Perception of freshmen Medical students about learning during the Covid-19 pandemic

Percepção de alunos ingressantes de Medicina sobre o aprendizado durante a pandemia da Covid-19

Ramiro Dourado-Maranhão[1] (iD) | ramirodourado@hotmail.com
Mariana Cunha[2] (iD) | Mariana.Cunha@einstein.br

ABSTRACT

Introduction: In 2019, with the emergence of the coronavirus pandemic, the world had to adapt to using social distancing measures to control the spread of the virus. Social isolation measures were imposed and one of the sectors that suffered the greatest impact from these measures was the education sector, having to adapt to emergency remote education (ERE).

Objectives: To understand the perception of students attending a medical course in relation to their own learning during the period of the Covid-19 pandemic.

Method: This is a descriptive and exploratory research with a qualitative approach. The theoretical framework was Symbolic Interactionism. The study was carried out in a private higher education institution in the Federal District. The study included 14 students attending the third semester of medical undergraduate school from classes that had the opportunity to attend undergraduate periods through ERE. Data were collected through recorded interviews, in the Focus Group modality, and analyzed using Inductive Thematic Analysis. All ethical concepts of Resolution n. 466/2012 from the Health National Council were respected.

Results and Discussion: The analysis of the discourses resulted in three thematic categories that explore the students' perception of learning. The first category, "Living as if in a test balloon", addresses the changes experienced by students when entering college, with feelings of fear, insecurity and lack of motivation due to the stress of the pandemic. The second category, "Feeling isolated and desolate", observed the perception of mental illness and the lack of support from classmates, teachers and the institution, influencing the students' performance and learning. The third category, "Dealing with mistakes and successes", identified the perception of learning outcomes during and after the pandemic, highlighting the impact on the knowledge deficit and the need to adapt when returning to face-to-face teaching.

Final considerations: the Emergency Remote Education brought drastic changes in medical teaching. Understanding these changes and understanding the students' perception of learning in this period allows us to recognize the challenges faced, understand the need for adequate emotional support and think of effective learning strategies to overcome these and other adversities.

Keywords: Education, Distance; Learning; Education, Medical, Undergraduate; Students, Medical; COVID-19, Remote Emergency Education.

RESUMO

Introdução: No ano de 2019, com o surgimento pandemia pelo coronavírus, o mundo teve que se adaptar e utilizar medidas de distanciamento social visando ao controle da disseminação do vírus. Um dos setores que sofreram maior impacto com essas medidas foi a educação que precisou se adaptar ao ensino remoto emergencial.

Objetivo: Este estudo teve como objetivo compreender a percepção dos alunos de um curso de Medicina sobre o próprio aprendizado durante o período da pandemia pela Covid-19.

Método: Trata-se de uma pesquisa descritiva e exploratória, de abordagem qualitativa. O referencial teórico foi o interacionismo simbólico. O estudo foi realizado em uma instituição de ensino superior privada do Distrito Federal. Participaram do estudo 14 alunos do terceiro ano da graduação em Medicina de turmas que tiveram a oportunidade de cursar períodos da graduação por meio do ensino remoto emergencial. Os dados foram coletados por meio de entrevista gravada, na modalidade grupo focal, e analisados por meio da análise temática indutiva. Respeitaram-se todos os conceitos éticos da Resolução nº 466/2012 do Conselho Nacional de Saúde.

Resultado: A análise dos discursos resultou em três categorias temáticas que exploram a percepção dos estudantes sobre o aprendizado. A primeira categoria, "Vivendo como se fosse em um balão de ensaio", aborda as mudanças vivenciadas pelos alunos no ingresso na faculdade, com sentimentos de medo, insegurança e falta de motivação devido ao estresse da pandemia. A segunda categoria, "Sentindo-se isolados e desolados", observou a percepção do adoecimento mental e a falta de apoio dos colegas, dos professores e da instituição, influenciando no desempenho e aprendizado dos alunos. A terceira categoria, "Lidando com erros e acertos", identificou a percepção dos resultados do aprendizado durante e após a pandemia, destacando o impacto no déficit de conhecimento e a necessidade de adaptação no retorno ao ensino presencial.

Conclusão: O ensino remoto emergencial trouxe drásticas mudanças no ensino médico. Entender essas mudanças e compreender a percepção dos alunos sobre o aprendizado nesse período nos permite reconhecer os desafios enfrentados, entender a necessidade de suporte emocional adequado e pensar em estratégias de aprendizado eficazes para superar essas e outras adversidades.

Palavras-chave: Educação a Distância; Aprendizagem; Educação de Graduação em Medicina; Estudantes de Medicina; Covid-19; Ensino Remoto Emergencial.

INTRODUCTION

In 2019, with the emergence of the Coronavirus infection and the high transmissibility rate that developed into a pandemic, the world had to adapt and use social distancing measures aiming to control the spread of the virus. Social distancing required Higher Education Institutions (HEIs) to change the way they offered their courses, changing from face-to-face to Emergency Remote Education (ERE)[1].

Considering these events, it is natural that students faced unusual situations that affected their personal and academic lives, especially because the historical characteristics of medical education were profoundly changed during this period.

Medical education in Brazil spans more than two hundred years of history, with important structural changes and alterations in the educational system since its onset. The first medical school in the country was created in Salvador as a result of the arrival of the Portuguese royal family to Brazil, which boosted the development of the educational system in the country, including the training of doctors[2]. The growth of medical schools was slow, following the country's economic and social development[3].

In recent decades, there has been an expansion of both public and private medical institutions[4]. These new HEIs have different characteristics regarding structure, teaching staff and educational program[5]. In this sense, the compulsory adoption of ERE during the pandemic period was also influenced by these resources and, consequently, this resulted in important differences in student satisfaction and learning.

ERE, in Brazil and worldwide, was implemented during the Covid-19 pandemic as an alternative for continuing education considering the need for social isolation[6]. In the health area, during the ERE period, strategies such as online, synchronous and asynchronous classes and telemonitoring were used to minimize learning loss due to the interruption of practical activities[7]. Teachers and institutions had to adapt to the new teaching reality, in record, unprecedented time, aiming to minimize the losses in this new teaching scenario[8]. To know how this process directly influenced the experiences, especially of those starting the medical course, still needs to be further explored.

After two years in this modality, medical schools returned to face-to-face classes, generating questions about the benefits and harms of ERE and the emotional impacts on students[9]. Medical education traditionally depends on contact with patients, but the use of digital technologies has become a viable option and can bring positive changes[10].

Reflecting on how we faced the pandemic, some questions arose: How did students experience the transition from school life to higher education during the pandemic period? What were the consequences for these students, due to the sudden and unplanned change in the medical education model during the pandemic period?

This study aims to evaluate the students' perception of learning during the ERE and contribute to the development of new medical education methodologies.

METHOD

This is descriptive and exploratory research, with a qualitative approach. The study was carried out in a private HEI in the Federal District which has had a graduation course in medicine for 22 years, with around 850 students, and currently uses the active teaching methodology. The participants were selected by convenience and invited to participate in the focus groups, personally by the researcher. There was no refusal to participate in the study by any of the participants.

The data were collected through interviews recorded on the Zoom® platform, in the Focus Group (FG) modality, where study participants were brought together and guided regarding the aspects and importance of the research, recording the interview, after being presented and signing the Free and Informed Consent Form (TCLE), as well as the Term of Authorization for image use. Data collection started only after approval by the Research Ethics Committees of the educational institutions, under Opinion numbers 5,506,190 (study coordination) and 5,801,190 (sample origin).

Two FGs were held, with an average of 45 minutes and a total of 14 students participating, in a single session. Eleven females and 3 males participated, with an average age of 23.5 years. Third-semester undergraduate students were included, at the time of data collection, submitted to the ERE at the beginning of the course, with migration to the in-person modality when allowed by the government. One of the students had already completed another previous degree, one had studied a semester at another institution. The focus groups were conducted by the two authors, with the second author having consistent experience in conducting and guiding qualitative research. The first author had previously met the students.

The central question of the study was: What is the perception of learning during the Covid-19 pandemic? As the interview progressed, other questions were introduced aiming at understanding the phenomenon. The reporting of the results found, as well as other requirements for collecting, analyzing and discussing the data, was guided by the COnsolidated criteria for REporting Qualitative research (COREQ)[11].

Data collection and analysis had Symbolic Interactionism (SI) as the theoretical framework, which is a Social Psychology perspective that involves concepts such

as symbol, self, mind, assuming the role of the other, human action, social interaction and society[12].

Based on the assumption of the teacher and medical student relationships, Symbolic Interactionism guided the research, considering the main concepts of this philosophy, especially those related to assuming the role of the other (in which the teachers need to put themselves in the student's situation to understand their needs, actions and feelings in ERE) and vice-versa, in some aspects; human action (to understand, given the teacher's attitudes and behaviors, how the student experienced this teaching proposal); and social interaction (the relationship established between teacher and student, student-student, permeated by the ERE context).

The interviews were completed after the authors obtained information to answer the initial research questions. No considerable new data was found according to the authors' perception. Theoretical saturation occurs when no more new data or concepts are identified by the authors, with this point being indicated in the literature as the moment when the information collected is satisfactory to answer the research questions[13]. Data analysis followed the Inductive Thematic Analysis[14].

RESULTS/ DISCUSSION

The analysis of the discourses resulting from the interviews resulted in the proposition of three thematic categories that elucidate the perception of students attending a medical course in relation to their own learning during the period of the Covid-19 pandemic.

The thematic categories were organized as follows: **1- Living as if in a test balloon: the experience of academic life during the pandemic period**, which explains the main changes experienced by students upon starting higher education; **2- Feeling isolated and desolate: the realization of mental illness and the perception of a lack of support**, which addresses the perception regarding one's mental health issues that influenced their performance and learning, in addition to feelings of lack of support during this period and **3- Dealing with mistakes and successes: the perception of learning results during and after the pandemic**, which addresses the consequences perceived when returning to in-person activities.

Thematic Category 1- Living as if in a test balloon: the experience of academic life during the pandemic period.

Entering higher education is a rite of passage, significantly significant, for young adults. When it comes to being approved at a course characterized by an intense and stressful selection process such as Graduation in Medicine, this fact is even more characterized by expectations and feelings of success and personal fulfillment. College becomes a big dream in itself, there is a promise of consistent learning and, consequently, a bright future. However, the pandemic negatively influenced this condition.

The pandemic changed the students' experience of starting higher education due to the absence of a previous similar condition, which served as a model or support to alleviate the fear and anguish caused by this condition. Therefore, the students themselves felt like guinea pigs in a trial-and-error laboratory in relation to classes, teaching methodologies and assessments.

A study identified that listening to students about their difficulties regrading ERE and giving them a leading role in taking actions would be crucial for the success of teaching during the pandemic. Actively involving students in the educational process and considering their perspectives to ensure better results[15] would be an action to be considered. Which, from the perspective of these students, did not happen.

Subcategory 1 - Experiencing changes within the change: The transition to student life in higher education during the pandemic

The pandemic experienced by some medical students directly impacted the perception of this experience, that is, the meaning attributed to this moment was that of experiencing a change within another change. They started their academic lives and were confronted with the adaptations promoted by ERE. The first changes identified were related to the way of studying in the university environment. Social distancing increased the challenge of having to participate in activities in collaboration with classmates that they did not have the opportunity to bond with.

The active methodology seeks to promote student autonomy and involve them in their own professional training, aiming at solid learning and development of critical awareness[16]. However, one of the principles for the successful adoption of active methodologies is the student's prior preparation to achieve this goal, it is the establishment of bonds and interactions between them for collaborative learning, which was not entirely possible due to social isolation.

> *"... I arrived in college, it was a complete change of teaching method, because we came from high school which was a traditional methodology, where I just absorbed the content, and didn't have to go after it and when I arrived in college I was really afraid, because I had to go after it, no one was going to give me the content and this was associated with a pandemic, in which we were at home, often we didn't know our classmates so we could ask for help and know how that was working." (Student 3)*

"But how are you going to learn to study, since it is an adaptation of both the lives of teachers and students, in a reality that has never happened in life. In other words, this is already a change that comes on top of a change." (Student 6)

In addition to these issues, the fact that there was a pandemic resulted in a breakdown in expectations regarding learning, relationships with classmates and teachers, in addition to the view of the role of course coordination at such a critical time. A study showed that many students were concerned about the distance from practice environments and were concerned about the impact of this fact on their training, especially due to lack of internship activities[17].

"Being in medical school was something I always dreamed of, being there learning and so on, but at the same time I wasn't learning, so... I didn't know where I was going." (Student 2)

"But when I arrived in Brasília again, when I went to a new college where I didn't know anyone, it was an existential crisis for me because it was completely new, I didn't see people." (Student 5)

The pandemic was perceived by these students as a challenging time, both for them and their teachers, a time of considerable stress, in the context of college and at home. They were aware that many of their teachers were experiencing a double shift, incessantly exhausting, as they were the frontline health professionals providing care. Another aspect identified was the fact that teachers had limitations regarding the use of technological resources. In relation to these situations, students sought to act with empathy towards educators.

"We demanded from the teacher a certain content or better support, or interactivity at college. But most of the people who teach us are healthcare professionals, right? Who also work in the healthcare scenario... so, they were still active during the covid pandemic. [...] But how are you going to learn to study, since it is an adaptation in both the lives of teachers and students, in a reality that has never happened in life." (Student 6)

"We had a lot of teachers who had a lot of difficulty, they couldn't use slides, they couldn't do things. Sometimes it would take them about 20 minutes before they turned on the microphone and things like that... Because they had a lot of difficulty with that. That was pretty bad." (Student 12)

The pandemic was long lasting and the desire for things to improve quickly remained in these students' minds. The physical distance during a period of discoveries and interactions with potential for transformation in the new phase of student life had a negative impact on their perception. The physical distance was revealed in the feeling of not belonging to the course, the group and the college, the meaning attributed was that of a lack of tangibility in this experience; academic life, under those circumstances, did not seem real.

"And then there was all the stress at home, wanting everything to be resolved and wanting an embracement that didn't happen due to a lack of physical interactivity. [...]There was the feeling of not belonging somewhere, not having a group. Sometimes there is no one to ask for help... " (Student 7)

"I had already been to college once, and my college course was entirely in-person and the periods that were taught as remote didn't feel like it was real, it was something like a rehearsal." (Student 5)

Subcategory 2- Realizing that the pandemic interfered with the study routine, engagement with classes and interaction with classmates.

The experience of academic life within the confines of one's house generated behaviors in these students that made learning and engagement in the course difficult. The home environment was often not prepared to stimulate the student's focus on academic activities, it did not allow for a study routine, there was disturbance in relation to construction projects nearby or in the neighborhood, other people in the same house attending meetings or classes, etc.

"... because when we studied online, everything was online, so the classes were at home and when you turn on the computer, sometimes you get sleepy, lose a little attention and that makes it bad for us to learn." (Student 1)

"Sometimes I wasn't able to, because of the noise, I ended up losing concentration... even during these long classes you get a little lost, there were times when the noise didn't allow you to concentrate on the class. [...] I watched them from my room, so I had my bed, my father speaking, technically, everyone was at home, so I think it wasn't that beneficial in relation to that... my attention wasn't 100%, which is the same when we are in the classroom." (Student 9)

Similarly, a study identified that the students' socioeconomic differences affected access to the internet and other technologies, as well as minimum conditions in relation to residences that supported the viability of classes at home, resulting in losses for some students[18]. Maintaining concentration was more difficult for the students, being more impactful than the technological platforms and tools themselves[19].

Likewise, poorly adapted or planned classes and, in addition, the concern about meeting the workload made online classes tiring and long, from the students' view, which made learning difficult. Regarding the number and duration of classes, it was found that smaller groups and shorter classes

were more effective for the learning process. This may indicate the presence of a "virtual hangover", which is characterized as a state of saturation in virtual environments, resulting in a lack of focus and demotivation by the individual[20].

> *"Then there comes a time when we no longer absorb it, regardless of one's concentration. I simply could concentrate for 4 hours. So we ended up turning off the camera." (Student 12)*

The lack of control, previously exercised by the school as a formal educational institution, with its rules and limits, was not practiced in the remote environment. The fact of being able to follow the class at an asynchronous or customized time, generated negative behaviors such as procrastination and the consequent accumulation of classes to retrieve the content, which only worsened their learning curve.

> *"Most of our classes could be recorded so we could watch them later, and then we would always end up, for instance, I have this class, but I don't want to watch it now, I'll watch it later, and then we would end up falling into a procrastination cycle" (Student 3)*

> *"Because you weren't able to study the content and you thought: no, I'll study in a little while or, in a little while I'll ask someone for help - and that moment never came." (Student 4)*

Another direct consequence of the need for social distancing was the difficulty in establishing bonds with classmates who not so long ago were seen as direct competitors in the College Entrance Exams. There were no opportunities to establish social interactions, which is so important for these students' self and for human action. During the break or at the end of the class, they did not have a moment of coexistence and exchanges, they did not exercise social relationships, normal attitudes among university students.

> *"We didn't have hazing, there were very few people at the lab coat ceremony, so it wasn't possible for us to meet in person and form a bond." (Student 6)*

> *"People who already knew each other got together more easily, so they started having meetings and everything. But I didn't have the opportunity to turn on my microphone and talk to people" (Student 5)*

> *"So, in my experience it was the following, I started later than everyone else. I joined different calls, right? As a result, I had no relationship with anyone. My only friend was a friend from high school, who also joined the same class. Anyway, during the pandemic, I only had her as a friend and when the pandemic returned, I only had her as a friend, because, as they said, the groups had already been formed. " (Student 8)*

For many of them, entering a new environment, without ties, generated distrust and the need for self-protection,

which at the time of remote teaching, was largely practiced by controlling the turning on of cameras. However, not turning on the cameras also meant the possibility of indulging in a common habit of using cell phones and accessing social media, in other words, diversions of attention that are so common in the current generations.

> *"But I didn't have the space to turn on my microphone, talk to people, you know? And then I managed to create other bonds." (Student 7)*

> *"... I couldn't pay that much attention, so I ended up using my cell phone precisely because the teacher wasn't looking." (Student 11)*

> *"... like it or not, when we are at home we don't need to turn on the camera, and personally, I respect the teachers so I avoid using my cell phone." Student 9*

The meaning attributed to the lack of support from teachers was not only in terms of emotional aspects. The students in their discourses revealed the teachers' lack of involvement in their learning as well.

> *"It's because the teachers made classes easier, especially compared to what we saw from the staff, and they gave extremely difficult tests, because they knew that people would use the internet." (Student 7)*

> *"We were in a new phase, which was college. So it was very complicated for both sides. They presented us the content, if you learned, you learned. If you haven't learned, go get it, do you understand?" (Student 3)*

Thematic Category 2- Feeling isolated and desolate: the realization of mental illness and the perception of a lack of support.

The challenges posed by the pandemic meant that students were faced with mental health issues that influenced their performance and learning. Students reported feelings of anxiety, suffering, depression, lack of motivation while their minds, all the time, raised questions about their own professional capacity, doubting the possibility of being good professionals in the future. It was a period of intense suffering.

During the Covid-19 pandemic, it was observed that around a quarter of university students had high levels of anxiety, affecting their mental health. This highlights the emergence of mental suffering during this difficult period, with feelings of discomfort, worry, restlessness, loss of meaning in life, imminent panic and the feeling of not knowing what to do being reported[21]. It was found that a large number of university students had symptoms related to minor psychiatric disorders during this period[22].

> *"... I became more anxious, I think, so much so that I even started going to therapy, I went to a psychiatrist,*

*I'm taking medication and I've never been like that."
Student 10*

"I have a lot of problems that were aggravated during the pandemic, including my mental health, which was the worst phase. I had no motivation to study because I couldn't learn adequately. So, many times I couldn't get up to go to class, like, I turned on the computer to watch a class and went back to sleep, because I was going through a depression process, a very deep one." (Student 3)

"I was desperate because I wasn't able to learn and for me, learning depended on me and how would a doctor grow in the future if I wasn't able to learn." (Student 4)

These findings are in line with the results of another study that indicates that there was a reduction in pleasure related to significant activities, difficulty concentrating, fatigue, sleep changes, as well as an increase in cases of depressive disorders during the pandemic[23].

Despite the students' understanding that ERE was a complex period, both for students and teachers, it was not possible to completely disregard the disappointment they felt regarding some teachers' attitudes. They identified a lack of support from teachers and the course coordination. There was an understanding that teaching became centered only on the teacher, the purpose was to meet the course's syllabus, there was no concern with learning.

"It's okay that it was also new for the teachers, but I think that perhaps a look more focused on us, we were also doing something different. We were in a new phase, which was college. So it was very complicated for both sides. They provided the content, and if you learned, you learned." (Student 3)

"... I think you're a doctor, you've been through this, you know that there are several illnesses, anxiety, depression, it's not nonsense, and they don't have a minimum of empathy, not all of them, but it happens" (Student 10)

Physical distancing resulted in a lack of connection with the teaching staff and, in this sense, students found themselves without alternatives to clarify doubts, and what in remote teaching is called social presence was not established, which creates a lack of confidence to expose themselves during the classes. One of the protective barriers adopted by the students was the action of not turning on the cameras during synchronous moments guided by the previously mentioned issues.

"Many teachers leave us with plenty of doubt, they don't demand as much attendance in class, those who want to pay attention, listen and participate." (Student 7)

"Yes, it was providing the content that was given to you. It was sent. Whether you learned or not is your problem, whether you are attending class or not is your problem." (Student 2)

"We missed out on asking questions, going after the teacher, because that would mean sending an email: teacher, I have doubts about this. And then it became difficult for you to have the freedom to ask questions, for example." (Student 5)

Considering the responsibilities of the educational institution and coordination with the student body, from the students' view, there were failures in the organization, support and availability to help students cope with this critical situation. The discourse did not follow the practice and they felt helpless.

"We didn't have support... I even think that nowadays there is still a lot of this, about the teacher being the center of learning, but during the pandemic it was much worse." (Student 7)

"One week before the start of the school semester, they didn't even know if they were going to be able to return to the in-person classes and ended up delaying the entire schedule at the beginning, until they managed to organize and align everyone is complicated." (Student 10)

"There was no support: how are you feeling? How are you learning? We never answered these questions to anyone." (Student 2)

Thematic Category 3- Dealing with mistakes and successes: the perception of learning results during and after the pandemic.

One of the main consequences of the pandemic was the learning deficit. The students' perception regarding the gap in knowledge began during the ERE period and was confirmed upon returning to the in-person cycle. Those students who took part of the in-person course, in the period before the pandemic, when compared to remote classes, recognized that these were easier.

Medical students had a negative perception regarding remote classes. Feelings such as insecurity related to the teaching, decreased study time, self-demand and fear of failure were described in this population[24].

"I realize that I couldn't learn 100% like this. My learning wasn't 100%. And then most of the things we learned online I can't remember." (Student 9)

"Yes, when the pandemic was over, I revised most of my tutorials that I had done online because I didn't remember most of the things and there are things nowadays that teachers, for example, include in today's subjects that I can't remember it because it was taught during the pandemic." (Student 10)

"When we returned to in-person classes, we returned during one of the most difficult semesters of college, which is the third semester. And then I needed some bases, which was the basis of the first, second semesters, and then when I saw it, I wasn't able to follow some subjects because I didn't have that basis" (Student 1)

In an attempt to establish some criteria for learning and impose limits that favored, for example, "cheating" during tests, teachers made assessments more difficult or sought to propose more dynamism to classes. In this sense, they also exaggerated the amount of content presented online, from the students' viewpoint.

During the educational assessment process, a specific challenge was the administration of the tests. Some students chose to copy from each other or reproduce excerpts from websites and course materials without providing appropriate citations. This behavior resulted in many students not achieving the minimum score in regular assessments during the pandemic[25].

"So the tests were also very difficult. OK, the online test allows you to cheat, do a lot of things. But I think if they wanted us to really learn they wouldn't make the test so difficult." (Student 10)

"I think it was very difficult because many teachers didn't really know what to demand, what not to demand, what you learned, what you didn't learn... if we didn't even have it for the hospital and they were a little lost. We didn't know what to do and neither did they." (Student 12)

The sudden return to in-person learning also generated insecurity and discomfort. Students started to deal with the cognitive overload caused by the lack of foundation caused by remote teaching, the need to re-study some contents and the organization to acquire new knowledge throughout the course.

"Then, when I was at last able to adapt to the online mode in the second semester, came the third, we went back to in-person teaching and it was like having the first semester at college." (Student 2)

"... we returned to in-person teaching in the third semester, which is the semester in which, for example, we have neuroanatomy and neurophysiology. And then I, at least, had a lot of difficulty adapting." (Student 3)

FINAL CONSIDERATIONS

Carrying out the study advanced the knowledge about the experience of medical students in the ERE by highlighting how this greatly affected the personal and academic lives of those entering the course. As perceived by them, it was a change within a context of unprecedented change.

Understanding the student as the center of learning and seeing the teaching process from their perspective is a challenge for educators. However, it is crucial to advancing education.

The students in this study considered the experience of starting the medical course at the time of the pandemic as full of changes, with feelings of isolation in relation to classmates and teachers, which led to losses in learning, lack of bonds and, above all, problems of mental health that will possibly result in greater consequences, which are currently not possible to be assessed.

The data in this study do not intend to exhaust the topic itself and cannot be generalized, as it represents the meaning of a specific reality. It is recommended that more research be carried out on the topic, expanded in different contexts, which can provide more information on this problem and provide a basis for the success of future teaching actions.

Listening to students about learning allowed them to give a voice to those who were previously unheard, understand the symbols behind the interpersonal actions they practiced and bring the main actor in the learning process into focus. The interview served as a listening instrument, a first sign of warmth aimed at those who were often silenced, and led to the discovery of an infinity of feelings, ideas and concepts that allow us to reflect on the experienced challenges and learn from this unique period in the history of our society.

AUTHORS' CONTRIBUTION

CONFLICTS OF INTEREST

SOURCES OF FUNDING

REFERENCES

1. Martins BL. Ensino remoto de emergência no período da pandemia: o uso da tecnologia e inovação nas instituições de ensino superior. Res Soc Dev. 2022 Feb 7;11(3):e0711326210-0 [acesso em]. Disponível em: https://rsdjournal.org/index.php/rsd/article/view/26210.

2. Prata PR. Duzentos anos de formação médica no Brasil: onde e quando devem ser comemorados? Interface Comun Saúde Educ. 2010;14:471-3 [acesso em 5 dez 2021. Disponível em: https://www.scielo.br/j/icse/a/D5VY4WkyMbRmQ79t9QwWJRq/?lang=pt.

3. Belisário SA, Abreu DMX de, Aguiar RAT de, Cherchiglia ML, Souza VPA de, Santos PL. Política de abertura de cursos de graduação em medicina no Brasil: elementos para a reflexão. Rev Méd Minas Gerais. 2006;46-51 [acesso em]. Disponível em: https://pesquisa.bvsalud.org/portal/resource/pt/lil-754724.

4. Silva ACV da, Godoi DF, Neves FS. Medical schools in Brasil: population, economic and historical analysis. Rev Assoc Med Bras. 2020 May 15;66:194-200 [acesso em 5 dez 2021]. Disponível em: https://www.scielo.br/j/ramb/a/X6xKcxPtFwttfBTC7GvTsdH/?lang=en.

5. Belisário SA, Abreu DMX de, Aguiar RAT de, Cherchiglia ML, Souza VPA de, Santos PL. Política de abertura de cursos de graduação em medicina no Brasil: elementos para a reflexão. Rev Méd Minas Gerais. 2006;46-51 [acesso em]. Disponível em: https://pesquisa.bvsalud.org/portal/resource/pt/lil-754724.

6. Charczuk SB. Sustentar a transferência no ensino remoto: docência em tempos de pandemia. Educ Real. 2020;45(4).

7. Neves VNS, Valdegil D de A, Sabino R do N. Ensino remoto emergencial durante a pandemia de Covid-19 no Brasil. Práticas Educativas, Memórias e Oralidades. 2021;3(2):e325271.

8. Appenzeller S, Menezes FH, Santos GG dos, Padilha RF, Graça HS, Bragança JF. Novos tempos, novos desafios: estratégias para equidade de acesso ao ensino remoto emergencial. Rev Bras Educ Med. 2020;44(supl 1) [acesso em 14 maio 2021]. Disponível em: https://www.scielo.br/pdf/rbem/v44s1/1981-5271-rbem-44-s1-e155.pdf.

9. Alves L. Educação remota: entre a ilusão e a realidade. Educação. 2020;8(3):348-65 [acesso em 28 out. 2021]. Disponível em: https://periodicos.set.edu.br/educacao/article/view/9251/4047.

10. Paiva VLM de O e. Ensino remoto ou ensino a distância: efeitos da pandemia. Estudos Universitários. 2020;37(1-2):58-70 [acesso em]. Disponível em: https://periodicos.ufpe.br/revistas/estudosuniversitarios/article/view/249044.

11. Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus group. Int J Qual Heal Care. 2007;19(6):349-57.

12. Charon JM. Symbolic interacionism. 3rd ed. New Jersey: Prentice Hall; 1989.

13. Fontanella BJ, Magdaleno Júnior R. Saturação teórica em pesquisas qualitativas: contribuições psicanalíticas. Psicol Estud. 2012;17(1):63-71.

14. Clarke V, Braun V. Teaching thematic analysis: overcoming challenges and developing strategies for effective learning. The Psychologist. 2013;26(2):120-3.

15. Pereira GBF, Aarão TL de S, Furlaneto IP. Percepção dos estudantes de Medicina sobre as habilidades de autogestão adquiridas durante a vigência do ensino remoto. Rev Bras Educ Med. 2022;46(4).

16. Dallabrida MM, Oliveira TMS de, Arruda MP de. Educação (remota) on-line e Covid-19: experiência de professores na educação médica mediada por metodologias ativas. Rev Bras Educ Med. 2023;47(1).

17. Regina, Caio Tonholo, Fabiane Mie Kajiyama, Porto M, Abdel D, Roseli Vernasque Bettini. Estudantes do curso de Medicina na pandemia da Covid-19: experiências por meio de narrativas. 2023;47(1).

18. Silva PH dos S, Faustino LR, Oliveira Sobrinho MS de, Silva FBF. Educação remota na continuidade da formação médica em tempos de pandemia: viabilidade e percepções. Rev Bras Educ Med. 2021;45 [acesso em]. Disponível em: https://www.scielo.br/j/rbem/a/pG6dfdC8cFW57YDKqTxNyJB/?lang=pt.

19. Motta-Passos I da, Martinez MLL, Andrade SC da S, Pinho AC dos S, Martins M de A. Percepção do ensino remoto emergencial por discentes em uma escola de ensino superior de saúde. Rev Bras Educ Med. 2023;47(1) [acesso em]. Disponível em: https://www.scielo.br/j/rbem/a/DsbpmD5PJvN8PNLQPscnqbq/?format=pdf&lang=pt.

20. Paiva L, Marcela, Helena L, Gurgel E, Taborda A, de A. Ensino remoto emergencial na Medicina: aspectos positivos e negativos no ensino e na aprendizagem em tempos de pandemia. 2023;47(1).

21. Ramos SRF, Braga Filho RA, Carvalho MA de, Costa DD, Carvalho LA de, Almeida MTC. Pandemia da Covid-19: um evento traumático para estudantes de Ciências Biológicas e da Saúde? Rev Bras Educ Med. 2023;47:e036 [acesso em 17 ago 2023]. Disponível em: https://www.scielo.br/j/rbem/a/dvYtHYLfGQ3r6MYLKKtCLnq/.

22. Luciane Prado Kantorski, Ariane, Aline Neutzling Brum, Alberto C, Santos, Bianca Albuquerque Gonçalves, et al. Transtornos psiquiátricos menores em estudantes universitários durante a pandemia da Covid-19. Rev Gaucha Enferm. 2023;44.

23. Camelier-Mascarenhas M, Jesuino TA, Queirós VO de, Brito LLC, Fernandes SM, Almeida AG. Mental health evaluation in medical students during academic activity suspension in the pandemic. Rev Bras Educ Med. 2023;47:e087 [acesso em 2 set 2023]. Disponível em: https://www.scielo.br/j/rbem/a/w7N97cgCrMjykrVFqbddJfR/?lang=en.

24. Arar FC, Chaves T de F, Turci MA, Moura EP. Qualidade de vida e saúde mental de estudantes de Medicina na pandemia da Covid-19. Rev Bras Educ Med. [acesso e, 8 jun 2023]. Disponível em: https://www.scielo.br/j/rbem/a/tzSLrZmJwnGTxjYkXKmyvxf/?format=pdf&lang=pt.

25. Agostini R, Araujo TW, Afonso ML, Silveira LB. "Novo normal", velhos problemas: ciências sociais e humanas na formação médica em tempos de pandemia. Rev Bras Educ Med. 2023;47(1).