
		Nurse is satisfied	
		Implementation according to standard	
		Achieve nursing care	
		Patient go home healthy	
Face complicated obstacles in carrying out nursing management	Limitations of standard operating nursing procedures applied in isolation wards	Shortage of PPE in COVID-19 wards	
		Inadequate PPE needs	
	Get response from patient and patient's family	The patient's family complains	
		Uncooperative patient's family	
		Complaints from patients	
	Limitations of staff	Refusal of the patient's diagnosis	
		Experiencing a staff shortage	
		Lack of human resources	
		Demand needs are not expected	
	Difference of characteristics	Staff doing disobedience	
		Have a different character from staff	
	Limited of standard operational procedure	No availability of standard operational procedure	
		Standard no yet available	
	Limited facilities and medical equipment funds	Incomplete facilities and infrastructure	
		Inadequate medical equipment	
	Activity limitations	Broken medical equipment needs	Experiencing fatigue
			Have limited movement with the use of PPE
Feel heavy doing activities		Feel the heat	
		Communication limitation in COVID-19 wards	
Limitations of supervision		Limitations of mobility	
		Carrying out a doctor's visit in COVID-19 wards	
Incentives have not been disbursed		Doing according to standard operational procedure	
		Minimize complaints	
Have high hopes in carrying out management functions		Nurses working in covid wards must be doing managements functions	Improve service
			Give healing

telephone. During face-to-face interview, researcher used KN95 masks, kept distance, brought hand sanitizer and interview was conducted in a special room, such as in meeting rooms or in the head office. The tools used, including: (1) voice recorder and note book, (2) in-depth interview guideline, (3) Questions about the nurse manager's system management nursing the guideline.

### Data analysis

The data analysis used is qualitative with content analysis. Using the Colaizzi's 1978 method as follows: (1) reading and rereading descriptions, (2) extracting significant statements, (3) formulating meanings, (4) categorizing into clusters of themes and validating with original text, (5) describing, (6) returning to participants, (7) incorporating any changes based on the informant's feedback. The analysis process was carried out as follows: the researcher conducted interviews with participants, then the results of the interviews were changed in the form of interview transcripts. Next, the researcher read the entire transcript and then returned it to the participants to correct whether the data provided was correct. In the next stage, the researcher extracted from the interview transcripts to obtain the meanings of the transcripts, then the researcher grouped each category obtained from that meaning so as to obtain a theme that was in accordance with the specified topic. After the theme was obtained, the researcher conducted crosschecks and feedback from the informants or participants. The results of the themes from the informants were then formulated into research results.

### Trustworthiness/rigor

The principle of trustworthiness was applied to ensure accuracy in qualitative research. The principle in the data validity test were credibility, dependability, transferability and confirmability. In particular, credibility was maintained through prolong engagement techniques, observation, comprehensive field notes, triangulation, and member checking, which was performed with reference to the truth of data and its interpretation. The concept of transferability depended on the researcher's knowledge of the sender's and the recipient's context – attained through detailed descriptions. Meanwhile, dependability was conducted by checking the interview and field notes in order to produce themes for participants and to maintain data stability. Furthermore, confirmability was carried out by examination results, which involved the input of three nurse experts in the aspect of system management nursing.

### Ethical considerations

This study was approved by the Research Ethics Commission of the University of North Sumatra. No. 101/Kep/USU/2021. Informed consent was obtained for this study with hardcopy. The participants dropped out if rejected or refused and had not worked in the

covid-19 wards for 3 months.

## Results

This study recruited 20 participants from 10 hospitals in North Sumatra province, around 55% government hospitals and 45% private hospitals, consisting of head nurses' room COVID-19 and most of them were aged 36-45 years. Most of the participants held bachelor's degrees in nursing (60%), while the other participants held diploma and master degrees (Table 1).

The implementation of the nursing management system in the COVID-19 treatment room during the pandemic COVID-19 was as follows ; (1) Carry out extra nursing management functions and high discipline, (2) There is a psychological disorder for nurse manager to carry out nursing management, (3) Requires moral and material support in carrying out their duties, (4) Performs various efforts to disseminate information on nursing care management systems, (5) Experiences more benefits in implementing nursing management in the COVID-19 ward, (6) Faces complicated obstacles in carrying out nursing management, and (7) Has high expectations in carrying out increasingly complex management functions.

## Discussion

### Carry out extra nursing management functions and in high discipline

When carrying out the nursing management function in the COVID-19 treatment room, nurses must be extra and have high discipline. They have to do massive planning, organizing, directing and monitoring. This is also stated by Tsay et al., (2020) who said that in combating the COVID-19 pandemic like this, nurse managers in Taiwan recruited staff to compensate for the labour shortage. This is in line with the results of research from Astuti & Suyanto, (2020) which states that the management of staff and nursing facilities such as power capacity with a balanced number of shifts and with adequate personal protective equipment will provide convenience in the services provided.

The nursing management process in the COVID-19 treatment room has differences, such as coordinating with the COVID-19 task force team, providing massive support to staff for the need for psychological support and the use or removal of PPE as well as staff psychological guidance or guidance. Based on the qualitative research conducted by Liu et al., (2020) the staff in the room needed great support to reduce the stress felt by the staff.

Furthermore, staff arrangements in the COVID-19 room consist of determining the criteria for staff in the room, recruiting staff, transferring, rolling and assigning shifts. This is also in line with the results of research by Poortaghi et al., (2021) which stated that the implementation of labour recruitment, managing labour arrangements and

manage workforce retention.

Then in carrying out shift arrangements by paying attention to conditions in the field, where staff always use PPE and get high demands for the tasks they do, the staff will not be comfortable to work and provide obstacles in the service process that is carried out. Based on the results of research conducted by Zhang et al., (2021) staff are more comfortable working with shift arrangements for 4 hours per shift. This is due to the use of PPE. If it is more than that, the staff will experience difficulty breathing, headaches and fatigue.

Another finding from this study was that in the implementation of supervision carried out in the treatment room using CCTV, the supervision was carried out to assess the performance of the staff in the treatment room. Besides that, the participants carried out intensive supervision of the patient's condition through CCTV.

### Expression of psychological feelings in carrying out daily nursing operations

In the COVID-19 treatment room, it was found that the psychological feelings of managers and staff experienced changed. Nurse managers experience feelings of joy and sorrow, fear, anxiety, stress, getting challenges and the workload getting heavier. In the results of the research by Ornell et al., (2020) mental health workers who work in the COVID-19 room have levels of stress, anxiety, and depression because working at the forefront will provide many other dimensions as a trigger for the stress. This was also conveyed by Xiang et al., (2020) who stated that during the pandemic, it gave a lot of psychological pressure for those carrying out duties in the COVID-19 treatment room.

Furthermore, there is an extra workload to manage inside and outside the COVID-19 treatment room, such as how to manage an unfamiliar room, having to coordinate with the cluster team, dealing with patients, families, and staff. This was also conveyed by Wahyuningsih et al., (2020) stating that an increase in workload or extras during this pandemic will have an impact on psychological conditions. (Xiang et al., 2020). The psychological feelings felt by the participants found in this study were the increasingly difficult task of being the head of the room, so that the burden faced by the participants is getting heavier. The research of Wahyuningsih et al., (2020) said that with a high workload due to additional hours of service and unexpected work.

Then the participants also revealed the challenges of being the head of the COVID-19 room and running the management system, while the challenges faced by the participants were that the participants had to be mentally prepared, prepared themselves and increased their adrenaline in this task. So, with the perceived challenges, participants had to prepare themselves to face pandemic conditions. The nursing management process in the COVID-19 treatment room would continue to

be carried out according to the common goal to be achieved, namely the achievement of nursing services to patients. Therefore, participants with psychological stress conditions would continue to provide the best nursing care and feel happy when the patients being treated feel healed (Karimi et al., 2021).

### Get moral and material support in carrying out tasks

In this study, the results obtained are getting moral and material support in carrying out the task. Moral support, such as getting education and training and awards, while material support is in the form of rewards and nutrition.

Education and training are given to staff to provide understanding and knowledge regarding COVID-19 rooms and treatments. The training carried out has an influence on staff performance, this will provide an increase in staff skills and knowledge. Getting training is one of the added values of room staff in providing nursing services (Astuti & Suyanto, 2020).

Furthermore, there are awards from professional organizations such as the Indonesian National Nurses Association (PPNI) in the form of certificates. Then there is material support in the form of giving rewards from the hospital and the government to participants in the COVID-19 treatment room. Rewards have a significant effect on the performance of nurses, and provide the view that rewards have an impact on performance (Isnainy & Nugraha, 2018). Support from policy makers is needed in providing financial and spiritual support so that it will provide protection and attention (Wahyuningsih et al., 2020). Furthermore, support is provided in the form of food, fruits, milk, supplements, vitamins and a place to rest. The provision of nutritional support is useful to provide increased stamina, immunity and health of officers in the room.

### Make various efforts to disseminate care information

Various efforts are made to disseminate treatment information by conducting discussions, sharing, using mass media and accessing information with Google. Information is obtained from several sources such as printed media, electronic media and through training (Notoadmodjo, 2003; Aisyah, 2021).

Several participants held discussions and shared to obtain the latest information related to COVID-19 treatment. They conduct discussions or share about the reciprocity of the information provided and provide each other with corrections or additions to the information submitted. This is done more effectively because it is obtained from a competent source, so that information about COVID-19 treatment is easily understood and applied by the staff in the room.

Therefore, social media and Google are an alternative reference for participants to access and obtain information related to treatment in the COVID-19 room as well as efforts to prevent the

COVID-19. This is in line with Aisyah's (2020) statement who said that social media had an influence on increasing knowledge related to efforts to prevent the COVID-19.

### Experience more benefits in implementing nursing management

Running a nursing management system in the COVID-19 room results in more effective management, achieved patient satisfaction, nurse satisfaction and implementation of care according to standards. In qualitative research, it is stated that effective nursing management is an important step to remove obstacles in providing care, motivation, and changing the management system will improve the quality of care (Rezaee et al., 2020).

The standard nursing care will provide achievements in accordance with the purpose of providing care, as well as having a positive impact on patients with patients feeling healthy. Work carried out according to standards will make the service process at the hospital runs smoothly and facilitates the achievement of nurse service goals for patients (Potter & Perry, 2005).

### Facing complicated obstacles in carrying out management

The implementation of nursing management in the COVID-19 room experienced various obstacles such as limited PPE, rejection from patients and patient families, staff shortages, staff cultural background, operational standards not fully available, limited infrastructure and medical equipment, exercise control and limitations to mobilization.

The shortage of personal protective equipment occurred at the beginning of the pandemic, such as hazmat, was anticipated by using raincoats as an alternative. Stocks for personal protective equipment are hard to find and if there are personal protective equipment, the prices are very expensive. Based on the results of Xie et al., (2020) research said that in China there was a shortage of nurses, little logistics, lack of personal protective equipment and disposable instruments.

Then, the patient and the patient's family refused when the service process was provided in the treatment room, the patient also complained and was not cooperative in the nursing care process that was carried out. In addition, the patient's family often refuses, complains and hinders work. The patient's family does not accept the condition of his family member who is tested positive for COVID-19, does not accept the reality that is happening and is difficult to coordinate.

Furthermore, the COVID-19 treatment room experienced limited staff. where the need for staff in the room still experienced imbalances with the conditions that occurred. This is due to the increasing number of patients being treated, the staff resigning and the increasing workload or overload in the treatment room. Officers who treat COVID-19

patients feel the addition of extra personnel and experience discomfort caused by the outbreak, intense work, large number of patients and lack of protective materials in the COVID-19 treatment room (Kim, 2018). Therefore, with sufficient resources, it can overcome staff performance problems and improve the quality of nursing services (Ahmadi, F et al., 2011; Rezaee et al., 2020).

According to the study, it was found that the increasing workload and labour shortage have become factors, where the limited workforce and the increasing number of patients will significantly increase the workload in the COVID-19 crisis and this is detrimental to physical and mental health (Lam et al., 2019).

Then what caused the shortage of staff in the COVID-19 treatment room, namely the staff restrictions carried out by the hospital to overcome the spread of infection that occurred. This means that more and more people on duty in COVID-19 rooms will increase mobilization and create crowds in COVID-19 treatment rooms (Stone, PW et al., 2004; Poortaghi et al., 2021).

The staffs in the COVID-19 treatment room had different ethnic, religious, cultural and experience backgrounds. The staff in the room had not known each other yet, had never worked in a team, so there were differences in nature, they were rebellious, and it was still difficult to work together. Based on the results of the study, the differences obtained had an influence on the implementation of the management of the COVID-19 treatment room, so that whatever the participants said to the staff was not easily accepted properly. So whatever was said would be ineffective for the staff to hear. In the study of Farajzadeh & Karimi (2020) it is said that communication between nurse managers and staff will have an influence in improving the quality of nursing care.

Then, another obstacle in implementing nursing management in the COVID-19 room that participants felt was the limited infrastructure and medical equipment. The constraints on facilities and infrastructure such as the condition of damaged room air conditioners, power failures, dead water faucets, damaged communication tools and damaged CCTV. Where the ward structure and facilities can have an influence on the quality of services provided, the availability of adequate equipment and facilities and effective communication will provide high-quality care services (Nobahar et al., 2014; Rezaee et al., 2020).

Furthermore, what participants felt in managing the COVID-19 treatment room were limited activities, which could be seen from feeling tired, having limited use of PPE, experiencing difficulty in carrying out activities, heat, difficulty in carrying out control and limited mobilization. For communication, it is felt that communication is less effective between patients and other officers, due to the use of strict personal protective equipment, so that the intensity of the sound emitted is neither appropriate nor valid.

The limitations in the implementation of supervision are caused by restrictions on entering the room and the duration of supervision is also small.

Furthermore, the delay in providing incentives from the government, where participants stated that the incentives they received had not yet been issued. The incentives that had not been issued yet were in November to March 2021, where this is due to the administrative process of patient input, the method of proposal to the centre and the current system. In the study, it was stated that the obstacles in carrying out managerial in the form of lack of human resources, lack of financial resources and inadequate equipment (Babaeipour et al., 2011; Rezaee et al., 2020).

### Have high hopes in carrying out increasingly complex management functions

Running a nursing management system in the COVID-19 treatment room has expectations in the form of running according to standards or SOPs, minimizing complaints, improving services and providing healing. The COVID-19 treatment room is one of the red zones in the spread or contamination of high COVID-19 transmission, therefore all forms of services and activities must be in accordance with the stages that have been set. Implementing standards will provide increased accountability for the performance of the staff in the room, so that the entire performance of the staff will be achieved in accordance with the expectations of the room, as well as providing clarity on the performance of each staff during carrying out nursing services. It was also explained that by carrying out all activities and activities running with SOPs, it became a performance appraisal tool oriented to internal institutional performance appraisal, especially in terms of clarity of work processes within the organization (Taufiq, 2019).

Then, to minimize complaints by carrying out nursing management that will have a positive impact on the room in the form of healing, maximizing room management and improving the quality of services provided. This is one of the things that participants have as a strong foundation in managing the COVID-19 treatment room. Indirectly, managing the COVID-19 treatment room is not as easy as an ordinary room, but participants must be able to manage it well as much as possible. This was conveyed by Karimi et al., (2021) who said that even in the psychological pressure, they felt they would still provide the best nursing care and feel happy if the patient who felt cared for felt healed.

### Conclusion

The nursing management system in the COVID-19 wards involves psychological feelings, requires extra self-preparation, requires support from all parties in providing nursing care and improving nursing services to the maximum. The nursing management system in the COVID-19 room is a

form of coordination, integration, management for nurse managers and the preparation of guidelines for the implementation of the nursing management system in the isolation ward.

### Declaration of conflict of interest

The authors have no conflict of interests to disclose

### Funding

The funds in the implementation of research are carried out independently by researcher

### Acknowledgement

The authors are a master's student in nursing at the University of North Sumatra. This research was funded by personal.

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