

TEACHERS AND COLLECTIVE HEALTH: PERCEPTIONS, TRAINING AND
IMPACT ON THE HEALTH PROFESSION

*DOCENTES E SAÚDE COLETIVA: PERCEPÇÕES, FORMAÇÃO E IMPACTO NA
PROFISSÃO DA SAÚDE*

*DOCENTES Y SALUD COLECTIVA: PERCEPCIONES, FORMACIÓN E IMPACTO
EN LA PROFESIÓN SANITARIA*



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ABSTRACT: The text in question addresses the perceptions and reflections of educators regarding Collective Health in the education of healthcare professionals. The objective was to understand the viewpoint of educators teaching subjects related to Collective Health, their perceptions, relevance, integration, and the impacts of knowledge from this field on healthcare professionals. The study was conducted at a University Center, specifically across ten undergraduate courses in the healthcare field. Educators were questioned about their understanding of Collective Health, its importance, integration, education, and potential development opportunities for healthcare professions. Some teachers comprehend Collective Health from an expansive perspective, recognizing its significance for professional education, and perceiving its strong presence within their courses. However, others do not perceive it as distinctly. The main challenges involve students' resistance to learning about Collective Health and a lack of recognition among fellow educators. Furthermore, the importance of incorporating this field into the curriculum was emphasized. This study aims to contribute to the reflection on the integration of Collective Health into the education and practice of healthcare professions, identifying challenges and possibilities within this process.

KEYWORDS: Collective Health. Health professional training. Teachers. Perceptions. Reflections.

RESUMO: O texto em questão aborda as percepções e reflexões dos docentes sobre a Saúde Coletiva na formação de profissionais de saúde. O objetivo consistiu em entender o ponto de vista dos docentes que ministram disciplinas sobre Saúde Coletiva, suas percepções, relevância, inserção e os impactos dos saberes dessa área para os profissionais de saúde. O estudo foi realizado em um Centro Universitário, especificamente em dez cursos de graduação na área da saúde. Os docentes foram questionados sobre a compreensão da Saúde Coletiva, relevância, inserção, formação, possibilidades de desenvolvimento para as profissões de saúde. Alguns professores compreendem a Saúde Coletiva em uma perspectiva ampliada, reconhecem sua importância para a formação profissional, percebem fortemente em seu curso, enquanto outros não a percebem tão claramente. As principais dificuldades envolvem a resistência dos alunos em aprender sobre Saúde Coletiva e a falta de valorização entre os colegas docentes. Além disso, foi ressaltado a importância da presença dessa área nas grades curriculares. Este estudo busca contribuir para a reflexão sobre a incorporação da Saúde Coletiva na formação e prática das profissões da área da saúde, identificando desafios e possibilidades nesse processo.

PALAVRAS-CHAVE: Saúde Coletiva. Formação de profissionais de saúde. Docentes. Percepções. Reflexões.

RESUMEN: El texto en cuestión aborda las impresiones y reflexiones de los docentes sobre Salud Colectiva en la formación de profesionales de la salud. El objetivo fundamentó en comprender el punto de vista de los docentes que imparten asignaturas sobre Salud Colectiva, sus percepciones, relevancia, integración y los impactos del conocimiento de esta área en los profesionales de la salud. El estudio se llevó a cabo en un Centro Universitario, específicamente en diez cursos de grado en el área de la salud. Se preguntó a los docentes acerca de su comprensión de la Salud Colectiva, su importancia, integración, educación y posibles oportunidades de desarrollo para las profesiones de la salud. Algunos profesores comprenden la Salud Colectiva desde una perspectiva amplia, reconocen su importancia para la formación profesional y la perciben con fuerza en sus cursos, mientras que otros no la perciben con tanta claridad. Los principales desafíos involucran la resistencia de los estudiantes a aprender sobre Salud Colectiva y la falta de reconocimiento entre los colegas docentes. Además, se destacó la importancia de la presencia de esta área en los planes de estudio. Este estudio tiene como objetivo contribuir a la reflexión sobre la incorporación de la Salud Colectiva en la formación y práctica de las profesiones de la salud, identificando desafíos y posibilidades en este proceso.

PALABRAS CLAVE: Salud Colectiva. Formación de profesionales de la salud. Docentes. Percepciones. Reflexiones.

Introduction

Public Health is an area of health that stands out for its expanded approach, presenting the different aspects related to promoting health and maintaining everyone's well-being. It is an interdisciplinary field that involves actions and interventions between professionals, whose objective is to improve health conditions and prevent diseases in the community.

One of its main proposals is to rescue the social aspect of health. Authors such as Silva, Schraiber and Mota (2019) highlight that Public Health is the space in which critical approaches and research on the issue of health are concentrated, seeking to weave relationships between health, society, and the biomedical construction.

Given this context, it is important that all health professions incorporate, in their training and practice, elements of Public Health. However, it is observed that Brazilian universities, for the most part, have closed curricula, less interdisciplinary interaction and more specialized topics, which makes efficient teamwork difficult and does not fully meet social health needs (Osório, Schraiber, 2015; Almeida Filho, 2013).

Considering these questions, there was an interest in carrying out a study that analyzed the contents related to Public Health in higher education courses in the health area offered by an HEI in Sobral – CE.

To address the problem, this study has the following guiding questions: What are the main objectives of Public Health and how does it seek to improve the health conditions of the community? How have Brazilian educational institutions approached Public Health in their undergraduate health curricula? What are the challenges faced in incorporating elements of Public Health into the training and practice of health professions?

In order to answer the established guiding questions, the general objective is to understand the point of view of teachers who teach subjects on Public Health, their perceptions, relevance, insertion and the impacts of knowledge in this area for health professionals.

Methodology

Research was conducted using a case study with qualitative approach characteristics. In this type of research, holistic, ethnographic, phenomenological and biographical research methods are used.

Yin (2015) supports this approach, highlighting the objective of describing the case study design and methods, and defending it as a legitimate methodology in the social sciences, capable of conducting investigations into a theoretical proposition.

The study took place at Centro Universitário INTA - UNINTA, more specifically in ten undergraduate courses in the health area, in which the Course Pedagogical Projects (PPC) were analyzed with the aim of investigating the presence of disciplines for the field of Public Health or those that come closest through checking the syllabus and bibliographies.

As inclusion criteria, the coordinators had to accept the participation of their courses in the research and the professors had to be teaching the subject of Public Health or teaching the subjects that come closest, to this end, signing the Free and Informed Consent Form - TCLE. The proposal was submitted to the Research Ethics Committee under CAAE number: 31346920.3.0000.8133 and approved under opinion number: 4.085.735.

Thus, fifteen teachers participated, whose data collection technique was the interview with a semi-structured script with questions that addressed the teachers' perception of the content of Public Health in the training of health professionals. The interview responses were qualitatively analyzed using Minayo's Thematic Analysis *et al.* (2014). Data collection for this research took place from August to December 2022.

Results and discussions

Next, the results and discussions that were characterized in categories created from the main results that will emerge through the interviews carried out with the teachers will be presented, they are: Teachers' perception of Public Health; The relevance of Public Health for the training of health professionals; Insertion of Public Health in the course; Challenges in implementing and/or developing Public Health knowledge in your course; The DCN of Courses in the area of Health and Public Health.

Teachers' perception of Public Health

One of the first questions was about the teachers' understanding of Public Health. In this way, the responses were organized into two thematic categories: Public Health in its integral aspect for expanded health care; and b) Public health in terms of its areas of knowledge.

Public Health in its integral aspect for expanded health care

Some teachers had long speeches, while others were objective in their responses and, most of the time, agreed with this category. It is worth noting that, although they reached these conclusions, most teachers reported, at the beginning of their answers, the term *public health* and, in some of the statements, there was a certain confusion when defining it.

The theme "Collective Health and health care in an expanded way" can be represented by the statements of P1, who sees it as an interdisciplinary field, with multi-professional involvement, in which subjectivity, affections between doctor, patient, professional, health and community. P5 understands it as health aimed at everyone. P7 pointed out that the individual should be seen in an integral way, in which collective health must be included from the individual's first glance. P13 points out that talking about Public Health is looking at the completeness of being and P15 presents, in his speech, an understanding based on the studies of Campos Gastão, as an expanded, interdisciplinary, multi-professional field.

According to Campos (2015), Public Health presents fundamental conceptual frameworks that promote the intersection of different knowledge and practices, in addition to emphasizing comprehensiveness and equity in the Unified Health System (SUS). It also

values the social aspect, subjectivity and care, while establishing meaningful connections between the population and health professionals. These elements contribute to the evolution of knowledge and the improvement of the living conditions of people and communities, with a focus on promoting and caring for individual health.

In a reflective perspective on Public Health, Osmo and Schraiber (2015) emphasize its interdisciplinary nature, highlighting the importance of a broader view of health and a multidisciplinary approach to dealing with the diversity present in health practices.

When observing the concepts presented by the authors, it is clear that Public Health, amidst the perceptions of the interviewed teachers, interact significantly in the context of the social determination of the health-disease process, based on a theoretical basis of integration in health care.

In this sense, the findings highlight that the teacher, through his pedagogical practice, allows an in-depth understanding of this field of knowledge, in order to develop a critical and reflective look at his future professional practices. This multidimensional approach to Public Health favors the expansion of the horizon of possibilities and the preparation of professionals to face the complex challenges of the health sector more effectively.

Public Health in relation to its areas of knowledge

Two professors mentioned that to understand collective health, it is necessary to think about their areas of knowledge. According to P9, collective health must be understood together with the fields of activity linked to it, such as epidemiology, Human Social Sciences, politics and planning. And P14, in turn, mentions that it is a field of conquest, where they have epistemological configurations, health policies, social and human sciences as a right.

In the professors' analyses, it is evident that their knowledge about Public Health is deeply linked to their respective areas of expertise, covering epidemiology, social and human sciences, politics and planning. This approach allows us to understand that teachers' understanding of Public Health is based and structured on these precursor disciplines. With this, the importance of consolidating knowledge about public health is highlighted, as professional training must be based on the fields of activity that support this area.

In this way, by highlighting the relevance of these structuring disciplines of Public Health, the relevance of consolidating the understanding of collective health becomes evident,

since professional training must be based on the reinforced fields of activity structuring collective health, as mentioned by the authors above.

The relevance of Public Health for the training of health professionals

In the question related to the importance that the professor attributes, given the possibilities of knowledge in the field of public health for the training of health professionals, all professors considered the degree of importance positively, however, some justifications took different paths. The responses were categorized into three themes: a) Public Health and its contributions to the development of a critical and humanistic professional; b) The emphasis of Public Health on multidisciplinary work and the breaking of training paradigms; c) The importance of public health being introduced into the curriculum.

Public Health and its contributions to the development of a critical and humanistic professional

In the interviews carried out, some of the teachers (P1, P7, P9 and P13) emphasized the relevance of the relationship between theory and practice in the training of public health professionals. They highlighted the need to demystify subjects such as public health and collective health, making them more accessible and interesting for students.

Furthermore, they also highlighted the importance of seeing the patient holistically, considering their socioeconomic and emotional context. They also highlighted the importance of providing practical experiences during graduation, through workshops and events, so that students understand the importance of public health in their professional activities.

The search for humanized, empathetic professionals prepared to face challenges in the health sector has been driven by the appreciation of direct experience and practical knowledge. Training in this field has undergone significant transformations, highlighting the rapprochement between the training process and service.

Pereira *et al.* (2016) point out the need for professionalization, qualification and training of new generations of workers, as well as criticism of the traditional educational content present in many training processes in the area. Furthermore, the discussion about the rapprochement between school and the world of work has been a notable point in the debate about the relationship between work and education.

This approach emphasizes the importance of applying theory together with practice during training. This approach enables the generation of more critical professionals, prepared to face complex situations in their future practices.

According to Souza *et al.* (2017), the Unified Health System (SUS) has allowed a broader view of the health-disease process, favoring the integration of practices and knowledge in collective health. In this transdisciplinary field, the complexity of the subject and their life context requires health professionals to develop critical-reflective thinking about the social determinants of health.

However, practice reveals that many professionals lack the necessary skills to adequately face the challenges of consolidating the SUS (Souza *et al.*, 2017).

The humanized perspective, highlighted by the teachers' statements, emphasizes the importance of collective health knowledge for health professionals. This approach highlights the need to transform practices and quality of care, considering the comprehensiveness of service to the user. The construction of this care and the action to promote the health of the collective individual require critical and reflective health professionals, from a more humanistic perspective, given the complexity involved in the area (Ferreira; Artmann, 2018).

These discussions reinforce the statements made by teachers in this category, given the importance of the relationship between theory and practice in professional training, as well as the requirement for a critical and reflective look from health professionals in the midst of the challenges faced in the health field. The development of humanistic skills and a comprehensive approach to care are fundamental to building a more effective and individual-centered health system.

The emphasis of Public Health on multidisciplinary work and the breaking of training paradigms

The teachers interviewed highlighted the importance of Public Health knowledge in encouraging multidisciplinary and multidisciplinary work.

P3 and P11 highlighted the need for a broad vision and the exchange of knowledge between professionals from different areas. Furthermore, they emphasized the importance of discussing the complementarity of knowledge and its application in professional practice, to overcome a limited vision and effectively promote the biopsychosocial concept in all dimensions.

The information presented highlights the importance of collective health knowledge for professionals working in this area, and teachers are able to highlight this relevance by relating it to the applicability of knowledge from a multi-professional perspective.

Roquete *et al.* (2012) emphasize that, in the context of collective health, the combination of knowledge from different areas is increasingly necessary to deal with the complexity of this field. The authors highlight that the multidisciplinary approach has been widely applied both in universities and in professional practice.

The relevance attributed by teachers, corroborating the reflections of the mentioned authors, is related to their practical experiences during continuing education. It is worth mentioning that many of these teachers participated in Multiprofessional Residency programs, recognizing the value of incorporating this reflection from the initial training of professionals. This approach enables a better understanding of the role of each professional, qualifying them in a more comprehensive and consistent manner throughout the training process.

This multidisciplinary approach and the practical application of collective health knowledge contribute to the training of professionals who are more prepared and qualified to face the complex challenges in the health sector. The combination of different knowledge provides a holistic and integrated view of health problems, enabling more effective and comprehensive interventions to benefit the population.

In addition to this multi-professional vision attributed in the speeches of some teachers, two professors addressed in their speeches the importance of breaking existing paradigms in training for this field of knowledge. Two professors, P4 and P14, highlighted the importance of breaking with existing paradigms in training for the field of Public Health. They emphasized the need to develop critical thinking and a broader view that goes beyond individual treatment and considers the history and possibilities before dealing with the patient.

The results highlight the importance of integrating different knowledge and overcoming the culture that values only the most up-to-date technical knowledge, to the detriment of the ability to listen, share and work as a team. The researchers highlighted the need to give a new meaning to Public Health in health and Social Sciences courses, emphasizing that everyone plays a crucial role in this field.

The analysis allows us to understand that, to incorporate such content, it is necessary to break with paradigms in professional training. Each professional who studies public health must understand the role of others and their contributions in this expanded format of action. The field of collective health is complex and intertwined, presenting countless variables that

influence the health-disease process and an evolution of epistemological paradigms marked by significant changes.

According to Roquete *et al.* (2012), if the application of paradigms in public health is occurring inadequately, this can be attributed, in part, to lack of knowledge and, in part, to the human failure to think in a disciplinary and fragmented way.

This statement reinforces the statements presented and highlights the value of reframing collective health and the urgency of breaking with existing paradigms in this field of knowledge. This transformation is fundamental to stimulate the development of public health knowledge in the training of health professionals.

Therefore, it is essential that professional training adopts an integrated and collaborative approach, valuing the diversity of knowledge and skills of the different professionals involved in Public Health. Changing perspectives and breaking paradigms can enhance joint action and the search for more effective and comprehensive solutions to challenges in the health sector.

The importance of Public Health in the curricular matrix

Among those interviewed, another part emphasized the importance of including Public Health topics as mandatory content in undergraduate courses. They highlighted the need for a more comprehensive and constant approach throughout training, integrating these themes transversally across different disciplines.

Reflecting on what was stated by P10, he points out that the students' lack of interest may be related to the little emphasis given to the subject, generally approached in a specific and isolated manner. To spark students' interest, he argues that Public Health should be explored more broadly and constantly.

In turn, P15 emphasized that Public Health should not be treated as an isolated discipline, but rather permeate the entire training, integrating transversally with other subjects. He argues that the fragmented approach is not effective and argues for the need for a more comprehensive and integrated perspective.

Although the inclusion of Public Health content has advanced in some courses, it is still clear that in others the introduction is quite timid, limited to a single discipline. As Leal and Camargo Junior (2012) highlight, the innovative characteristic of this field is the possibility of interconnections between different areas, covering life in its different

dimensions of existence. Furthermore, it operates across disciplines, constituting a political field of action for the production of knowledge and practices committed to the Brazilian reality.

The results indicate a conception aligned with the interviewees' statements, suggesting that Public Health must be worked on continuously in the curricular matrices, considering the collective perspective present in all areas in which health professionals intend to work.

However, it is worth highlighting that the analysis also highlights difficulties in finding scientific productions on the process of transversality in training, which suggests that this topic is emerging and still faces challenges in its application in the training curriculum. This gap may be an opportunity for future research and reflections in the field of Public Health.

The inclusion of Public Health in the course

Regarding the question whether teachers perceive the insertion in the field of Public Health in their course. If so, how should it be pointed out? From this, three thematic categories were formulated: a) Public Health is highly perceived in the disciplines and in the extension and research axes of the course; b) Lack of perception of collective health; c) Ignorance of its insertion.

Public Health perceived in the disciplines and in the course's extension and research axes

The majority of professors expressed a positive view about the integration of Public Health in the courses in which they work. They mentioned different approaches, such as the inclusion of the theme in disciplines, extension courses and research. The first excerpts of the speeches highlight the teachers' perception in relation to the course's subjects:

Some teachers emphasized the importance of the Integral Health Actions (AIS) disciplines, in which students have contact with communities and professionals from different areas from the first semesters. These subjects address relevant public health concepts and provide practical experiences for students (P1).

Others highlighted the insertion of students in the field of public health through the AIS modules, which take place from the beginning of the course until the final semesters.

These modules explore different contexts related to collective health and are also covered by academic leagues focused on family health, women's health and other areas (P2).

The perception that internships provide partial coverage of collective health content was mentioned by one interviewee. Despite being covered in just one semester, practice during internships allows students to understand actions and interventions aimed at promoting health and treating diseases in the population (P10). Furthermore, P14 reported his experience in bringing the discussion of public health to his discipline and inviting colleagues to do the same, promoting an integrated approach.

In the speeches, the teachers' view regarding the perception of insertion in disciplines is clear, given that, in some courses, it is inserted throughout the semesters and teaching practice, in the same way that the understanding of the lack is evident for others, it is mainly noticeable in the stages of understanding how to support something that is still insufficient.

According to Correia, Telles and Araújo (2018), undergraduate health courses have undergone curricular changes with the aim of providing training that is more aligned with the social needs of the population and the reality of the Unified Health System (SUS). These changes have emerged as a response to the realization that the pedagogical projects and curricular matrices of these courses are still permeated by a technical perspective, fragmenting the contents and following hegemonic models, predominantly biomedical and sanitary.

Professions in the health sector require special attention, as training professionals with a vision focused on the SUS represents an important challenge to improve people's quality of life. This training must seek to expand alternatives suited to changes in reality and collaborate with the development of health workers, as advocated by Castro, Cardoso and Penna (2019).

In this context, curricular transformations in undergraduate health courses play a fundamental role in preparing professionals to face the challenges of the Brazilian health system. The search for more humanized, comprehensive training aligned with the needs of the population is essential to contribute to the improvement of health care and promote the advancement of the SUS. After all, it is through adequate training of future professionals that it will be possible to drive significant and positive changes in the field of public health. In addition to inclusion in the disciplines, teachers also highlighted the importance of extension and research courses. See the following:

- P8 mentioned the presence of public health in the institution's extension and research activities. He noted that both teachers and students show interest and desire to work in this area, recognizing the importance of collective health in their lives. UNINTA broadly develops collective health, both in discussions and in practical actions carried out by academics.
- P13 highlighted specific projects of the institution, such as "UNINTA in the Community". These projects seek to disseminate the practice and knowledge of collective health, both internally, involving the academic community and employees, and externally, reaching society in general. The objective is to promote the dissemination of collective health concepts and ideas (P13).
- It is clear that the inclusion of collective health in extension projects, research, academic leagues is a positive point in terms of practical application in the teaching-learning process in the face of an association of theoretical contents through practical experiences, a preponderant factor in training of future health professionals. However, it is worth highlighting that although the courses promote the inclusion of collective health in these environments, the value of its inclusion, especially in the mandatory curricular components of the highlighted courses related to health professions, in general, cannot be forgotten.
- Since, according to Palácio (2017), student participation in extension projects can represent a positive activity for students in terms of theoretical appropriation about Public Health, however, participation is not mandatory and cannot be considered a fixed component in the initial training of students.

Furthermore, some teachers highlighted an aspect related to perception in the course subjects, mentioning devaluation on the part of both teachers and students. See the following:

- One of the teachers emphasized the need to value public health more, both in practical application and in the students' perception. He highlighted that appreciation should not only come from students, but also from teachers themselves. For him, it is important to have the presence and appreciation of collective health in every semester, with greater weight given to it. He believes that teachers must show the importance and value of the subject, conveying to students the relevance of what they are teaching (P4).

- Another professor mentioned that he perceives strong resistance and devaluation on the part of students in relation to collective health. He recognized that the training of general practitioners working in the public health system (SUS) is a fundamental purpose, but regretted the students' resistance to valuing this content, considering it inferior in relation to other disciplines. He highlighted, however, that the presence of collective health in the curriculum is significant and important (P5).

The teachers' statements allow us to understand that the teacher is not defined only by his mastery of content. It requires the teacher to reflect and value pedagogical practice in order to enable meaningful learning.

The teacher training process requires time and space and indicates that the teacher is largely responsible for their own ongoing training, whose knowledge is constructed from reflection and understanding of teaching practice (Soares; *et al.*, 2022)

It is worth highlighting that this process of appreciation must also come from the student, as it requires reflection on how that knowledge could impact future training, so that this vision is not already perceived in the field of activity.

Non-perception of collective health

On the other hand, some teachers interviewed do not perceive a strong insertion of Public Health in the course, as can be seen in the following statements:

One of the teachers, P9, expressed that he does not really understand the public health perspective in the course. He believes that there is a lack of greater understanding not only on the part of the students, but also on the part of the collective as a whole. He emphasized the importance of studying more about public health and not just focusing on specific disciplines, which are often more related to the Clinic.

Another teacher, P15, mentions that public health began as an optional subject and did not have a regular offering. It was only during the process of reforming the curriculum that he suggested making it mandatory, but it is still only a subject offered halfway through the course.

In the statements presented, we can recognize two perspectives that the teachers do not consider perceptible to the inclusion of public health in their course. The first involves, in a certain way, a disarticulation on the part of teachers with the teaching of collective health in

their own discipline. From the other point of view, it consists of delayed insertion because it is just one discipline, resulting in very little impact on training.

Aguiar, Silva Júnior and Soares (2018) state that, to achieve interdisciplinarity in training, teachers need to work together and articulate their knowledge in a complementary and organized way, in order to seek the active participation of students in the teaching process.

In this attempt, corroborating the speech of the interviewed teachers, the work of inserting collective health requires joint action in order to articulate knowledge so that it can assist in the teaching process.

The lack of knowledge about its insertion

During the interviews, only one professor addressed his lack of knowledge about the inclusion of collective health in the course (P6). He mentioned that, due to the lack of contact with other subjects on the course, he could not provide detailed information. However, he highlighted that the Public Health I discipline broadly covers public policies, providing a basis on how they were, how they are and how they could be. He also mentioned that in the course she is part of, the topic continues with specific subjects, but there was no information about the continuity of public health in other courses.

As the last thematic category is related to the lack of knowledge about the inclusion of collective health, based on the interviewee's speech, it is clear that the teacher does not know the curricular structure of the course itself, considering that it is more linked to the process of teach the Public Health discipline offered in the course, which can be a negative point when thinking about an integrated, transversal and interdisciplinary perspective.

The speech presented by the participant reinforces the previous discussion about interdisciplinary work, highlighting the importance of a complementary dialogue with other disciplines and course colleagues to offer comprehensive assistance to students, going beyond an isolated approach to each subject.

In light of this subject, Aguiar, Silva Júnior and Soares (2018) state that interdisciplinarity in the area of public health is a crucial requirement in the health system, and its effectiveness occurs when professionals are prepared from the student stage to meet the demands imposed.

Furthermore, Moura *et al.* (2021) highlight that interdisciplinarity is gaining strength in response to the need to modernize and diversify learning processes. The segmented approach to teaching is not sufficient to provide a complete understanding of the content, making the exchange of knowledge between disciplines essential.

These aspects highlight the importance of teachers deepening their knowledge of the course's curricular structure and promoting coordination with colleagues, in order to develop in an integrated manner, the skills and abilities proposed in the graduate professional's profile. Collaboration and joint work between teachers are fundamental for more complete training that is aligned with the needs of students and the job market.

By prioritizing interdisciplinary work and strengthening the exchange of knowledge between different disciplines, academic training gains in richness, promoting a broader and more integrated view of health issues. This prepares future professionals to face the complex challenges of the area, contributing to more effective and comprehensive action for the benefit of the population.

Challenges of implementing and/or developing Public Health knowledge in your course

Those involved were asked about the difficulties they perceived in the insertion or development of collective health knowledge. Some teachers reported not experiencing difficulties, others ended up distancing themselves from the question presented; the majority, in turn, answered yes. The responses were categorized into two themes: a) Public Health as a field of resistance by students; b) The process of valuing public health knowledge by teachers.

Public Health as a field of resistance

Some teachers, such as P1, P2, P6, P8 and P13, report students' resistance to public health in the course. Students tend to prioritize other subjects, disregarding the importance of public health. However, there are students who are dedicated and enjoy the discipline.

The difficulty also lies in the immature reception of students regarding the concepts of collective health. Some teachers seek to make the subject more interesting, encouraging students to think beyond the usual.

Regarding the difficulties of including public health knowledge in the courses, teachers are able to point out a certain resistance on the part of students in receiving Public Health content, as some insist on a vision of training centered on the biomedical model.

According to Vasconcelos and Gouveia (2011), the theoretical field of Public Health is configured not as a single field, but as an interdisciplinary space, which enables the study of the health-disease relationship as a social process, enabling an understanding of the means used by the community to organize and solve their health problems.

In this attempt, it is necessary to reflect on the breaking of paradigms in the training process of these students so that they can incorporate the contents of collective health into the development of their professional practice in an integrated, interdisciplinary way so that the objectives of a more comprehensive training can be achieved.

The process of valuing collective health knowledge by teachers

P4, P9 and P14 mention difficulties in inserting and developing public health knowledge among their colleagues. There is a need to make teachers aware of the importance of incorporating this knowledge into their disciplines in a transversal way. A deeper understanding of collective health by teachers is necessary so that they can promote a comprehensive vision throughout the course. The appreciation of knowledge in public health is also highlighted as fundamental to encourage students to become interested in the area.

For Vasconcelos and Gouveia (2011), it is still understood that there is resistance, on the part of the teachers themselves, to allowing their previous “convictions” to be in fact modified. Furthermore, the same authors state that reforms in the format of courses do occur, however, in most cases, they become limited, as they are not incorporated by teachers and, consequently, by students.

Such conceptions lead to the reflection that both difficulties perceived by the interviewees end up reflecting each other, considering that for the student to be able to value, it is essential to be valued and encouraged by the teacher.

The DCN of Courses in the area of Health and Public Health

In the following question, those involved were asked how they have observed the relationship between the DCN of health courses and Public Health in the current global health scenario. The responses were diverse and, given this, they were organized into two thematic

categories for analysis: a) Advances in public health in the training of health professionals based on the DCN; b) Public Health as a challenging field for inclusion in training.

Advances in collective health in the training of health professionals based on the DCN

P2, P4 and P6 highlight an approximation of Public Health content in the National Curricular Guidelines (DCN), which are becoming more comprehensive and generalist. This change reflects a tendency to incorporate public health into courses in a broader and more global way. Teachers realize that the DCN explore practice and experience in the context of public health, taking into account the integration between teaching and service. Over the last few years, public health has gained more space and visibility in the curriculum, reflecting a significant change in the way it is approached.

For Funghetto *et al.* (2015), a common professional profile described in health guidelines corresponds to training linked to the needs of the population anchored in the principles of the SUS, based on generalist, critical, humanistic and reflective teamwork training.

From the statements, it is clear that some teachers understand the view of this favorable advance to content that involves aspects of collective health through curricular guidelines.

However, it is possible to understand, from the interviewees' statements, contradictory points of view, although some perceive advances, others see great differences regarding the inclusion of such content in the training of health professionals, which we can view in the following thematic category.

Public Health as a challenging field for inclusion in training

A portion of the teachers interviewed highlighted that, although the National Curricular Guidelines (DCN) currently contemplate the relationship between disciplines and collective health, there is still a significant distance for their effective insertion in the training process of future health professionals, such as the case of P8 and P15.

They observe that, even with advances, a Cartesian vision and a compartmentalization of knowledge still persist, in which public health is treated as an isolated discipline instead of permeating all areas of study. These professors consider that the DCN could be better

reformulated at some points, in order to promote a more integrated approach to collective health in all disciplines. Furthermore, they emphasize the need for greater proximity between the DCN and the field of collective health in some courses, highlighting the lack of discussions and significant scientific production in this area.

The participants' speech corroborates the understanding that there is still weakness in the inclusion of Public Health in courses. They consider that there is still a compartmentalization of knowledge and that training focused on the biomedical, Cartesian model is still noticeable, which is still very timid.

For Lima *et al.* (2018), the remaining challenge regarding the transformation of the SUS to train generalists to work based on Public Health signals the need to reorient higher education in all health courses in Brazil, in order to extrapolate the paradigm biologicist assistance, focusing on relational technologies, characteristics of the care recommended by the SUS. This reorientation process involves great challenges in the curriculum structuring process. Because there's no point if the changes don't get off the ground.

Considering the information presented, we can observe a certain distance between some courses in relation to the challenges of a curriculum aimed at training health professionals, especially those working in collective health. Although there are noticeable advances, it is clear that there is still a lot to be achieved and worked on more actively in courses, aiming for a more comprehensive training of health professionals.

Final remarks

The research carried out achieved results that are aligned with the objectives established to analyze collective health in the training of health professionals in a Higher Education Institution in Ceará. The methodological path followed was considered satisfactory, using interviews with teachers.

Therefore, the analysis of the results leads us to reflect on the importance of a more emphatic approach to collective health in the training of future professionals. It is essential that courses promote greater integration of knowledge related to public health, in order to prepare students to face the complex challenges in the area and act more effectively in promoting the health of the population.

This finding also opens space for discussions about strategies that can be adopted to strengthen the presence of collective health in academic curricula. The integrated training of

health professionals requires a broad and interdisciplinary vision, in addition to a greater emphasis on practices and approaches aimed at the collective.

Therefore, it is essential that educational institutions commit to revisiting their curricula, considering the inclusion of content and activities that focus on collective health in a more comprehensive way. Only with this more active and integrated approach will it be possible to train professionals who are better prepared to face health challenges in their collective aspect and contribute to a healthier and more equitable society.

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