



Being a nursing student in times of COVID-19

Ser estudante de enfermagem em tempos de COVID-19

Ser estudiante de enfermería en tiempos de COVID-19

Cristina Lavareda Baixinho¹

Óscar Ramos Ferreira¹

1. Escola Superior de Enfermagem de Lisboa, Centro de Investigação, Inovação e Desenvolvimento em Enfermagem de Lisboa, Lisboa, Portugal.

ABSTRACT

Aim: To understand how the pandemic has affected nursing students in clinical teaching contexts. **Method:** This was a qualitative, exploratory, cross-sectional, and descriptive study. The participants were five newly graduated nurses who had completed the last clinical internship of their program during the COVID-19 pandemic. The narratives were analyzed using content analysis. **Results:** Five categories emerged: Difficulties felt in integration; difficulties in completing clinical internship; the influence of the pandemic on students' expectations regarding the clinical internship for integration into professional life; fears related to COVID-19, and suggestions for training nursing graduates to prepare them to manage pandemic situations. **Conclusions and implications for practice:** The clinical internship was experienced with anxiety, fear, and pressure to achieve the skills required for professional practice, with the possible support provided by clinical supervisors, who were also under pressure given the increased work overload caused by the pandemic. The study allows for recommendations for the area of nursing education and research.

Keywords: Pandemics; Nursing; Clinical Clerkship; Students; Nursing Supervisory.

RESUMO

Objetivo: Compreender como a pandemia afetou os estudantes de enfermagem nos contextos de Ensino Clínico. **Método:** Este é um estudo de abordagem qualitativa, exploratória, transversal e descritiva. Os participantes foram 5 enfermeiros recém-licenciados que realizaram o último estágio clínico da sua licenciatura durante a pandemia de COVID-19. A análise de conteúdo ocorreu por meio da técnica para a análise dos achados das narrativas. **Resultados:** Emergiram 5 categorias: Dificuldades sentidas na integração; Dificuldades na concretização do ensino clínico; Influência da pandemia nas expectativas dos estudantes ante o ensino clínico de integração à vida profissional; Receios, relacionadas com a COVID 19; e Sugestões para a formação dos licenciados em enfermagem, com vista a capacitá-los para a gestão de situações de pandemia. **Conclusões e implicações para a prática:** O ensino clínico, cujo objetivo é atingir as competências exigidas para o exercício profissional, foi vivenciado com ansiedade, medo e pressão, porém com o suporte possível por parte dos supervisores clínicos, eles próprios também sob pressão, dado o aumento da sobrecarga de trabalho provocada pela pandemia. O estudo permite fazer recomendações para a educação e investigação em enfermagem.

Palavras-chave: Pandemias; Enfermagem; Estágio Clínico; Estudantes; Supervisão de Enfermagem.

RESUMEN

Objetivo: Comprender cómo afectó la pandemia a estudiantes de enfermería en el ámbito de la enseñanza clínica. **Método:** Estudio de abordaje cualitativo, exploratorio, transversal y descriptivo. Participaron 5 enfermeros recién graduados que realizaron la última práctica clínica de licenciatura durante la pandemia de COVID-19. Se aplicó análisis de contenido para estudiar los hallazgos narrados. **Resultados:** Surgieron 5 categorías: Dificultades percibidas en la integración; Dificultades en la concreción de la enseñanza clínica; Influencia de la pandemia en las expectativas estudiantiles respecto de la enseñanza clínica de integración a la vida profesional; Temores relacionados con la COVID-19; y Sugerencias para la formación de licenciados en enfermería con el objeto de capacitarlos para manejarse en situaciones de pandemia. **Conclusiones e implicaciones para la práctica:** La enseñanza clínica fue experimentada con ansiedad, miedo y presión para alcanzar las competencias exigidas para el ejercicio profesional., con el respaldo posible de los supervisores clínicos, ellos mismos también bajo presión dado el aumento de la sobrecarga de trabajo provocada por la pandemia. El estudio brinda recomendaciones sobre educación e investigación en enfermería.

Palabras clave: Pandemias; Enfermería; Prácticas Clínicas; Estudiantes; Supervisión de Enfermería.

Corresponding author:

Cristina Lavareda Baixinho.
E-mail: crbaixinho@esel.pt

Submitted on 12/22/2020.

Accepted on 04/28/2021.

DOI:<https://doi.org/10.1590/2177-9465-EAN-2020-0541>

INTRODUCTION

The SARS-CoV-2 pandemic has imposed complex challenges on health systems and the education of health professionals¹⁻⁵, in terms of ensuring that clinical education is delivered with the same quality, guaranteeing the safety of patients, professionals and the community, while simultaneously enabling the acquisition of knowledge and the development of skills.

To respond to the challenges posed by the pandemic, higher education institutions responsible for the training of nursing professionals have adjusted their curricula, opting for a B-learning modality for theoretical, theoretical-practical, and laboratory practice classes. As active elements in the teaching-learning process, students alternate between theoretical classes and practical internships in healthcare services to acquire the necessary skills to provide quality clinical practice that guarantees the safety of citizens^{4,5}.

Clinical learning is a central element of nursing education, recognized as one of the most important factors for the development of skills⁶. In light of the pandemic, the clinical internship (CI), both in hospitals and primary health care settings, has been maintained in the in-person regimen, albeit adapted to the circumstances imposed by the situation. Despite the difficult circumstances in which it is carried out, the intended learning outcomes of this type of teaching have not changed.

In Portugal, the undergraduate nursing degree requires carrying out the CI in specific care contexts and with clients who are experiencing different developmental, health-disease, situational, and organizational transitions. The internship is a privileged moment for the theoretical and practical integration of knowledge⁶, because it provides students the opportunity to confront their academic knowledge and integrate it into professional clinical practice. Because the CI is the optimal process for learning and consequent acquisition and development of skills, it must enable student involvement⁶ and in the face of the challenges mentioned above, establish a set of strategies to improve the quality of clinical education^{7,8}.

The COVID-19 pandemic has changed the daily life of the population and also of nursing education^{1,2}, taking it far beyond in-person teaching, i.e., to a reality also marked by remote education. In the first wave, a period of compulsory lockdown was decreed in Portugal and students had to suspend their clinical internships, as occurred in other countries². Three months later, they returned to clinical contexts, and some students remained on the front line, witnessing the effects of the disease on the different life transitions of the population^{1,2}, especially those most vulnerable to this type of infection. In some situations, with the emergence of the COVID-19 pandemic, students were set before a dilemma, where they had to choose between their safety and that of their family's and the continuation of their studies and consequent professional career¹, especially students with chronic or oncological diseases.

In both cases, fear, uncertainty and worry affected students¹. They felt fear of individual contagion and uncertainty regarding the manifestation of signs, symptoms and the prognosis of the

disease, combined with the fear that the suspension of the internship or contagion during its completion would interfere with plans to complete the program and enter the labor market. All this resulted in a state of greater anxiety and stress¹.

The authors note that in addition to the risks of contamination, students were also subject to psychological-emotional alterations⁵ arising from this scenario, also due to the ambivalence between fear and the desire to fulfill the social mission of the profession they had chosen. Recent studies report that nursing and medical students and interns from the United States and Europe have experienced feelings of anxiety and vulnerability that internally compete with the desire and commitment to care for COVID-19^{3,4} patients.

Professional identity is important for future nurses. Students feel an intrinsic reward in taking on their role in a clinical context. For some, being a nurse is linked to the notion of nursing as a vocation, and many students describe it as an essential source of motivation in their choice of career³ and in crisis situations, feel this 'vocational appeal'.

Some experts argue that despite the presence of certain negative aspects, education during pandemics can also be seen as an opportunity for students to develop or strengthen skills that have been under construction since the initial years of the program². These scholars emphasize that in higher education it is essential not only to provide guidance and training to students regarding their nursing practice but also to provide support in times of crisis¹ like the current one.

The pandemic caused by SARS-CoV-2 and the concomitant need to increase the number of nurses to cope with it provided those whose option was to undertake a clinical internship (CI) the opportunity to do something they would not normally be able to do, and consequently, obtain other learning outcomes³.

Based on the premise that the current COVID-19-related challenges faced by health systems and the organization of care to ensure the safety of patients, professionals, and the community has imposed changes to the teaching-learning process of students who are carrying out the CI in different health contexts, the objective of this study was to understand how the pandemic affected nursing students in internship contexts.

METHOD

The nature of the phenomenon investigated and the paucity of studies on the subject guided the design of this exploratory study, with a qualitative, cross-sectional and descriptive approach. The study was carried out at the partner hospital of the Lisbon School of Nursing within the framework of the Safe Transition project, through which nursing students participate in their last CI of the undergraduate nursing program to then integrate into professional life.

The participants were asked to provide a written answer to the following central research questions: "How did the pandemic influence your clinical internship?" To guide their answers, the students were given a script with prompt questions to give them a greater understanding of what the study wanted to comprehend and also to provide them space to freely and spontaneously reflect about the topic⁹.

Narrative is an important technique for data collection in qualitative research because it allows to establish objectives and formulate options for actions that are based on practice, theory and research. This leads to interventions characterized by a higher level of knowledge, mobilizing what has been experienced¹⁰.

Five seniors who had performed their last CI in a hospital environment participated in this study. They were asked to participate by one of the researchers, who ensured they fulfilled the inclusion criteria: senior, completing CI that had undergone organizational changes arising from the National Plan of Preparation and Response to the Novel Coronavirus Disease (COVID 19) and the internal guidelines of the institutions regarding the organization of care, and providing free and informed consent to participate in the study.

All the selected participants had carried out their CIs during the COVID-19 pandemic in a hospital institution, allowing the researchers to focus on the phenomenon of the topic of discussion.

Data collection was carried out in the second week of August after the students had received the results of their CI evaluation to minimize the effect of socially desirable responses.

The participants' discourse was described and interpreted using content analysis¹¹. The protocol included preparing the information; transforming the content into units; categorizing the codes; then describing and interpreting the results^{9,11}. After reading the participants' answers, content exploration began, with the selection of the coding units (excerpts; enumeration; choice of categories) followed by categorization, maintaining a continuous and two-way dialogue between theory and data¹¹.

The analysis process revealed the following domains: the context, people, processes, and the time in which the action took place, in order to create the conditions for systematic reflection to occur, considering the diversity and uniqueness of these students' experience¹⁰ in a changing clinical context. The categories defined had to be exhaustive, representative, homogeneous, relevant, and exclusive^{9,11}. The analysis performed by the researchers was given back to the participants for their validation.

This study was authorized by a Research Ethics Committee (Resolution - 09/HVFX/2019). The institutions involved had a formalized partnership protocol that authorizing research studies. It abided by all ethical and formal research principles, including obtaining authorization by participants to be part of the study, obtaining signed informed consent forms, and ethical issues inherent to research development. Anonymity and confidentiality of data were also assured to all participants.

RESULTS

The sample consisted of five senior nursing students (S) who had carried out their last CI of the undergraduate nursing program at the Lisbon School of Nursing in a hospital in greater Lisbon during the first wave of the COVID-19 pandemic that ravaged the country. The CI ended in July 2020. The average age of the nurses was 21.8 years old, and 80% of them were 22 years old.

Participants carried out the CI in the emergency department, the intensive care unit, surgical specialties, and medical specialties.

The analysis of the participants' discourse yielded five categories: difficulties felt in professional integration associated with the pandemic; difficulties in carrying out the internship associated with the pandemic; the influence of the pandemic on the students' expectations regarding their internship to integrate into professional life; fears related to COVID-19 during the internship; and suggestions for training nursing graduates in order to empower them to manage pandemic situations. Table 1 presents the categories and how many times they appeared in the analyzed content. The identification of 101 units highlights the richness of the students' discourse, enabling the interpretation and inference of the findings based on each unit analyzed and properly classified, observing the requirements of exhaustiveness, exclusivity, homogeneity, reliability, and validity.

Difficulties experienced in integration associated with the pandemic

The difficulties experienced by the students in their integration into the CI associated with the pandemic were related to the use of masks, which, according to them, "impaired communication" (S1), with the need to work with professionals in the COVID area and with COVID-19 patients, maintaining social distancing and having to prepare to carry out the CI in a different place than where they had started (S1, S2).

Also, the three-month paralysis because of mandatory lockdown was felt like a hindrance, given the "fear of returning to the clinical internship context" (S2), having "felt regression" (S4) in their clinical reasoning abilities, and "dexterity" (S4) when this happened. The absence of CI sites and length of the lockdown prevented students from developing the clinical reasoning skills that daily and systematic clinical practice allows. This situation also interrupted the development of acquired instrumental skills.

Another difficulty in integration expressed by the students was the burden that the pandemic had put on health services and professionals (S5), who in addition to their clinical practice in the services also had to take on the role of clinical advisors. Such an overload would have made them less available to properly integrate the students.

Table 1. Categories and Frequency of Registration Units by Category. Lisbon; 2020.

Categories	FI (units)
Difficulties experienced in integration	27
Difficulties in completing the CI	23
Influence of the pandemic on the expectations of students regarding the CI for integration into professional life	21
COVID-19-related fears	19
Suggestions for training nursing graduates to enable them to manage pandemic situations	11
Total	101

Only one of the students (S3), who performed the CI in a surgical service, did not express feeling difficulties associated with the pandemic. The justification for the absence of difficulties in this service was related to the fact that, despite having a contingency plan and having undergone changes due to the internal organization of inpatient services, the service did not receive any actively infected patients during the student's CI. This distance from the front line (emergency services, and intensive medicine and care) where the fight against the pandemic was a constant seems to have influenced the integration and availability of nurses to integrate students. Another reason may be related to the fact that this student was already familiar with the service and was well integrated before social isolation was instituted that was mandated to the Portuguese population.

Difficulties in carrying out the internship associated with the pandemic

The students understood that the reduction of the clinical teaching time "Reduced hours of contact with patients and service staff, that is, of internship workload" (S1) was one of the main difficulties in carrying out the CI associated with the pandemic, which led to them having to "acquire the maximum theoretical-practical knowledge, in a six-week period" (S2). Another difficulty was related to making contact with patients' relatives (S4) and managing their own time due to the insufficient nursing staffing in the services, a situation that already was a reality before the pandemic and that was aggravated (S4), with the consequent reduction in the availability of nurses present to adequately receive, guide, supervise, and evaluate students.

The mandatory lockdown, which caused a "loss of rhythm" (S5), made it so students had to "strive harder to make up for lost time" (S5) and to be able to adequately complete their CI. The student who performed her CI in the surgical specialties (S3) also said that the pandemic "did not influence" the completion of the CI, corroborating the statements above, because if the nurses in the service were not in the frontlines in the fight against COVID-19, they would be more available to adequately monitor this student during her stay in the service.

Influence of the pandemic on the expectations of students regarding the CI for integration into professional life

The pandemic seems to have lowered the expectations of students regarding the CI for fear of failure. This failure is related to the possibility of becoming sick through contact with COVID-19 patients and from exhaustion. One student mentioned how harmful this fear was when caring for the patients: "There was always a fear when touching someone, which hinders care" (S1). These low expectations were also related to the possibility of the CI being more challenging than originally planned, due to the increased pressure to develop the expected skills and the resulting exhaustion, both physical and psychological, because of the reduction in the length of the CI to six weeks, as expressed by two students: "expectations of a higher difficulty level, and an

increased level of exhaustion, both physical and psychological. (...) because I would have to acquire the same knowledge in six weeks, rather than four months" (S2); "this increased the pressure, (...) because it did not allow certain skills to develop, or they had to be developed faster" (S4).

In fact, the students' expectations regarding the possibility of developing skills during the CI were so low that one student was amazed at the success obtained: "the successful conclusion (...) in face of context in the CI took place made me more confident and surer of myself" (S5). Once again, and interestingly enough, the student who performed her CI in the surgical specialties revealed that the pandemic "did not influence" (S3) the expectations she had of the CI.

Main fears COVID-19-related fears during the CI

The main COVID-19-related concerns of the students during the CI were, in descending order, the possibility of being infected: "this internship was not easy, the word that defines it is fear, first in terms of fear of not having the internship, then we're there and afraid of being contaminated, it seems strange when they say that young people don't develop severe forms of the disease, but in the service next to mine there were some" (S3) and then fear of transmitting COVID-19 to family and friends: "As soon as I got home I took my clothes off and took a shower, I didn't know what I was bringing home from the hospital" (S1); fear of not finishing the program "when they told us that the criteria for choosing the internship would be the same I thought that because my GPA was low, I would not be able to do the internship so soon, which would be difficult for me because I really need to start working" (S4); and fear when the students went back to the internship after the interval of three months: "I started the internship, I spent one week at the service, and three months later I come back to a completely different one, I wasn't prepared, I had lost some skills in that period (...) not so much knowledge, but dexterity and it felt hard to make progress. (S2).

Suggestions for training nursing students to enable them to manage pandemic situations

The four students who said that the program had trained them to carry out the CI in contexts of risk of contagion suggested that it would be important "to reinforce the importance of social distancing with patients (...) and with the health team" (S1) and to have "training in this area" (S3), taking courses, discussing" knowledge with classmates and the rest of the team" (S4), courses that could be "online", specifically "about the pandemic" (S5). In addition, this respondent (S5) suggested that "additional documentation on infection control and about the pandemic" (S5) would be important.

The participant who reported not having been prepared for CI in contexts of risk of contagion suggested that "psychological support" be provided (S2) by the school and that it invest "in specific training for the pandemic" (S2), corroborating the suggestions of the other participants.

DISCUSSION

The results of this study reinforce the assertion that the pandemic has changed the paradigm of clinical education¹². Some authors even consider that nursing and nursing education are entering a new era¹, resulting in the need to explore new pedagogical strategies and evaluate their effectiveness.

The findings of this study showed that during their CI, the students were afraid of becoming infected and transmitting COVID-19 to friends and family and were afraid of coming out of lockdown and being in contact with people and providing care, a finding which corroborated by other studies on the subject concluded that anxiety among nursing students was very high during the COVID-19 pandemic^{1,13-16}. One study conducted in Spain assessed students' stress level at three moments (once before and twice after lockdown) and concluded increased substantially during the period of social isolation¹⁶.

The reasons that led students to become anxious were related to the risk of infection. One study found that 68.1% of students expressed this concern¹⁴; with uncertainty and economic problems^{14,16}, with family problems¹⁶; with fear of infection within their family¹⁴; with the need to support and care for their dependents¹⁴, and with the lack of resources to deal with the challenges of the new pedagogical modalities¹³.

Another troubling symptom resulting from anxiety relates to the prevalence of poor sleep quality and the consequential change in sleeping patterns among nursing students, which have been associated with reduced performance, behavioral changes, changes in diet, and even aggressive behavior¹⁵. The restrictions placed on different life activities can result in lifestyle changes that affect the quality of sleep¹⁵, which, coupled with the rotating schedule that clinical education requires, can contribute to the risk of exhaustion.

Regarding the categories that emerged and that were related to difficulties in integration and carrying out the CI, this study corroborates the opinion of physicians who have reported that maintaining clinical education, despite the risks, is beneficial to patients and health systems, because the participation of students reinforces important values, such as altruism, care in times of crisis, and solidarity with the profession¹⁷. However, it is with some concern that this study discusses the role of clinical advisors and professors in this process.

In order for clinical experiences to enable lasting and positive learning, it is necessary to rethink how students are integrated into the services and the role of clinical advisors in this process, especially in times of greater demand and complexity in the provision of care. The findings of this investigation point to difficulties at this level, not only because of the fear of students and the temporary absence they had from clinical context, which made them feel more insecure about their practical skills, manual dexterity, and clinical reasoning in nursing but also because the workload of nursing professionals decreased their availability to adequately integrate students and effectively support them throughout the entire educational process.

The difficulties in student integration and the development of the CI affect the teaching-learning process. The goal of inserting students into the real world of work, while supervised by the concrete figure of the nurse professional and mediated by the didactic-pedagogical organization of the professor, is so that they can carry out real interventions in work processes and to train professionals capable of using praxis (the union of theory and practice) to underpin collective reflections, resulting in changes in real health situations^{18,19}.

The tutoring performed by clinical nurses has been recognized in the international literature as a strategy to maximize the benefits of nursing education in terms of acquiring knowledge and skills, security, and professional socialization²⁰, which is compromised when these professionals are less available as a result of the demands of the context and the complexity inherent to the pandemic.

It is important to recognize the importance of nursing supervision during CI, even in a complex situation such as the SARS-CoV-2 infection, lest the process of socializing, teaching, and evaluating students be put at risk, hindering the integration of theory into practice^{18,20}, and the acquisition of new knowledge, skills, and attitudes for the development of professional competences¹⁹. The participants expressed this concern in their written responses, saying that they were afraid, both at the beginning and during the CI, that the reduced hours of the internship could affect the development of their skills and abilities to autonomously exercise the profession. The discourse analysis also highlighted the students' apprehension with their ability to mobilize cognitive, psychomotor, and attitudinal learning, consciously and systematically, in clinical decision-making^{6,18-20}.

Future studies should explore whether the CI experience during COVID-19 influenced the integration into professional life and whether this constituted a traumatic event. Another study indicated that the impact of the pandemic on students and professionals, especially the most vulnerable ones, will require special care and attention to ensure that they are successful¹. If integration takes place in the service where the last CI was developed, the impact will be zero or certainly much less. However, further research is necessary to confirm or refute this hypothesis.

Fear and anxiety in the face of a new and complex situation that presents risks to one own's safety and that of one's family draws attention to the need to prepare future professionals for traumatic experiences or adverse events¹ and to provide them psychological-emotional support. Psychological-emotional help can be delivered through mental health care, including psychological support, which has already been shown to be effective in previous epidemiological crises and has now been strengthened in the face of the current pandemic²¹.

A survey conducted in Japan focusing on the experiences, sense of belonging, and decision-making processes of professional reveals that although COVID-19 strongly influenced the participants' understanding, feedback, and living standards, their sense of belonging and decision-making remained unchanged, and in some situations, they were strengthened by their certainty about professional choice and social mission²².

The development of professional identity and the definition of the social mission of nursing educators play a critical role in preparing students to work in complex and ever-changing healthcare environments²³.

Because it was not the scope of the present study, it is important to explore the motivations of students who chose not to perform the CI during the pandemic, in addition to the consequences of this decision. The reasons behind this decision may have to do with the fact that these students live with people in risk groups; because they themselves belong to a risk group; or because they felt unprepared for the challenges posed by the pandemic. One study showed that this option put students in a difficult situation, inducing feelings of guilt in many of them²⁴, which may influence future clinical experiences.

One of the participants suggested that the students receive psychological support, which corroborates the findings in the literature. Receiving psychological support before and during CI can help interns to cope with stress, and thus help them to develop skills to protect themselves, their families, and the community during epidemic infections¹⁴.

Education in nursing and other health disciplines should promote critical thinking, reflection, and safe decision-making, ensuring health care users the best care at the lowest cost¹⁹. The idea behind this statement is an international concern and a challenge for education so that students can acquire knowledge, attitudes, and skills for a safe and evidence-based clinical practice. Future studies should explore whether having been a nursing student in times of COVID-19 made them better nurses²⁴ and professionals more able to face adverse and complex situations. One participant's recommendation was that educational institutions develop training on this topic. Even after the end of this pandemic, nursing curricula should include spaces to discuss contingency plans and debates based on COVID-19 case studies²⁵, taking advantage of the potential of high-fidelity simulations for this purpose²⁶.

FINAL CONSIDERATIONS

The content analysis of the narratives of the five participants shows that they experienced the clinical internship with a mixture of feelings: fear of failure, fear of contagion, motivation to finish their curriculum, and concern with the development of skills that prepared them for the exercise of functions. There were difficulties in their integration and carrying out the CI related to the 3-month interruption and the reduction in the work load. Contingency plans, infection control measures and the evolution of SARS-CoV-2 infection conditioned the integration, communication, and availability of clinical supervisors for student guidance.

These findings open way to public discussions about learning opportunities and the difficulties students face in clinical teaching. The pandemic, organizational changes, and increased workload affected the time and availability of clinical counselors, which influenced the learning and clinical experience of students who are vulnerable to the ambiguity toward their obligation to provide care and associated fears.

This discussion should extend to the role of educational institutions and teachers to ensure the quality of nursing education and has implications for the clinical and pedagogical practice of supervising nurses. Therefore, training courses in nursing supervision should address the issues of the role and activities of the clinical supervisor in time of pandemics as someone who facilitates the integration of students and support their learning.

One of the main limitations of the study was the sample size, which did not allow for data saturation. Future research, with larger samples and possibly guided by the categories that emerged in this discourse analysis should conduct a more in-depth analysis of the findings of this study.

FINANCIAL SUPPORT

The "Safe Transition" project is funded by the Lisbon Center for Nursing Research, Innovation and Development (Cidnur).

AUTHOR'S CONTRIBUTIONS

Design of the study. Cristina Lavareda Baixinho. Óscar Ramos Ferreira.

Data collection or production. Cristina Lavareda Baixinho. Óscar Ramos Ferreira.

Data analysis. Cristina Lavareda Baixinho. Óscar Ramos Ferreira.

Interpretation of the results. Cristina Lavareda Baixinho. Óscar Ramos Ferreira.

Writing and critical review of the manuscript. Cristina Lavareda Baixinho. Óscar Ramos Ferreira.

Approval of the final version of the article. Cristina Lavareda Baixinho. Óscar Ramos Ferreira.

Responsibility for all aspects of the content and integrity of the published article. Cristina Lavareda Baixinho. Óscar Ramos Ferreira.

ASSOCIATED EDITOR

Antonio Jose Almeida Filho 

SCIENTIFIC EDITOR

Ivone Evangelista Cabral 

REFERENCES

1. Fowler K, Wholeben M. COVID-19: outcomes for trauma-impacted nurses and nursing students. *Nurse Educ Today*. 2020 out;93:104525. <http://dx.doi.org/10.1016/j.nedt.2020.104525>. PMID:32659536.
2. Franzoi MAH, Cauduro FLF. Participation of nursing students in the Covid-19 pandemic. *Cogitare Enferm*. 2020;25:e73491. <http://dx.doi.org/10.5380/ce.v25i0.73491>.
3. Swift A, Banks L, Baleswaran A, Cooke N, Little C, McGrath L et al. COVID-19 and student nurses: a view from England. *J Clin Nurs*. 2020;29(17-18):3111-4. <http://dx.doi.org/10.1111/jocn.15298>. PMID:32298512.

4. Gallagher TH, Schleyer AM. "We signed up for this!": student and trainee responses to the Covid-19 pandemic. *N Engl J Med.* 2020;382(25):e96. <http://dx.doi.org/10.1056/NEJMp2005234>. PMID:32268020.
5. Miller DG, Pierson L, Doernberg S. The role of medical students during the COVID-19 pandemic. *Ann Intern Med.* 2020;173(2):145-6. <http://dx.doi.org/10.7326/M20-1281>. PMID:32259194.
6. Jamshidi N, Molazem Z, Sharif F, Torabizadeh C, Najafi Kalyani M. The challenges of nursing students in the clinical learning environment: a qualitative study. *ScientificWorldJournal.* 2016;2016:1846178. <http://dx.doi.org/10.1155/2016/1846178>.
7. Albarqouni L, Hoffmann T, Straus S, Olsen NR, Young T, Ilic D et al. Core competencies in evidence-based practice for health professionals: consensus statement based on a systematic review and delphi survey. *JAMA Netw Open.* 2018;20181(2):e180281. <http://dx.doi.org/10.1001/jamanetworkopen.2018.0281>. PMID:30646073.
8. Shadadi H, Sheyback M, Balouchi A, Shoorvazi M. The barriers of clinical education in nursing: a systematic review. *Biomed Res.* 2018;29(19):3616-23. <http://dx.doi.org/10.4066/biomedicalresearch.29-18-1064>.
9. Minayo C, Costa AP. Técnicas que fazem uso da palavra, do olhar e da empatia. *Oliveira de Azeméis: Ludomédia;* 2019.
10. Silva IB, Amendoeira J. The use of narrative in the paradigm of qualitative research. *Rev UIIPS [Internet].* 2018; [citado 2020 dez 22];2(VI):29-40. Disponível em: <http://ojs.ipsantarem.pt/index.php/REVUIIPS>
11. Bardin L. Análise de conteúdo. *Lisboa: Edições 70;* 2011.
12. Hilburg R, Patel N, Ambruso S, Biewald MA, Farouk SS. Medical education during the coronavirus disease-2019 pandemic: learning from a distance. *Adv Chronic Kidney Dis.* 2020 jun 23;27(5):412-7. <http://dx.doi.org/10.1053/j.ackd.2020.05.017>. PMID:33308507.
13. Savitsky B, Findling Y, Erel A, Hendel T. Anxiety and coping strategies among nursing students during the covid-19 pandemic. *Nurse Educ Pract.* 2020 jul;46:102809. <http://dx.doi.org/10.1016/j.nepr.2020.102809>. PMID:32679465.
14. Aslan H, Pekince H. Nursing students' views on the COVID-19 pandemic and their perceived stress levels. *Perspect Psychiatr Care.* 2021 abr;57(2):695-701. <http://dx.doi.org/10.1111/ppc.12597>. PMID:32808314.
15. Romero-Blanco C, Rodríguez-Almagro J, Onieva-Zafra MD, Parra-Fernández ML, Prado-Laguna MDC, Hernández-Martínez A. Sleep pattern changes in nursing students during the COVID-19 lockdown. *Int J Environ Res Public Health.* 2020;17(14):5222. <http://dx.doi.org/10.3390/ijerph17145222>. PMID:32698343.
16. Gallego-Gómez JI, Campillo-Cano M, Carrión-Martínez A, Balanza S, Rodríguez-González-Moro MT, Simonelli-Muñoz AJ et al. The COVID-19 pandemic and its impact on homebound nursing students. *Int J Environ Res Public Health.* 2020;17(20):7383. <http://dx.doi.org/10.3390/ijerph17207383>. PMID:33050435.
17. Miller DG, Pierson L, Doernberg S. The role of medical students during the COVID-19 pandemic. *Ann Intern Med.* 2020;173(2):145-6. <http://dx.doi.org/10.7326/M20-1281>. PMID:32259194.
18. Esteves LSF, Cunha ICKO, Bohomol E, Negri EC. Supervised internship in undergraduate education in nursing: integrative review. *Rev Bras Enferm.* 2018;71(Supl. 4):1740-50. <http://dx.doi.org/10.1590/0034-7167-2017-0340>. PMID:30088648.
19. Baixinho CL, Ferreira Ó, Cardoso M, Nascimento P, Pedrosa R, Gonçalves P. Autopercepção dos estudantes sobre a participação em atividades extracurriculares de transferência de conhecimento: o exemplo da Transição Segura. *NTQR.* 2020;2:588-601. <http://dx.doi.org/10.36367/ntqr.2.2020.588-601>.
20. Iglesias-Parra MR, García-Mayor S, Kaknani-Uttumchandani S, León-Campos A, García-Guerrero A, Morales-Asencio JM. Nursing students' and tutors' satisfaction with a new clinical competency system based on the Nursing Interventions Classification. *Int J Nurs Knowl.* 2016;27(4):193-200. <http://dx.doi.org/10.1111/2047-3095.12102>. PMID:26033284.
21. Moreira WC, Sousa AR, Nóbrega MPSS. Adoecimento mental na população em geral e em profissionais de saúde durante a Covid-19: scoping review. *Texto Contexto Enferm.* 2020. In press. <http://dx.doi.org/10.1590/SciELOPreprints.689>.
22. Santos LMD. The relationship between the COVID-19 pandemic and nursing students' sense of belonging: the experiences and nursing education management of pre-service nursing professionals. *Int J Environ Res Public Health.* 2020 ago 12;17(16):5848. <http://dx.doi.org/10.3390/ijerph17165848>. PMID:32806697.
23. Taylor R, Thomas-Gregory A, Hofmeyer A. Teaching empathy and resilience to undergraduate nursing students: A call to action in the context of Covid-19. *Nurse Educ Today.* 2020 nov;94:104524. <http://dx.doi.org/10.1016/j.nedt.2020.104524>. PMID:32771262.
24. Monforte-Royo C, Fuster P. Coronials: nurses who graduated during the COVID-19 pandemic. Will they be better nurses? *Nurse Educ Today.* 2020 nov;94:104536. <http://dx.doi.org/10.1016/j.nedt.2020.104536>. PMID:32801065.
25. Tracy S, McPherson S. Navigating COVID-19 through an unfolding case study for undergraduate nursing students. *J Nurs Educ.* 2020 ago 1;59(8):475-6. <http://dx.doi.org/10.3928/01484834-20200723-11>. PMID:32757014.
26. Prasad N, Fernando S, Willey S, Davey K, Kent F, Malhotra A et al. Online interprofessional simulation for undergraduate health professional students during the COVID-19 pandemic. *J Interprof Care.* 2020 set-out;34(5):706-10. <http://dx.doi.org/10.1080/13561820.2020.1811213>. PMID:32917099.