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ARTICLE

ELDERLY HEALTH: DISCOURSES AND EDUCATIONAL PRACTICES IN MEDICAL TRAINING

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ABSTRACT: Brazil, along with the world is dealing with the phenomenon of population aging, which, in turn, requires adequate training of professionals to care for the health of older adults in their specific aspects. This article is the result of qualitative research investigating the curriculum of the subject 'Comprehensive Care for the Health of the Elderly', in the Medicine undergraduate degree at a Federal University in the countryside of Minas Gerais. This course was especially organized based on the National Curricular Guidelines for Medicine Degrees, published in 2014. This document guides the use of active teaching methodologies, curricular integration, and early student participation in health network services. Based on the observation of theoretical and practical classes, field notes, and interviews with students and teachers of the subject, we approach the discourses and educational practices to identify the relationships between the regulations of medical education, curricular integration, and use of the curriculum by competences and of the active methodologies in teaching health focused on seniors. We concluded that there is an effort to follow normative documents, and adopt curricular integration as well as active methodologies. However, there is no radical break from traditional teaching as the institutional stance allows traditional classes and assessments to coexist with active methodologies and formative assessment. The adoption of the guidelines is questioned as methods are expanding, without a change in the concept of education that would support such methods.

Keywords: medical education; aging; educational gerontology; elderly health; active methodologies.

SAÚDE DO IDOSO: DISCURSOS E PRÁTICAS EDUCATIVAS NA FORMAÇÃO MÉDICA

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RESUMO: O Brasil e o mundo passam pelo fenômeno do envelhecimento populacional que, por sua vez, demanda formação adequada de profissionais para o cuidado à saúde do idoso em seus aspectos específicos. O presente artigo é resultado de pesquisa qualitativa que investigou a unidade curricular Cuidado Integral à Saúde do Idoso, ministrada no curso médico de uma universidade federal do interior de Minas Gerais. Tal curso tem a especificidade de ter sido organizado a partir das Diretrizes Curriculares Nacionais para os Cursos de Medicina, publicadas em 2014, sendo que tal documento orienta o uso das metodologias ativas de ensino e inserção precoce dos estudantes em serviços da rede de saúde. A partir da observação de aulas teóricas e práticas, do registro de diário de campo e de entrevistas com alunos e professores da referida disciplina, analisamos os discursos e práticas educativas com o objetivo de identificar as relações entre as normativas da educação médica, a integração curricular, o uso do currículo por competências e das metodologias ativas no ensino da saúde do idoso. Conclui-se que há um esforço em seguir os documentos normativos, com adoção de integração curricular e metodologias ativas. No entanto, não há um rompimento radical com o ensino tradicional na medida em que a postura institucional permite a coexistência simultânea de aulas e avaliações tradicionais paralelamente às metodologias ativas e à avaliação formativa. Questiona-se a adoção das orientações das diretrizes enquanto ampliação de métodos, sem que haja uma mudança na concepção de educação que sustentaria tais métodos.

Palavras-chave: educação médica, currículo, envelhecimento, gerontologia educacional, metodologias ativas.

SALUD DE LOS ANCIANOS: DISCURSOS Y PRÁCTICASEDUCATIVASEN LA FORMACIÓNMÉDICA

RESUMEN: Brasil y el mundo están cruzando por el fenómeno del envejecimiento de la población, que exige una capacitación adecuada de profesionales para cuidar la salud de los ancianos en sus aspectos específicos. Este artículo es el resultado de una investigación cualitativa que investigó la unidad curricular de Atención Integral para la Salud de los Ancianos, impartida en el curso de medicina de una Universidad Federal en el interior de Minas Gerais. Dicho curso tiene la especificidad de haber sido organizado en base a las Directrices Curriculares Nacionales para Cursos de Medicina, publicado en 2014. A partir de la observación de clases teóricas y prácticas, la redacción de un diario de campo y entrevistas con estudiantes y docentes de esa disciplina, abordamos los discursos y las prácticas educativas para identificar las relaciones entre las reglas de educación médica, integración curricular, uso del currículo por habilidades y metodologías activas. Se concluye que hay un esfuerzo por seguir los documentos normativos, con la adopción de la integración curricular y metodologías activas, sin embargo, no hay una ruptura radical con la enseñanza tradicional ya que la postura institucional permite la coexistencia simultánea de clases y evaluaciones tradicionales junto a metodologías activas y evaluación formativa. La adopción de las directrices se cuestiona mientras se amplían los métodos, sin un cambio en el concepto de educación que respaldaría dichos métodos.

Palabras clave: educación médica; envejecimiento; gerontología educativa; salud de los ancianos; metodologías activas.

INTRODUCTION

Old age matters little, what is old age?
Your shoulders support the world

and it weighs no more than a child's hand.

Carlos Drummond de Andrade
(From the poem "Shoulders support the world").

Brazil, along with the rest of the world is going through a demographic transition as human beings are aging. Quoting Drummond's verses, we ask ourselves: "what is old age?" As the demographic transition draws a new social scenario, wherein aging must be appropriated re-signified, it is therefore necessary to train doctors to deal with older people, whose "shoulders support the world".

The "aging index" is estimated to increase to 173.47% in 2060 from 43.19% in 2018 to 173.47% in 2060 (PERISSÉ; MARLI, 2019). Thus, an increased life expectancy of a population has direct consequences for public health, since changes in the demographic profile, are followed by epidemiological profile changes with increased chronic diseases, dementia, and other disorders that may or may not be present in old age. The health system must be prepared to tackle these transformations, both in a curative and preventive sense while taking into consideration the importance living conditions in determining the population's health-disease process (MOTTA; AGUIAR, 2007; XAVIER; KOIFMAN, 2011; CARVALHO; HENNINGTON, 2015; GIACOMIN; MAIO, 2016; MIRANDA; MENDES; SILVA, 2016; GALERA *et al.*, 2017).

Currently, health care for older people in Brazil is coordinated by the National Health Policy for Older People (*Política Nacional de Saúde da Pessoa Idosa* - PNSPI), 2006, which guides health care for more fragile older people, encourages active aging, supports families, and provides professional training within primary care teams, including the "permanent education and training of SUS health professionals in the area of older people's health" as one of its guidelines (BRAZIL, 2006). Given these guidelines, we face the challenge of training health professionals who are committed to the reality in which they will work. Brazil's primary and secondary care services have a large presence of older people, mostly belonging to the low- and middle-income population, which demands greater assistance from the public health system (RODRIGUES; TODARO; BATISTA, 2019).

According to Cachioni and Todaro (2016), aging education has not been part of the curricula of elementary and high school in Brazil, and only isolated and poorly systematized actions have been taken in this regard. The same authors report that this gap is also observed in higher education, pointing to disparity between Higher Education Institutions (HEI) and the Brazilian demographic transition process. This data is reinforced by Diogo (2004) and Xavier and Koifman (2011), who also indicated the lack of literature on aging in undergraduate health courses.

The curriculum structures and standardized system of education determine what should be taught and when, guiding while simultaneously limiting teaching actions. It is not static, but it is a process whose movement follows social tensions since its creation, based on negotiations between different interests and forces (SACRISTÁN, 2013).

There is no neutrality in the elaboration and concretization of a curriculum. Constant tensions of the social network, through which power relations circulate, reverberate in what is taught and learned, makes curriculum a complex and tense space that is not subsumed into bureaucracy, but goes through the training of professionals, people, and their subjective trajectories (Silva, 2009). As for the curriculum of health courses, pedagogical issues, health system organization, public policies, epidemiological profile, economic conditions, and social and community characteristics of the population should be considered (BOLLELA; MACHADO, 2010).

Health education in Brazil has been historically criticized for not following the ideal health care model. Since the establishment of the Unified Health System (*Sistema Único de Saúde* - SUS), the need to change educational concepts and perspectives to adequately prepare professionals for reformulations in health care has been evident (BATISTA, 2013). In other words, an aging population urges the question "what knowledge does the curriculum require when we think about medical education?"

The current study was performed in a medical course at a federal university in the interior of Minas Gerais to investigate the teaching of older people's health in medical education. This course was implemented based on the 2004 National Curricular Guidelines for Medicine Courses (*Diretrizes Curriculares Nacionais para os Cursos de Medicina* - DCNM). It includes a mandatory subject on older people's health called Comprehensive Older People's Healthcare (COPH), taught in the sixth period for 20

students. This subject has three professors and a total workload of 108 hours, 36 being theoretical and 72 practical; therefore, this curricular unit promotes practice.

COPH is part of the curriculum in the Integration, Teaching, Service, Community Practices (ITSCP) axis. Practical classes are held at Basic Health Units (BHU), which have Family Health Strategy (FHS) teams and a Long-Term Care Facility for Older People (LCFOP). The study was approved by the Human Research Ethics Committee[4].

The methodological resources used in this study included 30 hours of theoretical and practical classes observation, followed by registration in a field diary, semi-structured interviews with COPH professors and students, documentary analysis of the DCNM/2014, the Pedagogical Project for the Course (PPC, 2016) and the lesson plan of the COPH subject (second semester of 2018).

Class observations took place in the second semester of 2018. Two professors and three students were interviewed between March and July 2019, each interview lasted for approximately forty minutes. The two professors[5] initially chosen for the interviews were the ones teaching both theoretical and practical classes (one of the professors works exclusively in the practical learning environment); however, scheduling issues restricted us from adhering to the initial plan. Therefore, the second interview was conducted with the professor who taught practical classes. The students were chosen based on theoretical class observations. The initial proposal was to interview a male and a female student; however, three students stood out during classes for different reasons. One with the pseudonym Alice [6] demonstrated a critical and combative attitude throughout the classes, Cristina, showed a collaborative and disciplined attitude, and José presented a refined opinion on the social aspect of aging.

The guiding questions in the interviews were related to content, methodology, skills, humanization, and the relationship between theory and practice in COPH.

This study presents qualitative results and the analysis of educational practices in the context of medical education to identify the relationships between normative rules, curricular integration, curricular skills, and teaching by problematization (active methodologies).

NORMATIVE MEDICAL EDUCATION RULES

At the beginning of the 20thcentury, medical schools in the United States and Canada were evaluated to guarantee the scientific basis of the contents taught, which resulted in the Flexner report, published in 1910. Flexner's orientation fragmented the medical education into specialties, with the hospital as a priority practice place. This model started to be exported to the world. Even though it brought systematization and science to teaching, it ended up favoring the medical technology industry, increasing healthcare costs and, consequently, hindering the expansion of medical care to the poorest population (KOIFMAN, 2001; NOGUEIRA, 2009).

In Brazil, the military government implemented the Flexnerian model in medical schools in 1968. With the fragmentation of health into specialties, the curricular matrix was divided into a basic and a professional cycle, distancing theory and practice. In this context, the hospital was chosen as a priority scenario for practice and research. Theoretical teaching remained traditional and focused on content, essentially including the anatomopathological aspects of illness. Such a positivist model resulted in subjects with rigid boundaries, a lack of discourse of economic and socio-cultural aspects that permeate the health-illness process. In addition, these guidelines are imposed vertically; therefore both professors and students are left with limited options and possibilities for transgression (MACHADO; WUO; HEINZLE, 2018).

Seeking to align medical education with the population's health needs and SUS guidelines, in 1991, a space was created for discussion between several institutions, such as the Brazilian Association of Medical Education (*Associação Brasileira de Educação Médica* - ABEM), the Federal Council of Medicine

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[5]One of the professors, who we call Celio, is a physician with residency in Family Medicine, Anthroposophical Medicine training, a specialization in Geriatrics, and a master's degree in Social Psychology. The second professor interviewed, who we call Luciene, is a cardiologist with a master's degree in cardiovascular health focused on older people's health, the area in which she is taking a PhD.

[6]All names used in this article are fictitious.

(*Conselho Federal de Medicina* - CFM), and others, forming the National Interinstitutional Commission for the Evaluation of Medical Schools (*Comissão Interinstitucional Nacional de Avaliação das Escolas Médicas* - CINAEM), which worked for ten years on the discussion and evaluation of medical education. In 2001, the National Education Council approved the Medical Education Curriculum Guidelines (*Diretrizes Curriculares do Ensino Médico* - DCNM). Such guidelines brought about significant changes in relation to the previous teaching model. These included transforming hospitals for primary healthcare as a preferential space for practice, curricular integration, inclusion of humanistic content, guiding the use of active teaching methodologies, and the search for a closer relationship with services as well as the reality of the population's health.

However, medical schools were not obliged to follow the DCNM/2001 guidelines and, according to Gomes and Rego (2014), medical education underwent some changes. However, there was a failure to prioritize ethical and humanistic aspects, and the course continued to a technical one, with a biomedical focus that valued specialties. The DCNM were revised pursuant to Law 12,871 of October 22, 2013, which instituted the *Mais Médicos* Program. Published in 2014, the current guidelines strengthen primary care education and maintain the orientation for the use of active teaching methodologies, also determining its mandatory implementation in all medical courses in the country.

Considering that the proposal of the curricular guidelines is to present medical education principles, the content included throughout the course is not precisely specified, and does not have a direct reference to older people's health. Such a course offers a generic and superficial curricular approach to the topic, lacks emphasis on peculiarities and vulnerabilities inherent to the aging process, and includes content previously covered in subjects on adult health.

OBJECTIVES AND SKILLS IN OLDER PEOPLE'S HEALTH EDUCATION

COPH has three permanent professors, two teaching both theoretical and practical classes, and one exclusively working with practical classes. The three professors have professional experience in older people's health. This is a positive point, because one of the obstacles to approach older people's health in undergraduate health courses is the inexperience of teaching staff (DIOGO, 2004).

The role of the professors to propose curricular changes is fundamental in materializing new objectives in pedagogical practices. In the case of reorienting medical curricula, it is the role of the professor to reject fragmented and banking education, which is characteristic of the Flexnerian model. This model dominated the curricula and was aimed at pseudo-specialization, in such a way that the professor was not involved as an educator, but as a specialist in the medical field, and consequently did not need to be properly prepared from a didactic point of view (MOURÃO *et al.*, 2007).

One of the COPH professors was part of the team that planned the curriculum of the medical course analyzed. According to Lopes and Macedo (2011), the Tyler model (1949), which starts from the principle of rationality to reach efficiency and is based on basic questions on educational objectives and on experience organization and effectiveness to reach these objectives, still prevails in curricular planning.

By dealing with planning and answering each of these questions, Tyler considered that the efficiency of the curriculum was directly related to clearly proposed educational objectives. It would therefore be essential to understand the reality in which the curriculum would be implemented. With a behavioral approach, Tyler's curriculum defined objectives regarding expected students' behavior changes to transform the curriculum field evolved into a skill-based curriculum.

Already present in the 2001 medical guidelines and maintained in the DCNM/2014, the skill-based curriculum is defended by some authors as a strategy to face medical course fragmentation, which, in turn, converges in the split between training and work (BOLLELA; MACHADO, 2010; LAMPERT; CAMPOS; ALVES, 2016).

According to Lopes and Macedo (2011), the notion of skills in the curricular field comes from criticism to planning based on Tyler's rationality, which would have been atomized over time. The concept of competence first appeared in a behavioral matrix, with Eva Baker and James Popham (1976) bringing nuance to Piaget's work. According to the latter, subjects bring mental schemes they usually use. Such schemes may be insufficient in more complex situations, requiring educational interventions to

create effective skills in new situations. It is not, therefore, just a matter of applying knowledge to given situations. Skills are built on concrete social practice and, as social situations are unique, they cannot be trained and mechanically acquired. When requested in a given situation, the skill develops new skills and transforms the subjects themselves.

Given its necessary relationship with social practice, the development of a skill-based curriculum should begin with knowing the reality of establishing teaching objectives and only then should strategies and methodologies be drawn up to achieve the expected results. The process requires continuous evaluation to allow adaptions to social changes and improvements in the educational experience (BOLLELA; MACHADO, 2010).

The COPH curricular unit was planned by professor Celio and linked to a training course for professors. The orientation to know the local reality, already mentioned in Tyler's curriculum planning and maintained in skill-based curricula, was followed, as reported by the professor in the interview:

> (...) Then the first thing I did was to carry out an epidemiological survey of the illness, so I used DATASUS to survey the pathologies that killed and hospitalized older people more, the epidemiological profile. Then I surveyed the community; I looked for some community groups. There is an old age group at the university; I did research with this group, asking them what they expected from older people when they went to the doctor's visit. So they answered some questions, they answered five questions, and those questions mentioned respect, attention, looking into the eyes, they wanted much more than... Knowing how to listen to older people, they were much more concerned with attention than with the professional's medical skills, they said this was the biggest problem. (...) **(Interview with professor Celio).**

For Lopes and Macedo (2011), the notion of skill comes from the science crisis, because, with no more absolute truth to be discovered, knowledge becomes the foundation of performance. According to them, as stated in recent curricular policies, skills have maintained an efficiency character, as they obey the demands of the labor market, which is constantly developing and transforming and thus, requires dynamic workers.

COPH prioritizes practical learning, presupposing social contextualization and transcending the linear association between previous skills and schemes (LOPES; MACEDO, 2011). In addition, skill-based teaching has been advocated in older people's health by Motta and Aguiar (2007), when stating that skill-based training brings a differentiated pedagogy, centered on learning, on the subjectivity of the student, and on building knowledge.

The PPC states that the proposed curriculum model used in the evaluated medical course relates to the acquisition of the necessary skills, to ensure that the graduate has a generalist, ethical, humanistic, and responsible profile, according to the DCNM/2014 provisions.

The teaching plan of the COPH curricular unit does not mention what the desired skills are. The document makes an indirect reference to skill-based planning in its approach to assessment: "In the skill-based curriculum, it is essential to indicate an assessment method for each learning objective that is coherent with this objective" (Teaching Plan, 2018, p. 6). It is deduced, then, that the objectives established in the teaching plan are the skills to be acquired by students over the period.

One of the interview questions was related to the skills to be acquired throughout the subject. The interviewed students emphasized the importance of understanding the specificities of older patients as compared to adult patients. This brought to light gerontological concepts brought by the curricular unit and the importance of an integral care for older people:

> (...) I don't know, but I imagine it is quite related to the issue of understanding, like, of knowing how to recognize the different situations of vulnerability for an older person, I imagine that it has to do with knowing the concepts of autonomy and several other issues. (...) Independence, autonomy, we argue a lot about them, right? Knowing these concepts, knowing what differences there may be between older people institutionalized and older people not institutionalized, the main ones, the major syndromes within geriatrics, in older people's health, knowing how to recognize and manage this. It is also to understand a little about managing the pharmacokinetic issue, which drugs I can or cannot use for them, and why I cannot (...). In addition to the issue

> of welcoming, which is always very important in everything. For older people, due to fragility, maybe even a little more **(Interview with student Cristina)**.

In short, skill is a complex concept that considers cognitive, integrative, relational, affective, and moral functions. It must be continuously developed, since, as provided in the DCNM/2014, skills refer to medical practice, transcending academic learning. According to Dias *et al.* (2018), although the notion of skill has several meanings, the skill-based curriculum allows integrality to function as a structuring axis of medical education. We agree with this statement as far as good skill development conditions are provided through teaching, as observed in the analyzed subject, with emphasis on learning scenarios in the health system.

CONCEPTIONS AND CONTENTS OF OLDER PEOPLE'S HEALTH TEACHING IN THE MEDICAL CURRICULUM

Integrated curricular content has been advocated in health courses based on the discussion that learning contextualized with praxis is more effective, that different subjects and professions provide greater approximation to the world of work, and that integrated curricula increases motivation for learning and are more attractive for students. Curricular integration can be vertical, horizontal, or both concomitantly. In horizontal integration the subjects are organized around concepts or themes, and in vertical integration they are organized in axes that continue throughout the course (IGLÉSIAS; BOLLELA, 2015).

For Lopes and Macedo (2011), different curriculum conceptions bring different proposals to integrate content. There are, basically, three main curricular integration conceptions: by the skills desired in the graduate, by the concepts of the different subjects included in the curriculum, and by the students' interests in the social and political issues of the country. According to the authors mentioned the curricular organization by subjects, which list the skills to be prioritized in teaching has prevailed.

According to the analyzed PPC, the curriculum is organized to integrate theory and practice, training and work, medical training and other professions, subjects, and basic and professional curriculum (rotation residency). The ITSCP axis is strategic, as it is configured as practice in the health system from the first to the eighth period, and aims at reducing the dissociation between the basic and professional cycles through diversification of learning scenarios.

The researched medical course seeks curricular integration both by skills (since each subject should, according to the PPC, work the skills suggested in the DCNM) and by concepts, maintaining the division into subjects, in line with what is found in modern curricula. Considering the importance of practice in the researched course, through the ITSCP axis, this analysis showed that the prioritization of the practice scenario in the longitudinal axis of the course also works as a curricular integration device.

Compared to the previous teaching, the PPC as curriculum renewal model follows trends in medical education observed in the literature. These include search for curricular integration to avoid fragmentation into specialties, approximation of basic and professional cycles, insertion of students in health services since the first periods, and inclusion of an ethical-humanistic axis (SOUZA, 2011; GOMES; REGO, 2014; LAMPERT; CAMPOS; ALVES, 2016;). However, it is worth asking whether the curricular integration has materialized in the everyday reality of the course, as data collected through the current study demonstrates that fragmented subjects act in isolation, even in the same course period:

> For example, it is... Let me think about a subject here... Endocrinology, endocrine, it has a clinical part, so we have professors from the clinic, there are professors from radio, we have teachers from pathology…there is a conversation between them,... within endocrinology. But no talk, for example, about older people, who are the most affected by diabetes, there is no conversation. There's no talk about women's health either. Each one within its own space. **(Interview with student Alice).**

> I think there is, in the design of the course there is [integration]. They are more or less thinking about it, it is modular even at the beginning, after that it ceases to exist a little…But I feel that what is missing, we lack communication, between professors, for example, in the same period, there is no such space. There is no exchange space, there are department meetings, everyone goes once a month, they have to go **(Interview with professor Celio).**

Iglésias and Bollela (2015) state that a horizontal form of curricular integration has been adopted by medical courses across the world to prioritize life cycles as an organizing element of teaching. Similarly, Motta and Aguiar (2007) assert that aging would be a powerful mechanism for curriculum integration, as it favors interdisciplinarity, in addition to attitude and skills that can increase healthcare quality in general.

According to Motta and Aguiar (2007), curriculum content on older people's health should include knowledge of and approach to geriatric syndromes, abandonment and maltreatment, mood disorders, sexuality; instruments to assess functional and cognitive skills, comprehensive geriatric evaluation, team learning in diverse scenarios, knowledge of the health system, and resources and social support available. All of these are included in the teaching plan of the COPH subject.

The number of objectives proposed in the Teaching Plan of COPH exceeds the number proposed by the Brazilian Society of Geriatrics and Gerontology (*Sociedade Brasileira de Geriatria e Gerontologia* - SBGG) for the entire basic cycle of the medical course (which comprise first to eighth periods). Therefore, considering that the curricular unit analyzed is taught in only one semester of the course, it is necessary to assess whether the content is extensive for the time available.

As there is no teaching without content, and content is not neutral, but indicates values and intentions (FREIRE, 2003; 2014), would this amount of content reflect the search for general education? Of the 37 objectives listed, only two use the term "geriatrics". They corroborate the effort to surpass specialties in favor of general training and go beyond anatomopathological issues to include the social determinants of health (XAVIER; KOIFMAN, 2011).

Most of the objectives in the teaching plan are related not to the level of specialty, but to the general contents and skills necessary to assist older people at primary healthcare level. However, regarding the contents studied throughout the theoretical classes observed, the anatomopathological issues of aging are prioritized and a theoretical concept of older people or old age is excluded, as we saw in the interview with one of the professors:

> You see, there is no tied conception, because aging has many nuances, you know, we have to differentiate senescence from senility, physiological aging from pathological aging. So, I think the subject is very open in this regard; it does not come with something very tied, wrapped, so I think that for being very open to student learning, it is broader, right. (...) **(Interview with Professor Luciene)**

The question asked to students about their conception of aging generated answers regarding age-related stereotypes, demonstrating that prejudices were worked on and, although in different perspectives, there was an understanding of the heterogeneity of aging and the vulnerability that this process can bring:

> Celio gave us a questionnaire about age-related stereotypes... But from the beginning I don't have a very stereotyped view of what aging is or what it means to be older... (...) in fact we have to deconstruct all these forms of standardization, right? Not only regarding older people, but for any type of subject, when we work with the person, all these forms of stereotyping and standardization limit our knowledge about our patient. Each patient will present his own subjectivity, his own uniqueness. So, working with older people is working with any other type of patient, but considering that they are slightly more fragile, and a little more susceptible, but the issue of older people as a subject is no different from any of us **(Interview with student José).**

> (...) we always had that idea that is common sense, of thinking that older people are boring, that they always say the same things…that they just want to stay at home embroidering and crocheting…we have that stereotype of older people. An example, the first older patient I approached in my first month was called João, from the LCFOP, he is a very active person, even more active than me, he wakes up at 5 am, works in the garden, goes up and down, talk to everyone, interact with everyone (...) and you see a population that is not this stereotype that we tend to put in a single package, older people are all like that and that's it, no, it's not like that, it's completely different **(Interview with student Cristina).**

Summarizing, dealing with older people in COPH practice scenarios has enabled students to compare their own notions of aging with reality, and helped them understand that old age is a stage of the life cycle loaded with stereotypes and prejudices.

THE DAILY TEACHING OF OLDER PEOPLE'S HEALTH AND PROBLEMATIZATION AS A METHOD

The DCNM/2014 guides active methodologies as an educational resource to be used in undergraduate courses. Both the COPH PPC and teaching plan assume active methodologies as the ideal pedagogical resource in teaching, where in the student must be active in the learning process and the professor should act as a facilitator. When dealing with active teaching methods, the PPC states that:

> In this perspective, the professor needs to develop new skills to allow students to actively participate in their learning process. In this new posture, it becomes essential to assume the role of facilitator in the teaching-learning process, with a willingness to respect, compassionately listen, and believe in the learner's capacity to develop and learn in an environment of freedom and support **(PPC, 2016, p. 58).**

The guideline to develop a "new posture" only takes on meaning when we consider a previous posture that needs to be revised. If the professor is the center, the student has the role of being the passive and receiving object in the teaching-learning process. This model is called Banking Education by Paulo Freire (2018c), where in teaching is conceived as a natural process that does not demand questions or reflections. The professor acts as a content transmitter. The content is conceived as "fixed truths" and passively assimilated by students. Such a model predominated in Flexnerian teaching.

The PPC reiterates, throughout the document, that the researched medical course follows the new guidelines, making a difference in relation to the Flexnerian medical education model: "This new guideline no longer follows the classic model proposed by Flexner." (PPC, 2016, p. 8). The document presents the main teaching-learning modalities to be used in the course: 1– Problem-based learning (PBL) and Team-based learning (TBL); 2 – Problematization; 3 - Project pedagogy - Project-based learning (PBL); 4 – Action - reflection - action. Theoretical and content transmission classes are maintained and varied teaching strategies should be used and combined according to the intended learning objectives (PPC, 2016).

Active teaching methodologies are based on autonomy and meaningful learning. This concept was developed by David Ausubel (1918–2008). According to Ausubel, the student's prior knowledge as a port in which the new knowledge will be anchored. Meaningful learning is an interactive process where students actively participate in learning and build their own knowledge by reframing the newly learned data. Such a process is opposed to mechanical and traditional learning, connecting to Freire's Banking Education theory (CARRIL; NATÁRIO; ZOCCAL, 2017).

The main strategy used in active teaching methodologies is problematization (MITER *et al.*, 2008), which in turn is heir to Paulo Freire's problematizing or liberating education. The latter classified as a progressive pedagogical tendency by Libâneo (2011), is based on concrete reality and on the knowledge brought by students from their experiences. These are sources of the problematizations and must be used in the search for critical understanding and knowledge building. The teaching method is dialogue. It begins with a democratic relationship between professors and students, and both act as active subjects in the educational process.

The problematization, in Freire (2018c), is related to a reflection on praxis. Contrary to alienation, it entails an unveiling of the forces and conflicts inherent to the problem. This process has the potential to transform subjects and their realities, as far as everyone assumes a critical posture of epistemological curiosity in face of reality, which must be constantly problematized.

The COPH curricular unit is a subject that prioritizes practical experience over theoretical classes. Students go to the field to learn and approach a reality that they theoretically study in the classroom. The field consists of SUS services, in which students have direct contact with teams, users, and the health reality, and these experiences provide material to be problematized and support knowledge building. According to the teaching plan,

> The **Active Teaching Methodology** will be used throughout the module: Problem-Based Learning, Problematization, Group-Based Learning, Inverted Classroom, Task Based Learning, Clinical Case Based Learning, Clinical Care Based Learning, Fishbowl, Trigger Films, Artistic Expression: dramatization, drawing, painting, etc.. (**Teaching plan, 2016, p. 6, emphasis added).**

A variety of didactic strategies to be used throughout the classes is consistent with the literature on the topic, which in turn presents reports on the use of plays, narratives, tai chi chuan, films and visits to places attended by older people. The authors indicate that different teaching strategies are important in raising students' awareness on a better approach to older people (NOGUEIRA, 2014; CARVALHO; HENNINGTON, 2015). There is no consensus among students on the use of active teaching methodologies, which led one of the students to mention a "mixed" methodology:

> It was a mixed methodology, so at times we had active methodologies, for example, TBL, that learning based on problems in teams, we also had conversation circles. Storytelling, (...) I think it's cool, because the subject is extensive, although we have a notion from the other subjects… it is still an extensive content so it softens and makes things a little lighter, which does not imply disengagement or learning less. On the contrary, it makes it more pleasant, and as it is mixed, we had some theoretical classes, and theoretical classes were also very good because usually the professor sent the material before so that we arrived in class with some notion, and he went through the main points of that chapter in class **(Interview with student Cristina).**

Teaching methods by problematization, which predominated in the theoretical classes observed throughout the research, are tools used in very popular active methodologies, known as PBL and TBL. They have been taking increased space in medical courses to stimulate the students' autonomy, decision-making capacity, and maturity (MITER et al, 2008).

One of the assumptions of teaching through problematization is to start from social reality. This provides the material to be problematized to uncover solutions that must be returned to reality, in a dialectical action - reflection - action process (MITER *et al.*, 2008). However, in the COPH subject, the movement to leave and return to reality has not assured the praxis. This is because, despite having a significant workload in the practice scenario, the problematizations worked on the TBL and PBL methods throughout the theoretical classes do not start from situations experienced by students. On the contrary, these experiences are not discussed in the space of theoretical classes; thus, maintaining the theory-practice dichotomy:

> (...) So, I think maybe we need to bring this reality from here, to discuss in the classroom. For, example, I, as a doctor, work at the unit, what am I going to do with this? (...) I think it's more advantageous to bring a clinical case (from practice), and not teach a class... I don't know... PBL style, of urinary infection (...) **(Interview with student Alice)**.

Despite the effort to implement active methodologies, the classes continue to be guided by pre-established content. As students do not find space in theoretical classes to problematize the difficulties discovered in their practical experiences, they lose out on a precious learning opportunity through problematization. We therefore return to Freire, as education does not refer only to teaching content, but also to teaching how to think, reflect and interpret the experienced world, and "think right" (2018b, p. 28). It entails overcoming the student's naive curiosity, and transforming it to epistemological curiosity and making them capable of problematizing reality in its multiple determinations.

Problematization and PBL are the most used active methodologies in Brazil. They have been defended for their dynamic and complex character, for valuing all the actors involved in the educational process and for bringing teaching closer to community services and needs. Guided since the DCNM/2001, the active methodologies were implemented by some educational institutions as the only mechanism to adapt to the desired medical education changes, which led Gomes and Rego (2011) to classify them as a "panacea".

One of the principles of active methodologies is autonomy. The DCNM/2014 indicates that students should have intellectual autonomy in their own learning, take responsibility for their own

training, realize learning needs, and seek knowledge. This is a characteristic of liberal pedagogical tendencies. These tendencies are related to capitalism values, appraise individualism and hold people responsible for their own vicissitudes, despite the unequal social conditions from which they originate (AMÂNCIO FILHO, 2004; LIBÂNEO, 2011).

Hence, it is important to clarify the concept of autonomy. In the present study we understand autonomy not as freedom to act according to one's own desire, but as the result of a reflective exercise that presupposes critical analysis capacity, an ethic. Ethical and committed positioning in the face of reality requires subjects to critically position themselves in the face of this same reality, that is, human action in the world is limited by the lack of critical reflection (FREIRE, 2018a, 2018b, 2018c).

In this reflective exercise, the position taken by the professor is of paramount importance. The role of the professor is not only restricted to allowing students to act. It entails stimulating their curiosity, placing them in a condition to critically read reality. According to Freire (2018b), it is through dialogical and democratic education that students are able to exercise their autonomy. Class observation showed that the attitude of COPH professors provides this autonomy to students in a practical learning scenario. However, in the theoretical classes, with predominance of content exposure, there is little time for dialogue.

In the practical learning scenario, there were situations that encouraged students to maintain an active and autonomous posture, and in some of these situations the students them selves showed some resistance to decision-making possibly due to lack of confidence. According to Gomes and Rego (2014), this attitude on the part of the students may be due to previous education, which functions on more heteronomy than autonomy, and fails to stimulate students' critical and active posture. The professor emphasizes the importance she attributes to autonomy in the subject:

> I think what draws attention to this subject is precisely the autonomy it gives to the students, so they have their own patients, so which exam will I ask for, why will I ask, why it is important for the patient, why is it important to discontinue this medication. It was something that didn't exist in my education, in my education these were peculiarities and here this is essential for the student's training itself **(Interview with professor Luciene).**

Although the PPC guides the preferential use of active methodologies; however, there is no consensus on its use in the different units of the medical course curriculum. The coexisting of different teaching methodologies in the researched course point to different pedagogical trends and education conceptions and reflect tensions and disputes that permeate current medical education (KOIFMAN, 2001; NOGUEIRA, 2014; 2009; GOMES; REGO, 2014; 2011). Such tensions are reflected among students, who feel overwhelmed by the excess of material, readings, assignments, and evaluations.

According to the analyzed PPC, the modular structure of the curriculum allows for a better distribution of evaluations, and "(...) avoiding undesirable stress that students are subjected to during the evaluation period of several curricular units, which are developed in a concomitant and dissociated way." (PPC, 2016, p. 51). However, the reality is the accumulation of evaluative activities, which engenders stress among students, and the option to dedicate themselves to the study of the subjects that use traditional and expository classes and that use tests such as evaluation, to the detriment of subjects such as older people's health, which proposes active methodologies and formative evaluation.

According to the DCNM/2014 and the PPC, the assessment must be formative and procedural. Moreover, it should aim at improving the student, who should receive feedback from the professor in a timely manner without fail. Everyone can learn under the right conditions; in this sense, the fundamental objective of an educational assessment is improvement of the learning process. Moreover, an educational assessment must emphasize the formative approach that favors the student's development. (PPC, 2016, p. 222).

As for assessment, the COPH teaching plan states that each teaching objective must be assessed consistently with its purpose. Students are assessed using the following tools: 1) Reflective Portfolio (electronic portfolio, in which students reflect on practices and have feedback from professors); 2) Mini-Cex (assistance provided for older patients by the student); and 3) Long Case (dissertation on the older patient case assisted by the student). In active teaching methodologies, it is expected that the students' capacity to evaluate reality encompasses their own posture; they are therefore responsible and

capable of self-assessment (MITER *et al.*, 2008). However, this maturity was not observed in the students when dealing with evaluative issues, as the interviewed professor says:

> (...) I realize the moment you tell them: "you are being evaluated", they change. Apart from this mechanical part, we realize that there are difficulties (...). The first appointment is very scary. So, nobody wants to be the first to do the Mini-Cex, right, every now and then a brave man appears: then I will! But most want to be the last, they want to see how the professor evaluates them **(Interview with professor Luciene).**

Teaching that takes place using banking and traditional education approaches, in which assessment is related to punishment, tends to establish dichotomous and authoritarian relations between professors and students. Students are seen as objects, while professors are subjects of the educational process. In medical training, this model tends to be reflected in the graduates' professional posture in establishing authoritarian and asymmetric relationships with patients and staff (GROSSEMAN; KARNOPP, 2011).

The students' discourses reaffirm the discomfort generated by the evaluation and point to the remnants of traditional teaching, centered on the figure of the professor, who uses evaluation as an instrument of power and authority reaffirmation:

> I think one point that bothered me in the subject was that we had to go through the Mini-Cex process, where we saw a patient, the professor analyzed us and there were several steps that we had to follow with the patient, and that were evaluated. (...) One of the students, the first who did the Mini-Cex, cried inside the clinic when Celio gave her feedback, she cried **(Interview with student José).**

Formative assessment, characteristic of active methodologies, reverses the notion of hierarchy and punishment to reinforce learning. Just as the implementation of active teaching methodologies, the use of formative assessment must be an institutional position. It is crucial for professors to be equipped with necessary skills. For example: planning the test as a learning moment for the student, effective student feedback training, prioritization of practice within the service reality (instead of laboratories), and assessment of the student's autonomy (SOUZA, 2011).

The researched PPC included formative evaluation guidelines; however, as it coexists with traditional evaluations that work through cognitive quantification, there is no clear institutional position on the topic, and it is up to the students to adapt to the choice of each professor. The same is true for didactic practices, indicating the coexistence of different pedagogical trends and education and science conceptions.

Cecílio-Fernandes and Carvalho Filho (2017) noted that Brazilian medical education has undergone changes to promote training that is more appropriate to SUS reality, and closer to the population's health needs. However, most teaching methodologies used as a strategy in the modernization of Brazilian medical education were imported from other realities, such as the United States, Canada, and the Netherlands. Freire (2018a, p. 30) states that "There are no neutral techniques that can be transported from one context to another".

Considering the data collected in this study, the effectiveness of the implementation of active methods in the COPH subject can be questioned, since there is no break between subject division and traditional classes in the analyzed curriculum, which has a large theoretical and in-class workload, making it impossible for learning to be conducted by the student and mediated by the educator. To summarize, while there is discourse in the documents on the use of active methods, there is no radical implementation of the approach that supports the methods like problematization. It is, therefore, a challenge to bridge the gap between discourse and practice.

FINAL CONSIDERATIONS

The texts of the analyzed documents, the students' and professors' reports, and the observed educational practice, in our analysis, reveal tensions between the skill-based curriculum and PBL. It

becomes critical to pay attention to advancements in medical education to bridge the gap between theory and practice when teaching on older people's health and to present scenarios in which the presence of older people can be problematized as other possibilities of living old age.

It is important to highlight the context of university document production, which must adhere to policies that regulate and evaluate medical courses in the country. Curricular policies have been formalized as guidelines for educational practices; however, these norms are not absorbed by courses in a harmonious and coherent way, since educational institutions are social spaces, which materially and symbolically reproduce the society's contradictions and disputes. It is in this context that the curriculum takes on meaning and legitimizes what should be assumed as formal knowledge in the institution.

In this study, varied education and science conceptions prioritized throughout health education result in different assistance models. Education conceptions that value dialogue, problematization, social context, and the historicity of knowledge tend to produce symmetrical and dialogical interactions between the actors involved in the educational process, all conceived as subjects. Such interactions, when focused on healthcare, tend to be reproduced by graduates as a form of care.

On the other hand, traditional and banking approaches to education, which disregard the historicity of knowledge, produce vertical and authoritarian relations between professors and students and distance them from one another. When transposed to care, such approaches tend to reproduce authoritarian and asymmetric relationships, from a decontextualized view of the population's health-illness process, and create distance in the physician-patient interaction. This distance is nothing more than the reproduction of the divorce between science and the world of life, as denounced by phenomenology.

In short, the methods that permeate educational practice are very important to achieve educational objectives. However, the cement that supports the educational building are the multiple relationships established throughout the learning and knowledge building processes, in the relationships between professor and student, between them and the educational institution, and between all people and the society in general.

In medical training, aging needs to be seen as a process that, whether or not associated with good health, is experienced not only by older people, but also by students and professors. Like Drummond, in the epigraph we have quoted in this article, "old age matters little", as long as we educate ourselves to deal with it as a stage of the life cycle to be experienced and understood in all its complexity, especially when dealing with older people's health.

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