

# Exploring the perception of nursing students facing burnout in clinical settings during COVID pandemic

Badanie postrzegania wypalenia zawodowego studentów pielęgniarstwa w warunkach klinicznych podczas pandemii COVID

Elizabeth Adwa<sup>1,A-B,D-E,H,K-L</sup>, Klaudia Cwiękała-Lewis<sup>1,A-E,H,K-L</sup>, Jenna Groff<sup>1,B,D-E,H,K-L</sup>,  
Brandon Parkyn<sup>1,A-B,D-E,H,K-L</sup>, Beata Haor<sup>2,E,K-L</sup>, Monika Biercewicz<sup>3,E,K-L</sup>,  
Anna Antczak-Komoterska<sup>2,E,K-L</sup>, Carol Naugle<sup>1,B,D-E,H,K-L</sup>

<sup>1</sup>The Stabler Department of Nursing, York College of Pennsylvania, United States  
<sup>2</sup>Faculty of Health Sciences, The State Academy of Applied Sciences in Włocławek, Polska  
<sup>3</sup>Department of Geriatrics, Collegium Medicum in Bydgoszcz, NCU in Torun, Polska

CORRESPONDING AUTHOR:

Anna Antczak-Komoterska

Faculty of Health Sciences, The State Academy of Applied Sciences in Włocławek, Polska

e-mail: [anna.antczak-komoterska@pans.wloclawek.pl](mailto:anna.antczak-komoterska@pans.wloclawek.pl)

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## STRESZCZENIE

### BADANIE POSTRZEGANIA WYPALENIA ZAWODOWEGO STUDENTÓW PIELĘGNIARSTWA W WARUNKACH KLINICZNYCH PODCZAS PANDEMII COVID

**Cel pracy.** Celem tego badania było poznanie doświadczeń tej grupy studentów, którzy są w grupie wysokiego ryzyka wypalenia zawodowego i niedoboru pielęgniarek. Niniejsze badanie ma na celu ujawnienie postrzegania przez studentów wypalenia zawodowego pielęgniarek i niedoboru pielęgniarek zaobserwowanych podczas kursu klinicznego.

**Materiał i metody.** Badanie przeprowadzono metodą jakościową z wykorzystaniem konwencjonalnego podejścia do analizy treści. Dane zebrano poprzez przeprowadzenie pogłębionych, częściowo ustrukturyzowanych wywiadów.

**Wyniki.** Analiza tematyczna transkrypcji wywiadów zidentyfikowała cztery główne tematy, z odpowiadającymi im podtematami: Źródła wypalenia zawodowego, Niepewność, Strategie radzenia sobie, Różnicowane wsparcie wydziału podczas rotacji klinicznej. Badanie to dowodzi, że studenci pielęgniarstwa doświadczyli podobnego uczucia wypalenia i napięcia emocjonalnego podczas rotacji klinicznej podczas pandemii COVID-19. Dowody podkreślają wpływ stresu psychicznego na studentów pielęgniarstwa w warunkach pandemii, a dodatkowo stres związany jest z uzyskaniem wszystkich wymaganych kompetencji do ukończenia studiów.

**Wnioski.** Wyniki tego badania to źródła wypalenia zawodowego takie jak warunki pracy, obciążenie pracą, radzenie sobie z cierpieniem, śmiercią i umieraniem oraz niepewność co do teraźniejszości i przyszłości, w związku z ewaluującym i zmieniającym się rozumieniem pandemii COVID-19. Mechanizmy radzenia sobie z tym problemem to pozytywne nastawienie i rozmowa z rodziną i przyjaciółmi. I wreszcie różnicowane opinie studentów na temat emocji i poczucia wsparcia ze strony wykładowców.

**Słowa kluczowe:** wypalenie zawodowe, studenci pielęgniarstwa, COVID-19, pandemia, doświadczenie kliniczne

## ABSTRACT

### EXPLORING THE PERCEPTION OF NURSING STUDENTS FACING BURNOUT IN CLINICAL SETTINGS DURING COVID PANDEMIC

**Aim.** The purpose of this study was to learn about the experience of the group of students who are at high risk for experiencing burnout and nursing shortage. This study seeks to reveal students' perception of nursing burnout and nursing shortage observed during a clinical course.

**Material and methods.** This study was conducted with a qualitative method using conventional content analysis approach. Data were collected by conducting in-depth semi-structured interviews.

**Results.** Thematic analysis of the interview transcripts identified four core themes, with corresponding sub-themes: Sources of burnout, Uncertainty, Coping Strategies, Varying faculty support during clinical rotation. This study proves that nursing students experienced similar feelings of burnout and emotional strain during their clinical rotation during COVID. Evidence highlights the impact of psychological stress on nursing students in pandemic circumstances and additionally the stress of completing all required competencies to complete their degree.

**Conclusions.** The findings of this study include sources of burnout such as working conditions, workload, dealing with suffering, death, and dying, and uncertainty in the present and future such as the evolving and changing understanding of COVID. Coping mechanisms involve staying positive and talking to family and friends. Finally, the varied opinions of the students regarding emotions and feelings of support from faculty.

**Key words:** burnout, COVID-19, pandemic, nursing students, clinical experience

## INTRODUCTION

The global shortage of nurses was problematic before the pandemic, and during and after the pandemic, the nursing shortage has worsened due to COVID-19. According to the authors [1], the global shortage of nurses is estimated at 5.9 million, primarily concentrated in lower-income countries. The pandemic has globally exacerbated this shortfall. The reasons behind nursing shortages are multifactorial and include stress, poor mental health, low job satisfaction, heavy workloads, and the high demands of constant change in an unpredictable clinical environment [2].

One consistent factor that has historically contributed to poor retention and nursing shortages is burnout. The World Health Organization [3] describes burnout as, “a syndrome conceptualized as resulting from chronic workplace stress that has not been successfully managed”. Burnout is characterized by exhaustion, negativism or cynicism related to one’s job and reduced productivity at one’s job [3]. The high level of stress of the nursing profession puts nurses at an increased risk for work-related burnout [4]. Certain interventions can help reduce nursing shortages by directly addressing burnout, fostering retention, building a healthy team dynamic, improving work-life balance, and reducing the negative perception of the profession.

Burnout among nursing students has a significantly negative impact on their mental health, quality of life, and academic performance. Despite the high prevalence of burnout among medical students, few researchers choose to study this area. In their systematic review and meta-analysis, the authors found an overall prevalence of burnout among nursing students at 46%, with mild burnout at 26.1%, moderate at 47.7%, and severe at 22.5% [5]. Other researchers, in a conducted meta-analysis [6], reported a burnout prevalence rate among nursing students of 23%. Regarding emotional exhaustion, it affected 47.1% of the respondents, depersonalization 32.2%, and reduced personal accomplishment 43.5%.

The purpose of this study was to explore and describe the York College of Pennsylvania (YCP) nursing students’ perceptions and experiences of nursing burnout and nursing shortage during COVID pandemic. The research questions are:

1. What were the nursing students’ experiences of nursing shortage during their clinical courses taken at YCP during the COVID pandemic?
2. What were the YCP nursing students’ perceptions regarding nursing burnout while taking clinical courses during COVID pandemic?

## MATERIALS AND METHODS

### Participants

The target population were undergraduate students from York College of Pennsylvania. Data were collected through in-depth interviews virtually via Zoom between November 2022 and January 2023. A semi-structured interview guide was used with open-ended questions to allow the participants to share their experiences and perceptions in detail [7].

Anonymity was guaranteed to protect each participant in the study from being identified. Because the school details are presented in the study, other techniques were used to ensure the anonymity of the participants. All participants signed informed consent forms agreeing to participate in the study. The recorded interviews, interview transcripts, and field notes are stored in locked files on a password-protected computer belonging to the researchers. If the study is published the data will be deleted after two years. If the study is not published, the data will be deleted after five years. These techniques will prevent any link to individual responses from the data collected.

### Study Design

This research adopts a qualitative, exploratory and descriptive approach to allow the students to share their stories, experiences, and perceptions regarding nursing burnout during their own personal clinical experiences. This approach was intended to gain a deeper and more holistic understanding of nursing students’ opinions, experiences and attitudes toward nursing burnout and processes [8].

The researchers apply purposeful sampling during this research. Sandelowski [9] states that purposeful sampling is the most appropriate strategy for descriptive qualitative research and that sampling should allow the researcher to capture and describe the phenomena over a variety of situations.

### Study Inclusion and Exclusion Criteria

**Inclusion criteria:** Nursing students enrolled in the undergraduate or graduate program at the York College of Pennsylvania who agree to participate in the study by signing the consent form.

**Exclusion Criteria:** First- and second-year undergraduate nursing students were excluded from the study as clinical courses are not part of the first- and second-year learning objectives.

### Analysis

The data collection method was semi-structured interviews conducted via Zoom video conference software

and in person between November 21st, 2022 and January 30th, 2023. The time of a day for the interview was chosen by the participants. The interviews were recorded with the permission of the participants. Data including age, gender, race and year of attending nursing clinical rotation were collected. All students interviewed attended York College of Pennsylvania School of Nursing.

All interviews began with an open-ended question: "What is your understanding of the causes of burnout symptoms and nursing shortage during COVID?" Participants were then asked follow-up questions to encourage them to talk about their experiences to increase the depth of the responses. All of the questions asked during the interviews are available in Appendix.

The data were analyzed after all interviews were conducted. All recorded interviews were transcribed and thematic categories were searched. The audio recordings were transcribed by two researchers and reviewed by a third researcher for additional accuracy.

Colaizzi's [10] method of data analysis was used to analyze the transcriptions. During the analysis researchers read transcriptions several times to understand the meanings conveyed. During this process, researchers took notes and identified significant concepts. Later the research teams met to discuss the proposed themes. During this process, some themes were reformulated and clustered in categories to validate the meanings agreed by the whole research team. Lastly, the final themes were agreed upon by the whole research team [7,11]. The criteria developed by Lincoln were used to evaluate the data: credibility, confirmability, dependability, and transferability [12].

## Trustworthiness

The trustworthiness of the study was evaluated through the credibility, transferability and the dependability of the answers provided to help establish the reliability and validity of the research study [13]. This credibility was increased through investigator triangulation [14] through multiple researchers collecting and analyzing the data. To help determine the transferability of the research, the researcher's included students of diverse backgrounds, cultures, ethnicities, and levels of study (undergraduate and graduate students). A detailed audit trail of data analysis to provide the rationale for the reporting of the final themes that were created by the research will help the confirmability of this study. Lastly, the dependability of the study will be shown through the review of the data by experts in qualitative data and an audit, performed externally, to help authenticate the relationship between the data and concepts developed by the research.

## Ethical Considerations

Informed consent was obtained from all participants prior to starting the interview. At the beginning of each interview, the objective of the study was explained in full to each participant. All respondents were assured that interview recordings and documents would be kept strictly confidential. This study was approved under IRB NUMBER: 22FA008 by York College of Pennsylvania.

## RESULTS

All participants had clinical rotations during COVID-19 pandemic from January 2020 to December 2021. Eleven interviews were conducted between November 2022 and February 2023. The mean duration was 40.04 min (range: 11 min – 1 hour 13 min 28 sec). The demographic characteristics of participants are described in Tab. 1.

■ Tab. 1. Participant characteristics

Participant	Interview time	Age in years	Gender	Race	Year in clinical rotation
N1	40.52 min	20	Female	Pacific Islander	2020 and 2021
N2	1.13.28	20	Female	Caucasian	2020 and 2021
N3	11 min	21	Female	Caucasian	2020 and 2021
N4	35.46	21	Female	Caucasian	2020 and 2021
N5	22.52	21	Female	African American	2020 and 2021
N6	58.23	24	Female	Caucasian	2021 and 2022
N7	37.5	25	Male	Hispanic	2020 and 2021
N8	42.7	28	Female	Caucasian	2021 and 2022
N9	44.7	24	Female	Hispanic	2021 and 2022
N10	58.9	21	Male	Caucasian	2021 and 2022
N11	15.6	45	Female	African American	2021 and 2022

The results from the conducted research were analyzed according to four main categories: Sources of burnout, Uncertainty, Coping Strategies, and Faculty support during clinical rotation, along with a detailed description of each (Tab. 2).

■ Tab. 2. A schematic view of the development of category

Category	Description
1. Sources of burnout	Working conditions including workload, low staffing levels and lack of Personal Protective Equipment (PPE), exposure to suffering, death and dying, relationships and teams, individual inexperience and student identity, stress from assignments and workload and stress from knowing that I may get the COVID infection and be sick and/or make family and friends sick, and the question why were we not ready for this? Experiencing death several times a day, being dehydrated and exhausted as drinking was difficult with all PPE, PPE was causing wounds on my face. Nurses on the units were frustrated, working double shifts, crying and stressed out and sometimes did not want a nursing student.
2. Uncertainty	Shifts and changes of understanding COVID symptoms and PPE necessities. Fears of getting sick, not knowing if clinical rotation will continue, not knowing what the future brings with layoffs of family members, and trepidation of how long the pandemic will last.
3. Coping Strategies	Staying positive, talking to friends that are going through the same situation, finding time for self-care, relying on faculty to listen and guide students, stepping off the floor to recharge, practicing leaving emotions at clinical and not bringing them home.
4. Faculty support during clinical rotation	Faculty provided positive support to students such as being available to answer student questions. Students expressed the notion that some faculty felt as if it was a nuisance for students to be on the hospital units during the pandemic, lack of support for sick students and not enough grace time to finish assignments while sick. Student emotions and high stress were ignored by faculty.

## Category 1: Sources of burnout

Participants identified sources of burnout due to challenging working conditions faced by student nurses and nursing preceptors.

“I think it’s gotten worse because of the staffing shortage” – regarding burnout (N2)

“There’s definitely anxiety because there’s so much to do” (N6)

“If I could leave bedside nursing I will. I love it but I feel that the expectations are too high, and the support is low” (N8)

“The nursing shortage caused a lot of nurses to be over-assigned with patients, which resulted in a high workload for the nurses, which then resulted in a lot of nurses being overwhelmed by their workload” (N4)

“It was hard to learn when your nursing mentor is crying from being stressed out and could not handle a student” (N7)

“During my practicum my nurse did not want a student, she was so stressed out that having me was adding to her burden, due to this I try to not be in the way or ask any questions. That made my learning experience more difficult” (N1)

“Short staffing is the number one thing that is causing burnout and it is a residual of COVID” (N2) “People were just calling off because they feel like they’d seen too much and didn’t have the support that they needed to advocate for their patients” (N2)

“An overwhelming number of patients; the hospitals were so full” (N6)

“We did not have enough supplies on the unit during my clinical, there was not enough PPE, and other supplies. Oxygen was in high demand and was only given to really critical patients.” (N11) Sources of burnout were identified by the participants as the result of exposure to suffering, death and dying.

“On some clinical days I experienced 5 deaths a shift. No one can cope with that much sadness. It’s not normal and my nurse told me it became normal” (N10)

“My aunt died, and my grandpa died because of COVID. They did not want to take the vaccine. It was hard to see your loved one die, but I still had to go to the clinic and help others, there was no time to cope.” (N9)

“I experience patient died before in clinical, but to have that many of them pass away when they can’t even see your face or hold your hand or even have some by their side from the family was horrible and dehumanizing” (N7)

“My source of burnout was the idea that death became normal occurrence and caring was replaced by need of infection control.” (N9)

“I have experienced patients dying alone, as family was not allowed to visit. I still can’t shake this hopeless feeling of not being able to help my patients to say goodbye to their love ones. This feeling almost made me not want to be a nurse.” (N11)

Sources of burnout were identified by the participants as a result of stress from knowing that I may get the COVID infection and be sick and/or make my family and friends sick.

“No one knew how to protect themselves. Nurses and nursing students came in really close contact with COVID patients, which made it next to impossible for nurses not to catch COVID themselves. With all the nurses getting sick and having to stay home to isolate, it raised the patient to nurse ratio for the nurses who weren’t sick.” (N3)

“Every day I went to clinical I was worried I would get sick and then I will bring this virus home to my child. How horrible would that be?” (N7)

“I worried that I would get sick and won’t be able to continue my clinical. This would put my graduation behind me and cost me more money. I could not afford this” (N10)

“Any time we have a fever we could not go to clinical. This was replaced with tons of paperwork that really did not prepare me for being a real nurse. I would much rather be in clinical with real patients.” (N9)

Sources of burnout were identified by the participants as facing physical challenges during clinical rotation during COVID.

“There were days during our clinical that we did not have a break for several hours. It was hard to find a place available to take all your PPE off. When I did, I have pressure ulcers on my face from N95 mask.” (N1)

“I had a hard time working all day with all the PPE. I was sweating a lot but it was not easy to take a break or even drink some water. There was no place available to quickly take PPE off and drink” (N7) “There were days in clinical that I did not pee for 6 to 7 hours as we were so busy and there was not a place to quickly take off the PPE and go to the bathroom. Infection control was our priority, but nursing students and nurses were so exhausted. The working conditions were very challenging.” (N9)

## Category 2: Uncertainty

“During lockdown people were laid off. I know that I may have a job but will my mom or dad?” (N8)

“I was so stressed out. Not knowing if I can go to a store and buy staff was horrible. I was thinking how long will this be?” (N8)

“I felt as, I didn’t get the education I should have” (N2)

“I wasn’t sure if my clinical hours would count and if I had to repeat anything” (N6) “I just lost it... I was a mess” (N6)

“Changing understanding of COVID symptoms and PPE necessities made me worried and my nursing preceptor was upset and confused. No one had clear understanding on how to protect themes or how to educate patients.” (N1)

“I was in my last clinical semester and not knowing if we will be able to continue with clinical rotation was scary. We all wanted to graduate on time, but pandemic made our future unknown.” (N7) “Infection protocols were changing from one clinical to the other. We were uncertain what the future brings.” (N9)

“I feel like the only people who could understand COVID are those who had to work through it” (N2) “Not knowing if we can continue clinical rotation was scary.” (N1)

“We did not really know how this bug is transmitted. This uncertainty made all of us worry about our health and the health of our families. We did not know if we could make them sick.” (N11)

### Category 3: Coping Strategies

“There should be better mental health resources for nursing students in the future” (N2)

“I delegate appropriately, which takes the weight off my shoulders, and this can help prevent burnout” (N2)

“I took time to take care of myself even if that meant skipping class, I would do it” (N2)

“What helped me cope was talking to friends that are going through the same stuff” (N10)

“I learned to listen to the advice of my faculty and mentors as I realized they lived through this every day. One piece of advice for staying with me was very simple: If you feel that everything is too much just take a moment and take a few deep breaths. This helps me put things in perspective and makes everything a bit more manageable.” (N11)

“During my practicum, my mentor told me to step out to recharge if I feel overwhelmed. This was amazing advice and now as a nurse I do that when I am overwhelmed.” (N7)

“I met frequently with my advisor during COVID. She helped me understand that nurse’s job is emotionally and physically demanding and that it was important for me to find ways to cope with the job demands. I used prayer and music as my coping.” (N9)

“My clinical faculty told me to leave my emotions behind in clinical setting and not bring them home. This helps me not to go home mad and disappointed and have an emotional break.” (N8)

### Category 4: Faculty support during clinical rotation

“The extra stress and the pushback I got from professors gave me burnout.” (N2)

“Emotions and high-stress levels for nursing students were ignored by faculty.” (N2)

“I felt like faculty had no respect or understanding for nursing students.” (N8) “I felt like we were just a paycheck.” (N6)

“In community health I have an amazing faculty that I was relying on to listen and guide us, we survived because of their willingness to support us.” (N11)

“Some faculty felt it was a nuisance for us to be on the units during the pandemic. We wanted to learn but they did not want to get sick.” (N7)

“We have many challenges during clinical rotation during the pandemic. One was when we were sick we still had to work on our clinical paperwork. And some of us were really sick. Some faculty were not really understanding.” (N1)

“I would say faculty was available to answer our questions and support us the best they could during very challenging times.” (N10)

## DISCUSSION

Nursing students at YCP faced significant challenges due to nursing shortages during the COVID pandemic. They experienced increased workloads and were often required to work in understaffed units. This led to heightened stress and burnout as students had to take on more responsibilities and manage additional patients. The shortage also resulted in less supervision and support, which further overwhelmed the students.

YCP nursing students reported heightened burnout and emotional strain during their clinical courses amid the COVID pandemic. They experienced mental, physical, and emotional exhaustion similar to practicing nurses, attributed to the intense pressure and stress in their clinical environments. The strict adherence to pre-pandemic rules, even when students were unwell, and feelings of being ignored by faculty compounded their stress. The pandemic significantly impacted their mental health, leading to increased perceptions of burnout and emotional distress.

During the COVID pandemic, nursing students at YCP encountered significant challenges due to the pervasive nursing shortages. They experienced heightened stress and burnout as they faced increased workloads and had to work in understaffed units. This shortage not only intensified their responsibilities but also meant that they managed more patients than usual, which exacerbated their emotional and physical exhaustion. The limited supervision and support during their clinical rotations further contributed to their sense of being overwhelmed [15,16].

The students’ perceptions of burnout were notably high, reflecting a similar intensity of mental, physical, and emotional exhaustion to that experienced by practicing nurses. The added pressure and stress from their clinical environments during the pandemic played a significant role in this experience. Students reported that the strict enforcement of pre-pandemic rules, such as adherence to paperwork deadlines despite being unwell, combined with feelings of being ignored by faculty, further intensified their stress and emotional strain [17,18,19].

Key sources of burnout included the demanding working conditions, heavy workloads, and the emotional toll of dealing with patient suffering, death, and dying. The uncertainty surrounding the evolving nature of COVID-19 and its impact on healthcare added to their stress, contributing to a sense of instability about the future [20,21].

Mufarrih et al. [22] assessed the prevalence of burnout among nursing and medical students. Among medical students, burnout was reported in 16.9% of the participants, while among nursing students, it was found in 6.7%. It was shown that medical students experienced burnout more than twice as often as nursing students (OR = 2.49;  $p < 0.001$ ). Significant risk factors for burnout among the participants included reduced sense of efficacy, living in a hostel, and occasional drug use. Meanwhile, Olmos-Bravo et al. [23], in a systematic review, observed an average prevalence of burnout at 35.3% among health science students in Spain. Significant correlations were found between burnout and variables related to academic

performance and mental health. Lindsay et al. [24] evaluated experiences related to COVID-19 from the perspective of nursing and social work students. The participants reported that the COVID-19 pandemic negatively impacted their education, including reduced learning opportunities and increased feelings of isolation, stress, and anxiety. Therefore, conducting research in this area is crucial, as significant deficits have been observed.

To cope with these challenges, students employed various strategies such as staying positive, seeking support from family and friends, and engaging in self-care. They also relied on faculty and staff for guidance, which was crucial during their clinical training [15,16]. However, the study revealed mixed feelings regarding faculty support. While some students found the support essential and beneficial, others felt that it was insufficient during their hospital experiences [17,18,19].

These findings highlight the parallels between student and practicing nurse burnout and underscore the need for faculty to better manage student stress in future crises, potentially addressing issues such as student attrition and contributing to the broader nursing shortage [20,21].

## CONCLUSIONS

In conclusion, this study explored the perceptions of YCP nursing students facing burnout during clinical rotations amid the COVID pandemic. Using qualitative research methods and interview data, themes emerged reflecting common experiences among participants. The study highlights the psychological stress experienced by student nurses, including the challenge of meeting competencies while managing pandemic-related stress. These findings emphasize the impact of working conditions, workload, and dealing with suffering and uncertainty. Coping strategies identified include staying positive, seeking support from family and friends, and relying on faculty guidance. The study also revealed mixed feelings about faculty support, with some students finding it essential while others felt it was lacking. The insights gained can help faculty better manage student stress in future crises and address the nurse shortage issue.

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