Medical schools that received the PROMED (program for the encouragement of curricular changes in medical courses)—Preconditions and change process

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ABSTRACT

Since the Curriculum Guidelines (CG) which were created in 2001 and PROMED (Program for the Encouragement of Curricular Changes in Medical Courses), several schools have applied for this incentive. Medical Schools (MS) have faced important changes in their curriculum throughout the years. The purpose is to verify if medical schools that received PROMED already had a historical of curricular changes. Several interviews, which were carried out with PROMED coordinators, were recorded, transcribed and analyzed according to the Bardin's content analysis technique. Later, these interviews were later categorized into nine themes. This paper analyses the Medical School History category which encompasses three subcategories: existence of a former changing history; need to overcome the model and changing period. It is highlighted that medical schools that received PROMED had a previous changing historical which was sometimes located in anti-hegemonic niches. It is noticeable, however, that such changes were not enough to affect the comprehension of healthillness process and its consequent results. PROMED was, effectively, the reference for medical schools implementing the C.G. which represents, now, a benchmarking for all new and old schools in the country.

Keywords: Curriculum Guidelines; Medical Schools

1. INTRODUCTION

Medical Schools (MS) had significant changes in their curricula over the years. And these structural changes in

the way of teaching the individual to become a physician enable us to observe new attitudes towards the care of human beings.

In Brazil, the first medicine schools arose in 1808 when the king Dom João VI authorized the opening of the Medical Schools in the States of Bahia and Rio de Janeiro [1].

There are five distinct periods throughout the history of medical schools in Brazil. The first period started with the creation of the first school, lasting up to 1960. In that time, Brazil had 29 schools, of which only four were private, of which three were philanthropic schools [2]. The second period started in 1961, lasting up to 1971, when over 43 schools started to work, of which 24 are private schools [3], increment held in order to ensure the Flexnerian model (teaching focused for the biological determinism). The third period started in 1972, lasting up to 1990. In such period, nine schools were created, of which four are private schools. Such period is characterized by the redefinition of the way of thinking about teaching. From 1991 until 2001 34 schools were built, of which 23 are private schools. In such period, we can notice a wide expansion of private schools. And the last period, started from 2002 until now, was marked by the implementation of the Curriculum Guidelines, with the creation of several programs to encourage curriculum changes including the PROMED (Program for the Encouragement of Curricular Changes in Medical Courses) and Pro Health. Thus were created more 61 schools, of which 48 are private. In 2009 there were 176 schools operating in Brazil [3].

Public schools are government-funded, and no monthly payments are charged. Private schools are held through the monthly financial contribution, charged to students. Philanthropic schools receive government assistance by tax exempt in return for keeping a percentage of monthly payments and free activities. Fees are charged to students. Although there are legal distinctions between them, we consider them private because they are not held by the government and also generate income, even if this income is not accounted as a profit [4].

In recent decades, there have been significant changes in medical curricula in several countries around the world. These curriculum changes are a result of signifycant changes in the paradigm of health care, beyond the individual's care for the promotion of health in the community [5].

The training of future physicians are reoriented, in addition to student-centered education, emphasizing problem-based activities within an integrated program, rather than a passive acquisition of knowledge and transmission of content without a proper context, characteristic of traditional medicine. New methodologies used in medical education based on the community and problem-based learning (PBL), have received great impetus as essential in the development of new medical curriculum [5].

In Brazil, for over 30 years there are discussions on medical education and arguments that lead to the need for change. Both the Brazilian Ministry of Education and Culture (MEC) [6], as National Interagency Commission for Evaluation of Medical Education (CINAEM) discussed this situation and found that the physician was not formed with the minimum competency to meet the demands of the population. Since the problem was discovered, an attempt was made to build tools to generate change processes [1]. 95% of existing medical schools in 1991 (80 of the existing medical schools, 77 participated in the first stage) voluntarily participated in the evaluation [7].

However, only in 2001 the changes really start to happen from the diagnosis of National Interagency Commission for Evaluation of Medical Education (CINAEM). We have detected that the physician is not formed with the minimum competency to meet the demands of the population. It is expected that the medical school are enable to graduate physicians to meet the demand with social and ethical stance developed in accordance with the health needs of the population [8].

With this, the medical training came to be viewed in the social area. This visibility created a tension on the results of medical works versus the rights of patients in the 1990s, building an understanding of health as a citizen's right and duty of the State. Thus it is proposed to change the focus of the organization of health services, in order to formulate policies that could produce health from the state of law.

This organization has democratized the discussion about the need of changes, re-structuring along the proposed construction of the Curriculum Guidelines (CG) before the Brazilian Ministry of Education and Culture. In 2001, Curriculum Guidelines were approved with the intention to change the course of health until 2004, which is a feature of the new Brazilian model of building a new profile [8]—the role of civil society. However, the change in medical schools is slow and has many difficult- ties [9].

In some universities the experiences in the community had been very specific, identifying the new formation of the physician, because such universities had applied some points in their curricula that have been implemented by the CG.

The coordination of various movements against the hegemony in health in the 70 and 80, constituting a social actor called collective movement for health reform. It is this movement that wins the inclusion of a new thought: public, universal, hierarchical in order to build a health system [9].

In 1990, the Organic Law on Health (Law No. 8080), which was created to stimulate and manage the process of training health workers, with the profile that meets the needs of the Brazilian Universal Healthcare Program ("SUS"), health courses need to tailor their teaching approach, encouraging the articulation of knowledge in promoting practical activities throughout the course in all types of health facilities [10].

The CG require the training of professionals, especially physicians, with comprehensive social vision and technically able to provide continuous care for the community [11]. The CG's purpose for the medical courses is to build academic and professional skills and abilities to work with quality and solution in the Brazilian Universal Healthcare Program ("SUS") [11]. The education scenarios should be diversified by adding to the process, in addition to health, educational and community facilities. The care practices can be performed in the outpatient clinics, in the community or at home, encouraging student' active interaction with the public and health professionals to take place since the beginning of the training process, providing the student to work with real problems, assuming increasing responsibilities as a provider agent of care compatible with their degree of autonomy [11].

In 2001, PROMED was created in a joint initiative by the Brazilian Ministry of Health and Brazilian Ministry of Education and Culture, which aimed to provide financial support through the presentation of projects in the public bidding [1,11], for the medical schools that wanted to voluntarily adjust their teaching processes of knowledge production and services, and to train physicians to meet the appropriate real health needs of the population [1,11].

A large number of schools that received PROMED had curricular experiences in community activities and activities held with other programs.

The strategy to reach the goal of change should create

favorable conditions. So, the institutions of higher education should adopt teaching practices, research and health care attuned to the paradigm of wholeness. Thus, three themes were proposed: theoretical orientation, practice scenarios and pedagogical approach, each one with specific vectors [11].

For the new model of learning, the relations of partnership between universities are very significant, and also the community groups and services in order to ensure the planning of the teaching-learning process, focused on prevalent health problems [11].

The production of knowledge according to the needs of Brazilian Universal Healthcare Program ("SUS") intends that schools have high production-oriented research needs of primary care, without prejudice to the pure research and technology. It is necessary that schools have a strong interaction with the health services in the area of production and evaluation of clinical protocols, innovations in management and cost/benefit analysis. An understanding of health and disease should lead curricular strategies, so that future physicians are socially committed before the confrontation of population health. These considerations should be stated in the structure of the course curriculum, but should not be construed as a new discipline, but as foundations of the curriculum, discussed over the course [12].

According to Da Ros, 2004, there are three levels of difficulty for changing; external structural (involving international and national capital), internal structural (social) and situational (gratification and hiring of teachers, lack of time dedicated to meetings, ghettos' structure, basic-clinical segregation, teachers who do not believe in education) [13].

PROMED was provided for its execution within three years, with half-year financial plans of R\$200,000.00 (two hundred thousand reais). To enroll in the program every education institution shall submit a technical and financial proposal, which shall be evaluated by a committee. The initial proposal contemplated at least 1 (one) school in the Brazilian North Region, one school in the West Region, two schools in the Northeast Region, two schools in the South Region and four schools in the Southeast Region. After the approval, each institutions of higher education signed an Agreement Letter based on the technical and financial proposals submitted. For the signing of the Agreement Letter, however, the institution of higher education shall submit documents proving certain required items. After 15 days of signing the letter, the institutions should start the project.

The funding provided by PROMED allowed the payment of costs of service, including the staff (field and headquarters), and living expenses (travel allowances, housing), transportation (international and domestic, for mobilization and demobilization), services and equipment (vehicles, office equipment, furniture and materials) office rent, insurance, printing of documents, surveys and training, which are already described in the financial proposal.

One of the requirements to participate in the application for PROMED was the partnership established with the Health Department of the Municipality or State, in case of the teaching take place in public health especially in primary care, and evaluation criteria were considered: institution's experience and team management, project management, analysis of the current situation and goal, strategy and resources [11].

Each criterion presented items that were taken into consideration for the trial, and these different developments enable to locate the internal consistency and reliability of the proposal.

The universities that received PROMED were contacted by their coordinators of the courses or PROMED's coordinators located in the institutions.

The purpose is to verify if the medical schools that had received PROMED had histories of curriculum changes.

2. METHOD

Interviews were conducted with 19 coordinators of the medical schools, who received funds from PROMED. These course coordinators are teachers who receive a wage for the position medical school's coordinator. The interviews were taped, transcribed and analyzed using content analysis, according to Laurence Bardin [14] and the methodological basis, the qualitative research of Cecilia Minayo [15]. In the words of Cecilia Minayo, "the final product of an analysis of research, however brilliant it may be, should always be viewed by a temporary and approximate way."

After transcribing the interviews, we have the organization of information through a floating reading, in order to get an overview of the statements. In a subsequent reading, keywords were extracted and significant portions were grouped according to the convergence and divergence of meanings. We performed a re-reading, in order to classify them into analytical categories. The categories followed the same line drawn in the theoretical framework originally presented. The texts were organized and separated into sheets, in accordance with the expressed understanding of each topic.

All structures were grouped and, therefore, categorized into nine themes: The History of the Medical School; The Evaluation; The Curriculum Guidelines and Practice; The Faculty; The Continuing Education: the need for the Postgraduate—The Significance of Research; The Internship; Structures not grouped, but significant; The PROMED and SUS-University Interaction Network.

In this paper the category analyzed was The History of

Medical School, in which we found three subcategories: existence of a prior history of change, need to overcome the model, a period of change.

In order to preserve the privacy of every coordinator herein presented, each school coordinator received identification by the letter E (Educator) and a subsequent number.

The research was approved by the Ethics Committee in Research of the FCM—Faculdade de Ciências Médicas on September 27, 2005, project opinion No. 483/2005, CAAE 1448.1.146.000-05.

Below you can observe speeches of the coordinators, the relations between similarities and differences compared to the previous model to the PROMED of each school.

3. RESULTS AND DISCUSSION

By a geographic and administrative profile of the universities that received PROMED, we can observe that three schools are located in the Southern Region, 11 schools in the Southeast Region, one school in the North region, three schools in the Northeast Region and one school in the Midwest Region. There is a concentration of schools in the southeast but on the other hand, we can contemplate, though not equally, all regions of Brazil. In relation to the type of schools' administration, there are 10 federal schools, six state schools and three philanthropic schools, highlighting 16 public schools. It can also be separated according to the period: 11 schools were created between 1808 and 1960, seven schools were created from 1961 to 1971 and one school was created between 1991 and 2001, and we can notice a concentration of funds in older schools.

It is therefore interesting to note that most schools were old, public and focused on the most populous regions of Brazil.

In relation to the topic discussed herein, one of the subcategories found was the existence of a prior history of change, in which the majority relates the significance of curriculum change occurred before the PROMED. Therefore, Medical Schools already demonstrate changes in structural form as can be seen below.

E11: There was a significant change compared to the previous model, in 1998 it has happened, when school started in 1968 with an innovative proposal, 30 years before... the main features of the curriculum being developed since 1998.

E16: Heavily influenced by the "UNI" project from the Fundação Kellogs, this had invested nearly US \$3 million in our school, in that time.

E17: According to the capacity and competence in the beginning of the course, this was one of the guidelines, one of our curricular reforms in 1997.

E19: First in a particular case of our school, I repeat, this bold cutting-edge curriculum change awarded by UNESCO, was independent of the PROMED... since 1970, long before it actually right there three decades, our student went to the network, especially in the subjects in the area of public health. (...) This is an attitude; it is our own pioneering initiative.

E7: In 1994 it had been a reform in the curriculum and in 2002 other one.

E8: We can see specific changes between 1999 and 2000.

E9: Our University (...) has a history of curriculum change, which is a process called curriculum development process since 1975. So is turning 30, as Balzac, and it is an interesting thing... What are the bases of the proposals in 1975, (...), training of general physicians, with primary care, and this concept of primary care in 1975 was very early in the community's Brazilian role. Training of general physicians with responsibility for primary care and participation in the community.

By the existing speeches, we can observe that some schools presented herein demonstrate that the model prior to PROMED showed a certain potential for change, a history that belongs to every school on a new vision in medical education.

Universities which have obtained the ministerial funds beyond previous attempts to change, had previously implemented a curriculum model grounded in primary care, thus allowing the solution of health problems in primary health.

Every change is built on a history established within the goals that are grounded in the schools. These goals enable the observation of the Style of Thinking in which the Medical Schools are, which is more easily detectable in public universities and a history of previous attempts to change, according to Cutolo, 2000, Fleck-based epistemology is "a way of seeing, understanding and procedural design, dynamic, subject to regulatory mechanisms, determined psycho/social/historical/cultural, which leads to a body of knowledge and practices shared by a collective with specific training" [11].

Even with a history of innovation and change throughout this period of transformation, a new model has not been consolidated. This can be observed below, in another subcategory that was the need to overcome the model.

Featuring a persistent tendency to "EP" [16], the attempts to break the hegemonic model did not materialize and PROMED came as a new possibility of building another model. Various obstacles that hindered implementtation:

E19: A curriculum like all the other ones in that time, mostly like the centers. Not very focused in the master class, (...) offices that the new curriculum is not so new,

versity teaching hospital of greater complexity, in our case the university hospital. E2: The previous model was a fully sealed model, dis-

cipline, per enclosures, and then we are doing a modular system during four years,

it needs... to meet... social messages, the concern about

the formation in order to meet the society by the social

demand and therefore an understanding that the locus for

teaching is not confined to the hospital, whether it's uni-

E4: A culture of departments and that each one is facing the area of knowledge and without being aware of the need to interact by an interdisciplinary approach... in the construction of knowledge, it was a big change,

E14: A certain independence of mind so endogenous, that is very good, but it is also very complex when trying to work on a departmental structure, with continued scientific production, we have 270 teachers, but 134 teachers are a staff which already has many graduate programs, with a "locus" of activities centered on a line, that kind of motivation is sometimes complicated.

E13: Our previous curriculum had disciplines, the basic cycle, clinical cycle, internship, Flexnerian model, typical of most schools in the Country, in fact the curriculum is very similar to the curriculum that I did, uh... 20 years ago.

This coordinator's speech deals with a pre-established curriculum in the 60's, the Flexnerian model which focused on biological determinism as a significant factor in health care. The current traditional model is still based on Flexnerian model, created at the beginning of last century. It reports that some schools that received the PROMED still had a view for the compartmentalized sector of education.

As we can see the difficulties are concentrated in the consequences of the deployment of previous model Flexnerian: sealed disciplines, non-integrated cycles, emphasis in the hospital. There were also conflicts between graduate and postgraduate, in which the intellectual autonomy did not lead to working together but to the individuals, without interaction. The classes were masterful and not focused on the interests of society.

Among the previous attempts to change not subsidized and despite attempts broke the hegemony, and the evaluation period we held with the coordinators, the PROMED generated a process of change that introduced a new concept shared by coordinators, who begin to use inclusive a new language characterizing the outbreak of a new way of thinking with a collective that supports it. To evaluate this new period that began these words we seek a new category which is called the period of change.

E14: ... it is complicated, there is a very motivated group on the other side, and then the challenge is to get that motivation to the entire faculty.

E1: Important point to emphasize, I think this inte-

grated curriculum has much to further integrate, but I think the first step was taken, and ... I have spoken, I have programmed the modules together, I think now at the sixth year of its enforcement, I think the acceptance by the community has been far greater. With a greater acceptance, consolidation and improvement become easily. I think that it is a good movement to the university. Recalling also another important point is that we have thought to articulate within the curriculum as a whole already deployed, uh modules that are linked to each other and continue to make sense of them. So, uh... a discussion of the creation of themes, a major theme that has been created, well established as the Ethic-bioethics that it goes from the first to the sixth grade with a single teacher, which has evolved in a very satisfactory way, other theme would be the integration of teaching and service in primary care, the other would be the introducetion to the practice of science, and the other lines we are identifying and trying to enable.

E3: The very introduction of SUS, the changes in the organization of care model, it has a speed greater than the universities that have a major slowdown.

E11: There are accumulation, after it has gone through periods of lethargy of... it is... abandonment, proposals for change but.

E15: The University is organized into Institutes and this was considered in the change.

E16: From 1997 we started to transform both the medical school and the nursing program.

E16: The proposal to change is a consequence, I think it needs to be clear, a process that has been happening since the late 90s.

E19: From 1994 it became formal, from the mandatory guidelines, and curriculum guidelines are quite flexible, which enable us to adapt our practice scenarios, each health reality of city A, B, C or D.

As we can observe, a new terminology emerges in the process simultaneously in several medical schools, characterizing the break with all the Flexnerian features of the curriculum. Words such as motivation, integrated curriculum, modules, community acceptance; themes; teaching-service integration, change in the model of care, flexibility and new practice scenarios characterize the collective construction of this new thinking.

However, it is also important to emphasize that there is clear evidence that the model of care/SUS requires promptly changes in education and the universities are slow. Moreover, there are periods in the process in which changes crystallize and new breakthroughs are needed in order to come out from this lethargy.

We can said that all the existing period of change is totally transformer, because the change does not happen overnight, everything is built daily, which characterizes the process.

4. CONCLUSIONS

It was clear that medical schools that received PROMED had a previous history of change, sometimes located in counter-hegemonic niches. This existing history enabled the expansion of the reform's proposal for the entire school. This process was implemented in the ideology of the school, in an explicit or implicit way. One of the variables of this ideology entailed changing of attitudes within the community and the relationship with the emphasis on primary care, therefore outside the hospital context. However, it is notable that the changes were not enough to affect the understanding of the health-disease process and its consequent understandings.

According to Cutolo, 2003, curriculum changes that are in progress have the purpose of a comprehensive view in health-disease process, but the road is long and there are difficulties, as well as resistance to the new, naturally [17]. But these potential challenges also reflect changes. There is a methodological problem that is always second- dary because it is a sequel of a structure of Styles of Thinking, which in this case is reflected by the lack of understanding of the health-disease process [12].

It is important to note that the change/PROMED assured resizing of curricula towards the needs of the population, compatibility with the SUS' proposals; strengthening of the Family Health, flags held by the historical actors constitutive of health reform. However, it is observable that the integrality is still a process that needs to be built.

The PROMED was an attempt to meet this change, enable the encouragement and awakening before the necessary changes. Thus, it became necessary this awakening, ensuring the continuity of a program beyond these achievements. So, strategies were thought, and they can be detected with the new funding programs of the Ministry of Health such as the "PRÓ-SAÚDE" and the "PET-Saúde".

PROMED was the benchmark for the medical schools actually deploying the CG, which are now the benchmark for all the old and new schools in Brazil, including private, semi-public (including philanthropic schools) and public schools.

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