MEDICAL EDUCATION IN GERIATRICS: BRAZILIAN AND GLOBAL CHALLENGE

Educação Médica em Geriatria: desafio brasileiro e mundial

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ABSTRACT

The significant aging of the world population increases the demand for professionals with adequate training to care for the elderly. There is shortage and unsatisfactory distribution of health professionals worldwide, and so occurs in relation to professionals trained to care for the elderly. The deficiency of Medical Education in Geriatrics is a global phenomenon, since only about 40% of the countries refer some content of Geriatrics in undergraduate Medical courses. Even though Brazil has advanced legislation in terms of elderly policy, less than half of the medical courses offer Geriatrics disciplines/modules or content related to aging, besides the lack of training activities for teachers, specialists and researchers in the field. This situation is worsened by the fact that in this population group there is prevalence of chronic-degenerative diseases, specificities in the manifestation of diseases and, consequently, their handling, emphasizing the need for a biopsychosocial model with the performance of a multidisciplinary team trained for this purpose. Despite the efforts of several institutions and societies around the world involved in establishing a minimum Geriatrics curriculum in Medicine courses and qualifying professionals to work in the area, the problem is aggravated by the speed of population aging. The challenges are many and there is a lot of work to be done. The creation of feasible and sustainable models of care for the elderly should be the goal of governments and of all of those who work in the field, not only in Brazil, but all over the world.

KEYWORDS: aging; Medical Education; Geriatrics.

RESUMO

O acentuado envelhecimento da população mundial aumenta a demanda por profissionais com formação adequada para o atendimento da população idosa. Há carência e má distribuição de profissionais de saúde em todo o mundo, situação também vivenciada pelos profissionais capacitados para o atendimento ao idoso. A deficiência da Educação Médica em Geriatria é um fenômeno mundial: cerca de 40% dos países referem algum conteúdo de Geriatria nos cursos de graduação em Medicina. No Brasil, apesar de existir uma legislação avançada em termos de política do idoso, menos da metade dos cursos de Medicina oferecem disciplinas/módulos de Geriatria e/ou conteúdos relativos ao envelhecimento, além da escassez de atividades de formação para professores, especialistas e pesquisadores na área. Essa situação é agravada pelo fato desse grupo populacional apresentar grande predominio de doenças crônico-degenerativas, especificidades na manifestação das doenças e, consequentemente, no seu manuseio, enfatizando a necessidade de um modelo biopsicossocial com atuação de equipe multidisciplinar capacitada para esse fim. Apesar do esforço, em âmbito mundial, de diversas entidades e sociedades envolvidas na área em instituir um currículo mínimo de Geriatria nos cursos de Medicina e em qualificar profissionais para a atuação na área, o problema agravava-se pela rapidez do envelhecimento populacional. Os desafios são muitos, e há um grande trabalho a ser realizado. A criação de modelos viáveis e sustentáveis de cuidados para idosos deve ser o objetivo de governantes e de todos os que atuam na área, não somente no Brasil, mas em todo o mundo.

PALAVRAS-CHAVE: envelhecimento; Educação Médica; Geriatria.
Brazil is currently experiencing the fast aging process of its population: according to projections, people aged more than 50 years will constitute the group presenting positive growth rates after 2045, unlike the other groups. The contingent of the very old (80 years old or more) will stand out in this growth, that is, there will be an overaging of the Brazilian population, followed by the gradual total population reduction.

Projections show that, in 2050, only 6 countries will have 10 million or more people aged 80 years old or older: China (99 million), India (48 million), the United States (30 million), Japan (30 million), Brazil (10 million) and Indonesia (10 million), which will correspond to 57% of the entire world population in this age group.

This tendency will lead to the increasing demand for welfare and care benefits, and, consequently, will affect the health system; it will also change the epidemiological profile, with prevalence of chronic-degenerative diseases in relation to infectious and contagious ones; and will lead to the presence of multimorbidities, increasing the complexity of care. The overaging of the population will also lead to the increasing search for care, improvements and adaptation in housing, public security, transportation conditions, among others, which will certainly increase the costs.

The shortage and poor distribution of health professionals are worldwide phenomena, made worse by demographic and epidemiological transitions and by the redistribution of the incapacity load. It is estimated that at least one billion people do not have access to a trained health professional, and the World Health Organization (WHO) calculates a 15% deficit in the total number of physicians and nurses all over the world.

The progressive population aging increases the demand for the training of specialized professionals, and/or with basic formation for the proper care of the elderly population.

This population group presents peculiarities in the manifestation of diseases, which are grouped in specific scenarios called “geriatric syndromes”. The evaluation of functionality, the need for constant contact with family members and caretakers and the experiences with loss and death situations impose the need for a biopsychosocial model in order to provide proper care for the elderly population.

Margaret Chan (2015), director of WHO, defends that the health needs among the elderly are the result of experiences of life, being mostly changeable, considering the cycle of life for the understanding of the aging process.

Training health professionals for the adequate care of the geriatric population is an urgent educational challenge for developing countries, including Brazil, since most students will work with elders in the health system, both public and private.

Therefore, it is necessary to have a holistic view, since care involves both the dependent elder and the one at risk of dependence, taking it consideration their functional capacity and autonomy.

A survey conducted in the United States showed that 45% of the medical appointments with the elders were conducted by family doctors and general doctors.

A study conducted in 9 societies of North-American specialties showed that 30 to 60% of the patients cared for by their members were 65 years old or older.

The Medical student should be able to pay full attention to the elder, therefore requiring Gerontology subsidies and the work of an interdisciplinary team, which gathers professionals with different skills – since one professional alone does not have all the necessary skills to properly care for an individual.

The recommendation of WHO, especially in developing countries, of implementing contents referring to aging and the elders’ health, reinforces the need for skilled professors for this purpose.

Brazil has a legislation for aging that, for decades, has been developed by contemplating the training of human resources in the fields of Geriatrics and Gerontology, as is the National Elderly Policy legislation (Law n. 8.842/1994) and the Statute of the Elderly (Law n. 10.741/2003), which disposes of the inclusion of minimum content related to the aging process in the curriculum of several levels of formal education.

The law is advanced, and institutions and governmental sectors involved with the theme aim at its fulfillment, but the changes and its implementation are slow, in contrast with the fast population aging process. The lack of skilled professionals is also aggravated by bureaucratic issues that need to be trespassed, and, essentially, by the wrong concept that this population group does not require a special approach.

The urgent need for skilled professionals to work in the field of aging should not generate inconsistent training activities, since this will lead to a higher number of professionals that are unable to work with competence and skills in this field.

Studies have shown that, in graduation, the specific round trainings in Geriatrics prepare the student to care...
for the elderly patient more adequately, in comparison to training in Internal Medical services or other specialties. 17

In Brazil, the matter of contents related with aging in graduation Medical courses is intriguing. Until the late 1970s, there was no formal training in Geriatrics. In this period, the first department of Geriatrics was created in the country, in Pontifícia Universidade Católica of Rio Grande do Sul (PUCRS), followed by another one developed in Universidade de São Paulo (USP), and, afterwards, in Universidade Federal do Rio Grande do Sul (UFRGS). There was a gradual expansion of the programs, 18 however, the situation is far from ideal.

According to the study by Pereira et al. (2010), less than half of the Medical schools participating in the analysis (42%) included Geriatrics and disciplines related to aging in their curriculum, without specifying when they will be present in the course (in the basic cycle or during the internship). 19 The study was conducted when there were only 167 Medical courses in the website of the Ministry of Education (MEC), and, despite its limitations, the study shows a worrisome reality, especially if we extrapolate these data to other health professions.

Cunha et al. 20 assessed the offer of mandatory or elective disciplines in the field of Geriatrics in 180 Medical courses in Brazil, in 2013, registered in MEC’s system. At the time, only 41.1% of the courses offered these disciplines; proportionally, the Northeast and North regions were the ones with the highest percentages – 36.9 and 37.5%, respectively. The Southeast and South regions, despite having more Medical schools, presented the lowest percentages – 27.0 and 22.6%, respectively. In the Center-West region, 25% of the schools met this criterion, however, with fewer Medical courses. The study also showed that in most courses that had the disciplines, they were mandatory, and not elective.

Finally, the study points out to the need for increasing the offer of these disciplines, so that it is possible to handle the fast aging of the Brazilian population. 20

Brazil has currently 271 Medical courses (CFM, 2016); there are no official data about which of them present content of Geriatrics and/or about aging or specific stages in the period of residency. 21

The National Curricular Guidelines (DCN) for Medical Graduation courses in 2001, and then in 2014, defined the need to train the students to care for the individual in the different cycles of life, stimulating the interdisciplinary work and the early insertion in the health network; however, in both cases there is no definition of specific contents. 22,23

However, in Revalida (revalidation of Medical Degrees obtained abroad) there is a Curricular Correspondence Matrix, which is a responsibility of the Education and Health Ministries, defining the skills in a minimum content in the field of Geriatrics for this purpose. 24

There is a Law Project (LP) in National Congress referring to to the mandatory inclusion of Geriatrics in Medical courses, both public and private, with minimum of 120 hours (LP n. 0363/2009). The project is considered to be an advancement, since it defines a minimum time load dedicated to the theme; however, it does not establish its minimum contents, which may lead to the lack of uniformity in the curriculum of several Medical courses in the country. 25

Being aware of this fact, and in its role to stimulate the dissemination of knowledge in the aging field, the Brazilian Society of Geriatrics and Gerontology (SBGG) instituted, in 2012, a Commission to elaborate the guidelines about the content of disciplines/modules related to aging (Geriatrics and Gerontology) in Medical courses, which defined a minimum content in the field and the skills to be acquired by the student, both in the basic cycle and during residency. It was published in 2014 in SBGG’s official scientific publication agency. 26

Because of the constant evolution of Medicine and Medical Education, it is necessary to periodically review this document, considered a structural step in the definition of Geriatrics and Gerontology education in the country.

The problem of forming professionals in the field becomes stronger when we asses the postgraduate programs in Brazil. The stricto sensu programs in the aging field, as well as those regarding the elders’ health, began in the 1990s and are inserted in the Interdisciplinary area. In 2014, there were only 10 programs related to aging in a total of 312 interdisciplinary programs. On the other hand, there are multiple lato sensu postgraduate courses(specialization courses, not medical and multidisciplinary residencies) in Geriatrics and Gerontology, reaching a total of 68 courses in 2014 (informations provided by Anita Liberalesso Neri, in the Education Forum of Geriatrics and Gerontology, in the XIX Brazilian Congress of Geriatrics and Gerontology, in Belém (PA), in April, 2014).

The difficulty presented here results from the fragility and superficiality of the Resolution from the National Council of Education/Higher Education (CNE/CES), in April 3, 2001, 27 which allows courses to be available, in many cases, being coordinated by professors without
specific skills in the aging field. This leads to the inadequate training of the professionals who will work in this area.¹⁶

Medical Residency, which is another form of postgraduate education, is the gold-standard in the specialization of health professionals. There are 135 vacancies/year in Medical Residency, programs of Geriatrics registered in MEC, with duration of two years, 2,880 hours/year of training in service (supervised activities), whose pre-requisite is 2 years of Residency in Clinical Medicine.²⁸

In this matter, SBGG aimed at the minimum standardization to train geriatric physicians and, in 2010, created a Commission to elaborate the guidelines referring to Medical Residency in Geriatrics, published in 2011, in the Official Scientific Publication of SBGG.²⁹

For the adequate planning related to training professionals in the field, it is necessary to know which would be the ideal number of Geriatrics experts in Brazil.

In an editorial published in the journal of the American Geriatrics Society, Fried and Hall (2008) write about this controversial theme that has raised many discussions, both in developed and developing countries. The author defends that 25 to 30% of the elders are considered complex, therefore requiring follow-up of a professional specialized in Geriatrics being that one geriatric physician can work with an average of 700 to 1,000 complex elders. By extrapolating these numbers to Brazil, which has about 23 million elders, there will be about 6 to 7 million elders who require a common geriatric follow-up. Therefore, the country needs from 6 to 7 thousand geriatric physicians to care for the elderly population, besides professionals skilled to work with management, research and education in the aging field.³⁰

On the other hand, the elders who do not present with complexity require skilled professionals in the basic network to work with them properly. This fact reinforces the need for training, not only of medical professionals, but also the entire interdisciplinary team.³¹

The number of vacancies in Medical Residency, in Geriatrics is below the needs of graduation of geriatric physicians in Brazil. At the time, there is a phenomenon of open vacancies in several programs. This is a probable result of the deficiency of some programs, and/or because the specialty, for several reasons (lack of civil service examinations, lack of conditions to work with the specialty, inadequate pay by health insurance plans etc.), has not been seen as attractive. It could also be because of the unawareness about the specialty by most students, since a significant number of Medical courses do not have specific content of Geriatrics and Gerontology.³¹

These issues contrast with the fact that no other medical specialty has developed such wide and successful programs aiming at the improvement of quality of life of the elderly, not only improving the care for this population in the hospitals, long-stay institutions and households, but also preventing general conditions, implementing the research in the field and fundamentally reducing the costs of care.³² Geriatrics is one of the most promising medical specialties in the world.²

In August, 2016, 1,365 physicians were registered as experts in Geriatrics (geriatric physicians) in the Federal Council of Medicine (CFM), and this data does not represent the real number of geriatric physicians in the country, since many of them have not registered their diplomas in this council.¹³

The Mixed Commission of Specialties (CME), composed by the CFM, by the Brazilian Medical Association (AMB) and by the National Commission of Medical Residency (CNRM), consider the following as Geriatrics experts: physicians who developed Medical Residency, in Geriatrics (approved by CNRM); and/or doctors approved in a public test as experts. This test is a responsibility of the Commission of Expert Title in Geriatrics (CTEG), from SBGG, and must be taken at least once a year, according to AMB rules, which is in charge of issuing the expert certificate.¹⁴

CTEG is a permanent SBGG commission that organizes, publicizes, coordinates, develops and judges the tests to obtain the expert title. These tests are guided by the Resolutions of CFM, by the guidelines of AMB and by the determinations of CME.¹⁴,¹⁵

In 2013, the program “Mais Médicos” was instituted (Law n. 12,871/2013), aiming at the formation of human resources in the medical field for the Unified Health System (SUS). The main goals in the field of education are: “to improve the medical training in the country”, generating more “experience in the practical field during the graduation process”, the strengthening of the “permanent education policy with the integration of teaching-service”, by the supervision of medical activities by Higher Education Institutions (IES). It also aims at improving the doctors’ training to work with public policies in Brazil and in the organization and functioning of SUS”. These and other objectives, in order to be reached, pass by the reordering of the offer of Medical courses, of vacancies for Medical Residency, and new parameters for the medical training in Brazil.¹⁶

Despite being an advancement, the creation of this program was a target of criticism, since medical institutions that represented the physicians, as well as IES, were not consulted properly, therefore not participating in the
elaboration of the program actively. The creation of medical schools and vacancies in Medical Residency, without clear criteria, in an excessive manner, with deficient structure, without preceptors and professors skilled in the different areas – including the Elderly Health Care –, and the hiring of foreign professionals without the revalidation of their diplomas, also compromised the adequate execution of the program.31

With the population aging and the epidemiological transition, the health costs increase, which makes it difficult to promote equity, one of SUS’s basic principles. Taking care of the poorer and older population, with multimorbidities and incapacities, imposes changes to the clinical care model and to the formation of the health professional.6,7,37

The problem of medical education in Geriatrics is a global phenomenon. Mateus-Nozal et al., in a systematic review, showed that only 41% of the countries report having some content of Geriatrics in the Medical graduation courses. In Europe, despite the gradual increase throughout the years, the mandatory teaching of Geriatrics occurs in only 62% of medical schools, being taught by specialists in only 50% of the schools in Austria, 50% of the schools in the United Kingdom, 21% of the schools in Spain and 65% of the schools in Germany, which makes the problem worse. In the United States, only 49% of the medical schools follow the orientation of the Institute of Medicine regarding the presence of nine or more geriatric physicians as professors in each course. Besides, only 21 to 65% of the people in charge of teaching Geriatrics in Medical courses are geriatric physicians.38

Despite the European effort to institute a minimum curriculum of Geriatric Medicine in Medical graduation courses, specifying the minimum skills of each student in the field, medical training is regulated by different institutions (Ministry of Health, medical associations or universities), which leads to a great variability in the contents.2

The clear aspect is that experts in Geriatrics need to train research doctors in the field, encouraging younger physicians to become clinical doctors and professors, following the academic career.39

The European Academy for the Medicine of Aging, working to resolve this issue, created courses to train “trainers” in the 1990s, addressed to training professionals with scholarships selected by the societies of Geriatrics from many countries, lasting one week, for four periods, for two years. These societies are located in Europe, in South, Central and North America, in the countries of Eastern Europe (including Russia), in Hong Kong and in the Middle East.2

Success is demonstrated by the self-evaluation of the participants, who reported updating their knowledge, recognizing their fragilities and the need for qualification in the field, besides the fact that more than 50% of the participants of the course became professors of Geriatrics in famous universities all over the world, in cities like Basel, Bordeaux, Brussels, Helsinki, Lisbon, Lyon, Madrid, Paris, Rio de Janeiro, São Paulo, San Jose etc.2

This result encouraged the creation of similar courses by the Latin-American Academy of Elderly Medicine, in 2002, and by the Aging Medical Academy in the Middle East, in 2004.2

Afterwards, in 2011, the International Association of Geriatrics and Gerontology (IAGG) organized a shorter training for the “trainers” (two-day long) in Beijing, Taipei (twice), Hong Kong and Seoul. Other courses are scheduled for the future, as a responsibility of IAGG and the Asian Aging Academy. WHO and IAGG suggested that the next targets be the Southeast of Asia and Sub-Saharan Africa.2

Many other initiatives for training and recycling of professionals in the field are being carried out around the world in the different segments of elderly care. These projects promote the training of different health professionals, aiming at improving the assistance for this population group.2

As observed, there are many successful initiatives in Geriatrics education; however, geriatric physicians have to overcome some challenges to organize, harmonize and promote the specialty in a scientifically adequate manner. Three major issues must be observed for that goal to be reached. They comprehend the need to:

- Attract young colleagues with academic potential for the introduction of the Geriatrics discipline. The exposure, in the pre-clinical stage, to elders in the community or institutions increases the motivation for them to become geriatric physicians; in parallel, the exposure to teaching specific skills in the first years of school improves the attitude of medical students regarding the elderly;
- Train an increasing number of health professionals for elderly care, be it in the community or in the other health care services addressed to this population, besides instituting coordinated programs based on previous successful experiences; and
- Coordinate training efforts, be it for geriatric physicians or colleagues from other specialties, regarding the care of elders who are malnourished, with multimorbidities, fragile or with incapacities.2
It is important to mention that the knowledge about aging required from the physician can be summed up in a model of skills with three layers:

1. Skills required for all physicians;
2. Skills required for physicians working with fragile elders in their daily practice; and
3. Skills required for physicians specialized in Geriatrics.40

With public policies and adequate services, aging becomes a valuable opportunity for individuals and for the entire society. The efficacy of health systems for the elderly population requires the presence of health professionals with basic formation in Geriatrics and Gerontology, besides training in full health systems, including the work in a multidisciplinary team, information and communication technologies.7

The challenges are many, and much work should be done all over the world.2 The creation of a viable and sustainable model of care for the elderly in Brazil, that can be extrapolated to other Latin American countries, should be our main goal. The main point is to know if there is a social will and financial viability to reach this purpose.18 We have a big responsibility in this process, which demands urgency and efficiency to face these issues, especially the adequate formation of professionals to care for the elderly population with efficiency, competence and rationality of costs.

REFERENCES


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