Experiences of discharge planning practices among Indonesian nurses: A qualitative study

Titik Kurniawan1,2∗, Kittikorn Nilmanat1∗, Umaporn Boonyasopun1∗, and Amelia Ganeifianty1,3,4

1Faculty of Nursing, Prince of Songkla University, Songkhla, Thailand
2Faculty of Nursing, Universitas Padjadjaran, West Java, Indonesia
3Department of Nursing, Dr. Hasan Sadikin Hospital, West Java, Indonesia

Abstract

Background: Discharge planning is vital to preventing hospital readmission, and nurses play a key role. The COVID-19 pandemic has posed challenges to hospital services that may persist or recur. Therefore, exploring nurses’ experiences with discharge planning practices before and during this pandemic is crucial.

Objective: This study aimed to describe the experiences of discharge planning practices among nurses at an Indonesian tertiary hospital before and during the COVID-19 pandemic.

Methods: A qualitative descriptive study design was used. Telephone interviews were conducted to collect data among ten nurses from March 2019 and continued between December 2020 and August 2021. Content analysis was done for data analysis.

Results: Two main themes emerged: 1) Challenges in discharge planning practices and 2) Perceived discharge planning as a professional responsibility. Implementing the inpatient ward fusion policy as part of the hospital’s pandemic response presented greater challenges to nurses in coordinating care and performing discharge planning. Fear of COVID-19 infection, social distancing measures, and using personal protective equipment also affected how nurses delivered discharge education during the pandemic. However, the nurses sensed a greater responsibility to ensure the maintenance of essential elements of discharge planning procedures to guarantee the patient’s capability to perform self-care at home.

Conclusion: Nurses viewed discharge planning practices as their responsibility and continued them during the pandemic despite facing various challenges. In addition to recognizing the significance of nurses’ roles in discharge planning practices and overall patient care, it is crucial to anticipate and address the diverse working patterns and styles among healthcare professionals in unified wards, ensuring effective coordination.

Keywords

COVID-19; pandemic; discharge planning; Indonesia; nurses; patient readmission; self-care

Background

Discharge planning (DP) is generally known as the plan developed to ensure patients’ continuity of care after leaving the acute-care hospital setting and returning to the community (An, 2015). This process involves assessing post-discharge needs, creating a plan, educating patients and families on self-care, and monitoring patients’ health post-discharge (Reddick & Holland, 2015). It also includes collaborating with community care facilities and supporting patients and their families (Bajorek & McElroy, 2020; Rodakowski et al., 2017). Recent systematic reviews have shown that DP practices effectively reduce unplanned readmissions and shorten hospital stays across various patient conditions (An, 2015; Gonçalves Bradley et al., 2016; Rodakowski et al., 2017). Inadequate preparation and planning for discharge can lead to post-discharge care failure or readmission (Zurló & Zuliani, 2018). Thus, effective patient and family preparation through DP is crucial to hospital service.

Effective DP necessitates the collaboration of various healthcare professionals (HCPs). Physicians, nurses, case managers, nutritionists, social workers, and health insurance agents are integral to the DP process (Rodakowski et al., 2017). Their collective aim is to ensure patients can engage in self-care and adapt behaviors for sustained health maintenance. Among these professionals, nurses frequently undertake the role of discharge planners (Hayajneh et al., 2020). While managing the DP process, nurses strategize, organize, and maintain communication with patients, families, and other healthcare team members. They evaluate the readiness of patients and caregivers for discharge, educate and assess patients’ understanding and ability to manage post-discharge care appropriately and continue caring for patients’ chronic needs (Rodakowski et al., 2017). Additionally, nurses play a pivotal role in communicating and coordinating patients’ care needs and discharge plans with other HCPs, as well as with patients and their families (Bajorek & McElroy, 2020).
As DP requires multidisciplinary collaboration, effective communication and coordination among HCPs emerge as pivotal factors (Agerholm et al., 2023; Plotnikoff et al., 2021). However, various studies highlight challenges in achieving effective DP. Recent evidence suggests that communication and coordination tend to deteriorate with increased involvement of more HCPs and organizations (Karam et al., 2018; Lundereng et al., 2020). Moreover, ambiguous DP-related roles among HCPs not only create uncertainty about specific responsibilities (Agerholm et al., 2023; Okoniewska et al., 2015) but also disrupt the cohesion and function of the HCP team (Gane et al., 2022). Beyond ambiguous roles, nurses face difficulties in engaging in discharge coordination due to their heavy workload (Agerholm et al., 2023).

The global healthcare system underwent significant impacts due to the COVID-19 pandemic. Hospital units were restructured, and HCPs were redeployed to COVID-19 service centers to meet escalating demands. Consequently, numerous routine and elective services were postponed or suspended (World Health Organization [WHO], 2020). Concurrently, a study reported decreased adherence to self-management practices among patients during the pandemic (Sakur et al., 2022). Additionally, a survey indicated that over half of COVID-19 patients with chronic illnesses required regular follow-up, with 83% assigned to follow-up appointments with primary care providers (Loerinc et al., 2021). Therefore, DP remains crucial in ensuring patients’ continuity of care post-discharge.

Indonesia suffered significant impacts from the COVID-19 pandemic, witnessing a surge in cases, shortages of personal protective equipment (PPE), and a high fatality rate among both COVID-19 patients and Indonesian healthcare professionals (Yunus & Andarini, 2020). A review highlighted the chaos in hospitals due to the influx of COVID-19 patients, leading to shortages in healthcare resources, oxygen, and PPE (Mahendradhata et al., 2021). Consequently, essential healthcare services at the community and public health center levels were suspended for community safety (Ministry of Health Indonesia & UNICEF, 2020). With limited healthcare services, the importance of DP increased during the pandemic, requiring patient readiness to manage their illness at home and prevent COVID-19 transmission.

Despite the pandemic’s disruption of hospital services, studies have consistently shown nurses assuming frontline roles as pandemic responders. Nurses have been fundamental across various levels of care and providing patient and family education (Sarango et al., 2021). To our knowledge, prior research had not explored nurses’ DP practices during pandemics in Indonesian hospital settings. Yoon et al. (2022) described disruptions in follow-up care for older adults in Singapore due to the pandemic. Similarly, another study stressed the necessity of non-traditional post-discharge assistance involving various healthcare organizations in monitoring and caring for COVID-19 patients (Shapiro et al., 2020). Earlier studies in Indonesia before the pandemic suggested sub-optimal DP practices, indicating a need for improvement (Asmuji, 2018; Hardivianty, 2017; Wulandari & Hariyati, 2019).

In 2023, the world enters the fourth year of the coronavirus pandemic. Despite a decline in global cases and an increase in vaccine coverage, COVID-19 has not been fully eradicated (del Rio & Malani, 2022) and remains a persistent threat, with the possibility of recurrence (Gao et al., 2022). In the upcoming era, the situation may not be as complex as in the previous pandemic, but there will still be positive cases, hospital admissions, and, unfortunately, deaths from COVID-19. Even in non-pandemic situations, nurses may frequently encounter smaller-scale pandemic-like scenarios, such as caring for patients with prevalent infectious diseases, particularly in Indonesia. Apart from the tropical climate, which facilitates the transmission of vector-borne diseases, Indonesia faces a significant and growing population of zoonotic infections that could potentially lead to local outbreaks or even pandemics (de Jong et al., 2018).

Therefore, given the phenomena and the research gap mentioned above, our study aimed to explore nurses’ experiences in DP practices in both pre and during the pandemic contexts. The findings will provide significant lessons for future healthcare services.

**Methods**

**Study Design**

A qualitative descriptive approach was utilized to explore the experiences of Indonesian nurses in conducting DP practices before and during the pandemic. These findings are part of a broader institutional ethnography study to explore how DP practices were carried out and structured at a tertiary hospital within the Indonesian context. Institutional ethnography involves examining the empirical connections between people’s daily lives in local settings and the broader administrative and governmental frameworks (Smith, 2005). The phenomena surrounding everyday nursing DP practices represent the social activities of nurses within the institutional world. According to Smith (2006), everyday DP practices are not randomly occurring but are regulated and organized by specific social relationships associated with the hospital. Thus, the findings presented represent the initial analysis of our research. This study adhered to the 32-item Consolidated Criteria for Reporting Qualitative Research (Tong et al., 2007).

**Setting**

The research was conducted in an adult medical ward in a tertiary teaching hospital in West Java Province, Indonesia. This specific ward comprises 32 nursing staff members and accommodates 72 beds. All nursing staff in this ward hold registered nurse qualifications and are designated to different roles based on their educational background and years of experience. These roles include nurse associate (holding a diploma in nursing and having less than ten years of experience or a bachelor’s degree with less than five years of experience), primary nurse (holding a diploma in nursing and having more than ten years of experience or a bachelor’s degree with more than five years of experience), and clinical case manager and nurse supervisor (possessing a master’s degree or specialist nurse status with over 15 years of experience). Nurses in these categories are responsible for delivering patient care, including DP. Alongside routine patient care, the primary nurse serves as the shift coordinator, while the clinical case manager oversees patients with specific or complex conditions and handles managerial tasks within the ward. Data for this research were collected initially in March.
2019 and continued amidst the COVID-19 outbreak between December 2020 and August 2021.

Participants
The nurse participants were purposefully recruited based on their level of experience with the hospital’s DP process. We included nurses who had worked in the selected ward for over a year and had experience with the DP of hospitalized patients. Initially, the head nurse facilitated the approach, providing eligible nurses with additional information about the research procedures. Those nurses who willingly consented to participate were recruited for the study. This recruitment process concluded upon achieving data saturation, marked by information redundancy and the emergence of less new information (Morse, 2015).

None of the approached potential participants refused to participate or withdrew from the study. In total, ten nurses were recruited and coded as P1 (participant 1) to P10 (participant 10). The average age of participants was 38.6 years old (ranging from 33 to 55 years old). Most participants were nursing school graduates with a bachelor’s degree and served as associate nurses. Almost all had been working for over six years (ranging from 1 to 16 years) but had not received any DP-related training.

Data Collection
After obtaining ethical approval and hospital permission to collect data, the first author initially met with the head nurse, who also served as a gatekeeper, to approach potential participants. All nurses received information about the research, data collection procedures, and the initial consent request during the shift handover session. Due to the COVID-19 outbreak restrictions, the originally planned face-to-face interviews were replaced with telephone interviews. Open-ended questions were utilized, encouraging participants to express themselves freely. Probing questions were formulated based on the key issues emerging during the interviews. Table 1 displays a sample of interview questions.

Table 1 Examples of interview questions

<table>
<thead>
<tr>
<th>Question examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Could you tell me about your involvement in DP practices?”</td>
</tr>
<tr>
<td>“How are the current DP practices compared to those of the non-pandemic era?”</td>
</tr>
<tr>
<td>“Could you describe your feelings when performing DP?”</td>
</tr>
<tr>
<td>“What do you think about the DP practices followed at this hospital?”</td>
</tr>
</tbody>
</table>

Each interview session was audio recorded and transcribed verbatim following its conclusion. Five participants underwent one interview session, while the remaining five (P1, P4, P5, P6, and P7) engaged in two sessions lasting 45 and 60 minutes each. Only the first author conducted the interviews, possessing experience in qualitative interview techniques, having completed a semester-long qualitative research course, and receiving training in qualitative data analysis. The second and third authors are skilled and experienced qualitative researchers. Additionally, the first author is a nurse educator and clinical instructor who previously interacted with the nurses in the study setting during his clinical supervision of nursing students.

Data Analysis
The research employed qualitative content analysis, following Elo and Kyngäs (2008). Data analysis occurred concurrently with data collection, involving the selection of the unit of analysis, coding, grouping, categorization, interpretation, and identification of main themes. Initially, the transcript underwent repeated readings, with the researcher coding critical keywords describing DP-related practices. These codes were then discussed with the second and third authors. Approved codes were subsequently grouped, collapsing similar or dissimilar categories into higher-order categories to reduce their number and enable comparison to formulate the main themes. Throughout the data analysis processes, two qualitative study experts (the second and third authors) actively engaged in online discussions to verify codes and sub-codes and finalize the identified themes.

Trustworthiness
The researchers applied various techniques outlined by Lincoln and Guba (1985) to enhance the trustworthiness of the study. Member checking was performed with each participant. The first author summarized the main issues raised and confirmed whether they accurately reflected the participant’s descriptions and thoughts during the interview. Additionally, participants were asked if there were any revisions or additional points they wished to include. All participants agreed with the summarized key issues. All authors held online meetings every 3-4 weeks to facilitate peer debriefing. These sessions covered discussions on the collected data, further exploration, future plans, and data analysis. Furthermore, the first author maintained a reflective diary during the fieldwork, documenting thoughts and emotions concerning the data collection processes and the acquired data.

Ethical Considerations
This study complied with the principles of the Declaration of Helsinki and obtained approval from the Ethics Committee of the Center for Social and Behavioral Sciences at Prince of Songkla University (approval no: 2019Nst – Ql 029) and the hospital’s ethics board (approval no: LB.02.01/X.6.5/350/2020). Participants were informed about the voluntary nature of their participation and that they could withdraw from the study before data collection concluded without facing any consequences. After receiving research information during shift handover sessions, potential nurses were provided with a participant information sheet and consent request. Nurses who agreed to participate were required to provide verbal and written consent. This consent was reconfirmed during telephone discussions to agree on interview times after adjusting data collection procedures. Participants were also involved in scheduling interview times and assured that all data they provided would remain confidential.

Results
Two main themes emerged regarding nurses’ experiences with DP practices at an Indonesian tertiary hospital before and during the COVID-19 pandemic: Challenges in DP practices and DP as a professional responsibility (Table 2).
Theme 1: Challenges in DP Practices

Before the pandemic, the study ward served patients with medical conditions. Nurses predominantly collaborated with internists and internist residents who were acquainted with each other’s working patterns. They had also established certain agreements to facilitate patient care coordination. Subsequently, the hospital implemented numerous policies and practices in response to the COVID-19 pandemic. Inpatient units were fused, accommodating different types of patients. The study ward was additionally tasked with caring for a diverse range of patients, including pediatric, chemotherapy, and surgical patients. Nurses highlighted that these hospital policies influenced and posed challenges to their DP practices in various aspects.

Challenges in coordinating care. Due to the ward fusion, nurses had to coordinate with several HCPs, who followed the transferred patients. Therefore, it became challenging for nurses to deal with primary physicians with different working styles. Our nurse participants expressed difficulties contacting the primary surgeon for patient care consultation or coordination since no assigned physician was in charge. One nurse narrated that:

"The (surgery) residents are frequently rotated....it was different from internal medicine students, who take responsibility for a particular patient from admission to discharge....the surgeon in charge often rotated from one patient to another....so, during hospitalization, a patient could be treated by many different surgeons.... So, sometimes, we had not finished working (on a patient), but the surgeon in charge had already moved on...and another surgery resident was now in charge." (P6)

The newly emerged difficulties also presented challenges to the nurses in coordinating patient treatment and discharge plans, including determining the discharge date. Surgeons often delegated routine visits to assess the patient’s vital signs and overall health condition to their junior colleagues, who might not have been fully informed about the established treatment regimen. As a result, the junior doctors occasionally couldn’t address the nurses’ inquiries regarding the patient’s treatment program and discharge plan. One of the nurse participants described that:

"...usually, the junior surgery residents in training regularly visited the patients to check their vital signs....but they often knew little concerning the treatment and their senior plan for patient treatments... so, generally, we provided daily post-operative wound care till the surgeon informed us that the patient would be discharged...the problem is that the discharge decision was not communicated until the day of discharge" (P8)

Before the pandemic, internal medicine residents typically communicated the discharge decision on the day of discharge. Within this limited timeframe, nurses faced difficulties in adequately preparing patient education and discharge-related documents, such as discharge summaries, instructions, follow-up visit forms, and other necessary administrative documents. Subsequently, a multidisciplinary agreement on DP was established in the studied ward. Part of this agreement stipulated that internal medicine residents should notify ward nurses about discharge decisions at least one day before the discharge date while handing over the completed DP-related documents. One nurse participant described that:

"... “Another thing that I encountered was when an internist abruptly informed us that the patient would be discharged immediately.... However, it is rare nowadays.... in the past, patients could be discharged without any prior notice, (and) no early information about it... now, it is informed at least one day before..." (P1)

Amid the pandemic situation and following the ward fusion, nurse participants highlighted that various working styles led to several DP-related challenges. Surgery residents typically visited patients in the late afternoon and frequently notified nurses about the patient’s discharge for that day, even though the patients’ DP-related documents had not yet been completed. Moreover, nurse participants explained that the surgery residents mentioned their previous practice in another ward, where they were not responsible for documentation, including discharge instructions, as it was typically handled by internists in the medical ward. Consequently, nurses struggled to complete all the necessary documents promptly, often delaying the patient’s discharge to the following day. One nurse narrated that:

"Since the (discharge patient’s) documents are not completed yet, patient discharge cannot be processed in the afternoon.... Say that the documents are completed by 3 PM, then the patient cannot be discharged on that day because (our agreement stipulated that) the documents must be completed before 2 PM..." (P1)

Furthermore, the nurse had to inquire and remind the surgery residents if they had instructed the patient on wound care at home or if other preparations were required for the patient before discharge. One nurse participant explained:
[43x152]...Most patients were discharged with surgical wounds...for this reason, we developed appropriate discharge instructions...how the patient to treat his/her wound at home... meanwhile, they (the surgeons) were not used to doing this... so, we had to frequently remind the surgeon...” doctor...when will the patient be discharged...what needs to be prepared before discharge? what about wound care?... what education should be provided to the patient?...” (P8)

**Challenges in providing patient discharge education.**

Nurses explained that the implementation of the ward fusion policy had an impact on their DP practices, especially concerning discharge education. Initially, the ward primarily served medical patients, and nurses were accustomed to providing discharge education on medical-related topics. However, with the inclusion of patients with diverse health conditions, nurses found themselves caring for patients with unfamiliar health conditions. Consequently, in certain instances, the nurses lacked confidence in addressing the discharge needs of these patients. One of the nurse participants described that:

“...we are not that familiar with some of the cases, as we do not deal with such conditions in our normal nursing routine...we did anyway though... we provided education on this or that condition, but we were not perfectly certain, whether or not the given information on the related topic was enough...or appropriate for that particular case”(P8)

Another challenge in providing discharge education was related to COVID-19 prevention measures. Nurses mentioned that they had to wear level-3 personal protective equipment (PPE) like hazmat suits, masks, gloves, and face shields as part of their daily practice during the pandemic. Previously, nurses working in isolation rooms wore this PPE before the pandemic. However, the nurses noted that the use of PPE during the pandemic differed. They emphasized that these preventive measures impacted their routine patient health education, especially in verbally delivering discharge education. One nurse described that:

“...when wearing personal protective equipment (PPE)...it is difficult... sometimes...when we must put on PPE level 3, and it is so hard sir...it is hard to breathe...so we can only educate the patient shortly...it is so hard to breathe...I used to feel exhausted.”(P4.1)

**Challenges in taking a balance between personal and professional responsibilities.** One of the most significant challenges nurses faced during the pandemic was maintaining a balance between personal and professional responsibilities. As individuals, nurse participants held fears of contracting COVID-19. They were not only concerned about their own risk of infection but also about the possibility of transmitting the virus to their children and families. A nurse participant shared her feelings on this issue:

“...When I was informed that the patient was positive (infected with COVID-19)...I was just shocked...ran to have a PCR test...prayed...and prepared to be ready for any result (laughs)...I protected myself more at home. Before my PCR results came out, I always wore a mask at home and stayed away from my daughter...I was afraid of being infected...afraid of infecting my child and other family members...” (P8)

Another nurse described that her fear of infection began even before interacting with the patient. Wearing the level-3 PPE as part of infection prevention measures caused not only physical discomfort but also anxiety. She reported that:

“Initially, I would panic...just putting on the gown...I would feel so panicked and suddenly develop dyspnea when I visited and came into contact with patients with a positive PCR test result... so, can you imagine what it feels like...?!” (P4)

She also described these fears of infection became greater when her colleague was infected with COVID-19. This fear caused the nurse to shorten the physical interactions with patients and their families, including focusing the education session on explaining what they perceived as essential to know about the patient’s care process in the home setting. She expressed that:

“Before the pandemic, I used to chat with patients and their families for a while, hearing what they had to say...but now, when it comes to educating, I just go straight to it...straight to the point...especially since my friend got infected... I’m afraid of being infected, too.” (P4)

Another participant confirmed that the shortened duration only eliminated what was considered less important. The coverage of the topic remained consistent before and during the outbreak. She narrated that:

“I didn’t have much conversation with patients... but if education is really needed, I did it... for instance, when teaching insulin injections, in the past, I could usually teach patients how to inject, the dosage, the injection site, and practice all in one session... but now it’s at most one topic each session, the rest of topics, including practice was allocated in other sessions or another day....” (P8)

**Theme 2: Perceived DP as Professional Responsibility**

Despite facing challenges in coordinating care with other healthcare professionals, especially primary physicians, and providing discharge education, nurses continued to give DP-related care to patients and their families before and during the pandemic. They managed the balance between personal and professional obligations. Our nurses regarded DP as a significant responsibility, acknowledging its direct impact on patients’ post-discharge outcomes. One of the nurses put it like this:

“I think DP is the nurses’ responsibility, and it is crucial to the prevention of unnecessary readmission.” (P1)

With this awareness, they continued to provide DP for patients. Furthermore, they do not consider their work-related challenges to be a burden. One nurse had this to say about this topic:

“Not really a burden actually... since the DP is our responsibility...no matter what happens...we must do it.” (P3)

**Adjust DP practices.** As nurses were aware of their professional responsibility, they indicated that DP persisted during the pandemic with certain adjustments aligned with cross-infection prevention procedures. Overall, the pattern of DP practices resembled what was done before the pandemic, but now they consistently adhered to social distancing...
measures and wore personal protective equipment. Additionally, the nurses mentioned minimizing individual contact and modifying their nursing routines to emphasize essential points when interacting with patients and their families.

“No different, sir…but (now) we do social distancing, sir… the patient is also mandated to wear a mask…I wore two masks, one on top of the other, and a face shield too…but the patient education was still conducted…but we kept our distance, sir… in the past (before the pandemic), we did it by sitting or standing close to the patient, now, we do not… With the patient’s family, for example, we kept a distance of 1 meter between us…but we still educated them, sir…” (P4)

Another participant described that minimal physical contact was implemented by conducting the education in multiple shorter sessions as opposed to one long session. The nurse described that:

“...when providing education or other care to the patient, it must not last more than 15 minutes...If I have not finished my task in 15 minutes...I stop and leave that patient and (go) help other patients...later, I returned to the first patient. Therefore, it (the patient-nurse contact) does not take longer than 15 minutes at a time”. (P2)

As good as it could be. Our nurse participants perceived their practices related to DP, either before or during the pandemic, as good enough, though they might not have been ideal. One nurse regarded the DP-related practices as well-executed, as they followed the recommended procedures: assessment, patient education, discharge instructions, and documentation. Likewise, they adhered to those hospital DP procedures during COVID-19. The nurse mentioned that the main difference was the additional topic covered during the pandemic, which involved COVID-19 prevention procedures. One nurse participant narrated that:

“I mean (it is correct) since from the beginning of the process we filled the DP assessment form... then the education form... hmm.... then before patient discharge, we developed the written discharge instructions covering what must be continued at home, and we explained those instructions to the patients and his/her family.... So, if we followed those procedures, it means the DP practice followed was pretty much correct...” (P8)

However, the absence of a post-discharge care program was one component contributing to the nurses’ perception that DP was not conducted perfectly. This typical DP practice had been in place before the pandemic. One of the nurses described that:

“I think the correct things (in relation to DP-related practice) are more actually. Even though, on the whole, the practice is quite correct...I mean, it should be more detailed...in our setting, it might not have been 100% perfect...as we don’t have a home visit program...However, based on my experience, it was good enough...” (P4)

Another consequence of the absence of a post-discharge care program was the nurses’ inability to evaluate if the patient followed the discharge instructions or faced difficulties with care at home after leaving the hospital. One of the interviewed nurses proposed that upon the readmission of a discharged patient, the nurse becomes aware that the patient might have encountered some issues at home. Regarding this, she narrated that:

“Hmm...as far as I know, there is no other evaluation or care activity after the patient is discharged, sir...if the patient is readmitted, then we know that there was something wrong with the treatment program at home...(laughs)" (P2)

Discussion

This study revealed that performing DP is challenging, especially during the COVID-19 outbreak. These challenges were related to care coordination, DP education, and balancing personal and professional responsibilities. Despite these challenges, nurses perceived DP as their professional obligation to their patients and endeavored to accommodate DP practices in response to the pandemic.

Our study found that coordination among involved HCPs was crucial before and during the pandemic. Before the pandemic, nurses faced difficulties coordinating DP-related procedures as internists informed the discharge decision on the day of the patient’s discharge. However, this issue was resolved by agreeing that the discharge decision must be communicated to the nurse at least one day before the patient’s discharge. Due to the pandemic, hospitals underwent organizational and operational transformations to maintain essential healthcare services or respond to the surge in COVID-19 cases (McLean et al., 2022). In our study setting, the hospital converted several wards into COVID-19 centers and relocated patients and healthcare staff to the medical ward. This hospital transformation posed challenges to everyday nursing practices, especially DP practices. Nurses now had to care for patients with various diseases beyond their routine scope. Additionally, nurses in the ward had to collaborate with multiple primary physicians during a patient’s hospitalization. The diverse working styles among these physicians hindered the coordination of care related to DP practices, resulting in uncoordinated care and inadequate patient discharge preparation.

Nurses mentioned that the newly involved HCPs, particularly primary physicians, perceived ambiguous roles and maintained different standards regarding DP practices. Surgeons and surgical residents believed that DP practices and documentation were not their responsibilities, while nurses in the medical ward thought that all primary physicians should participate in DP practices and related documentation. Consequently, nurses in our study reported that the discharge decision was made and communicated to the nursing staff on the day of the patient’s discharge and with very short notice. Additionally, the discharge-related documents expected to be completed by the physicians had not been filled out. The DP processes were disrupted as neither the surgeons nor the nurses took responsibility for completing the discharge-related documentation. This resulted in a struggle to complete all documents promptly, leading to potential delays in the patient’s discharge and requiring them to stay at the ward for another night.

This finding highlights another type of time pressure issue experienced by nurses in providing DP practices, as described in a previous study (Kang et al., 2020). They identified that nurses frequently experienced time pressure due to a high
workload, resulting in incomplete DP assessments and discharge education. Our study’s findings confirm previous research, describing that ambiguous roles among involved HCPs lead to uncertainty regarding specific DP-related tasks and hinder effective and safe DP practices (Agerholm et al., 2023; Okoniewska et al., 2015).

Before discharging the patient, nurses had to coordinate the discharge decision with other HCPs, such as nutritionists, for additional discharge education on diet-related topics or pharmacists to provide specific patient medication information. Abruptly informed discharge decisions can result in inadequate or inaccurate discharge information. Another study found that such inaccuracies negatively impacted patients’ treatment adherence, safety, and satisfaction (Alberti & Nannini, 2013). Additionally, these coordination issues inadvertently led to delays in care coordination, affecting other health team members or healthcare facilities at the community level (Graham et al., 2013). Current studies recommend the implementation of a discharge coordinator (Agerholm et al., 2023) or regular multidisciplinary meetings integrating case coordinators (Ibrahim et al., 2022) as effective strategies to improve multidisciplinary discharge coordination.

Discharge education is an essential component of the DP process. However, providing health education to patients during the pandemic posed challenges. After the ward fusion, nurses mentioned that they had to care for patients with various diseases receiving different treatments than those typically provided to medical patients. Previous studies have highlighted that different diagnoses require specific or individualized discharge planning and education (Sheikh et al., 2018; Yilmaz et al., 2019). Nurses need adequate knowledge and competence to address discharge education effectively.

Nonetheless, nurses participating in our study stated that they lacked updated clinical knowledge beyond their medical specialties. They reflected on the need to be more confident in providing appropriate health information about patients’ diseases. As generalist nurses, they are educated to diagnose and manage general conditions, requiring additional training or education to enhance their competencies (International Council of Nurses [ICN], 2020). Our study confirms previous findings that nurses may lack adequate knowledge of DP practices (Hayajneh et al., 2020) and confidence in performing discharge education (Sepulveda-Pasci, 2019). Additionally, our study highlights that unfamiliar patient diagnoses and conditions potentially reduce nurses’ confidence in providing DP practices.

A periodic educational DP program is recommended to enhance nurses’ DP-related knowledge, including discharge education (Jehosua et al., 2023). First-Williams (2019) mentioned four essential areas in DP training: effective communication, determining required patient education, implementing effective discharge education strategies, and knowledge of available post-acute care services.

Before the COVID-19 pandemic, discharge education was conducted face-to-face. However, during COVID-19, patient education was approached differently. Nurses had to wear PPE and maintain social distancing while educating patients. Our nurse participants mentioned discomfort, breathing difficulties, and physical exhaustion while conducting discharge education sessions in PPE. Therefore, they developed strategies to ensure safe discharge education and adequate patient self-care knowledge.

Along with maintaining distance, nurses shortened the discharge education sessions, focused on crucial topics, and split the education into multiple shorter sessions. Prior research has identified technology-based discharge education strategies, like video-based discharge information or mobile discharge instruction videos, as preferable for both nurses and patients. These strategies effectively improve patients’ understanding of their diagnosis, medication, and discharge instructions (Newnham et al., 2017). These technology-based approaches, with their reduced physical contact, could serve as additional options for discharge education, particularly where the supporting infrastructure is available.

Furthermore, our nurse participants emphasized the struggle of balancing personal and professional obligations while caring for hospitalized patients during the COVID-19 outbreak. They faced ethical dilemmas between their personal concerns and their professional duties. On one hand, these nurses expressed fear about the risk of COVID-19 cross-infection, especially in their line of work, and were anxious about transmitting the virus to their families. Yet, they remained committed to providing care for their patients. Our study resonates with previous research that has highlighted the psychological distress among frontline nurses during the COVID-19 pandemic, a phenomenon observed not only globally (Hickling & Barnett, 2022; Huerta González et al., 2021) but also within the Indonesian healthcare context (Mulantino et al., 2021).

However, despite these psychological challenges, the nurses in our study felt a strong sense of responsibility toward providing discharge education to their patients. This sense of responsibility aligns with the core nursing values of taking ownership of patient care (Schmidt & McArthur, 2018). Despite their fears of COVID-19 infection, these challenges did not deter the nurses from delivering discharge planning at an acceptable level, given the circumstances in their ward. They believed that neglecting this aspect of care might jeopardize patient safety, leading to potential post-discharge complications or unplanned readmissions. This finding aligns with prior research conducted in non-pandemic settings, where nurses considered discharge planning essential for patient well-being (Asmuji, 2018).

Our study further extends this understanding by highlighting nurses’ beliefs that their DP practices, both before and during the pandemic, might not ensure a safe patient transition after discharge due to insufficient follow-up care. Evidence supports that robust follow-up care after discharge enhances patient satisfaction and significantly reduces the risk of unplanned readmissions (Jackson et al., 2015). Recent reviews also affirm that a combination of pre-discharge programs and timely follow-up care effectively ensures safe transitions and minimizes unplanned emergency visits or hospital readmissions (Ganeftianty et al., 2021; Jehloh et al., 2022).

To cope with their fears, nurse participants in our study adapted discharge education by condensing sessions, emphasizing essential points, and conducting multiple shorter sessions while strictly adhering to social distancing measures. Their “as good as it could be” approach reflects an awareness that their DP practices might not have provided full post-
discharge protection for patients. Nevertheless, despite the detailed challenges mentioned earlier, the nurses in our study expressed their utmost dedication to adhering to the best possible discharge planning practices amid the COVID-19 pandemic.

The findings of this study echo the existing knowledge regarding how the nursing profession takes responsibility, particularly during the pandemic. An earlier review highlighted that nurses played transcendental and fundamental roles at various levels of care during the COVID-19 pandemic (Sarango et al., 2021). Our study also adds insights into the challenges and the developed strategies nurses experienced due to pandemic situations, particularly in coordinating DP practices and providing discharge education. These findings emphasize the importance of developing DP and interprofessional collaboration competencies for nurses since they are in nursing school and regular upskilling to respond to workplace situations.

**Strengths and Limitations of the Study**

To our knowledge, this is the first study exploring the nurses’ experiences in providing DP within an Indonesian hospital context before and during the COVID-19 pandemic. The fact that the first author performed all interviews contributes to the consistency of the methodology in this study. Additionally, the shared background between the investigator and participants likely fostered trust, positively influencing interviews and information accessibility (Noble & Smith, 2015). However, the limitations of using telephone interviews as a data collection method should be acknowledged. While previous studies suggest telephone interviews are valid for gathering detailed narrative data, they often yield shorter and potentially incomplete responses (Drabble et al., 2016; Rahman, 2015). Further research is warranted to understand nurses’ roles in coordinating DP practices and the strategies employed to address challenges within and beyond the pandemic, including post-discharge follow-up care.

**Implications of the Study**

This study has immediate implications for hospital organizations, HCPs, and higher education. As multidisciplinary coordination is one of the main challenges caused by different working cultures, the hospital needs to communicate standardized DP practices to facilitate an agreement among the involved HCPs within the hospital. Additionally, it is essential for the hospital to conduct regular DP-related training to continuously update the involved HCPs’ knowledge and competencies in performing safe and effective DP. The HCPs may adopt the developed strategies by nurses for overcoming the challenges of DP practices during the pandemic to similar scenarios outside the pandemic, such as caring for patients with infectious diseases, especially in Indonesia, where contagious diseases are still prevalent. The recent issue is Monkeypox, which has increased to 63 cases scattered over 10 provinces since September 2022 (Ministry of Health Indonesia, 2022). Though it has lower fatality, this disease shares some transmission mechanisms and potential outbreaks with COVID-19 (Sari & Hairunisa, 2022).

Additionally, acknowledging the role of higher nursing education institutions in fostering collaboration skills among healthcare sectors and professions is critical. These institutions can initiate this by promoting shared knowledge and mutual goals, particularly in DP-related practices. Interprofessional Education (IPE) emerges as an effective strategy recommended by numerous studies to enhance collaboration awareness and skills among healthcare science students or HCPs (Hoffman & Cowdery, 2022; Stadick, 2020; Zechariah et al., 2019). In addition to improving HCPs’ collaboration skills, IPE can clarify the roles of involved HCPs. Moreover, nursing education institutions hold the potential to provide students with a strong DP foundation, including post-discharge care, reinforcing essential competencies in this crucial healthcare practice.

**Conclusion**

The nurses interviewed in this study perceived DP practices as challenging, involving difficulties in coordination, providing discharge education, and navigating concerns about COVID-19 infection. Despite these challenges, the nurses consistently fulfilled their DP responsibilities, coordinating care with other HCPs and adapting their practices in response to the pandemic. This study not only reaffirms existing knowledge but also adds some instants of specific DP-related challenges, strategies developed, and potential areas for improvement both before and during the pandemic. Providing adequate orientation on variances in work patterns among unified ward HCPs, embracing interprofessional education, and regular training to enhance DP-related competencies are crucial steps to address the identified pitfalls in DP practices highlighted by the nurse interviewees. While these insights might be applicable in other contexts, further research is essential to comprehensively understand how nurses navigate their roles, coordinate care, and manage DP challenges during outbreaks or in the post-pandemic era.

**Declaration of Conflicting Interest**

The authors had no conflict of interest to declare.

**Funding**

This study was supported by the Thailand’s Education Hub for the Southern Region of ASEAN Countries (THE-AC) Scholarship from Prince of Songkla University, Thailand.

**Acknowledgment**

Heartfelt thanks are extended to every contributor to this study, particularly to participants who shared valuable information and their experiences on practicing discharge planning during the pandemic situation. Sincere gratitude was also sent to the hospital director, who permitted the team to conduct this study, and the ward head nurse, who acted as a gatekeeper and helped us complete the study during the pandemic. Moreover, our gratitude goes to the Prince of Songkla University, Thailand, for supporting this work with the Thailand’s Education Hub for the Southern Region of ASEAN Countries (THE-AC) Scholarship.

**Authors’ Contributions**

Conceptualization, Methodology, Drafting the manuscript (TK, KN, and UB); Data analysis (TK, AG, KN, and UB); Critical revisions for important intellectual content (TK and KN). All authors have read and agreed to the final version of the manuscript.

**Authors’ Biographies**

Titis Kurniawan, S.Kep., Ners., MNS is a PhD Candidate at the Faculty of Nursing, Prince of Songkla University, Thailand. He is also a Lecturer at
the Medical-Surgical Nursing Department, Faculty of Nursing, Universitas Padjadjaran, West Java, Indonesia.

Dr. Kittikorn Nilmanat, PhD is an Associate Professor at the Faculty of Nursing, Prince of Songkla University, Thailand.

Dr. Umaporn Boonyasopun, PhD is an Assistant Professor at the Faculty of Nursing, Prince of Songkla University, Thailand.

Amelia Ganefianty, S.Kep., Ners., M.Kep., Sp.Kep.MB is a Clinical Nurse at Dr. Hasan Sadikin Hospital, West Java, Indonesia, and a PhD Candidate at the Faculty of Nursing, Prince of Songkla University, Thailand.

Data Availability

The datasets generated during and analyzed during the current study are available from the corresponding author upon reasonable request.

Declaration of Use of AI in Scientific Writing

Nothing to declare.

References


