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THE CHALLENGES OF MEDICAL EDUCATION AND THE CROSSINGS OF THE COVID-19 PANDEMIC

OS DESAFIOS DA EDUCAÇÃO MÉDICA E OS ATRAVESSAMENTOS DA PANDEMIA COVID-19

LOS DESAFÍOS DE LA EDUCACIÓN MÉDICA Y LOS CRUCES DE LA PANDEMIA DEL COVID-19

Eliana Goldfarb CYRINO [1]
e-mail: eliana.goldfarb@unesp.br

Maisa Beltrame PEDROSO [2]
e-mail: maisapedroso@hotmail.com

Mara Regina Lemes DE SORDI [3]
e-mail: maradesordi14@gmail.com

Maria Antonia Ramos de AZEVEDO [4]
e-mail: maria.antonia@unesp.br

Marta Quintanilha GOMES [5]
e-mail: martaqg@ufcspa.edu.br

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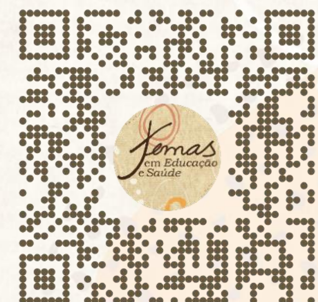

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Editors: Prof. Dr. Luci Regina Muzzeti
Prof. Dr. Rosangela Sanches da Silveira Gileno
Deputy Executive Editor: Prof. Dr. José Anderson Santos Cruz

[1] Universidade Estadual Paulista (UNESP), Botucatu – SP – Brasil. Professora Titular do Departamento de Saúde Pública.
[2] Secretaria Estadual de Saúde do Rio Grande do Sul, Porto Alegre – RS – Brasil. Nutricionista.
[3] Universidade de Campinas (UNICAMP), Campinas – SP – Brasil. Professora Associada do Departamento de Estudos e Práticas Culturais.
[4] Universidade Estadual Paulista (UNESP), Rio Claro – SP – Brasil. Professora Associada do Departamento de Educação.
[5] Universidade Federal de Ciências da Saúde de Porto Alegre (UFSPA), Porto Alegre – RS – Brasil. Professora Adjunta do Departamento de Educação e Humanidades.

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ABSTRACT: One of the marks of the COVID-19 pandemic is medical education, insofar as healthcare professionals have been called upon to act in a situation of unimaginable unpredictability. This study analyzed how the pandemic has affected medical education from the perspective of professionals working in this field. We conducted a qualitative exploratory study using data collected during online conversation circles held via Google Meet in 2020 based on semi-structured interviews. The data were analyzed in two categories: challenges for pedagogical practice and medical training and the multidimensionality of management. The investigation points to the need to rethink education plans, focusing on the gaps revealed by the pandemic. The findings reinforce the importance of the intersection between theory and practice not addressed by the exclusive use of technologies and of engaging actors from the course in a collective action that is sensitive to the unpredictability of life and the reality of public health in Brazil.

KEYWORDS: COVID-19 pandemic. Medical education. National curriculum guidelines.

***RESUMO**: Frente repercussões derivadas da Pandemia COVID-19, identificam-se suas marcas à educação médica, posto que profissionais da saúde se viram convocados a atuar em situação de imprevisibilidade inimaginável. Este estudo objetivou analisar como a pandemia repercute na formação médica na visão de profissionais referência nesta área. Trata-se de estudo de abordagem qualitativa, de cunho exploratório, realizado com rodas de conversa, em 2020, utilizando Google Meet, com roteiro semiestruturado. Os dados foram analisados em categorias: Desafios da prática pedagógica e Formação médica e a multidimensionalidade da gestão. A investigação aponta a necessidade de repensar os Projetos Pedagógicos a partir dos vazios evidenciados pela pandemia. Reforça a importância da articulação teoria prática não atendida pelo uso exclusivo das tecnologias e a importância do engajamento dos atores do curso em ação coletiva sensível à imprevisibilidade da vida e realidade da saúde pública no Brasil.*

***PALAVRAS-CHAVE**: Pandemia COVID-19. Educação médica. Diretrizes curriculares nacionais.*

***RESUMEN**: Ante las repercusiones derivadas de la pandemia COVID-19, se identifican sus marcas sobre la educación médica, puesto que los profesionales de la salud se vieron convocados para actuar en situación de imprevisibilidad inimaginable. El objetivo de este estudio es analizar el cómo la pandemia repercute en la formación médica en la visión de profesionales de referencia en esta área. Se trata de un estudio de abordaje cualitativo, de cuño exploratorio, realizado con rondas de conversación, en 2020, utilizando Google Meet, con guion semiestructurado. Los datos se analizaron en dos categorías: Desafíos de la práctica pedagógica y Formación médica y la multidimensionalidad de la gestión. La investigación muestra la necesidad de repensar los Proyectos Pedagógicos a partir de los vacíos puestos en evidencia por la pandemia. Refuerza la importancia de la articulación teoría-práctica no atendida por el uso exclusivo de las tecnologías y la importancia del compromiso de los actores del curso en una acción colectiva sensible a la imprevisibilidad de la vida y la realidad de la salud pública en Brasil.*

***PALABRAS CLAVE**: Pandemia COVID-19. Educación médica. Directrices curriculares nacionales.*

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Introduction

There is no denying the repercussions of the COVID-19 pandemic on the world, affecting our way of life, dying, coexisting, teaching, and learning. These repercussions were significant regarding medical education, as healthcare professionals were called to act with unimaginable unpredictability and constant stress (PRESSLEY 2021; SOUSA; COIMBRA, 2020; PINHO, 2021).

Courses were widely affected because the teaching-learning processes, linked to the interconnection of theory and practice, and the real difficulty of in-service training, magnified challenges that have existed since the National Curricular Guidelines for Undergraduate Medical Education (BRASIL, 2014). These guidelines seek to transform the training model into an emancipatory and humanizing praxis ordered by the principles of the Unified Health System (SUS).

Harari (2020) emphasizes that the pandemic has imposed the need to redefine the course of humanity and highlights the importance of countries collaborating with each other. He warns that the fight against the pandemic should not result in the isolation of nations, emphasizing the continuous need for cooperation and solidarity:

> A society that equips its citizens with good scientific education, and that is served by independent and strong institutions, can deal with an epidemic much more effectively than a brutal dictatorship that must constantly police an ignorant population (HARARI, 2020, p. 50-51, our translation).

In a post-pandemic scenario, it becomes imperative to confront and transcend the way the triad of capitalism, patriarchy, and colonialism has been experienced, as there is an imminent risk of facing new and more severe pandemics (SANTOS, 2020). It is essential not only to focus on the consequences that led to the chaos we are experiencing but also on the need to change the way we relate to different living beings on the planet.

In this adverse scenario, in Brazil, we still face the escalation of conflicts and disagreements between the federal government, state governments, and municipalities to address the health emergency, as observed in physical distancing measures and the adoption of unproven medical treatments (HENRIQUES; VASCONCELOS, 2020).

Healthcare professionals were called to face the unknown, fear, powerlessness, and death. It was necessary to act and react to different demands without secure paths and guidelines regarding reception, care, individual and collective health measures, and the search for a cure and a vaccine, also putting tension on training processes in the field.

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The pandemic demonstrated the strength of the SUS in the face of the complexity of the healthcare sector and the challenges faced at each point in the Health Care Networks (RAS). The challenges are chronic and were intensified by the pandemic, requiring reinvention and innovation in the "connection, capillarity, and integration of health services and actions" (BOUSQUAT *et al.*, 2021, p. 23, our translation).

Initially, Primary Health Care (PHC) was not given due value in care organizations (DAUMAS *et al.*, 2020). The relationship between PHC and the training process was also underestimated, and most medical schools continued to consider the hospital as the main place for students' practical learning. Thus, the opportunity for dynamic training in the various points of the Health Care Networks (RAS) was lost, and technologies ended up occupying that space. While this facilitated pedagogical activities on the one hand, on the other hand, it distanced students from the protagonism of being and learning with Primary Health Care (PHC) in the RAS.

This research aimed to analyze the repercussions of the pandemic on medical education from the perspective of professionals in this area. The goal was to understand how the phenomenon of the COVID-19 pandemic impacted the development of medical courses in the first year of the crisis, in 2020, from the viewpoint of teachers with extensive experience in course management and the formulation of formative policies at the end of this initial period of the pandemic. The investigation intends to support undergraduate course coordination by indicating vulnerabilities and proposing possible advances.

Methodological Approach

The qualitative exploratory research aimed to explore the perceptions of eight reference professionals with extensive management experience in the field of medical education. Five male and three female participants, all doctors, have been or are affiliated with public university institutions. All participants have experience as course coordinators and/or university managers, sharing a common leadership experience in the curricular reform processes of medical courses and the implementation of new medical courses over the last decades. They all have theoretical production and over twenty years of teaching experience in higher education institutions.

They work or have worked in Public Health, Pediatrics, Clinical Medicine, Family and Community Medicine, Infectology, and all in Medical Education. Their trajectories on the

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subject, as well as epistemological proximity, influenced the researchers' intentionality in constituting the group of interlocutors. The selection of interlocutors occurred intentionally, considering the recognition of these individuals in communicating relevant data for the analysis and achievement of the research objectives (CAMPOS; SAIDEL, 2022).

The research sampling follows the representativeness of intrinsic interest, which, unlike numerical representativeness, seeks the interlocutor's ability to discuss meanings related to the research object, demonstrating their own experience relative to the studied phenomenon (BLANCO; CASTRO, 2007). In other words, the meaning or resignification of a theme by the sample participant is the fuel that drives the researcher to valid interpretations of the phenomenon based on relevant theoretical frameworks.

Three discussion rounds were conducted in November 2020, each lasting two hours, using Google Meet and with the participation of all researchers. The triggering questions were: What have we learned from the COVID-19 pandemic, and what emerged in medical education?; and What has the pandemic shown regarding gaps in medical education?

They listened to medical education professionals who are reference points for reflections on this complex scenario. The participants agreed to record the meetings, which were transcribed.

The researchers read the material floating, generating coding axes for considered significant speeches. After the mentioned organization and a careful reading of the material, groupings were created that, articulated with the theoretical discussion, allowed for data treatment. This treatment was organized into two analysis categories: "Challenges of pedagogical practice" and "The multidimensionality of management in medical education." These categories arose from integrating theoretical references, collected data, and research questions (BARDIN, 2011, our translation).

In the data treatment, an attempt was made to understand the perspectives of the interlocutors during the discussion rounds regarding medical education guided by the National Curricular Guidelines (DCN) (BRASIL, 2014) and formative practices in the context of the pandemic. The interlocutors were identified in the text as PR1 to PR8.

The constructed analysis categories represent the concretization and organization of interpretations of the information. Reis Filho (2019) aids in thinking about the issue of subjectivity in qualitative research with experts by mentioning that interlocutors bring their understanding of a context. The intention is not to confer universal validity to the data but to

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present perspectives grounded in interests, life trajectories, and accumulations of knowledge. It involves understanding contexts and agglutinating subjectivities, biographies, and experiences.

The research was approved by the Research Ethics Committee of the Faculty of Medicine of *Botucatu*, UNESP, under opinion 4,899,500.

Challenges of Pedagogical Practice

The suspension of in-person activities demanded a quick decision-making process, aiming to organize classes and restore a sense of "normalcy." The readiness of responses varied significantly, given the objective conditions of universities facing challenges that brought about situations of learning and adaptation to the new way of being in institutions.

> The reaction times were very different, and they have to do a bit with the place, tradition, and all the issues that may hinder or favor your ability to react more quickly to the unexpected (PR2, our translation).

The interlocutor's statement points to an initial view of the urgent need for digital learning among educators.

> [...] I was no longer willing to learn about new technologies for remote teaching. The pandemic teaches us that this is necessary and takes on a meaning that we didn't have before the pandemic. It was something I left to the younger generation. Now it seems that we have to master it, propose it, and find alternatives that we didn't look for before (PR7, our translation).

Various limitations and resistances were identified, including insecurity regarding the distance learning modality, which requires more than mere digital instrumentalization. It is necessary to contemplate reflection on the conception of the work to be developed.

Gusso *et al.* (2020), ANDIFES (2020) and Nez, Fernandes and Woicolesco (2021) address the training movement triggered in universities, which was centered on essential technological knowledge to face the emerging scenario. Additionally, they discuss the need to address pedagogical issues in this new teaching and learning format.

> In many schools, there was no reflection on the educational model, and the transposition from face-to-face to virtual is a tragedy, and students are overwhelmed. On the contrary, it got worse because the content ended up even greater since it's virtual. I can send more text, I can send many videos, I can send podcasts, I can invent anything I want because it fits in the virtual space; it's flexible there, in virtual time and space. It didn't rethink the model; the use of remote activity can be a tragedy, not a way out (PR3, our translation).

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The statement allows for reflection that there was an expectation that the virtual modality could be accompanied by more relational and less directive pedagogical models. The practice of exposition (in-person) and resource availability (virtual) is insufficient for learning. This conception, predating the pandemic period, emerges in online pedagogical practices, reproducing the logic of banking education, albeit veiled with some innovation.

There is a challenge in changing the conception of teachers who believe that higher education is merely the transmission of content (GUSSO *et al.*, 2020). They indicate that such a conception is incongruent with the vision of higher education aimed at university and human formation, seeking to understand and intervene in social reality through scientifically and ethically involved actions. Another problematic issue relates to how mediations started occurring in the virtual environment.

> [...] What caught my attention was the difficulty some teachers had in innovatively using these mediations. They brought much more repetition of the traditional than they were used to and did not take advantage of this truly valuable opportunity to try another path and formula. What I saw were many reproductions of traditional recorded classes. I think it was a waste of this opportunity; we ended up doing the same, could have done differently (PR2, our translation).

In this banking perspective, there is little room for contextualization, reflection, and transformation of reality (FREIRE, 1987). The teaching is more directive and focused on the teacher who does not communicate but issues statements to students who receive, memorize, and repeat the content. This conception restricts the understanding of possibilities and adds limitations to remote teaching.

Adapting in-person teaching content to Emergency Remote Teaching (ERT), as well as the initial impossibility of carrying out some practical activities, may also result in a possible loss of quality in teaching and learning processes.

> [...] The university's guideline separates the theoretical and practical content. We developed the theoretical part remotely and saved the practical part to conclude when possible. This drove me crazy because we spend our whole lives fighting not to make this division (PR6, our translation).
>
> The fundamental point is the issues of practice, the issues of face-to-face learning, and how important this is in Medicine. Medicine is the class we are discussing here, but it applies to the entire Health field. In the health field, face-to-face learning ranges from the culture of environments (if they are good environments, but if not, it's also learning) to teaching the skill itself, the contact, and learning from the teacher. So, remote teaching does not provide all of this (PR7, our translation).

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There are limits to online professional training, primarily related to developing skills that require a level of interaction that technology cannot handle. In this context, some formative dimensions outlined in the curriculum structure were reduced. It was impossible to accommodate a curriculum originally intended for in-person development within the contours of online work, even if cutting-edge educational resources for this modality were being used.

The trajectory for integrating theory and practice in health education was abruptly interrupted. The effort was directed toward building an integrated curriculum, avoiding fragmentation, in a perspective where the curriculum is considered a cultural construction composed of knowledge and practices that go beyond the mere transmission of content but are also aligned with the formation of learning subjects through actions and their effects.

The intentionality recorded in the Pedagogical Projects of the Courses (PPC), as a guiding document for the practice developed in education, becomes problematic, now with another contextual panorama.

> The pandemic shocked us, forced us to talk about Pedagogy..., put SUS on Brazil's agenda, put SUS on the college's agenda, a lot of the functioning of hospitals is in question, it emerged (PR5, our translation).

Observing a neotechnicalist tendency in the approach is relevant, minimizing the importance of critical-reflexive issues inherent in human formation work and aligned with DCN (BRASIL, 2014). This approach manifests itself through the integration of education with the development of the Unified Health System (SUS), the interconnection between work and education, as well as between theory and practice.

The utilitarian nature of pedagogical approaches intensified with the impossibility of face-to-face meetings and the erasure of intersubjective exchanges. The moment revealed the simultaneity of the multiple faces of reality, in which crisis and opportunity blend and compose a complex scenario, unveiling new paths for teaching and learning processes in Medicine.

> Emergency remote teaching does not replace it, but it can expand our understanding of the experiences within our society as we seek experiences available on the internet to engage with what we would like our students to experience (PR3, our translation).

It cannot be denied that the initial actions were influenced by inexperience in the face of an unprecedented situation, carrying the marks of the traditional approach to teaching, structured, artificially controlled, and distant from social reality. However, it is equally necessary to reflect on how the new scenario facilitated the construction of repertoires of

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resources and pedagogical strategies for the emergent modality through internet research and professional networks.

The conditions of the teaching-learning process during the pandemic reinforced the action of "multiplying teachers, through a collaboration process between teams of educators, who had previous knowledge of information and communication technologies and passed them on to their professional colleagues" (FERNANDES; ISIDORIO; MOREIRA, 2020, p. 6, our translation). On the other hand, the preparation of new classes raised questions about the curricular organization of the course.

> [...] An interesting issue in our course was the reflection of managers and teachers on educational content when they started having to record and put all that stuff on the platform. Several began to wonder if the content they were teaching was timely if that content would integrate a student's competence, and if that content was not repeated or unnecessary (PR4, our translation).

The pandemic scenario exposed established issues that proved to be fragile or poorly suited to the imposed reality. It allowed managers, teachers, and students to evaluate the formative trajectory proposed in the curriculum matrix, raising questions about how the contents are articulated and at what point in the course they are presented. These reflections may lead to adjustments in the Pedagogical Project of the Course (PPC), which is the documentation derived from diagnostic analysis, contextualization, and discussion of action principles, as well as theoretical positions, aiming to define goals and guide the development of the educational process (GOMES, 2016).

> Do you know the song by Milton Nascimento "*Nada será como antes* (Nothing will be as it was)"? There's no way around it. This partly concerns the intensity of what we are experiencing and its duration. I am an infectious disease specialist, and I study epidemics and pandemics. I didn't know what this was. We have to rethink what our role is (PR8, our translation).

The interlocutor's reflection supports the idea that it is necessary to seize the opportunity and reflect on the formative process. It indicates that, in addition to theoretically understanding processes, it is essential to strengthen the relationship between teaching and professional practice. The delineation of work in this unexpected situation generated uncertainties about the limits of knowledge (MORIN, 2002). The elements of pedagogical work in the pandemic scenario must, from this perspective, converge to promote and enable synchronicity with socio-cultural and historical reality.

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The pandemic context also reverberated in working conditions, causing suffering for educators.

> We started using this remote access technology in a very extensive way. My anticipation of tragedy has to do with the precariousness of our work as educators as well (PR2, our translation).
>
> Much of what is being discussed regarding psychosocial effects, one could even say certain psychopathology of the digital environment, is related to this transposition of parameters and criteria from one way of educating, without any adjustment, to another form of education (PR1, our translation).

In a study on interpersonal relationships and mental health in teaching practice during remote learning (FERNANDES; ISIDORIO; MOREIRA, 2020), concerns of educators about the increase in workload and the discrepancy between the necessary adaptations for teaching activities with students and their needs for this to happen are highlighted. According to the authors, this situation led to cases of depression, anxiety, and Burnout Syndrome. Teaching activities were added to various training sessions on information technology online teaching resources, among other demands specific to the pandemic period. However, it is also observed that educators embraced this new work situation.

> We work in these spaces to listen, care, and share experiences. We didn't know exactly what to do, but there were spaces for listening, solidarity, and support. What we demanded from these teachers in this change is something overwhelming (PR2, our translation).

The pandemic affected all those involved in education and brought forth strengths and weaknesses in the face of the unprecedented situation, experiencing a mixture of pain and perplexity.

> The experience of feeling vulnerable, at risk, limited, having to cope with the impossibility of freely coming and going, being unable to experience the rituals that our society values, such as funerals, and having to deal with the experience of death. If it didn't happen in your home or history, it happened in the world. It is something that can be brought into the realm of the experience lived by these students and teachers, who can transform the process of education and reflection on practice (PR3, our translation).

Understanding the circumstance of the pandemic as a possibility for health education in the "realm of lived experience" broadens formative dimensions, organically combining technical aspects and humanization in health based on the entire community's experience, even if in a singular way. One of the challenges of education lies in thinking about problems in their different dimensions.

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The Multidimensionality of Management in Medical Education

The experience of helplessness in the face of a virus that proved overwhelming and relentless impacted not only the structures related to the administration of courses and health services but also the very management of life.

> We didn't talk about the emptiness of evaluating the conditions of students. Remote learning emerged as a catalyst for the inequality of access for our students (PR4, our translation).

In this environment where rapid changes were necessary, the importance of planning proved essential, as activities required the use of methodological resources that allowed for the attempt to address a specific problem to be highlighted. One of the aspects addressed in discussions is the relationship between the management of the medical education project in Brazil and Science.

> We are quite small, much less than one imagines, perhaps smaller than the virus itself. What we thought we had dominion and control over, it is known that we don't. But sometimes, you feel so comfortable surfing on the waves that you start to believe you are in control. This year, we had an unequivocal demonstration that we are nowhere near any control (PR8, our translation).

Planning should be considered as a process of intervention in reality to change the future, both in personal matters and in educational processes. The emergence of COVID-19 in the era of information and biotechnology is a small sample of our lack of understanding of natural phenomena (VARELLA, 2022).

The interlocutors help reflect on the connection between medical education and the political processes of work contexts, pointing out the need to recognize alterity as a formative principle. Medical education must be implicated in the sociocultural context of practice, where students are committed to historical, ethical, and political reality. This perspective of education aligns with an understanding of Science that does not require a specific stance.

> The hypothesis is that Brazilian medical education adds very little or fosters very little political awareness in its processes and in its graduates (PR1, our translation).
>
> We will have to discuss the issue of social exclusion and health inequities from the very beginning. Within medical school, we have not worked on this perspective. Those who are excluded continue to be excluded! We only concede to go there too, once in a while, even in a curious way, get closer to that life that is different from mine (PR6, our translation).

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The difficulty in understanding the need for a planning process considering the current reality is evident. According to Morin (2001), we are challenged to conceive Science with social responsibility, exploring the possibility of questioning what we already know through the capitalization of acquired truths or the verification of theories. Thus, the complexity of the context instigates the activation of complex thinking.

> We are not prepared for the unexpected; we are always prepared for what is somehow derived from more linear, rhythmic, and known flows. Then we call it medical education, but often the name designates training or instructions in pre-established guidelines (PR1, our translation).

This way of explaining phenomena in the world is reductionist because it "does not comprehend ambivalence, that is, the intrinsic complexity found at the heart of Science" (MORIN, 2001, p.16, our translation).

During the pandemic, the ideology of denialism emerged as a concerning phenomenon, contrasting with Science's efforts to provide answers to the health crisis. In this perspective, there is a risk of the university losing freedom in knowledge production. Knowledge production must occur without constraints to impact society significantly (PERINI-SANTOS, 2021).

The emergence of new waves of the pandemic raises doubts about how long it will be necessary to coexist with it. It cannot be ignored that Brazil has been one of the major hotspots for the spread of disease and mortality, possibly as a consequence of how the state has dealt with it. The perspective of addressing the theme of the health crisis we are experiencing indicates the need to understand that the current moment is an invitation to think about the future of medical education and the valorization of Science.

This panorama's center is a continuous reflection on building paths that lead to an investigative pedagogy. It can be affirmed that the health crisis points to a new path to be taken by medical education, which must undoubtedly face the necessary formation of a professional who distances themselves from utilitarian reductionism, from a technicist formation, and opens up to new challenges (CUNHA, 2021).

> We may have had a very large, dominant, and hegemonic proportion of individuals who were formed distant from Science. Science, in some way, only complements, adorns, validates but is not, for them, an essential element for practice (PR1, our translation).
>
> The pandemic brought up the issue of Science, scientific work, scientific labor, and scientific information in the agenda of education, which was previously considered a task for highly gifted individuals, far removed from our daily lives (PR6, our translation).

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Therefore, calling the academic community to seek ways to understand the demands arising from the pandemic would be a way to approach Science as a social responsibility to deal with the provisionality of knowledge by inventing new answers. Additionally, as a strategy to address the challenges presented, there is a need to build these answers in collaboration with various professionals involved. The emphasis is on education and practice that address the interdependence of sectors and promote the resumption of interprofessional action, recognizing the legitimacy of Science without assuming a hegemonic position, as various knowledge domains must be considered.

> This improvement work in the clinic, in rehabilitation, done in intensive therapy, was multi-professional, was interprofessional; the role of nursing, physiotherapy appeared a lot […] (PR5, our translation).

Refusing the dialogue among diverse knowledge that can contribute to the democratic construction of knowledge, where processes are not separated from content (CARNEIRO *et al.*, 2014), reinforces the logic of knowledge monocultures (SANTOS, 2007), resulting in the construction of medical education based on the sociology of absences. In contrast, there arises the need to investigate and progress in understanding what is absent in the training and practices of professionals, transforming what does not exist into presences that integrate the complex interprofessional scenario.

> The greatest difficulty for us to think more progressively about medical education is the fact that it is medical, and not education for health professionals (PR1, our translation).
>
> The experience of the pandemic brings professional interdependence as the only way out. The value of other professionals, whether the fundamental and strategic cleaning professional needed to be seen in practice scenarios, needed to exist (PR3, our translation).

In this way, the necessary mechanisms are implemented to discover new paths as desirable transformations in educational practice occur. In this scenario, there is an opportunity to build meanings and senses about management practices, seeking strategies for reorganization to continue the work.

Thus, the role of course coordination is reinforced, which must trigger various learnings about the curriculum, the institutional policy in which it is inserted, the pedagogical action of its teachers in the face of the project in question, and the operationalization of administrative work (BARBOSA; PAIVA; MENDONÇA, 2018).

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> The pandemic made us think about access, not only access to health but to educational environments, both in-person and virtual. This mobilized our universities and schools to ensure quality access for teachers and students (PR3, our translation).

> The pandemic made clear a great emptiness that existed before, which is caring for relationships. When we weren't paying attention to how important it is to care for relationships: the relationship between undergraduates and the hospital, the relationship between undergraduates and health services, the relationship that is established among ourselves within undergraduate studies. I think we weren't aware of the power of relationships, especially for advancement. On top of caring for relationships, the power of collaborative work and shared learning (PR7, our translation).

In this context, it becomes essential to recognize the importance of improving the quality of interpersonal relationships and exchanging information and reflections among different worlds, languages, and perspectives. The institutionalization of democratic practices in various forms of social relations is necessary to build a more inclusive society.

> The first thing that emerged with the pandemic is the sense of humanity and human community that can be seen in the students. [...] The day after classes were suspended, we received students wanting to know what they could do. If they weren't in class, where could they help? What could be done because they felt a social responsibility to help manage this pandemic? And that was very cool; we ended up doing a teleorientation project, which ended up spreading throughout Brazil (PR4, our translation).

During the pandemic, course management faced the pronounced challenge of the relationship between teaching and service. For the interlocutor, there was a path towards strengthening this relationship, and the pandemic weakened the investment adopted until then.

> The integration of teaching-service-community was something that had been strengthening at certain times and weakened. With the pandemic, this dissolved; the teachers who accompanied the students stepped back, and the places of Health Care initially excluded the students, focusing only on the care function. Resources were drained to field hospitals. So, this issue of integrating teaching-service-community was completely changed (PR6, our translation).

In the National Curriculum Guidelines (DCN) (BRASIL, 2014), it is stated that the insertion of students in Primary Health Care (PHC) and Health Care Networks (HCR) should occur from the beginning of the course. This dimension of training is present in the curricula. However, the challenges of management regarding this articulation are amplified in the pandemic scenario.

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> It is concerning! How are we going to develop a curriculum based or centered on Primary Care if Primary Care in municipalities is undergoing all these setbacks, and during the entire pandemic, it closed? It was as if Primary Care and the pandemic did not match. The pandemic was synonymous with the hospital, ventilator, and ICU (PR6, our translation).
>
> I found this crazy; the services closed, and I stopped attending. Patients had nowhere to go, worsened, deteriorated. So this reflection, for those who have the Primary Care that we have, for those who have the condition that we have, the reach that we have, look, this is something we need to reflect on (PR2, our translation).

Another relevant aspect mentioned concerns the Course Pedagogical Projects (PPC). The situation resulting from the pandemic indicates the need for changes in this guiding document for pedagogical practices.

> No school will come out of this with the same project. It may not even change what is written there, but the project during the pandemic shows that it needs to be revised. Things that happen may mean changes, even in a non-pandemic situation, such as face-to-face teaching (PR7, our translation).

Furthermore, as a reflection on the PPC, it becomes evident that the management of courses in the Emergency Remote Teaching (ERT) model brought greater visibility to the contradictory and conflicting aspects of the curricular organization.

> [...] having the entire course online, of course, we don't have the practice fields online, but the theoretical part of the entire course brings a much more realistic view of what is happening in the course. We can see content and knowledge lines in another way and even see the problems we have and try to find solutions (PR4, our translation).

In the face of this new training scenario, aspects emerge to be considered in possible PPC reforms. Thinking about formative paths that address less predictable contexts from a protagonist and politically positioned perspective becomes relevant.

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Final considerations: Rethinking Learning through the Lens of Medical Education Leaders

> We are the memory we have and the responsibility we assume. Without memory, we do not exist; without responsibilities, perhaps we do not deserve to exist (SARAMAGO, 1997, p. 237, our translation).

Guided by the contributions brought by renowned experts in the field of medical education, robust evidence has been compiled to underpin new ethically implicated decision-making, recognizing how and why the pandemic, as an event, impacted our lives and affected the dynamics of medical courses.

The research reveals a previously announced issue that the pandemic, in its initial phase, ratified by highlighting the contradictions of the still hegemonic model of medical education despite what is proposed by the National Curriculum Guidelines (DCN) (BRASIL, 2014).

There is an emerging need for medical education that does not dichotomize theory and practice nor hierarchize or disqualify different knowledge. It is crucial for education to promote learning to deal with and face adverse scenarios, experiencing a circumstantial and scientific reading of evidence, not only clinical but also socio-political, environmental, and cultural, affecting the globalized world and producing disease and social misery. To meet these demands, health management and teaching categories require better articulation among the various actors within the courses and about services and society.

The data reveal that the pandemic required a reorganization of the pedagogical work of teachers and managers in Health courses, initially focused on mastering new technologies, which were understood by some as lifelines but proved insufficient to respond to the complexity of medical education. These technologies should be recognized as allies in teacher training as a means and not an end.

There is an urgent need to reassess the Course Pedagogical Projects (PPC) in their formative proposal and the curricular organization. This process should not overlook the importance of a humanized education directed towards the Unified Health System (SUS), which, during the pandemic, reiterated the centrality of its role in defending the health of the Brazilian population.

The strengthening of the Structuring Teaching Nucleus (NDE) is even more emphasized, driven by the proactive mediation of course coordinators who, through a critical evaluation of what has happened to us, outline future actions, as indicated in the epigraph above.

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Social responsibility compels us to transform our lived experience, demanding pedagogical practices that are more attentive to the complexity of our world.

Referring to Bondia (2002), extracting the value of experience and the knowledge that resides in it is possible. This understanding propels us towards education that exalts life, human aspects, diversity, difference, and civility. Advocacy is for medical education that rejects denialism and refuses to be merely a set of knowledge and techniques devoid of human values.

This text seeks to contribute to the reflection on the impact of the pandemic on education based on the contributions of reference professionals in medical education. It presents aspects that can trigger this reflection, such as aligning course projects with the guidelines of the National Curriculum Guidelines, especially in strengthening the teaching-service articulation and the challenges and possibilities of using new technologies in education.

Among the limitations of this study, it is worth noting the data collection context in November 2020, a period when there was still a significant impact of fear and intense mobilization to face the challenge of building life alternatives. Additionally, it is essential to highlight that the dialogue took place with a specific group of reference professionals in the field of medical education, providing a valuable analysis of the theme but without the possibility of generalization to broader contexts.

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