

**STUDENTS' CONCEPTIONS ABOUT THEIR MEDICAL EDUCATION AT A
PUBLIC UNIVERSITY**

**CONCEPÇÕES DE DISCENTES SOBRE SUA FORMAÇÃO EM MEDICINA EM UMA
UNIVERSIDADE PÚBLICA**

**CONCEPCIONES DE LOS ESTUDIANTES SOBRE SU EDUCACIÓN MÉDICA EN
UNA UNIVERSIDAD PÚBLICA**

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ABSTRACT: This study aimed to analyse the conceptions of medical students about their university education. Therefore, we opted for a descriptive, cross-sectional study with a qualitative approach, conducted with third-year medical students from a public school of the state of São Paulo. To this end, 10 students were randomly selected to respond to an instrument of complement sentences, and three of them to participate in a semi-structured interview. The subjects pointed out several aspects responsible for promoting transformations in themselves during their experience. In their speeches these aspects transcend the purely technical issue, also involving affective and cognitive aspects that enabled them to appropriate the human condition and develop self-knowledge. They also reported that with the methodology course they had to learn to work in groups and to exercise cooperation. On the other hand, the subjects also highlighted the difficulties in the initial years of the course, besides the need to be evaluated more frequently and objectively throughout the course.

KEYWORDS: Medical education. Undergraduate medical education. Medical students.

RESUMO: Este estudo tem como objetivo analisar as concepções de estudantes de medicina sobre sua formação universitária. Para tanto, optou-se por um estudo descritivo, do tipo transversal, com abordagem qualitativa, realizado com estudantes que frequentavam o último semestre do 3º ano do curso de graduação em medicina, de uma escola pública do interior do estado de São Paulo. Para tanto, 10 estudantes foram selecionados aleatoriamente para responderem a um instrumento de complemento de frases, e três deles para participar de uma entrevista semiestruturada. Os sujeitos apontaram diversos aspectos responsáveis por promover transformações em si mesmos durante a vivência universitária. Em suas falas tais aspectos transcendem a questão unicamente técnica, envolvendo também aspectos afetivos e cognitivos que os possibilitaram se apropriar da condição humana e desenvolver o autoconhecimento. Relataram, ainda, que com a metodologia do curso tiveram que aprender a trabalhar em grupo e a exercer a cooperação. Por outro lado, os sujeitos também

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destacaram as dificuldades nos anos iniciais do curso, além da necessidade que sentem de serem avaliados com maior frequência e objetividade ao longo do curso.

PALAVRAS-CHAVE: *Educação médica. Educação de graduação em medicina. Estudantes de medicina.*

RESUMEN: *Este estudio tuvo como objetivo analizar las concepciones de los estudiantes de medicina sobre su educación universitaria. Por lo tanto, optamos por un estudio descriptivo, transversal con un enfoque cualitativo, realizado con estudiantes de medicina de tercer año de una escuela pública del estado de São Paulo. Con este fin, 10 estudiantes fueron seleccionados para responder a un instrumento de oraciones complementarias, y tres de ellos para participar en una entrevista semiestructurada. Como resultado, los sujetos señalaron varios aspectos responsables de promover transformaciones en sí mismos durante su experiencia. En sus discursos, estos aspectos trascienden el tema puramente técnico, que también involucra aspectos afectivos y cognitivos que les permitieron apropiarse de la condición humana y desarrollar el autoconocimiento. También informaron que con la metodología del curso tenían que aprender a trabajar en grupos y a cooperar. Por otro lado, los temas también destacaron las dificultades en los años iniciales del curso, además de la necesidad de ser evaluados con mayor frecuencia y objetividad a lo largo del curso.*

PALABRAS CLAVE: *Educación médica. Educación de pregrado en medicina. Estudiantes de medicina.*

Introduction

Higher education has been going through countless transformations and being the target of intense debates, because more and more people are aware of the importance of a professional formation that is committed and capable of meeting the complex demands of our society. Specifically in relation to medical formation, there are numerous discussions aimed at favoring and enriching the years of graduation thinking about didactic-pedagogical strategies for the construction of a qualified professional profile (ARAGÃO; ALMEIDA, 2017; HAMAMOTO FILHO *et al.*, 2013; NOGUEIRA, 2009)

According to the National Curriculum Guidelines for the Undergraduate Course in Medicine (2014), medical formation is expected to contribute to the construction of a generalist, humanist, critical and reflective profile. It is believed that the medical professional should be able to act based on ethical principles in health and disease care, at their different levels of care, promoting prevention, recovery and rehabilitation in the health process, with responsibility and social commitment, having in view of the integral health of the human being and the commitment to society (BRASIL, 2014).

Accordingly, medical education has been gaining increasing prominence, mainly from the significant production of knowledge and debate about the dilemmas, challenges and achievements reached in medical education (FEUERWERKER, 2006; SIQUEIRA, 2006). And in this context, according to Barbosa Pott and Pott Junior (2019), among the most discussed topics in the area of medical education, the use of digital technologies is highlighted, mobilizing medical education and active teaching-learning methodologies (BARBOSA POTT; POTT JUNIOR, 2019). This same study also points to a trend of new teaching strategies, starting from conceptions that seek to break with the traditional teaching guided by the content proposal. However, there is a lack of studies that assess the impacts of implementing these strategies from the perspective of teachers and students.

Therefore, this article seeks to bring contributions to the field of medical education from studying students, from the 3rd year of the undergraduate course in Medicine, about their conceptions about their university education. Therefore, it is important to understand the structure of the course as well as its pedagogical proposal, which will be detailed below.

The Political Pedagogical Project

The political pedagogical project of the medical course in which this research was carried out is based on three pillars: competency-oriented curriculum, theoretical-practical integration and a constructivist educational approach. The proposal for a competency-oriented curriculum seeks to overcome the assumption of formation based only on the acquisition of technical-scientific content, requiring professional action, contemplating a set of competencies necessary for the professional action of the physician, who must be prepared to deal with the demands ethical, political, technical and social aspects involved in their professional action (UNIVERSIDADE FEDERAL DE SÃO CARLOS, 2007).

Within the scope of theoretical-practical integration, the health services available in the municipality are conceived as essential scenarios for the student learning process, enabling teaching and learning that are closer to the demands of professional practice. In this sense, the various modalities of health care make up an indispensable context for the student learning process, involving home care, outpatient care, pre-hospital care, hospital care, emergency services, schools, daycare centers, institutions for the elderly, among others. Therefore, from an integrated curriculum, exposure to the context of professional practice takes place from the beginning of formation, constituting a source for raising demands, issues and problems to be studied and scientifically deepened. Based on this proposal, active teaching-learning

methodologies are used as fundamental teaching resources, requiring the student to be involved in their learning process, through the constant search for the knowledge needed to solve practical problems (UNIVERSIDADE FEDERAL DE SÃO CARLOS, 2007).

Nevertheless, the curricular formation of the course is theoretically based on constructivism, which is based on the principle that the teaching-learning process is produced from investigative contexts that provoke questions. These practical contexts are the driving force for the study process and theoretical deepening of students, requiring involvement, commitment and initiative in the formation process. Thus, the initiating demands of learning are problem situations that the student encounters in their practice in health contexts, both simulated or real, requiring an articulation of various dimensions that constitute academic formation: ethical-social, technical-political, technical-scientific and affective. Through this educational approach, we seek to mobilize all aspects that constitute the subject: cognition, psychomotor and affective (UNIVERSIDADE FEDERAL DE SÃO CARLOS, 2007).

Another practical implication of this approach is the horizontal relationship between teachers and students, through the organization of small groups of students and encouragement of a critical-reflective posture and of co-responsibility in the teaching-learning process. In this context, it is up to teachers to facilitate the teaching-learning process in educational units, build simulations, carry out assessments, manage educational units and support centers for continuing education, in addition to acting as preceptors (UNIVERSIDADE FEDERAL DE SÃO CARLOS, 2007).

At this point, it is noteworthy that in this pedagogical proposal the student evaluation process is configured as formative and summative. In summative assessment, the aim is to assess the student based on the skills and general objectives, identifying students who can progress to the next cycle; those who do not have a satisfactory grade will have to have more time and support for the respective cycle. Formative assessments are carried out verbally during and at the end of all activities, at least every six months. In addition, the process and progress assessments are synthesized in a portfolio that follows the trajectory of each student (UNIVERSIDADE FEDERAL DE SÃO CARLOS, 2007).

Therefore, from this differentiated proposal for a curriculum for medical formation, it is necessary for the student to present scientific curiosity and permanent interest in learning, characterized by a constant critical and reflective movement in relation to theoretical and practical assumptions. It also requires creative initiative and responsibility, as well as an

interest in exploring the subjective and social dimensions involved in the health-disease process.

Methodology

This research is a descriptive, cross-sectional study, with a qualitative approach, carried out with students who attended the last semester of the 3rd year of the undergraduate medical course at a public school in the interior of the state of São Paulo. For this purpose, 10 students were randomly selected from a total of 40 students belonging to this class.

As a technique for data collection, an instrument to complement sentences and individual semi-structured interviews were used. According to González Rey (2011), the sentence complement proposal is an important instrument for research that seeks to access the meanings or conceptions configured about a certain phenomenon, as it presents the possibility of the subject to express themselves freely (GONZALEZ REY; MITJANS MARTINEZ, 2011). For this purpose, seven situations related to the university experience were formulated.

After this stage, three students were invited to participate in the interviews, carried out individually from questions that aimed to deepen the information accessed in the complement of sentences. The interviews were conducted in a private place, recorded and later transcribed to be analyzed.

After their transcription, the interviews were analyzed using content analysis, previously described by Bardin (BARDIN, 2011). For this, the reading and re-reading of all transcripts was continued, followed by the mapping of the significant speeches and the subsequent elaboration of indicators. After this step, the data were transformed in order to fit them into units, which allowed the exact description of the content characteristics. Later, the units were grouped into semantic categories, and then analyzed.

This study was approved by the Research Ethics Committee of the Federal University of São Carlos (CAAE: 18399119.0.0000.5504) and all participants signed an Informed Consent Form.

Results and discussion

This article aimed to access, in students of the 3rd year of the undergraduate medical course, conceptions about university education. For this purpose, the information accessed

was organized into analysis categories entitled: i) expectations of university entrance; ii) the experiences that promote transformation; and iii) the dilemmas faced in the course.

University entrance expectations

Entry into higher education is accompanied by countless expectations, anxieties, desires and investments of different natures. Such expectations do not refer only to the student's figure, but also to their entire family and the social context in which they are inserted (DIAS *et al.*, 2018). Regarding the choice of the medical course, many difficulties and anxieties are added, for example, the high cost of formation in private universities or high competition in public universities.

This category was marked by ideas and conceptions that, with the insertion in higher education, many of the dilemmas and difficulties experienced in basic education and during the preparatory course years would be resolved, as shown in the following statement:

When I joined, I thought it would be the solution to all my problems and what I most wanted (S1, our translation).

They still believed that upon entering higher education, they could devote themselves to other aspects of their lives that were not possible during the preparatory years, as shown in the following statement:

I expected to learn medicine, play sports (football, futsal), make friends and enjoy my free time (S3, our translation).

Based on their experiences during the preparatory years for entry into higher education, most subjects reported that they believed they would have a traditional education, very similar to what they had during basic education and preparatory courses. Let's look at some lines about this aspect:

I expected to be evaluated by many tests during the semester, that the volume of studies would never end. I thought that teachers would always be at unreachable levels of knowledge (S5).

My expectation was to enter an environment that would provide dialogue between various areas of knowledge. I believed that university life would be harder and denser than it actually was (S6).

That I should dedicate myself much more than in high school and in the preparatory course (S7, our translation).

Based on the speeches presented, it is noted that expectations in relation to higher education turn to the traditional model, based on constant assessments, with the teacher being the only figure in possession of academic knowledge. This expectation of students is the result of a whole trajectory in basic education and preparatory courses focused on a traditional model. According to Libâneo (1994), traditional teaching (or traditional pedagogy) refers to pedagogical conceptions based on the idea that teaching occurs through the action of an external agent (in this case, the teacher) on the formation of the student, involving the transmission of historically constituted knowledge (LIBÂNEO, 1994).

Upon entering higher education, students reported the need to take ownership of a new teaching and learning proposal, requiring them to be involved in the formation process itself. Another aspect presented by S5, her expectations were related to the figure of the teacher as “distant” from the student and the sole holder of knowledge, also in keeping with a traditional model. Thus, through the pedagogical proposal of this university, students are able to perceive that traditional teaching is not the only way to promote learning and that there are other ways for the teacher to position himself in the knowledge construction process.

From the speeches of the students participating in the research, it is possible to notice a certain questioning and reflection about the teaching models they experienced until entering higher education. Until this moment of the analysis, there is a confrontation with a new teaching model, which allowed the subjects of this study to broaden the ways of understanding human development and its formation process. The transformation of these students did not only occur with the acquisition of new knowledge, but also through the teaching and learning strategy.

With this, the students reported countless growths, provided by the university, and that the presented methodology was constituted as an important element, an aspect that will be deepened in the following category.

The experiences that promote transformation

Entry into higher education is an important milestone in the lives of people who have this opportunity, as they are faced with a series of knowledge, concepts and affections that drive and promote human development (MARINHO-ARAÚJO; RABELO, 2015). Regarding the reports of the research subjects, they pointed out several aspects that promoted their process of change during the years at the university, transcending the purely technical issue, focused on the appropriation of technical-scientific knowledge, also involving affective and

cognitive aspects that made possible to them the appropriation of the human condition and development of self-knowledge. Among the main positive aspects that the course provided them, the methodology was cited by the students as the main factor promoting changes and transformations over these three years of formation, as shown in the following statements:

What I like most is the methodology (S6).

I'm very passionate about the method (S7).

I think it's the best way for you to fix things. I don't like something memorized and repetitive. I can't memorize things, so methodology like that doesn't oblige you to know things, but to build a path to that thing. I think it's the best study method. I like this active learning (S6).

Here you have the teacher sitting with you at the same level and you debate. We have to prepare to come to class, and preparation is a great way to study. I finished high school, took a prep course and started engineering. I always thought I wanted engineering because I've always been very close to math, but it's really boring. At the university where I started engineering, the atmosphere was much more tense than here. I had the vision of the teacher as "God". Here, we have a very close relationship with the teacher. In engineering, the professor "vomited" the content up and you didn't dare question it, at least in the first semesters it was like that. It was an environment that didn't feel good (S5, our translation).

Based on the speeches presented, the course methodology was cited by students as a fundamental aspect in their formation, associated with the personal and professional growth they had since entering higher education. In particular, in the speech of subject S5, there is a counterpoint between his first formation (in engineering) and his formation in medicine, drawing attention mainly to the position of the teacher. Another aspect accessed in the subjects' statements is the humanization that the course favors, as observed below:

I learned to value my experiences more, my individuality and how I could help in my own way. Much of my adaptation focused on the form of study. Here, the course places a high value on individuality, so I had to find out what was important for my development. What I like most about the university is how much I evolve in my parameters of self-knowledge and in valuing my own conscience. I had to learn a lot about myself to be able to exist in this course (S5).

Last year I was charging myself too much and I wasn't doing the course, much less charging me. So this was important for me to learn how and to what extent I can charge myself (...) now I know how to limit (...) this comes a lot from the course, because it was a right that we didn't give ourselves. I didn't have this option of taking a day off. a day off was an absurd (S6).

We come from a "way" of competition in the course. I had an image that in college the competition would be much worse, but because everyone is in the same position as us, we end up helping each other. So it's a very positive point. (S1, our translation).

In the students' speeches, it is noted that they have a very intense individual demand regarding study, a reason associated with the effort that was necessary to enter higher education at a public university, that the feeling of competition and compulsion to study seems to be a social demand that is imposed by the education systems they have gone through until entering university. Students appropriate these characteristics and report the difficulty or contradiction they experienced in the early years of higher education, with a methodology that does not foster competition, but cooperation between students and teachers so that the teaching and learning process can take place. Thus, cooperation is an important element that appears in the speeches of students and highlights the importance of this type of methodology for higher education, since this is an important competence for multidisciplinary actions and practices that characterize professional practice in the current conjuncture (BRASIL, 2014).

Another aspect that stood out in the speeches was that the type of methodology applied in teaching favors the students' self-knowledge process, since they need to “learn how they learn”, knowing their limitations, scope and potential to be able to conduct and carry out the course. However, this aspect of seeking knowledge and adapting to the new demands imposed by the course and also by the methodology is not an easy task, as it causes a series of feelings that can be a source of anguish, fear and difficulties in the formation process. In this sense, many dilemmas and difficulties were pointed out by the students in their formation process, aspects that will be deepened in the analysis of the following category.

Dilemmas and difficulties faced in the course

Academic formation is constituted by different experiences and affections, which, at times, are constituted in contradictory and polarized ways with regard to the university experience. Regarding the course methodology, if on the one hand the students reported positive aspects in relation to the challenges imposed in this type of way of understanding the teaching and learning process, on the other hand they reported feelings of anguish and great difficulty with the adaptation process. Let's look at some reports:

We arrive and don't have a teacher who tells you what you are going to study on a certain topic. As a group, we come to an agreement on what topic we are going to discuss, then each person goes home, opens books, and there we have to find ourselves. So we have to develop our way of thinking about content. We need to learn to learn (S5).

Initially quite troubled, but now it's easier (S1).

Regarding the course, I think there are moments to prepare the student for the difficulties of practice (S9).

I have contact with traditional methods, and I see friends studying some things I've never seen. I start to study, to "lose myself", it generates a strong self-demand, it seems that we are not evolving. But this is part of the methodology, it has a theoretical foundation for it. What we started to have this year was a direction. Because here you are thrown and you have to learn to study, you are the one who determines what needs to be studied. So I miss having someone guiding, I don't need to someone to pick me up and carry me, just help me making a "fenced" directing (S1, our translation).

Based on the speeches presented, it is noted the difficulty faced by students regarding the study process, reporting that they do not have expository and guiding classes, revealing they need to learn to study on their own. Most students reported the initial years of the course with anguish, since there is no direction for what and how to study, they end up demanding too much to be able to understand the aspects observed in practice. This is because the curriculum inserts students in practical contexts from the early years, facing numerous problem situations, fictitious or real, which trigger the study activities. Another element mentioned as a source of anguish is the practical insertion in the course from an early age, often the students themselves do not feel prepared to deal with the demands presented. Regarding this aspect, let's see an excerpt from the S5 speech below:

My freshman year was troubled because I had some problems with the course and had to put it on hold. I stopped the first year, because in practice I was accompanying an elderly person and he died, and I was very upset. (...) The first year is very difficult. We have a lot of practice and I was not mentally prepared. In the first year we go to the health center (...) we have simulation stations with actors, the teacher gives you a guide and you go there to gather information. And I wasn't prepared for that. (...) I thought I would sit down and watch the most traditional class possible. I was pretty unprepared (...) so I stopped the course, went to therapy, and when I got better I came back. It wasn't easy, because our course is very demanding. We left the basic cycle straight for the clinic, really doing medical care. This act of leaving the protégé and entering the real world is very difficult. So I had these problems because of that, every day I knew I would attend was a despair for me, anxiety in the first semester was very high. I grew up this year, I doubted myself, I thought that what I knew was not enough for me to be here. Then you go on talking, listening to people, receiving feedback from the patient, the teacher and you see that we have much more knowledge than we think (S5, our translation).

Based on the speech presented, it is noted how much the practical insertion is conflicting for the student, requiring him to deal with his difficulties and fears highlighted in the practical context and that, often, the newly graduated student is not prepared. Thus, it is noted that the challenges involved in the formation process are not linked to the appropriation of contents only, but to dealing with the patient, understanding the demands presented, the

difficulties and vulnerabilities in situations of illness, among many aspects that formation based on the constant interaction with the professional practice provides. Yet another aspect of the course is that the assessment of students is also based on the feedback received from patients, which is an important source for the formation of students. The study by Hamamoto Filho *et al.* (2012) highlighted the importance of feedback from health users as an important subsidy for the evaluation process of medical students, which can be configured as a relevant strategy to be used by formation courses (HAMAMOTO FILHO *et al.*, 2012).

Regarding the students' assessment process, they expressed that the few assessments do not allow them to visualize the results regarding individual performance in the short term. Let's see some lines about this issue:

We don't have much evidence. Our evaluation is always feedback from the teacher and the portfolio. At the other university where I started engineering I had a test every 2 weeks. The head was in terror involved with tests. This way of thinking doesn't exist here, we don't have tests. Then my head had to get used to it. We are evaluated by subjective methods, and sometimes we don't even know what the teachers are using to evaluate us. (...) Some teachers do not say what they expect in the portfolio. This makes it difficult for us to understand what needs to be improved. (...) If you receive a note that you "need improvement", it becomes vague, I would like to know where. So I think I miss more reviews. Because the residency test is a formal test, then I think we are at a disadvantage. Never that I would like to take those content tests, but I would like tests that demonstrate the evolution of the student (S5).

I don't know if a test. But some way to show that I'm learning the content, I'm on the right path, beyond the subjective. It doesn't have to be an exact graded assessment, but a test to evaluate knowledge. Any alternative. In the course, we do a written test at the end of the semester and you don't know how you evolved during the semester. Once a year we do a progress test with ENEM-like questions, there are 120 questions. But it's not worth a grade, it's for the student to know how much progress has been made throughout the year. But throughout the semester we don't know how we evolved (S6, our translation).

In the students' statements, it is possible to notice a certain questioning in relation to the assessment process they undergo throughout the course, assessments that often do not correspond to their expectations and formation. Students reported the need to be assessed more frequently in order to allow them to perceive their academic development process.

In the formation of a curriculum, by proposing changes in the way of understanding and carrying out the formation process, it is also necessary that the evaluation process follow the fundamentals of pedagogical practice. Therefore, if the way of understanding medical education has evolved, breaking away from teaching based on traditional principles, it is

essential that the student evaluation process also undergo changes. In this sense, according to Marinho-Araujo and Rabelo (2015), evaluation has a commitment and function that go beyond the results of education and the meritocratic classification of students, courses or institutions, involving a process characterized by an educational, pedagogical and psychological intention (MARINHO-ARAUJO; RABELO, 2015). Thus, based on the students' conceptions about the evaluation process they undergo, it is important to find strategies and tools so that they feel permanently evaluated and can access the results of their professional growth.

According to the students' conceptions, many aspects of their education are positive and conducive to the process of professional and personal development, but there are also dilemmas and aspects that need to be rethought and discussed, posing a challenge the need for permanent discussion of student education.

Final considerations

This article sought to investigate the conceptions of students in a medical course about their university education, from a curriculum that seeks to break the more traditional paradigms of education and bet on active, reflective and contextualized learning. Therefore, the relevance of this study is to analyze the subjects who are receiving medical formation in order to expand and problematize the numerous issues involved in this process.

Based on the analysis presented, it was found that the subjects participating in the study went through numerous and different teaching strategies, either during the years of basic education or in preparatory courses for entry into higher education. They reported that in all teaching experiences they were exposed to a process considered more traditional, based on the content proposal and on the teacher as the central agent of knowledge transmission. Entry into higher education was marked not only by the transformations that this space itself provides (such as moving to another city, state, living alone or with colleagues etc.), but also by the challenges that the method adopted by the course provides. Most students indicated expectations with the entry into higher education aimed at traditional medical education, based on lectures, with constant assessments and with the teacher being the only figure in the transmission of technical-scientific knowledge. Such expectations were broken as soon as they entered the course, since they were not exposed to what they imagined and what they had in their school trajectories.

Still, several aspects were reported as promoters of transformations during the years at the university, which transcend the solely technical issue focused on the appropriation of technical-scientific knowledge, also involving affective and cognitive aspects that enabled them to develop self-knowledge. During the three years studying in higher education, they had to learn to study, to find the most relevant aspects of a specific practical problem, to deal with the challenges of professional practice and to know their limitations and self-demand capacity. They also reported that, with the course's methodology, they had to learn to work in groups, to exercise cooperation instead of competition.

Given the numerous benefits that the subjects pointed out in relation to university education and the course methodology, many dilemmas and difficulties were also present during the formation process. Most students reported anguish in the early years of the course, based on the idea that there is no direction to what and how to study, and they end demanding too much from themselves to be able to understand the aspects observed in practice. Regarding the evaluation process, they expressed the conception that the few evaluations during the formation do not allow them to visualize the results of individual performance in the short term and, therefore, they believe in the need to be evaluated more frequently so that they can perceive their process of academic development.

Thus, according to the conceptions accessed by students about university education, many aspects are positive and conducive to the development process, associating these aspects to the curriculum and methodology adopted by the course, but there are also dilemmas and aspects that need to be better discussed and planned.

With regard to the limitations of this study, the cut made in accessing a small sample of students undergoing formation in the course is highlighted. We recognize that the study could involve a larger number of participants and have included other years of formation. However, our objective in this study was to present an outline of the conceptions of students during medical formation, which makes us a future challenge to contemplate a larger sample size and information.

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