On the Hidden Curriculum: the Good Doctor, Hierarchy and Abuse*

Sobre el currículo oculto: del buen médico, la jerarquía y el maltrato

Sobre o currículo oculto: o bom médico, a hierarquia e os maus-tratos

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Abstract

Objective. The work sought to describe the interactions of some students from two Medicine programs in Colombia related with the hidden curriculum. **Methodology.** Hermeneutical study, using ethnography and grounded theory, through application of participant observation in five practice scenarios and 11 in-depth interviews. Data analysis was performed with open, axial, and selective coding, characteristic of grounded theory, which generated a matrix of the paradigm. **Results.** Studying Medicine implies being part of a hierarchy from inspiring to excessive. The demand on medical education to train a tireless and impeccable doctor, the competition to be admitted to each rank, and fear of making mistakes exacerbate the negative functioning of the medical hierarchy. This hierarchy is based on the power of knowledge that permits abuse. The above triggers exhaustion, frustration, disinterest and affects professional ethics, aspects that harm the doctor in training. **Conclusion. T**he hidden curriculum determines the doctor's training more than the formal curriculum. Recognizing and reflecting about the hidden curriculum from the academic community permits making visible, in future curricular reforms, the role it plays.

----------*Keywords:* medical education, school of medicine, hidden curriculum, informal curriculum, implicit curriculum.

Resumen

Objetivo: Describir las interacciones de algunos estudiantes de dos programas de Medicina en Colombia relacionadas con el currículo oculto. **Metodología:** Estudio hermenéutico, que utilizó la etnografía y la teoría fundamentada, mediante la aplicación de observación participante en cinco escenarios de práctica y once entrevistas en profundidad. El análisis de los datos se hizo con codificación abierta, axial y selectiva, propias de la teoría fundamentada, lo que generó una matriz del paradigma. **Resultados:** Estudiar Medicina implica hacer parte de una jerarquía desde inspiradora hasta excesiva. La exigencia de la educación médica por formar un médico incansable e intachable, la competencia para ser admitido a cada rango y el miedo a equivocarse exacerban el funcionamiento negativo de la jerarquía médica. Esta jerarquía se basa en el poder del conocimiento que permite el maltrato. Lo anterior desencadena agotamiento, frustración, desinterés y afecta la ética profesional, aspectos que estropean al médico en formación. **Conclusión:** El currículo oculto determina la formación del médico más que el currículo formal. Reconocer y reflexionar sobre el currículo oculto desde la comunidad académica permite visibilizar, en futuras reformas curriculares, el papel que este desempeña.

----------*Palabras claves:* educación médica, escuela de medicina, currículo oculto, currículo informal, currículo implícito.

Resumo

Objetivo: Descrever as interações de alguns alunos de dois cursos de Medicina da Colômbia em relação ao currículo oculto. **Metodologia:** Estudo hermenêutico, que utilizou etnografia e teoria fundamentada, por meio da aplicação da observação participante em cinco cenários de prática e onze entrevistas em profundidade. A análise dos dados foi feita com codificação aberta, axial e seletiva, típica da teoria fundamentada, que gerou uma matriz do paradigma. **Resultados**: Estudar Medicina implica fazer parte de uma hierarquia que vai do inspirador ao excessivo. A exigência da formação médica para formar um médico incansável e irrepreensível, a competição para ser admitido em cada posto e o medo de errar exacerbam o funcionamento negativo da hierarquia médica. Essa hierarquia é baseada no poder do conhecimento que permite o abuso. O exposto acima desencadeia esgotamento, frustração, desinteresse e afeta a ética profissional, aspectos que prejudicam o médico em formação. **Conclusão:** O currículo oculto determina mais a formação do médico do que o currículo formal. Reconhecer e refletir sobre o currículo oculto da comunidade acadêmica torna visível, em futuras reformas curriculares, o papel que ele desempenha.

----------Palavras-chave: educação médica, escola médica, currículo oculto, currículo informal, currículo implícito.

Introduction

Curriculum has had multiple conceptions, permeated by different historical contexts since its origin [1]. It is an intentional cultural elaboration of the human being to structure the transmission and construction of knowledge [1]. In the area of medical education, the curriculum was condensed in the 20th century, when American educator Abraham Flexner suggested the need to homogenize the teaching process in medicine [2]. At the same time, concepts emerged about different types of curriculums, besides the official [3].

Among the diverse classes of curricula, whose conceptions other authors expand and deepen, The hidden curriculum draws attention due to its dissonance with the formal curriculum and its impact on professional ethics [3]. Currently, the *hidden curriculum* is conceived as the set of knowledge, behaviors and values learnt in informal interactions during the clinical practice [3,4]. It is a form of implicit socialization that, both in the field of medical knowledge and in the formation of that knowledge, teaches students the dynamics of power based on the asymmetry of knowledge, crossed by organizational, structural, and cultural influences [4,5]. Thus, the hidden curriculum could have greater influence than the formal curriculum over the ethical, moral, and professional conducts, although that taught could even end up being anti-ethical and contrary to the "formal" objectives. Hence, the importance of recognizing the hidden curriculum to achieve an integral education [4].

Recognition of medical education as one of the bases of the care system places medical students as a population of special interest for public health, this, as it assumes that the well-being of the students will be positively impacted by having adequate training. In addition, it explains the reach any curriculum should have, not only on the wellbeing of the doctors in training, but also, consequently, on the patients' health [6-8].

The intensity, complexity, and hierarchical nature of medical education makes students more vulnerable to adopting values, whether positive or negative, without an adequate reflection process [6]. Likewise, the self-protection measures students implement to avoid abuse increase the risk caused by the burnout syndrome, diminish productivity and academic dialogue, bearing negative impacts on caring for patients [7].

The medical literature, in general, recognizes that the hidden curriculum has a direct effect on the care of patients, given that it influences the professionalization and practice of ethical principles of future doctors [6]. Negative experiences in relation with the hidden curriculum demotivate doctors in training to choose to work in primary care and this contributes to the lack of staff faced by this sector [8].

For the purpose of studying the hidden curriculum from the idea that this is immersed in the experiences of the students, qualitative strategies stand out over qualitative ones in their research. Those permit exploring, describing, and interpreting meanings, experiences, feelings, ideas, or beliefs, as well as knowing an "unwritten code" and the distance between it and the formal code.

In Latin America, although acculturation and hybridization phenomena have existed of the different curricular theories [3], few studies are available on these with a need for more information in our context. Due to this, from a hermeneutical perspective, we propose describing the interaction experiences of students from two medical programs in Colombia, in educational scenarios, in relation with the hidden curriculum.

With this study, we seek to contribute to the body of national and international evidence with respect to the importance of evidencing and keeping in mind the hidden curriculum to generate profound changes in curricular reform processes.

Methodology

This qualitative research was conducted by a group of students and professors from the Medicine program in the Faculty of Health Sciences at Universidad Tecnológica de Pereira and from the Faculty of Medicine in Universidad de Antioquia. From the beginning, the researchers identified the epistemological assumptions and theoretical and methodological aspects required, in addition to considering their own experience on the study issue.

Study design

This was a hermeneutical study that, to gather the information, used ethnographic techniques of participant observation and in-depth interviews [9,10]; to analyze the information collected, used techniques from grounded theory [11], which favors the generation of conceptualizations that facilitate understanding phenomena of social interaction and can last over time because they are derived from narratives collected and abstracted from the experience of individuals in a specific context, which are then analyzed systematically through a constant comparison process.

Collection of information

Initially, *participant observation* was conducted in the places where the research students were performing their practices. The four scenarios were the hospital medical rounds in an institution providing highly complex health services, surgery, outpatient consultation and academic seminars. This process was carried out by taking notes about their experiences for approximately one month, during late 2018, resulting in five field diaries.

Thereafter, students in different semesters from both universities were chosen by the student researchers to interview them, and invited them to participate following as inclusion criteria the prior knowledge they had of them, their proactivity and capacity for expression.

The students selected were not students of the professors involved at the time of the research. None of those invited to participate refused.

The study sampling was initially selective and intentional, but as the analysis progressed it became theoretical, turning to individuals who maximized opportunities to discover variations and depth in the concepts; for this purpose, a greater number of final semester students were selected and interviewed to favor greater experience with the respective curriculum and, thus, delve into aspects that started emerging.

The students interviewed were seven women and four men, who at the time of the interview were between 20 and 27 years of age, and came from eight cities in Colombia. All were single; seven lived with their families, three with colleagues or friends, and one lived alone. One student was in the 8th semester, five in the 10th, one in the 12th, and four in the 13th semester.

The interviews took place during 2019, from a semi-structured script, with open questions related with the interaction experiences during the career, the relevant actors involved, scenarios and moments that marked the learning process positively and negatively. The inter- and extra-curricular activities, rituals evidenced, the generational transmission of behaviors and patterns, and changes experienced during their time at the respective school of Medicine were also inquired.

To carry out the interviews, conditions of tranquility and trust were fostered to favor free expression.

Data analysis

The analysis was performed from the transcription of the five field diaries and 11 interviews conducted; in this last case, previously verifying the fidelity between that transcribed and the audio.

The data analysis used open, axial, and selective coding, besides constructing properties and subcategories that were the input of the application of the paradigm matrix, typical of the grounded theory [11], carried out with Microsoft Word® and Microsoft Excel®.

Coding of the texts was initially open, through line-by-line microanalysis, identifying interaction incidents that permitted generating codes or short, more abstract ideas. These codes were grouped inductively into descriptive categories, within which subcategories were identified (conglomerates of codes that share a sense) and properties (explanatory situations constructed from the subcategories at a higher analytical level and, thereby, with greater reach).

Subsequently, these properties and subcategories were related through the paradigm matrix, as central strategy of the axial coding, to permit the emergence of the phenomenon found, around which emerge its respective context and causes, its action-interaction relations, and its consequences [8].

Constant comparison among narratives, codes, categories, theoretical references revised, and abstractions by the researchers was iterative, interactive, and systematic [8].

This process was motivated by the intention to advance in conceptual density toward greater saturation of the categories (*i.e.*, when the collection of new data no longer contributed additional or relevant information to explain the existing categories or discover new categories), after identifying the variety of the phenomenon.

During the analytical process, the researchers' different perspectives were openly and continuously triangulated and compared, leading to continuous interpretative deliberations of the information analyzed [12].

Finally, selective coding permitted constructing an interpretive category, to explain how students interact with the hidden curriculum, which, beyond the descriptive, projects the construction of meaning. Results from this category express a phenomenon, the conditions in which the action and interaction relations are developed or the strategies to confront it and its consequences, and include textual interview fragments, followed by the gender and the semester that the informant was studying.

The results were shared with those interviewed via e-mail, asking them to express their thoughts regarding what was therein written, which generated constructive dialogue that permitted verifying that they saw themselves represented.

Ethical conditions

Prior to the interviews, an informed consent was signed and the confidential handling of the information provided and the identity of those interviewed was clarified.

The study was approved by the Ethics Committee of the Research Institute in the Faculty of Medicine at Universidad de Antioquia, Minute 008 of 24 May 2018.

Results

Hereinafter are the main findings in which 2,792 codes were obtained, grouped into 31 descriptive categories: social and cultural activities, support during the career, change from the school to the university, change de municipality, changes in the career, academic load, gossip, medical education, university experience, faculty Vs. city, academic failure, heritage, hobbies, the faculty where they studied, abuse, Medicine and other careers, motivation in Medicine, passage from basic to clinical formation, clinical practice, pressure and competency,

private Vs. public university, admission process, amorous relations, challenges in the university, sacrifices by the student, mental health, feelings, overall about medicine, treatment by professors, diverse university, public university. Each of these descriptive categories identified properties and dimensions gathered from the field diaries and from the initial coding of the interviews; thereafter, as stated, these were grouped into the paradigmatic matrix shown ahead.

Figure 1 presents an example of the relation between properties and their dimensions emerging from the interviews and field diaries, accounting for the progressive derivation of themes and subthemes. Chart 1 shows some codes selected from the field diaries.

Figure 1. Example of a property and the dimensions that permitted is emergence

From the hidden curriculum, studying Medicine implies being part of a hierarchy from inspiring to excessive

According to the participants, professors are a source of inspiration that influences on the students' professional future. The "good professor" teaches in academic, practical, didactic, and – above all – passionate manner; has a good relationship with students and guides them in learning. Hence, good professors stimulate their students, facilitate development of capabilities, and transmit more than knowledge, change the perception about medicine, their own dreams and, even, impact other aspects of life.

> […] [the professor] was like that person that placed the spark in me, the seed of "please, be more sensitive" [Woman 25 years – 10th semester].

The quality of the student's relationship with the professor is key upon defining the nature of the imprint: going from that where students learn in passive, monotonous manner and without interaction, to relations where there is active learning and intentional accompaniment.

Chart 1. Some codes arising from field diaries about the hidden curriculum

Field diary 1	Feeling unnecessary for the development of the round Witnessing that the teacher leaves the place of the round without notifying the students Hearing that the teacher belittles the inmates' right to rest Experiencing that a friend quits Medicine because she can't stand the pace and excessive pressure Witnessing that no one responds to a hostile comment from a teacher Hearing from a student who feels intimidated in a round for not being able to say “I don't know.” Hearing from a student who feels judged during rounds Demonstrate that in clinical rotations some teacher makes “insinuations” and invades the student's personal space Perceiving a mocking tone from the teacher due to the student's inexperience in believing a patient
Field diary 2:	Listen to good or bad comments about teachers before starting a rotation Feel motivated to study thanks to a pleasant relationship with teachers Having witnessed the teacher being late repeatedly and not informing the students or making excuses Feeling that the teacher does not respect the students' time Hearing a teacher talk disparagingly about patients Witnessing a teacher treat students who do not answer their questions as fools Get used to expecting bad taste jokes, euphemisms and abuse in a round Witnessing a teacher call a student stupid for asking about a drug Hearing from a specialist that they should limit themselves to referring patients as general practitioners Feeling bad because a teacher speaks badly of your classmates and not saying anything
Field diary 3	Witnessing classmates and patients being scolded by the teacher for not knowing something Having seen a patient being blamed for the complication of a procedure Witnessing a student being ridiculed in front of his classmates for his political stance Getting used to a teacher do not make it to the round and they have to go look for it Seeing classmates evade the proposal to report a teacher for fear of reprisals Hearing that when you make a complaint to an administrator about a teacher, he does nothing and tells the teacher Feeling inopportune , useless and that hinders a service, in addition that her time is not worth Witnessing that an internal doctor undervalues the students' work because they are not long shifts The rule is that a teacher does not take an interest in the particular conditions of his students; If anyone does it, it is an exception and surprising Ridicule the student in front of all the healthcare staff, and then ignore the aggression and continue as if nothing had happened
Diario de campo 4	Assume a passive and mechanical role in the teaching process by the teacher Learn mechanically and intuitively in monotonous queries Observe how the teacher is more concerned about the time of the consultation than the result Feeling guilty for being part of an environment that violates rights Feeling pressured to invent data from the medical history because it was not previously measured Feel comfortable due to the attitude and good atmosphere generated by the teacher Assess the presence and close support of the teacher during care Perceive that teacher-student communication is facilitated by trust Assess the demonstrated interest as a key factor of a “good teacher” Responding violently and bluntly to a student's ignorance
Diario de campo 5	Feeling like you're in the way and not feeling heard Perceive naturalization of violence in the medical act Perceiving that the right to privacy and informed consent is violated Ridicule the student when he does not know the answer Make dialogue impossible by preventing the student from speaking Witness the comparison of the patient with an animal Witnessing the teacher making fun of a patient's condition Hide disagreement with the teacher so as not to be discredited or pointed out Regret treating a patient badly so as not to clash with the work group Feeling ridiculed and excluded by the surgeon

The motivation of both actors modifies the dynamics of the formation process.

> This professor cares for the well-being of the students […] she demanded a lot from us; but due to her being so sensitive with us, I demanded more of myself to study more […] [Man 27 years – 13th semester].

Students tend to not be able to choose professors, but professors have the power of deciding over students. Students perceive that their complaints about professors have no effect, nor are they well received, and the only way to advance is to resign themselves with fear and climb the hierarchy that begins during the first semesters, passing through the residents in ascending order, to specialists, and added to the pressure to specialize. Likewise, obedience to the hierarchy is learnt and transmitted through example, where the upper scales have rights that the lower ones do not have and impose their position over the lower grades, even to the point of abuse as expression resulting from the logic of the power of knowledge.

> The professor never addressed us, she talked with the resident […] with us next to her […]She even told the resident to take us out of the office […] as if she disliked our being there [Woman 22 years – 10th semester].

Abuse from professors to students is manifested in mocking, derogatory, destructive criticism, with predictions of their being bad doctors, even intrusions into the students' privacy. Abuse is a public secret in which one is complicit and is endured for fear of reprisals taken by the teacher during the evaluation. They learn to tolerate these conducts, which are reinforced through example, are repeated and transmitted due to the lack of questioning, which leads to normalizing abuse even towards patients, as long as the academic process continues.

> Supernormal in that regard [abuse] and the university does absolutely nothing […] nobody does anything, and it is something inherited, and then new residents arrive, new interns and all learn from that person who says nothing [Woman 25 years – 10th semester].

From the best high-school grad to the struggle to becoming "the good doctor"

The students' training process takes place at the university and in the different health care spaces, where they end up spending even more time than in their own homes, which generates a sense of belonging. The university fosters an environment of openness towards other people, regardless of differences. However, small groups are also created, with exclusion tendencies, according to the origin of the school, city, socioeconomic level and semester, and where the exchange of others' anecdotes plays a leading role in socialization.

> My cohort, specially, had much division of powers […] those from certain schools gathered amongst themselves; those from another place in the country got together with each other and, thus, they started forming groups of people who did not speak to each other [Woman 25 years – 10th semester].

Choosing to study Medicine is not always an accurate decision, it is a search with multiple considerations: the family, especially if in it there are health professionals; difficulties in admission, which require prior additional preparation; high academic load, with sacrifices in personal life and emotional ups and downs; responsibility over the health of others; high monetary costs; the reputations of the different universities; the status promised by the profession; without forgetting the deep felt or unfelt vocation to understand and assist human beings, even beyond the doctor's office. Finally, the choice is ratified by feelings of plenitude, which mark life by allowing its learning and exercise.

> I love the clinical environment, the contact with patients […] but it was really something I always wanted, that was always in me [Man 20 years – 10th semester].

> That fame is something people already have deeply introjected, even seen before entering the university, and I also believe that many people enter Medicine for ego and status, more than any other thing [Woman 25 years – 10th semester].

The change from the school to the university is a drastic experience, which varies according to each student's prior conditions. Modifications in routine, the level of independence, the academic demand, relations with colleagues and professors, and even the change of city can be as scary as satisfying. Students who were the best in school now face the sense of not being so good and must make greater efforts to meet new challenges.

> The facto f going from having the best grades to perhaps not being as good, although one tries hard, is a harsh clash, as well as finding a study method, organizing schedules, like not forgetting to do other things besides studying. I felt that the career absorbed me and I no longer went out so much with my friends, I did not continue doing other things [Woman 24 years – 13th semester].

Medicine is a very academically demanding career, where it is difficult to have good grades. Students admire classmates who try the hardest no matter the cost. The grade average is a leading and public factor, which defines good and bad students, according to which classmates are also valued. You struggle your entire career with the fear and pressure of not being enough, and with frustration when effort is not reflected on the grades.

Comparison is the instrument of competition. Medicine exposes the most competitive and selfish part of students, seeking to have advantage over those they consider their rivals, willing to sacrifice whatever is required from the human being: from their social life to basic needs, like sleeping.

> An evaluation model that up to the moment rewards the grade, the best ones get better exchange opportunities, have more participation in research projects, honor roll; so, the competition handled. They have some information and do not share it […] I don't know if it's because they really feel inferior or because they think it is a way of standing out [Man 20 years – 10th semester],

> It is a setting of much competition and people are like: "Did you see the list of the mid-term exams? Oh, what so-and-so got! […]". People are sometimes more interested in the grades of others than their own [Woman 23 years old – 13th semester].

Good doctors are integral and empathetic humans who guide patients in their health-disease process. They avoid as much as possible making mistakes about the health of others, do not get tired of serving, have no other life other than the professional, for fear of not being good doctors. Further, they have the competence to solve cases during the time stipulated, even when they have limited knowledge, given that the specialist is only for selected cases.

These high expectations are reinforced in the undergraduate, when facing very high standards and exaggerated competitiveness, within an environment of little tolerance to error, always under the risk of being judged harshly. Consequently, the imaginary is materialized in doctors in training, who replicate it with an air of superiority, as if being doctors were far from being humans. Thus, the imaginary come true perpetuates itself.

> No sleeping, no time to eat […] that idea is something you accept […] you have to end all your obligations and comply with all your tasks, even if that means you have to sacrifice your lunch, that you have to sacrifice going to the restroom […] and it is something nobody teaches you, rather, you learn it by seeing others […] If any other person from any other career makes a mistake, well, okay, he was wrong; if I make a mistake, I kill a patient [Woman 24 years – 13th semester].

Doctors in training, human beings in deconstruction

Medical training has distinctive moments that mark students: being admitted, the first day of classes, "freshman antics", first time wearing the white lab coat, the first visit to the hospital, the Hippocratic oath, examining the first patient, attending the first delivery, the first necropsy, witnessing the first death. These are significant moments, loaded with deep emotions that mark professional development.

> I went to the morgue; that changed me a lot – because, I don't know, it made me see the simplicity of the human being. Like in the end we are all equal, we are going to the same place [Man 23 years – 12th semester].

The first semesters have heavy academic load, far from the expectation seeing patients, where students must learn to organize time and find study methods that allow them to approach extensive knowledge.

Meeting with patients in the clinical area and all their reality breaks the career in two. Theory is tested, makes sense and merges with practice.

Reality can be enormously far from theory and make it clear that each patient is a universe yet to be understood.

The sense of study is revived in its maximum expression, by the discharge of emotions, and learning continues closer to patients.

The start of clinical subjects is challenging, more so in its consummation during the internship; there is greater academic, care, and emotional load, but the meaning of the profession, the responsibility, becomes more evident, one learns and enjoys more.

> After I got to the 5th semester, life changed somewhat because there you saw patients and said like, oh, it was because of this, that is, this thing I studied during two years […] you see the patient and understand absolutely everything […] It feel different to do something for somebody, than doing something for a role or for a grade [Woman 25 years – 10th semester].

Moreover, students enjoy activities outside Medicine, where they integrate with other students, escape the routine and diminish stress. The career needs spaces different from academia, that are a support to overcome difficulties, that distract from daily obligations and deconstruct the idea of training linked only to theoretical components.

> I like to travel… do exercise… go out… and many times I haven't been able to do these things because of Medicine. The time comes when I say: "I'm not studying any more" […] because I want to share with my family, with my partner, with my friends or there are days I want to lay down to sleep […] and I don't care, but you acquire that with time [Man 27 years – 13th semester].

During the training process, different strategies are used to support the emotional burdens of being a medical student. In this exploration for university survival tools, students consolidate their family relations around the development of the formation process and strengthen bonds with their colleagues, which range from the supply of in-

formation or valuable material for academic life, making this even a practice transmitted generationally, to sharing leisure time, considering them their new family.

Many, additionally, find their first love during the career, turning this into not only academic support, but also emotional, although running the risk of Medicine being their only reality.

Furthermore, in cases where these tools are not sufficient, some students require support from mental health professionals.

> My parents […] have always been very attentive […] they don't pressure me, they take me out when I have too much load to do other things, they have been impressive support [Woman 23 years – 10th semester].

> Those who have influenced on my process are my colleagues and friends […] nothing is sure in life, but I'm sure I'm going to have friends who will be for life [Woman 24 years – 13th semester].

The university as school for life

The university experience is a difficult burden and full of setbacks for some students. The pressure of not being sufficiently good doctors, good people, good professionals, good students… and the fear of being wrong, ignoring, being ridiculed, or reprimanded limits their participation and subjects them to assuming a passive role during their training process.

Dropping out from extracurricular activities is also common due to high academic load, mental fatigue, lack of time, and even costs. Despite organizing and trying to squeeze in time to not give up on these, we end up sacrificing everyday life outside the hospital or the university.

As a consequence of this abandonment, isolation, pressure, competitiveness, selfishness, frustration, and stress worsen, becoming a vicious circle that has a negative impact on the students' emotional sphere. This situation contributes to low self-esteem, the onset of neglected mental disorders and, finally, greater susceptibility to abuse.

> Say, not sleeping well, not eating well, carrying certain frustrations […] all that leads to developing some mental health problem [Woman 23 years – 8th semester].

Abuse provokes various responses in those who endure it, from assuming it as a normal and necessary episode of medical training, to silencing those who perceive it as unacceptable. This event, added to competitiveness and the sacrifices made during the career, discourage students, causing feelings of aversion, frustration, fear, anger, and sadness, triggering desertion.

Although students reject the normalization of abuse, they promise not to be victimizers and aspire to contribute to the expulsion of those who exercise it. Abuse is still recognized among the biggest problems in medical education.

> There are professors who say: "You don't know anything!", when you made your best effort, or "I would never let a person like you to care for me!", in front of the patient. So, these are comments that at that moment discourage you a lot [Man 20 years – 10th semester].

> I had a panic attack in front of her [the professor] and she didn't treat me well […] she said that one could suffer from anything and have whatever one wanted, but that if I was studying Medicine, I had to stick to it [Woman 23 years – 10th semester].

In turn, we found experiences of students who adapt over time to the academic load, pressure, and competition, especially when starting the clinical practice. They learn to manage large amounts of information, with discipline and organization of time. They recognize that Medicine is a difficult career that requires learning to know their own limits and finding a balance to caring for themselves first. In that sense, they understand that their perception of themselves and of their abilities cannot depend on the opinions of professors and recognize the same struggle in their colleagues. They learn to be good colleagues, understanding that each has a different learning rhythm and wishing for others the same they want for themselves.

> When you are starting the career, that relationship of power exerted by the professors on you causes a lot of stress […] and that discomfort some professors caused in me because of their comments during the rounds or the way they evaluated, I that has been changing; I think now they no longer have that power over me [Man 20 years – 10th semester].

> One makes peace with oneself […] if people do not make peace and have to get the highest grade, they end up insane […] one has to have balance […] but one understands that to become a doctor you also have to be a person [Woman 23 years – 13th semester].

The university experience transforms the students' interests, thought, and even their life project, given that it allows them to discover themselves, recognize their emotions and feelings, reaffirm themselves on the construction of their new stage as adults and on the critical practice of their profession. Studying Medicine implies, for them, a constant interaction with otherness and suffering, which motivates them to forming stronger and transcendental human relations.

The university ends up being for students a scenario as hostile as it is hopeful, which lets them have an enriching experience that overcomes the mere acquisition of knowledge. It is a refuge for dreams, a space that trans-

forms the being, by inviting them to constant reflection and introspection.

> Before entering the career, I was a spoiled child […] I literally didn't know anything in life, I didn't appreciate many things, I simply had not experienced many things. I see myself as someone who has changed his interests and way of thinking a lot. Let's say the reason I started studying Medicine already changed; now I am someone who strongly appreciates the family, work […] seven years here, everything I've lived, all the experiences, everything I've known, what I've learned, what has changed my thinking [Man 23 years – 12th semester].

Discussion

The imaginary of the "good doctor" as a tireless and blameless being increases the expectation of students who compete to enter the medical hierarchy of knowledge and power. The exigency of medical education to achieve this ideal, the competition to be admitted to each level and the fear of making mistakes aggravate the classification environment, and facilitate abuse. This ends up leading to fatigue, frustration, lack of interest, and lack of ethics that harm doctors in training.

Diverse studies, like this, describe principally the negative impact of the hidden curriculum in human and professional aspects, with emphasis on the hierarchy and tolerance of questionable behaviors [13]. This occurs in relation with the meaning of the hidden curriculum, because while the formal curriculum includes everything intended in medical training as its duty, the hidden curriculum could explain results contrary to that expected from medical education and, in that sense, revealing it could permit seeking solutions to unintended negative aspects [14].

However, positive aspects also emerge with force, like the potential of trainers to influence and motivate their students, even to shape their attitudes and aptitudes in medicine [5,15,16]. In addition, other studies [17,18] indicate the need for the hierarchy in emergencies where time is crucial and leadership is required, without room for replicas from doctors with more experience. Although this was not a finding in the results shown, other authors cited previously mention the negative effects of the asymmetry of power, where negative results in patient care were avoided.

Further, this is about a knowledge-based hierarchy, in which not knowing and errors are hidden to preserve the idea of authority [5,19]. In contrast with other studies, the foregoing leads to students not participating in their evaluations but participating in the lack of objective evaluation criteria, more based on the fact of the subordination to which they are subjected or that may threaten them [17,20]. Other studies have found that the hierarchical system is simultaneously driven by humiliation, intimidation, and public disapproval, justified by the efficiency and importance of caring for the health of others [7,14,15].

Literature has indicated that fear or anxiety in professor-student relations interfere with the learning capacity [5]. In spite of this, it is noted that students can adapt to the negative aspects of the hidden curriculum, with development of empathy, resilience, perseverance, and psychological safety [7]. Nevertheless, use of negative emotions in teaching is not recommended, given the risk of impacting physical and mental health, until generating apathy, defensive attitude, loss of interest, lack of professionalism and, lastly, deficient learning in students [7].

Even so, submission to the hierarchy is the most bearable solution, under penalty of reprisals, as explained in other studies [5]. These attitudes are transmitted downward in the links, during the rounds, through body language, sarcastic comments and other subtle – and not so subtle – messages. [14,21]. Moreover, among the creeds transferred are overwork, exhaustion, emotional detachment, cynicism, and arrogance [21]. These qualities reinforce, on one side, the imaginary of the "good doctor" as that inexhaustible and blameless individual; but on the other, break this idealization by clashing with the doctor's reality. Students face ethical conflicts, where they must negotiate among fear, fatigue, and ignorance, versus the patient's wellbeing, generating high levels of stress and ethically doubtful decision making, to the extent in which, upon normalizing the dynamics of power between them and laymen, even the possibility of making mistakes is denied, let alone recognizing them, with dire consequences on the ways to avoid them in the future [5].

It has been observed that students enter medical training with preconceptions close to the idealization of what it means to be a doctor [5,20]. Another study identified ideas related with helping the needy, being the difference and being a true leader [22]. This could be explained because said study was conducted with first-year students, with perceptions closer to the idealization, while this research had participation from students in the final years, who had more opportunities of contrasting the initial imaginary with the doctor's human reality.

Added to the expectation of reaching the idealization of the doctor as he who is not wrong and the hierarchy that permits abuse, there is the competition to access each level of medical training [5,7,16]. In a study, half the students reported that competition is the principal characteristic of Medicine, more than cooperation, and 13 of 36 students stated the need to impress the professors to achieve prestigious work in the future [15]. The

previous motives could explain the phobia to err in the medical setting, beyond the risk to the patient's health.

In Spain, it was found that 76% of doctors recognize that they have been wrong some time, although it is difficult for them to delve into what the error consisted of, and only 40% admit to having communicated it to the patient [5]. Likewise, it has been observed that students avoid defying the *status quo,* asking questions, admitting to not knowing, and recognizing errors, although this could impact on patient care and increase fatigue [5,7]. Thus, idealization of doctors, the hierarchy, and competition can lead to the ethical incompetence of doctors in training [5].

Furthermore, to deal with the adversities of medical training, students rely on the satisfaction of the medical milestones achieved, especially those in which they get closer to the patient, and on the human relations with their family, friends, colleagues, and partner. However, in the relations among colleagues, excluding closed groups have been found, based on similarities among individuals, like the city of origin, culture, or sex [16], and even socioeconomic and educational background, like those found in the study herein. Some authors have suggested that using mixed work groups may influence positively on the relation of students and possibly the competition [16]. Likewise, different universities have made efforts to enhance these supports to cope with the hidden curriculum [5].

It is important to strengthen aspects that help students confront the hidden curriculum. Mahood [14] identified some characteristics that protect students from the negative consequences of the hidden curriculum: being older and more mature, having a previous career or a life project, being a woman, having non-medical commitments, having a patient-centered model, or having an orientation focused on primary care [14]. This may be related with the medical student's adaptation found in the present results; however, it is important to recognize that individualized interventions, although permitting students to endure temporarily their environment, are not sufficient and, hence, a structural change is required that permits students to have greater consistency among the different types of curricula [23].

Various studies have observed the students' struggle to establish limits in Medicine and seek personal/professional equilibrium [5,15]. On one side, it is questioned if the hidden curriculum could end up impacting students' mental health [7], given that the prevalence of anxious or depressive symptoms in doctors in training is from 29.9% to 34.1% higher than that expected for the general population, which is from 10% to 15% [24]. On the other hand, in the desire of the official curriculum to train doctors who are peaks of knowledge, it is possible to create doctors with questionable ethics.

As limitations to this study, it is recognized that some of the emerging categories may not have been delved into sufficiently, possibly because the authors lack greater training in social sciences, added to the heterogeneous evolution of the categories found. Besides, some difficulties are recognized in the coordination among the research teams from both universities; we could have been more efficient and have made much progress in better collecting, analyzing, and writing the manuscript, had we had enough time to do so. The work requirements of the authors during the COVID-19 pandemic affected the opportunity to finish the manuscript and submit it to publication.

Conclusions

After the analyses carried out, it was concluded that the hidden curriculum may determine with greater force the doctor's training than the formal curriculum; therein, the importance of recognizing it and timely confronting its negative aspects and reinforce the positive ones.

It will be necessary to teach how to educate and rethink the hidden curriculum to avoid ruining those starting to learn the profession. It is necessary to approach the hidden curriculum as an opportunity for reform for medical education and, consequently, the medical culture. It will be important to continue making visible what until now has been hidden, to try to integrate into the formal curriculum strategies that reinforce positive aspects and mitigate the consequences of negative aspects.

Training spaces must give rise to and insist on strengthening human relations and seek personal/professional equilibrium, as also suggested by other authors [25].

Retaking a model centered on the patient and on renovated primary care would permit rethinking the hierarchy and the competition [8].

In turn, upon improving learning environments, a sociocultural approach can be used, where students and professors understand otherness as the basis of diversity and inclusion [26].

Additionally, it is necessary to progress toward self-care promoting curricula, which not only impact positively the wellbeing of students during their formation process [27], but also train them to be better health promotors with their patients [28]. Recognizing and reflecting on the hidden curriculum in medical training will permit finding solutions to face it [16,21,29].

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Lina María Osorio Cock: data analysis; critical review of content; approval of the final version; capacity to respond for the work's integrity.

Daniela Muñoz Henao: data acquisition; data analysis and interpretation; drafting of the manuscript; critical review of the manuscript for important intellectual content; administrative, technical, or material support and supervision.

Carlos Enrique Yepes Delgado: construction of the idea; elaboration of the project; data acquisition, data analysis and interpretation; drafting of the manuscript, critical review of the manuscript for important intellectual content; administrative, technical, or material support and supervision.

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