



Thai Nursing Students' Experiences with COVID-19 Infection: A Phenomenological Study

Pornpun Manasatchakun¹, Yupares Payaprom^{1*}

¹Boromarajonani College of Nursing, Chiang Mai, Faculty of Nursing, Praboromarajchanok Institute, Ministry of Public Health, Thailand

*Corresponding Author: Yupares Payaprom, Email: yupares66@gmail.com

Abstract

Introduction: The COVID-19 pandemic has profoundly impacted public service management and the educational administration of health-related professionals, particularly registered nurses. Understanding the experiences of nursing students who are about to graduate and enter the healthcare workforce is essential for mitigating potential negative effects in future pandemics, especially in the context of theoretical and practical training. Therefore, this study aimed to explore the lived experiences of nursing students who had contracted COVID-19.

Methods: A phenomenological qualitative research design was employed. The study was conducted between October 2022 and March 2023. Participants were selected through purposive sampling and consisted of 32 Thai nursing students from first to fourth year enrolled in a nursing science institution. Data were collected through in-depth interviews, and analysis was conducted using hermeneutic phenomenology.

Results: The experiences of Thai nursing students who had contracted COVID-19 were represented in four thematic structures: "Fighters Against Anxiety", "Individuals Confronting Danger and Promoting Safety", "Handlers", and "Responsible Persons".

Conclusion: The findings of this study may contribute to the development of support and care systems for Thai nursing students, fostering greater awareness of self-protection against COVID-19 infection, enhancing understanding, and reducing residual fear or stigma associated with COVID-19 among both patients and healthcare trainees.

Keywords: Phenomenological research, COVID-19, Nursing students, Lived experiences

Citation: Manasatchakun P, Payaprom Y. Thai nursing students' experiences with COVID-19 infection: a phenomenological study. J Qual Res Health Sci 2026;15:1442. doi:10.34172/jqr.1442

Received: February 10, 2025, **Accepted:** February 12, 2026, **ePublished:** January 21, 2026

Introduction

From 2019 to the present, the Coronavirus disease (COVID-19) has generated a global pandemic that continues to challenge populations worldwide in terms of health management due to its extensive and multifaceted impacts. Although severe outbreaks have subsided and the number of new cases has significantly decreased, COVID-19 continues to exert both short-term and long-term consequences, such as multiple physical and psychological abnormalities collectively referred to as Long COVID. Moreover, the pandemic has provided valuable lessons across multiple dimensions (1), highlighting the outcomes of public health management strategies, the allocation of financial resources for medical treatments related to COVID-19, disparities in access to public health services, and stagnation in economic growth that has affected numerous countries (2). Additional consequences include the loss of human resources and increased unemployment, declining competitiveness, and widespread disruptions in education globally. It is estimated that approximately 1.6 billion students in more

than 200 countries have been affected by the pandemic due to the closure of schools and educational institutions implemented as part of pandemic control measures (3).

Thailand, a country in Southeast Asia, continues to confront the ongoing challenges of the COVID-19 pandemic. As of March 2024, reports indicated 1,672 new confirmed cases and nine deaths, with 148 patients requiring ventilator support (4). The pandemic in Thailand has had multifaceted impacts (5), particularly on the national education system. The spread of COVID-19 within educational institutions has posed significant health risks for students, teachers, lecturers, and educational staff. For some students, family circumstances have further exacerbated these challenges. Certain families have been unable to provide adequate care for their members during illness or crisis following a COVID-19 diagnosis. Others have struggled to support their children's learning effectively, as traditional in-class instruction was replaced with remote educational management and online learning modalities (3, 6). This situation has also amplified educational inequality, creating obstacles that have led



to learning loss among many students. Furthermore, numerous students have experienced psychological distress and cumulative stress resulting from prolonged online learning, insufficient preparation for virtual study (6), and difficulties adapting to new digital technologies and learning platforms. Such conditions have contributed to heightened levels of anxiety, fear, and boredom. Many students have also suffered from a lack of social interaction, fatigue from continuous screen exposure, increased academic burdens compared with traditional study formats, and anxiety related to examinations, particularly final assessments. These factors collectively represent major challenges for both students and educators during the COVID-19 pandemic.

Nurse education constitutes a central mission of higher education institutions. In Thailand, registered nurses are trained in accordance with the standards set by the Thailand Nursing and Midwifery Council to meet the needs of the national health service systems. Nurses are expected to possess the requisite professional competencies and demonstrate the ability to provide nursing interventions for individuals, families, and communities. To prepare nursing students for professional registration in the contemporary context, it is essential to enhance and develop their skills during higher education, thereby fostering learning processes aligned with 21st-century competencies (7). Effective nursing education management should incorporate diverse instructional modalities, including theoretical coursework, practical training, and field experiences in clinical or community settings. These learning approaches should stimulate analytical thinking, foster efficient patient care skills, and promote critical thinking and problem-solving abilities (7, 8). The emergence of the COVID-19 pandemic, however, has necessitated adaptation within all nursing institutions to ensure educational continuity and alignment with the demands of clinical practice and population rehabilitation (8, 9). When nursing education institutions confront the multifaceted consequences of the COVID-19 pandemic, such circumstances represent an educational emergency requiring systematic preparation, management, and support for students, particularly those who become infected with COVID-19 themselves. Nursing students who contract the disease continue to face educational challenges, as they are expected to participate in instructional activities despite their illness. Moreover, disruptions in nurse training during illness result in a temporary cessation of clinical education, thereby hindering the continuity of nursing workforce development. This interruption may prevent nursing students from acquiring essential hands-on experience in patient wards, posing potential risks to future service users (10). Besides, nursing students may experience feelings of insecurity and guilt related to their perceived role in disease transmission (10). Those living in dormitories or studying far from their families often endure these difficulties in isolation, which can exacerbate psychological distress. A review of the literature indicates that existing research on

nursing students primarily addresses their educational experiences during the COVID-19 pandemic (10, 11). However, the number of studies exploring the lived experiences of nursing students infected with COVID-19 remains limited. Gaining a deeper understanding of these experiences can yield valuable insights into their personal and professional development. Nursing students—who are future caregivers—may cultivate enhanced empathy and compassion toward patients after undergoing illness themselves (12). Such firsthand experience allows them to better comprehend the physical, emotional, and psychological challenges faced by patients, thereby strengthening the quality of their patient care (13). Furthermore, experiencing COVID-19 infection during nursing education provides an opportunity for students to engage in self-reflection regarding their strengths and limitations (14). This process fosters resilience and the development of coping mechanisms, both of which are essential attributes in the high-stress nursing profession. Accordingly, this study aimed to explore the experiences of Thai nursing students who contracted COVID-19, to understand their feelings, perceptions, and coping strategies related to illness. As nursing students are integral to the public health workforce and play a crucial role in clinical care provision, insights derived from this research may contribute to enhancing support systems and care practices for nursing students. The findings can further inform the development of institutional frameworks that promote effective care and recovery for nursing students diagnosed with COVID-19 within Thailand's nursing education institutions.

Methods

Design

This study employed a hermeneutic phenomenological approach to explore and interpret Thai nursing students' lived experiences with COVID-19 infection. The purpose was to develop a comprehensive understanding of these experiences through the lens of individual interpretation and meaning-making (15). Data collection and analysis were conducted between October 2022 and March 2023.

Participants

The study population comprised first- to fourth-year nursing students enrolled in the Bachelor of Nursing Science program at a nursing science institution in Thailand during the academic year 2022. The selected institution had been directly affected by the COVID-19 pandemic. Out of a total population of 598 students, participants were selected through purposive sampling to capture a range of experiences with COVID-19 infection during both theoretical and practical training sessions. This purposive sampling technique aimed to recruit participants capable of providing rich, detailed, and reflective accounts of their personal experiences as nursing students who had been infected with COVID-19. All participants were fourth-year nursing students who had been diagnosed with COVID-19 during their studies. The selection process

ensured that the participants possessed relevant firsthand experiences that would contribute meaningfully to the study objectives. In total, 32 nursing students participated in the research. The inclusion criteria were as follows:

1. Aged 18 years or older
2. Enrolled as a first-, second-, third-, or fourth-year nursing student
3. Confirmed experience of COVID-19 infection between July and September 2022
4. Positive antigen test for SARS-CoV-2 detection or confirmation by real-time RT-PCR / ATK, verified by healthcare professionals
5. Voluntary consent to participate in the study

The exclusion criterion was applied to any nursing students who discontinued their studies before graduation during the data collection period.

Data Collection

The research instrument was a semi-structured interview guide designed to explore nursing students' experiences with COVID-19 infection. The interview questions were developed to comprehensively address the study objectives and to elicit detailed descriptions of nursing students' lived experiences with COVID-19. Before developing the qualitative interview guide, the researchers conducted an extensive literature review to define the study context and refine the research focus. The content validity of the instrument was assessed by three experts in nursing education and qualitative research. Based on their feedback, the interview questions were revised to enhance clarity, inclusiveness, and relevance to the phenomenon under study, ensuring that the data collected reflected the full scope of experiences related to COVID-19 infection. During the interviews, the researcher began with initial open-ended questions to encourage the participants to share their experiences freely. When clarification or elaboration was needed, probing questions were used to facilitate deeper reflection and meaning-making regarding the participants' experiences with COVID-19 infection (Table 1).

Before data collection, the researcher obtained permission from participants to conduct interviews, each lasting approximately 60 minutes per participant, including audio recording and note-taking. At the beginning of each session, the researcher explained the objectives of the study, providing participants with a clear understanding of the research purpose and emphasizing the value of their

individual experiences regarding COVID-19 infection for nursing students. Interviews were conducted in a quiet meeting room within the nursing college to minimize interruptions and ensure that participants could speak freely without concern about being overheard. The first researcher took detailed notes during the interviews to facilitate follow-up questions and to obtain in-depth, rich data. Throughout the data collection process, particular attention was given to the depth and richness of the participants' responses. Interviews concluded when data saturation was reached, as subsequent questions yielded no new information (16). All interviews were subsequently transcribed word by word, and the transcripts were carefully reviewed to ensure completeness and accuracy of responses.

Data Analysis

Following the recommended procedures of van Manen's phenomenological method, the first and second authors independently analyzed the transcribed interviews (17). The analysis involved verbatim transcription, identification of meanings, and interpretation in the context of Thai nursing students' experiences with COVID-19 infection. Throughout the process, the authors continuously reviewed each step in detail to deepen their understanding of the essence of the participants' lived experiences. The analytical process comprised the following steps: (1) Data Preparation: Organizing and preparing the data for analysis, followed by reflection and verification to ensure completeness and accuracy, (2) Bracketing: Analyzing while suspending personal beliefs, biases, and preconceptions to maintain an open-minded approach to the data, (3) Data Familiarization: Repeated reading of transcribed statements to gain deep insight into the participants' experiences, (4) Identification of Significant Statements: Extracting statements that captured the core ideas of the nursing students' experiences with COVID-19 infection, (5) Phenomenological Reduction: Searching for meaningful insights without judgment based on prior experiences, ensuring that interpretations remained grounded in the participants' perspectives; the first and second authors cross-checked emerging meanings against the original data, continually comparing data points to maintain consistency through a reflexive process, (6) Categorization and Clustering: Grouping significant statements with similar characteristics according to themes, experiences,

Table 1. Initial Questions and Probing Questions

Initial Questions	Probing Questions
How did you feel when you were a COVID-19 patient?	Could you please elaborate further on this?
How do you think you contracted COVID-19, and where did this occur?	When you say that, what exactly do you mean?
How did you take care of yourself during your COVID-19 infection?	Could you provide a specific example of the tasks you mentioned?
Could you describe your self-care activities while you were infected with COVID-19?	Could you give an example of a particular activity?
How did you feel about the self-care activities you performed?	Could you please elaborate further on this?
How did you manage your emotions during this period?	What exactly do you mean by that?
Who assisted you or played a meaningful role during your COVID-19 infection?	Could you please describe this in more detail?

or shared meanings related to COVID-19 infection, and (7) Description Writing: Developing detailed descriptions for each category or cluster to clearly convey the main ideas of the experiences, facilitating phenomenological reflection and interpretation of the findings. This step allowed the researchers to link the essence of the participants' experiences to the research questions and generate meaningful insights into the phenomenon of COVID-19 infection among nursing students.

Trustworthiness Verification

In this study, trustworthiness was carefully considered to ensure the credibility of the findings in relation to the lived experiences under investigation (18). Specifically, credibility was established by ensuring that the findings accurately reflected the diverse experiences of nursing students across all four academic years. Data analysis was conducted by more than one researcher to enhance rigor and confirmability. To ensure dependability, the researchers collaboratively examined the research process, particularly during data interpretation, to confirm the consistency and reliability of the results. All data were verified to align with the research objectives, with attention to maintaining objectivity and minimizing bias throughout the study. Regarding transferability, although slight deviations may exist due to the focus on individual experiences, the findings provide valuable insights that can inform understanding of nursing students' experiences with COVID-19 infection in contexts similar to Thailand.

Results

All the 32 participants were first- to fourth-year nursing students, including 12 males (37.5%) and 20 females (62.5%), with ages ranging from 19 to 23 years (mean = 20.59, SD = 1.07). All participants identified as Buddhists. The analysis revealed that the meanings of nursing students' experiences with COVID-19 infection could be described across four experiential structures: "fighters against anxiety", "individuals confronting danger and promoting safety", "handlers", and "responsible persons."

Fighters Against Anxiety

Thai nursing students' experiences with COVID-19 infection revealed that they perceived themselves as fighters against anxiety. This theme reflects participants' efforts to recognize and accept their emotions without resistance, thereby reducing anxiety. They actively sought to identify and name their feelings as part of coping with the infection. During the course of COVID-19 infection, participants described themselves as fighters against anxiety because they had to acknowledge and endure both the physical and psychological impacts of the disease, despite being aware of treatment protocols and available healthcare. Their anxiety was particularly associated with the disruption of their studies, which were temporarily suspended following positive COVID-19 test results. For some students with underlying health conditions, the

infection elicited heightened fear due to concerns that COVID-19 could pose a life-threatening risk.

Participants described efforts to confront their anxiety by distinguishing between controllable and uncontrollable aspects of their situation. For instance, one first-year student explained: "I had asthma, so I was scared that it could cause serious harm because I have had asthma since childhood. I had stopped taking medication for over ten years. I was worried about whether COVID-19 would make it worse. I freaked out. When I searched for information, I didn't know who to ask because many people were under self-quarantine at that time. I had to endure the situation and wait to pull through" (Participant 8, 1st-year student). Similarly, a fourth-year student reflected on managing both health and academic concerns: "I was worried about my studies, and I had to handle everything myself. I tried to take care of myself with systematic treatments. I took the medications as prescribed by the pharmacists, and they were quite effective" (Participant 14, 4th-year student).

Apart from anxiety about the illnesses and complications caused by COVID-19 infection, participants also reported that they were anxious about their own emotions to prevent stress related to the effects of Favipiravir, an antiviral drug dispensed during the COVID-19 pandemic. A participant said, "At that time, I heard the news about its side effects and that it caused blue eyes. So, I was worried and frightened. It felt like I had to confront it. My symptoms were like the common cold, but I coughed a lot until I had chest pain. I was also worried about the side effects of drugs. I doubted whether or not they would cause any severe symptoms because I was overweight. My drugs were different from my friends, so I was not sure that mine would work out. But I took them anyway" (Participant 3, 1st year student).

Participants also faced the challenge of fighting against the perceptions and reactions of those around them. For example, one fourth-year student explained: "I had a fever and headache and asked a senior for paracetamol, but my symptoms did not improve. I was doing an internship at the time, and some friends and my roommate looked at me strangely. My parents lived far away. When the hospital confirmed that I was infected with COVID-19, they instructed me to self-quarantine in the hospital ward for 10 days" (Participant 12, 4th-year student). In addition, participants confronted anxiety related to their studies, self-quarantine, and potential delays in graduation. A third-year student described: "At that time, I was worried about my physical condition because I had never been infected with this disease before. I was so anxious that I struggled with stress. I doubted whether I could keep up with my classmates and feared that I would graduate later than my friends" (Participant 5, 3rd-year student). Overall, fighting against anxiety involved managing emotional, physical, and mental stressors, with participants striving to reduce the impact of fear, stress, and loneliness caused by COVID-19. This included concerns about the effects of infection on their daily lives, academic progress, and overall well-being, highlighting the multifaceted nature of

their experiences as nursing students.

Individuals Confronting Danger and Promoting Safety

Being a COVID-19 patient meant confronting potential danger while striving to ensure personal safety. Participants described experiencing problems or threats as a direct consequence of their infection but actively sought strategies to maintain safety. In this context, danger was perceived as an impending threat characterized by uncertainty and potential harm, whereas safety was experienced as calmness, stability, and the ability to survive. Participants sought supporting information and resources to enhance their safety, including guidance from health professionals, reliable informational sources, and other available supports. One second-year student explained: "I searched for information about the effects of COVID-19 on patients with underlying conditions and tried to understand how their symptoms might develop. I focused on staying calm first. Afterwards, I felt better and went to the drugstore to get medications. I looked for anything that could relieve my symptoms because I didn't want them to become severe" (Participant 22, 2nd-year student). Similarly, a first-year student described: "When I got infected with COVID-19, I kept thinking that I had to survive. I tried to exercise more and find healthy food. I thought about my options and also searched the internet for guidance" (Participant 25, 1st-year student).

The participants' experiences of harm were primarily related to the effects of COVID-19 on their health, including concerns about long COVID. Several participants noted that their educational institutions provided support that enhanced their sense of safety. For example, a third-year student explained: "The nursing school relieved me by providing a first aid room and teacher support. Some other institutions still need to provide these rooms for students" (Participant 14, 3rd-year student). When reflecting on safety beyond their institutions, participants identified their homes and families as safe environments during their infection. A first-year student described: "I got infected with COVID-19 during vacation. My mom cooked for me. It felt like she could help me a lot because she said it didn't matter and that I didn't have to be worried since nobody blamed me. The outbreak was very severe at that time, and nobody wanted to get infected. My family helped me a lot to pull through" (Participant 12, 1st-year student). These experiences align with the theme of responsible persons, reflecting participants' acceptance of illness, engagement with their physical and emotional challenges, and proactive efforts to identify strategies and resources that could alleviate their symptoms and reduce anxiety.

Handlers

Thai nursing students' experiences with COVID-19 infection revealed that they perceived themselves as handlers. This theme reflects their ability to respond to and adapt to the challenges posed by the infection, including managing future uncertainties. Participants

actively sought strategies to regulate their emotions, thoughts, and behaviors while allowing their bodies to recover fully, understanding that regular self-care could reduce the likelihood of future illness. Participants described adapting to their infection with a focus on treatment and personal responsibility. For example, a second-year student explained: "I was scared at first, but now I feel that I can handle it. I am not quite scared anymore. When I got infected with COVID-19, I just received the treatment and then kept protecting myself" (Participant 24, 2nd-year student). Similarly, a first-year student emphasized maintaining composure and routine: "We have to stay calm and focus on the present. We must take medications and carry out our daily routines as usual, without excessive stress" (Participant 2, 1st-year student). Participants also highlighted the importance of ongoing vigilance to prevent recurrence of infection. A third-year student noted: "COVID-19 is still a disease that we must be careful about because it affects us differently. I feel that we cannot neglect it, and we must prepare and protect ourselves all the time" (Participant 12, 3rd-year student). Overall, being handlers meant managing the disease, coping with stress, and addressing problems and obstacles associated with COVID-19 infection, reflecting a proactive and adaptive approach to their experiences.

Responsible Persons

Being a COVID-19 patient was also experienced by Thai nursing students as being a responsible person, encompassing personal relationships, professional roles, and community interactions. Participants described making thoughtful decisions and fulfilling their responsibilities not only to themselves but also to society and other patients, reflecting their awareness as future healthcare professionals. They carefully considered the impact of their actions on others, particularly regarding patient care and the potential spread of COVID-19 during clinical practice. Participants emphasized adherence to ethical standards, including professional codes of conduct, integrity, avoidance of harm to patients, and accountability to friends, families, and society. For instance, a second-year student explained: "I was shocked at that time. So, I called my friends who lived in the same dorm. I told them to take COVID-19 tests because I was worried that they might have been infected by me" (Participant 8, 2nd-year student). Similarly, a first-year student reflected: "If I got infected and it spread to others, I would be stressed out and worried because I felt guilty and wondered how I got infected" (Participant 6, 1st-year student). Participants also described actions to protect patients. A fourth-year student stated: "First of all, I immediately contacted the senior responsible for the dorm and the lecturers on duty at the patient ward. I was worried about how the patients would be if they got infected by me. I notified the lecturers first so that they could inform the involved nurses" (Participant 19, 4th-year student). Moreover, participants considered social expectations of healthcare personnel, acknowledging that contracting COVID-19 could create

perceptions of inadequate self-protection. A third-year student noted: "As nursing students, getting infected with COVID-19 could make others feel that we had poor self-protection despite our status as health-related personnel. People might think so" (Participant 9, 3rd-year student). These reflections illustrate that participants' experiences as responsible persons were closely tied to their roles as nursing students, highlighting their commitment to self-care, societal well-being, ethical practice, and trustworthiness.

Discussion

Thai nursing students' experiences with COVID-19 infection were characterized by four core themes: "fighters against anxiety", "individuals confronting danger and promoting safety", "handlers", and "responsible persons". These experiences encompassed the physical, mental, emotional, and social dimensions of being a patient, reflecting the multifaceted impact of COVID-19 on their lives. Participants' experiences were closely linked to the social context, including educational institutions, interactions with patients, and relationships within their communities. Importantly, the experiences highlighted participants' consideration for others, reflecting their roles as family members, students, and future healthcare professionals guided by moral and ethical values while navigating the challenges of infection. These meanings were shaped within the context of Thai nursing instructional management, which included in-class instruction, practical sessions, and hospital or community internships. The defined experiences were further associated with individual, familial, societal, and professional dimensions, reflecting participants' backgrounds, acquired knowledge, and decision-making processes. This included the application of instruction, research, and problem-solving skills to protect themselves from COVID-19 and to uphold social responsibility as nursing students (19).

As COVID-19 patients, Thai nursing students experienced a profound struggle with anxiety, encompassing concerns about symptoms, health effects, and uncontrollable situations. This was particularly pronounced among students engaged in in-class instruction, experimental sessions, or practical placements in higher years (e.g., third- and fourth-year students). Participants reported feeling as though they were undergoing a difficult and unfamiliar situation, even if some had friends or family members who had previously experienced COVID-19 infection. Many students, especially the first- and second-year participants with limited knowledge of the disease, symptoms, and signs, expressed insecurity and fear for their respiratory health and overall well-being. In contrast, third- and fourth-year students primarily struggled with anxiety related to disruptions in their studies, including paused instruction and the need for remediation to complete practical modules according to program requirements. This demonstrates that being a COVID-19 patient entails more

than transient worry; it represents an ongoing internal battle that affects daily life, relationships, and overall well-being. Participants often grappled with intrusive thoughts, irrational fears, and physical symptoms, which made routine tasks feel overwhelming. This experience can be metaphorically described as "accepting the storm", symbolizing participants' anxieties and hardships. Moreover, living far from home or residing in dormitories intensified feelings of loneliness and isolation during self-quarantine, further distancing students from their usual social interactions and routines (20). Consequently, the fight against anxiety emerged as a significant life challenge, fostering inner strength, resilience, and self-awareness among Thai nursing students during their COVID-19 experiences.

Defining nursing students with COVID-19 infection as "individuals confronting danger and promoting safety" and "responsible persons" reflects the societal expectations of the nursing profession, which is inherently connected to patient care and service provision. Consequently, their status as COVID-19 patients is closely tied to responsibility guided by ethics, professional codes of conduct, and core professional values, emphasizing the prevention of harm to service users (21, 22). The findings from this study demonstrated that participants were accountable not only for managing their own illness but also for minimizing the potential transmission of COVID-19 to other patients and maintaining a positive professional image as role models to prevent disease spread. Beyond patient considerations, participants also reflected on the effects of their illness on friends, family members, and the broader society in which they were involved (23). Being a COVID-19 patient appeared to encourage Thai nursing students to remain on a moral and ethical path, guiding their decision-making even under challenging circumstances. Their lived experiences provided a trustworthy framework for upholding ethical standards, making decisions aligned with professional and personal values, and maintaining accountability to others.

As handlers of COVID-19 infection, participants' experiences reflected their mental and behavioral responses as patients, closely linked to their efforts in fighting anxiety. They sought to adapt with support from multiple sources, including their educational institutions, family members, and other individuals in their lives (24). Participants actively sought information from media outlets and peers with similar experiences, pursued medical treatments, and explored strategies to manage their illness while minimizing adverse effects on their health. Once their COVID-19 diagnosis was confirmed, participants focused on recovery through appropriate treatment. By remaining aware, reflective, and rational, and by navigating feelings of loneliness and stress, they were able to accept their situation. Their behaviors encompassed managing symptoms, coping with the long-term physical, emotional, and mental effects, and addressing potential impacts on their studies, including possible delays in academic progress.

These findings emphasize the courage and resilience of Thai nursing students, who confronted their fears and demonstrated the ability to persevere through the challenges of COVID-19 infection.

Strengths and Limitations of the Study

One of the strengths of this study lies in its phenomenological approach, which enabled the researchers to capture the essence of Thai nursing students' first-hand experiences as COVID-19 patients, without imposing pre-existing assumptions. This approach provides a holistic perspective and emphasizes understanding the meaning underlying the participants' experiences with COVID-19 infection. While phenomenology offers deep insights into how individuals perceive and internalize experiences, limitations may arise. Specifically, the findings, which are primarily based on the lived experiences of a limited number of participants, may be difficult to generalize to broader populations of nursing students regarding experiences with COVID-19 infection.

Conclusion

The insights from this study enhance understanding of Thai nursing students' experiences with COVID-19 infection. Participants navigated anxiety while simultaneously assuming responsibility for the health and safety of service users. Furthermore, the findings provide valuable knowledge regarding how nursing students experience and manage illnesses caused by COVID-19. The data obtained can inform nursing educational management and the development of student care programs, supporting students in effectively navigating the challenges of being patients while participating in instructional and clinical training.

Suggestions for Future Research

Future studies should focus on employing quantitative methods to assess the effects of COVID-19 infection on nursing students and to inform the design of care systems for students in the event of future pandemics within educational institutions. Furthermore, subsequent studies should explore strategies to enhance nursing students' safety, including reducing stress, preventing infection, and implementing interventions that effectively meet their needs.

Acknowledgments

The researchers extend their appreciation to all the nursing students who participated in this research project.

Authors' Contribution

Conceptualization: Pornpun Manasatchakun, Yupares Payaprom.

Data curation: Pornpun Manasatchakun.

Formal analysis: Pornpun Manasatchakun, Yupares Payaprom.

Funding acquisition: Pornpun Manasatchakun.

Investigation: Pornpun Manasatchakun, Yupares Payaprom.

Methodology: Pornpun Manasatchakun, Yupares Payaprom.

Project administration: Pornpun Manasatchakun.

Resources: Pornpun Manasatchakun.

Supervision: Pornpun Manasatchakun.

Validation: Pornpun Manasatchakun, Yupares Payaprom.

Writing—original draft: Pornpun Manasatchakun, Yupares Payaprom.

Competing Interests

The authors declare that there are no competing interests.

Ethical Approval

This study received ethical approval from the Boromarajonani College of Nursing, Chiang Mai (Ethical Approval ID: BCNCT16/2565). The participants' privacy and confidentiality were strictly protected throughout the research process to ensure their safety. The researcher provided participants with detailed information about the study and all supporting documents, emphasizing that participation was voluntary and that they could withdraw at any time without any consequences. Informed consent was obtained from all participants before data collection. Participants were assigned codes to maintain anonymity, and data were reported as aggregated perspectives to prevent identification. All electronic files were securely stored on the researcher's personal computer, while any paper-based documents were kept in a locked cabinet.

Funding

This research project was funded by the Boromarajonani College of Nursing, Chiang Mai, under project No. C16/2565.

References

1. Khanna RC, Cicinelli MV, Gilbert SS, Honavar SG, Murthy GSV. COVID-19 pandemic: Lessons learned and future directions. *Indian J Ophthalmol* 2020;68(5):703–10. doi:10.4103/ijo.IJO_843_20
2. Hevia C, Neumeyer A. A conceptual framework for analyzing the economic effect of COVID-19 and its policy implications. *UNDP Lac COVID-19 Policy Documents Series*. 2020 Mar 20;1:29. <https://files.acquia.undp.org/public/migration/latinamerica/UNDP-RBLAC-CD19-PDS-Number1-EN.pdf>
3. Pokhrel S, Chhetri R. A literature review on effect of COVID-19 pandemic on teaching and learning. *Higher education for the future* 2021;8(1):133–41. doi:10.1177/2347631120983481
4. World Health Organization. Update on COVID-19 in Thailand [Internet]. 2024 [cited 2024 May 2]. Available from: <https://www.who.int/thailand/news/detail/02-05-2024-update-on-covid-19-in-thailand--02-may-2024>
5. The World Bank. Monitoring the Impact of COVID-19 in Thailand. 2021. Accessed May 20, 2024. Available from: <https://www.worldbank.org/en/country/thailand/publication/monitoring-the-impact-of-covid-19-in-thailand>
6. Pal I, Sukwanchai K, Bhuridatpong A, Pal A. Effects of pandemic on education sector in Thailand. In *Pandemic risk, response, and Resilience* 2022 Jan 1 (pp. 457–469). Elsevier. doi:10.1016/B978-0-323-99277-0.00016-4
7. Kavanagh JM. Crisis in Competency: A Defining Moment in Nursing Education. *Online Journal of Issues in Nursing*. 2021;26(1). doi:10.3912/OJIN.Vol26No01Man02
8. Carolan C, Davies CL, Crookes P, McGhee S, Roxburgh M. COVID 19: Disruptive impacts and transformative opportunities in undergraduate nurse education. *Nurse Educ Pract* 2020;46:102807. doi:10.1016/j.nepr.2020.102807
9. Corlatean T. Risks, discrimination and opportunities for education during the times of COVID-19 pandemic. In *Proceedings of the 17th Research Association for Interdisciplinary Studies Conference 2020 Jun 1* (pp. 37–46). doi:10.5281/zenodo.3909867
10. Agu CF, Stewart J, McFarlane-Stewart N, Rae T. COVID-19 pandemic effects on nursing education: looking through the lens of a developing country. *Int Nurs Rev* 2021;68(2):153–8. doi:10.1111/inr.12663
11. Liesveld J, Rohr J, Petrovic K, Grohman S, Bourgeois CL. Nursing student challenges during the COVID-19 pandemic from 2020 to 2021: A thematic analysis. *Teach Learn Nurs* 2023;18(1):50–5. doi:10.1016/j.teln.2022.10.006

12. Heggstad AKT, Nortvedt P, Christiansen B, Konow-Lund AS. Undergraduate nursing students' ability to empathize: A qualitative study. *Nurs Ethics* 2018;25(6):786–95. doi:10.1177/0969733016664982
13. Dailey MA. Needing to be normal: the lived experience of chronically ill nursing students. *Int J Nurs Educ Scholarsh* 2010;7:Article 15. doi:10.2202/1548-923x.1798
14. McCarthy B, Trace A, O'Donovan M, Brady-Nevin C, Murphy M, O'Shea M, et al. Nursing and midwifery students' stress and coping during their undergraduate education programmes: An integrative review. *Nurse Educ Today* 2018;61:197–209. doi:10.1016/j.nedt.2017.11.029
15. Sloan A, Bowe B. Phenomenology and hermeneutic phenomenology: The philosophy, the methodologies, and using hermeneutic phenomenology to investigate lecturers' experiences of curriculum design. *Quality & Quantity: International Journal of Methodology* 2014;48(3):1291–303. doi:10.1007/s11135-013-9835-3
16. Saunders B, Sim J, Kingstone T, Baker S, Waterfield J, Bartlam B, et al. Saturation in qualitative research: exploring its conceptualization and operationalization. *Qual Quant* 2018;52(4):1893–907. doi:10.1007/s11135-017-0574-8
17. van Manen MA. On ethical (in)decisions experienced by parents of infants in neonatal intensive care. *Qual Health Res* 2014;24(2):279–87. doi:10.1177/1049732313520081
18. Stahl NA, King JR. Expanding Approaches for Research: Understanding and Using Trustworthiness in Qualitative Research. *Journal of Developmental Education* 2020;44(1):26–8. Available from: <http://www.jstor.org/stable/45381095>
19. Ghasemi S, Ahmadi F, Kazemnejad A. Responsibility among bachelordegree nursing students: A concept analysis. *Nurs Ethics* 2019;26(5):1398–409. doi:10.1177/0969733018754369
20. Kim MA, Yi J, Sung J, Hwang S, Howey W, Jung SM. Changes in life experiences of adults with intellectual disabilities in the COVID-19 pandemics in South Korea. *Disabil Health J* 2021;14(4):101120. doi:10.1016/j.dhjo.2021.101120
21. Dadashi N, Pazokian M, Motamedzadeh M. The experiences of nursing internship students during the COVID-19 pandemic in Iran. *J Qual Res Health Sci*. 2023;12(2):60–67. doi:10.34172/jqr.2023.10
22. Sarani A, Seyed Askari SM, Beigzadeh A, Mohammadkhani M, Tavakolisani M, Khanjani N. Iranian Nurses' Behavioral Changes during the COVID-19 Pandemic: A Qualitative Study. *Journal of Qualitative Research in Health Sciences* 2023;12(4):208–13. doi:10.34172/jqr.2023.30
23. Fioretti C, Palladino BE, Nocentini A, Menesini E. Positive and Negative Experiences of Living in COVID-19 Pandemic: Analysis of Italian Adolescents' Narratives. *Front Psychol* 2020;11:599531. doi:10.3389/fpsyg.2020.599531
24. Savitsky B, Findling Y, Ereli A, Hendel T. Anxiety and coping strategies among nursing students during the covid-19 pandemic. *Nurse Educ Pract* 2020;46:102809. doi:10.1016/j.nepr.2020.102809