



## Experiences of nursing students at the beginning of the Covid-19 pandemic: a qualitative approach

Vivências de estudantes de enfermagem no início da pandemia da Covid-19: abordagem qualitativa

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### **ABSTRACT**

**Objective:** To understand the experience of nursing students at the beginning of the Covid-19 pandemic. **Method:** A exploratory study with a qualitative approach was carried out with 36 nursing students in a Brazilian public university. The data were collected by videoconference, and the semi-structured interviews were submitted for content analysis. **Results:** Two categories emerged: "Being a nursing student in times of the Covid-19 pandemic and emergency remote teaching" and "Transformations in students' daily lives at the beginning of the pandemic". The students' experiences were exhausting and stressful, interfering with their health and well-being. The participants' daily lives were marked by changes, especially in the experience withemergency remote teaching, which required the development of adaptive strategies. **Conclusion:** The planning and use of health promotion strategies and continuoussupport for students who experienced the context of the pandemic through nursingprograms become important.

**Descriptors:** Nursing Students; Pandemics; Mental Health.

### RESUMO

**Objetivo:** Compreender a vivência de estudantes de enfermagem no início da pandemia da Covid-19. **Método:** Estudo exploratório, com abordagem qualitativa, realizado com 36 estudantes de enfermagem, matriculados em universidade pública brasileira. Dados coletados por videoconferência e entrevista semiestruturada, submetidos à análise de conteúdo. **Resultados:** Emergiram duas categorias: "Ser estudante de enfermagem em tempos de pandemia da Covid-19 e ensino remoto de emergência" e "Transformações no cotidiano dos estudantes no início da pandemia". A vivência dos estudantes se revelou exaustiva e estressante, interferindo na saúde e no bem-estar. O cotidiano dos participantes foi marcado por mudanças, sobretudo, na experiência com o ensino remoto de emergência, que exigiu o desenvolvimentode estratégias adaptativas. **Conclusão:** O planejamento e o uso de estratégias depromoção da saúde e apoio contínuo aos estudantes que vivenciaram o contexto da pandemia, pelos cursos de enfermagem, tornam-se importantes.

**Descritores:** Estudantes de Enfermagem; Pandemias; Saúde Mental.

### **INTRODUCTION**

The Covid-19 pandemic brought with it the need to comply with community containment measures for the disease (distancing and social isolation) as a strategy to mitigate the speed of progression and avoid overloading health systems. This determination has had repercussions on activities carried out in different sectors, such as education<sup>(1)</sup>.

When considering face-to-face teaching as a potential scenario for virus transmission, the suspension of classes and the maintenance of activities remotely instead of face-to-face, with the use of Information and Communication Technologies (ICT), were some of the options used by educational institutions. However, this panorama, marked by changes, has brought challenges of various orders to the actors involved<sup>(1,2)</sup>.

Among the challenges faced in the use of remote teaching, the following stand out: access to the internet and other technological and material re-

sources; training the actors involved in the use of technological resources and ICT; the interaction between professors and students during the training process; faculty availability, aiming at learning in collaboration with the student; and care for the other, through integrated and cooperative learning<sup>(3)</sup>.

These aspects inherent to teaching during the pandemic implied adaptive difficulties and changes in the emotional state of students. In the context of higher education, experiencing the restrictions and changes imposed by the Covid-19 pandemic had a psychological and mental impact on students, with symptoms of anxiety, depression, and stress<sup>(4,5)</sup>.

In the area of nursing, studies indicate that the training process, by itself, represents an experience permeated by stress, trauma, and exposure to risks, with the constant proximity of the student to situations such as illness and death, in addition to the questionable conditions of health services, in which they often work. Besides this reality, the Covid-19 pandemic has potentiated the vulnerabilities related to the mental health of these subjects<sup>(6,7)</sup>.

In Israel, during the pandemic period, nursing students faced an unprecedented reality of economic uncertainties, fear of getting sick, delays in academic activities, challenges with changes in the teaching modality, and scarcity of personal protective equipment in practical classes<sup>(6, 7)</sup>.

In Saudi Arabia, research showed that 43.3%, 37.2%, and 30.9% of nursing students showed some degree of depression, anxiety, and stress, respectively. In addition, the perceived risk of infection by Covid-19 was configured as a predictor for experiences of fear<sup>(8)</sup>.

Corroborating these findings, a study developed in Mexico found that nursing students had high levels of stress and fear and a low level of knowledge about Covid-19. A high level of stress and a low level of knowledge among students predict fear of the disease<sup>(9)</sup>.

Although the situations of exhaustion and stress during the pandemic did not affect only nursing and health students, they deserve attention from researchers, both because they bring physical and psychological effects to the health of this population and because of the risks to which patients who are under their care are subjected. Given the findings suggestive of the deleterious effects of the Covid-19 pandemic on the health of nursing students, which may reflect on academic performance, as well as the factors

involving the use of ICT in health programs and in the socio-economic context of Brazilian students, attention on the experience of these subjects, when considering the meanings of this phenomenon for future nurses, can contribute to the development of strategies to minimize the vulnerabilities emerging in students' mental health with implications for the teaching-learning process and academic training.

Based on the above, this study asked: how did nursing students experience the beginning of the Covid-19 pandemic? In order to provide answers to the proposed problem, the study aimed to understand the experience of nursing students at the beginning of the Covid-19 pandemic.

### **METHOD**

An exploratory study with a qualitative approach was carried out. The Consolidated Criteria for Reporting Qualitative Studies (COREQ) were followed to ensure the study's rigor. This is a 32-item checklist used to promote quality in qualitative health research.

The study was conducted in the nursing program of a public and federal University located in the Midwest region of Brazil. The institution above chose not to suspend teaching activities during the Covid-19 pandemic, maintained the 2020 academic scheduled, and replaced classroom teaching activities with Emergency Remote Teaching (ERT), using ICT, since March 2020. Given this, faculty and students reorganized themselves to maintain academic activities.

The study population was represented by the 199 students regularly enrolled in the Undergraduate Nursing Program, and the convenience sample consisted of 36 participants. The response saturation criterion was used to define the sample. The inclusion criteria in the study were: being aged 18 years or older, being a nursing student for a minimum of six months, and having cognitive and emotional conditions to answer the proposed questions. Students who took a leave of absence during the 2020.1 semester were excluded.

The research was previously disclosed on the nursing program's networks and social media (Facebook, Instagram, and Whatsapp). Students indicated their interest in participating through a Google Form distributed to potential participants. The enrollment period lasted seven days, one week before the start of data collection.

Data collection occurred in April 2020, after thirty days of replacing on-site academic activities by

the ERT with ICT due to the Covid-19 pandemic. Data were collected through individual interviews, carried out by Google Meet videoconference, guided by a semi-structured script that addressed sociodemographic and academic aspects (gender, age, whom the students live with, academic period in which they were enrolled, number of courses in the program in the 2020.1 academic semester, number of withdrawals from courses in the 2020.1 academic semester, if the student was financially assisted during the pandemic, and access to the internet), in addition to the guiding questions: Describe your routine during the Covid-19 pandemic; Talk about your experience as a nursing student during the Covid-19 pandemic; In your perception, how has your experience at ERT with ICT been? Do you want to comment on something else?

Each interview lasted approximately fifty minutes. Before starting the interview with each participant, the researcher in charge read the free and informed consent form and sent two copies of it so that, in case of acceptance, the participant would return one signed. The interviews were recorded and transcribed in full and later submitted to a brief edition, eliminating language defects so as not to harm their meaning and content. In order to obtain access to the perceptions

In order to obtain access to the perceptions expressed by the participants, the material was submitted to content analysis in the thematic modality, which allowed attributing importance to words and meanings based on themes in different situations. The pre-analysis involved a floating reading that favored a deeper understanding of the content of the reports. Subsequently, the material was explored in detail, proceeding with the coding of the speeches using nominal codes and the constitution of the corpus of analysis, which corresponded to the material that effectively generated the inferences. The excerpts from the reports were grouped according to the assigned codes, by similarity or thematic approximation, in meaning cores<sup>(10)</sup>.

Then, the categorization step was carried out by condensing the nuclei of meaning into titles representing the main themes found in the speeches, and inferences were made from the selected excerpts. As a support for the analytical course and discussion of the results, scientific literature that addresses the subject under study was used.

The Research Ethics Committee of the Federal University of Mato Grosso do Sul approved the study, according to opinion number 4,047,265.

To ensure confidentiality regarding the identity of the participants, the term "Participant" was used, followed by a number corresponding to the order in which the interview was conducted (example: "Participant 1"), as a reference to each of them.

### **RESULTS**

Among the research participants, 30 were women, 21 were aged between 20 and 24, and 26 lived with family members. As for academic aspects, 23 students were in the seventh academic year, 25 were enrolled in five or more courses, 35 had not taken an absence leave during the Covid-19 pandemic, 23 were financially assisted, 30 had access to the internet at home, and six had access to the internet only at the University. The participants' reports were organized into the categories: Being a nursing student in times of the Covid-19 pandemic and emergency remote teaching and Transformations in students' daily lives at the beginning of the pandemic, presented below.

# Being a nursing student in times of the Covid-19 pandemic and emergency remote teaching

From the perspective of the study participants, being a nursing student in the context of the beginning of the Covid-19 pandemic was a "tiring", "exhausting", "stressful," and "draining" experience. These meanings emerged as the participants brought up in their speeches allusions to the superposition of new situations abruptly experienced in that period: social isolation, insertion in the ERT, experience with new technologies, overload of academic activities, and psychological exhaustion. The following excerpts exemplify the findings:

It has been heavy because of the demand (from academic activities). It's been stressful, it's been difficult, and it's letting me pretty overwhelmed. The experience is contributing to my learning. However, the practical classes, which for my class were always limited, are even more hampered. I am stressed, uncommunicative, and anxious. (Participant 1)

Exhausting, very tiring. We have many activities to do with little time to deliver, we spend all day doing tasks, and it takes time to solve. Some teachers give more than one activity, which is also bad, as we don't have much time available. It's tiring to be locked

in a room all day in front of the computer with the pressure of having so many activities: huge articles to read and an ongoing term paper. We are not keeping up with the demand. (Participant 7)

Faced with the impossibility of holding face-to-face classes at the beginning of the pandemic, the ERT was an important stress-generating factor and, based on the reports, did not seem to represent a teaching modality that promoted the protagonism and student autonomy in the formative path. Complaints and dissatisfaction regarding the experience with a virtualized teaching scenario, in addition to the adaptation to the new teaching strategy, the need to develop ICT skills in the training process and the home environment that sometimes acts as a distraction for learning, emerged as elements that made it difficult to study Nursing:

Having to learn working in a virtual system that you are not used to is complicated. There are many activities to do. I don't know what a weekend of rest is anymore. Every day, there is a new activity, and the most complicated thing is being able to reconcile all this with home and children who also deserve attention. (Participant 12)

It is bad to learn like this. Sometimes we have doubts, and even though the teacher answers them, I still have questions. I know in face-to-face classes it's hard; imagine in online classes. Some teachers, not all, think they need to fill us with activities and commitments, forgetting that out here, we also have a life, other courses, and commitments. I still haven't learned to deal with it very well. (Participant 32)

The speeches also indicated that some factors interfered with this experience, such as lack of familiarity/knowledge or resistance to the ERT, the number of academic activities to be carried out, quality internet access, prior availability of didactic material in electronic/digital format, the relationship and communication with professors, and the appropriate home environment for studies.

The participants highlighted the contributions (greater theoretical contribution in the courses, contact with new methodologies, and development of new skills) and the losses (decrease in

academic performance and impossibility of holding practical classes in laboratories and health services) that the replacement of face-to-face meetings with the ERT with ICT brought to the training process:

My experience has been a little bad, as I have a lot of difficulty with computers and, due to the large number of tasks through this medium, I feel that my performance has dropped compared to face-to-face classes. I've been finding difficulties with this study method; a good internet connection is needed, and the signal frequently drops, making me lose continuity of the subject. The bad internet and the lack of custom with this means of study make it difficult. What makes it easier is the availability and ease of scheduling an appointment to ask questions to the teachers. (Participant 3)

The practical disciplines demand a lot. The interruption of face-to-face classes was bad. Even though case studies contribute to learning, in my case, I can't study and learn effectively. I feel like I'm memorizing but not actually absorbing the content. I miss the liveliness I used to have in the clinical rotations. I'm not learning the content that will add to my profession's future. (Participant 14)

Being a nursing student at the beginning of the Covid-19 pandemic was an experience also marked by repercussions on health and wellbeing. The little time available for the practice of self-care and the frequent experiences of pain, irritability, fatigue, attention and sleep problems, mood changes, anguish, anxiety, fear, frustration, psychic suffering, and worsening of previous cases of mental illness stood out:

> My spine hurts from sitting for three periods a day, and my eyes are always irritated from being in front of the laptop screen for too long. I began to notice signs and symptoms that I had never had before, such as insomnia, tremors, anguish, and fear. (Participant 1)

> Not getting moments for myself leaves me frustrated and tired, and the episodes of anxiety attacks increased during the week. I have crisis almost every night and have trouble sleeping. Just the other day I had

things to do. It's a painful cycle every day. The doctor gave me a medication, but it didn't work. I'm looking to adapt to relaxation and physical exercise. Some days are harder than others. I have panic episodes. I try to avoid reading or watching any kind of news about Covid-19. It terrifies me, and I don't know how to deal with it very well. (Participant 9)

The findings suggest that the Covid-19 pandemic and its consequences have made being a nursing student an experience that impacts the health and well-being, in addition to bringing challenges to student protagonism and autonomy in the training path.

### Transformations in students' daily lives at the beginning of the pandemic

The reports denoted how the Covid-19 pandemic affected the participants' daily lives, causing changes due to the need to adopt measures to prevent the spread of Covid-19. Among the transformations, those concerning the restriction of liberty emerged; decreased social interaction, attendance to community spaces, and leisure activities, and increased length of stay at home. The statements suggested that these changes brought insecurity and uncertainty about the future and generated apprehension, fear, anxiety, and stress. The following excerpts are illustrative of the findings:

Isolation had a negative impact on my routine. I used to go to the gym daily, walk with my dog on the avenue, and go out to cafeterias and ice cream parlors. It was a way to relieve tension and reduce the stress and anxiety of the load of information that the nursing program offers. (Participant 5)

I miss my previous routine: waking up, going to college, taking my kids to daycare and school. I feel apprehensive, not knowing what is yet to come. I miss the tranquility of before, being able to come and go without fear of touching objects and people. I miss socializing with friends and family, taking my children for walks in the square and playgrounds. (Participant 14)

Other excerpts from the participants' reports alluded to the changes related to the insertion in a new learning process, deeply marked by the dependence on the internet, virtual environments, and platforms for remote classes:

My routine today is based 90% on doing college homework. I spend all day in front of the computer. I only stop for lunch, dinner, shower, and sleep. I hardly have time for anything else. Sometimes, we stay up to 23 hours to deliver the college works on the date. (Participant 7)

Amid the new routine imposed by the pandemic, the participants revealed attempts at adaptation that included reorganizing study schedules and practicing relaxation techniques and physical activities. The following statements exemplify the above:

I go to the gym three times a week, at 6 am, so that it doesn't get in the way of carrying out (academic) activities. In the morning, I hurry to requested readings or group works. At 1 (hours) and 30 (minutes) pm, usually, virtual classes start, and run until 6 pm. Weekends are for reading, and I always take Saturday afternoons or Sundays off, so I don't use my cell phone or computer. (Participant 2)

I have not been out of the house, except when my grandparents need something from the market. As they cannot attend, I buy some groceries that they need as they are at the risk group. At home, my routine is based on trying to keep up with classes. I do not have much to do, and I lack the courage to seek other entertainment. My (academic) income has been way below normal. (Participant 19)

The students' experiences at the beginning of the pandemic also seemed to have triggered questions about the quality of nursing education in this scenario and reflections on valuing life, collective health, academic performance, and professional training:

> Lately, I find myself very thoughtful about the current reality. People who are out there thinking that this whole stay-at-home movement is bullshit. I know there are people in worse situations than mine. I learned to value life more. (Participant 1)

I find much difficulty with this teaching medium. I see that my (academic) performance has dropped with face-to-face classes. Sometimes I think about dropping out of college. I'm having a hard time keeping up with my colleagues in group works. I'm worried about the type of professional I'm becoming; at the same time, I'm afraid that I'll have to spend another year in college, and I'll have to stay away from my family. The feelings are mixed. I feel like classes shouldn't have continued this way, and at the same time, I don't want to stay in college any longer (Participant 22)

In summary, the findings suggest that the pandemic's beginning changed the daily lives of nursing students, especially in the experience of interpersonal relationships and the learning process. This transformation caused feelings of fear and anxiety, perceived as a stressful event. Faced with changes in daily life, nursing students began to develop adaptation strategies.

### **DISCUSSION**

The characterization of the study participants points to sociodemographic and academic factors that could somehow interfere with the experience of being a nursing student during the pandemic. It is assumed, for example, that living with family members and receiving a scholarship/student aid would indicate greater social and financial support, given the changes that occurred in the pandemic period. On the other hand, it is believed that the fact of having attended most of the academic training in the face-to-face modality, being enrolled in a significant number of courses, and not having access to the internet at home could make it difficult to adapt and deal with the new technologies, as well as producing an overload of academic activities.

In Brazil, a survey on the mental health of university students during the pandemic period showed that gender, income, studying at a public university, not being affiliated to a religion, and not working were associated with symptoms of depression<sup>(11)</sup>.

A study carried out in the United States to identify the main stressors associated with the Covid-19 pandemic and understand their effects on the mental health of university students found that most of these students (68%) reported living with family members and that the home environment distracts students for performing academic activi-

ties. Living with the family has reduced personal interactions, the practice of physical activities, and other social activities due to fear and concern for themselves or loved ones during the pandemic<sup>(12)</sup>. In this line of reasoning, it is inferred that living with family members could contribute to coping with the pandemic and, consequently, favor the maintenance of the emotional state of university students.

Regarding students' experiences during the pandemic, the focus of this study, researchers say that this period brought impacts and changes in daily life, with emphasis on health students. Students suffered from the absence or precariousness of infrastructure conditions necessary for remote classes adopted during this period, such as adaptation to activities, difficulty in accessing the internet, family members needing attention, and individual cognitive singularities<sup>(13)</sup>.

In this logic, the pandemic quickly and significantly transformed how nursing students perceive and experience the training process. This change generated concern for themselves, family members, patients, the community, and the future prosperity. In general, events like this, which involve a high stress level, tend to produce fear, trauma, uncertainty, and anxiety<sup>(6)</sup>.

The results from a research carried out in different Nursing Schools in the Philippines revealed the existence of moderate to high levels of fear of Covid-19 among students enrolled in all academic years, but predominantly among those in the first year of the program. They also show that the experience of fear negatively affected the students' sleep quality and was associated with irritability and the intention to drop out of the course. These findings corroborate, in part, those found in our research<sup>(14)</sup>.

The reports also suggest that the experience of being a nursing student in the Covid-19 pandemic was significantly marked by the insertion and the need to deal with remote teaching, as evidenced in a study carried out at a university in Paraná. In that research, the students showed difficulty in understanding and accepting remote teaching as a substitute and not as a methodological choice in the face of the pandemic, discomfort with the adaptations promoted by the course, and previous prejudices regarding this teaching modality, considered inferior to the face-to-face learning<sup>(15)</sup>.

These same authors identified that some students reported dissatisfaction with the activities of the ERT, stating that the professors did not develop specific strategies for this modality and only carried out a transposition. In addition, they are critical and did not seem to understand the differences between remote and face-to-face learning, disregarding characteristic elements of remote teaching that require adjustments during the pandemic<sup>(15)</sup>.

Similar to the findings from the present study, a Brazilian research revealed that, in addition to the changes that occurred during the pandemic, nursing students had to adapt to a routine that included household chores, the presence of full-time children and family members who also needed to develop work and teaching activities remotely. These elements worked as distractions and made it difficult for students to participate in virtual activities<sup>(16)</sup>.

As in the face-to-face teaching modality, under normal circumstances, the ERT, in the pandemic scenario, has presented challenges and potential. Complaints, discomfort, and frequent demotivation of students may reflect, in part, student commitment to their own learning and history of underuse of digital technologies. The Covid-19 pandemic highlighted the need to reflect on the appreciation of student protagonism and autonomy for success in training, regardless of the modality of teaching to be adopted. Academic commitment, which is sometimes not assumed by the student, is developed through joint actions involving students, teachers, and educational institutions, leading each to assume their respective roles in the educational process(17).

In complex and adverse times, such as the Covid-19 pandemic, it is possible for learning to continue remotely. It is necessary to find alternatives to meet the different contexts and audiences so that the students can reinvent themselves and learn, inserted in consolidated, hybrid teaching. New experiences and spaces

propriation of scientific knowledge may emerge, provoking reflective, emancipatory, autonomous, and critical actions<sup>(18)</sup>.

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The potential of this study is to highlight existing needs during the teaching-learning process in undergraduate nursing programs, address the reality of the Brazilian context, and contribute to the planning and strengthening of strategies to support the training process during and after the Covid-19 pandemic.

As a limitation, it is believed that the use of videoconferencing, in some cases, limited the perception of non-verbal expressions of the subjects, compromising the use of observation to extract content expressed by the subjects. On the other hand, it is considered that this strategy was quite useful since it allowed data collection at a time permeated by strict social distancing measures, making it possible for the students' experiences to be captured precisely in a critical and peculiar occasion of the pandemic period.

### **CONCLUSION**

The experience of nursing students at the beginning of the pandemic proved to be exhausting and stressful, producing repercussions on the health and well-being of these subjects. The participants' daily lives were marked by significant changes, emphasizing the insertion and the need to deal with the ERT, a fact that required the development of adaptive strategies. The study helps nursing courses plan and strengthen health promotion strategies and support the continuity of the training process during and after the Covid-19 pandemic.

### **CONFLICT OF INTEREST**

The authors have declared that there is no conflict of interest.

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