

# The Role of Professors in Changing Medicine Programs

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## Abstract

The new Medical Program curriculum guidelines led to the program restructuring in Brazil. In 2001, PROMED (Program for the Encouragement of Curricular Changes in Medical Courses) was created, as a result of a partnership between the Ministry of Health (MS) and the Ministry of Education (MEC) to financially encourage medical schools to implement changes in 3 aspects. 1) Theoretical guidance (Production of knowledge as required by the Single Health System (SUS-free health care system for the population), 2) Post-Graduate Program and Continuing Education, Practices Scenarios Diversification of practice scenarios, 3) University services to serve the needs of SUS and Pedagogical Approach (Pedagogical change-student-centered, basic-clinical cycle integration). The purpose of this paper is to examine the role of professors in curriculum changes promoted by PROMED. Nineteen coordinators of medical programs that received PROMED resources were interviewed. The category: “The role of Professors” with 3 subcategories: The need for qualification of professors, adapting to change and the process under development. For a curriculum change to be consolidated it is necessary to overcome various barriers, as the starting point are ways, processes and teaching practices deeply rooted in some professors. And continuing education is essential for professors. They go from knowledge holder to learning facilitators, allowing students to learn by doing themselves.

## Keywords

Medical Education, Professors

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## 1. Introduction

In Brazil the educational training model in force until the 1960s was based in

the training model of general doctors. After the 1968 University Reform (Law 5540/68), medical schools began to officially adopt the American model (Flexnerian). In this model, there were departments with courses, and education was divided into two parts, one of basic courses and the other of professional courses. Thus, there is little interaction among the courses (Lampert, 2002), and there is no communication among professors of different areas. In this model, one of the issues is the appreciation of specialties at the expense of general knowledge.

The professional knowledge held by the professors with authority that legitimates them as truth holder is another scientific basis of the professional practice (Pierantoni & Ribeiro, 2001).

In 1997, the National Commission and Evaluation of Medical Schools (CINAEM) evaluated medical schools and found that for the medical school professors, teaching is a complement to the medical profession, and an aspect observed is that 20% of the framework professors were PhD (Pierantoni & Ribeiro, 2001). Medical school professors consider teaching a sideline activity to the medical profession and a consequence of the overvaluation of the research in relation to education in medical schools (Perim, 2009).

Curriculum changes in medical programs are required due to lack of minimum skills to be met by future doctors (Souza et al., 2008).

The new medical curriculum is a challenge for schools that incorporate a critical attitude and a broader concept of health, aimed at technological changes and the dynamics of social reality (Aguar, 2001).

In 2001, PROMED (Program for the Encouragement of Curricular Changes in Medical Courses) was created as a result of a partnership between the Ministry of Health (MS) and the Ministry of Education (MEC) to financially encourage medical schools to performed changes in 3 aspects. 1) Theoretical guidance Production of knowledge as required by the Single Health System SUS-free health care system for the population, 2) Post-Graduate Program and Ongoing Education, Practices Scenarios Diversification of practical scenarios, 3) University services to serve the needs of SUS and Pedagogical Approach (Pedagogical change-student-centered, basic-clinical cycle integration).

From an innovative proposal for a modular curriculum, the professor plays a unique role in the methodology consolidated by the pedagogical project, although the production of knowledge of all actors involved in the educational process is aimed (Toassi, 2008). These human resources training (professors) is required to contemplate the goals of the medical school (Bulcão, 2007).

Medical school professors must be prepared and aware to realize that their interaction with students is as important as their relationship with patients. And these students can only develop the perception of the patient as a person, if he (the student) is perceived and considered as a person (Cruz, 1997).

The purpose of this paper is to examine the role of teachers in curriculum changes promoted by PROMED.

## 2. Method

Nineteen coordinators of medical programs that received PROMED resources were interviewed. The interviews were recorded, transcribed and analyzed using content analysis, according to Laurence Bardin (Bardin, 1977) and as methodological basis, the qualitative research of Cecília Minayo (Minayo, 1994). After the interviews were transcribed, the information was organized through a reading.

All structures were grouped and, thus, categorized into nine topics: Assessment, Curriculum Guidelines and Practice, The Role of Professors; Continuing Education: the need for Post-Graduate Program—The importance of Research; School History; Residency; Ungroupable structures, most important ones; PROMED and SUS-University Interaction.

This paper discusses The Role of Professors, divided into three subcategories: the need for qualification of professors, adapting to change and the process under development.

Each school coordinator was identified by the letter E (educator), followed by a number to preserve their identity.

The project was approved by the Research Ethics Committee of the School of Medical Sciences, State University of Campinas (UNICAMP), Project Opinion 483/2005, CAAE 1448.1.146.000-05.

## 3. Results

### 1) The need for qualified professors

In the subcategory the need for qualified professors is fundamental for curriculum implementation, because it is closely associated to the proposed pedagogical approach in which learning is student-centered.

**E8:** I believe it is not only for our school, but it is a confirmation of what we have been observing in interactions with other schools of changing process (...) the need to re-educate educators, great professors, with great skills, highly competent, trained in the previous model and that tend to reproduce the model...

Professors training is considered important in the processes of implementation and support of curricular innovations in healthcare. In the medical field it is addressed as a strategy to improve teaching practices, some authors consider it an essential component in the process of curriculum changes and their consolidation (Lima et al., 2003).

Education should be understood as an ongoing process that once started continues in partnerships of universities with health care services, the community, institutions and relevant sectors of civil society. Thus knowledge becomes the result of a comprehensive and integrated construction with the work object (Lampert, 2002).

The change in pedagogical approach must be planned and carried out within an educational philosophy oriented to the practice scenario (health care services). Often professors are detached from health care service, as we can see below:

**E9:** changing this paradigm is difficult, like any paradigm shift, sometimes it

is proposed and well accepted, but in reality, the mobilization of the faculty and students is very demanding.

Managing a medical school is very complex, it is proportion to the complexity of thousands of teaching activities, research and extension, teaching-care actions and interpersonal relationships developed every day of the year. No exaggeration, they are “thousands”: just think of all the actions that result from the work of dozens (sometimes hundreds) of professors and hundreds (sometimes thousands) of students and staff, if we count those working in hospitals and health care services that directly or indirectly, interact with students and professors (Almeida, 2008). Hence the need for continuing education also in management.

Teaching is still a challenge:

**E2:** doctors who become professors without training course.

**E6:** they have a profile that is not much of a professor, they are doctors filling the role of professors.

**E4:** it does require a lot of training, that’s why I think the issue of professor training is very important. (...) When professors finally understand the purpose of this curriculum, that is to work in an integrated way, they begin to accede (...) it is really a collective construction...

One is aware of the need for establishing a SUS-University association. It is in the constitution that SUS is a training field for training professionals in health care, however, there are many difficulties to put this in practice. The obstacles are numerous, among them, the smooth approximation of the health care service to the university, insufficient funding, the concentration of most professors in hospital and specialized education, lack of monitoring and continued implementation of an assessment program on the curriculum reform (Souza, 2012).

The primary care held in the Local Health Care Units is part of the practice scenarios for training students in SUS, and many professors do not believe in the teaching/learning processes of these locations.

**E4:** colleagues would say that we are irresponsible to put these kids in the service system without the presence or guidance of a professor.

**E11:** a good part of professors still do not feel very comfortable. First because they are not participating in their course, as a participant of that entire module, their course is not clearly identified.

To accomplish the implementation of the new curriculum, several changes must be made, such as: insertion of the student in the primary health care service system, from their first phase, the creation of courses that address directly or indirectly issues related to the practice in services and/or Public Health, the participation of students in the scientific literature on medical education articulated to services practice. There is a national involvement in this sense, but the distortions and difficulties are enhanced by the existing economic model, as well as by power struggles, factors that are acknowledged but not used in the possibilities for change (Ciuffo & Ribeiro, 2008).

2) Change proposals face resistance

Change proposals face resistance to their implementation. According to Fraga,

for many professors, the articulation between education and service portrays the absence of the medical school (Bulcão, 2007).

Adapting to change is part of a process that is often slow because the new often causes insecurity because it is unknown.

**E13:** and now we are in another moment, the process is up and those professors who were indifferent are now adapting to the curriculum change. And a second aspect specifically of the medical school professor is... again ... to present the syllabus according to what is really necessary for the population health.

One of the issues faced in curriculum change are internal problems (resistance to change by the faculty).

The relationship between professor and student in the teaching and learning process occurs empirically. Where the professor is the holder of knowledge and the student is a sensory receiver of that knowledge. In the constructivist model knowledge is processed and built in the teacher-student relationship, the student's knowledge is valued with the esoteric knowledge of the teacher, where knowledge is not transmitted but built (Cutolo & Deleizoicov, 2003). And this is often hard to implement because teachers develop this resistance with many years of teaching and clinical knowledge that support them not to accept new forms of pedagogical approaches.

It is unusual to find professors exclusively dedicated to teaching in medical schools, especially in the clinical cycle. This reduced dedication to the career is related to greater financial success and a greater conformity with the infrastructure available at the school. There is a certain lack of commitment with the pedagogical issue, a lack of interest in the discussion and solution of medical education problems and a very large resistance to changes (CINAEM, 1997).

**E19:** breaking, overcoming the resistance of the faculty to accept reality is not a dream, but the reality of curriculum change.

**E1:** there were specific cases of unsuccessful training. This is one of our greatest challenges (...) Professors are very resistant in taking training courses or teaching improvement course.

Professors often believe that because they minister classes for many years, they do not need to improve themselves, as it is observed in the speech below:

**E19:** come up again to the professor and he says "I do not need it, I have been teaching for 30 years, you want to teach me teach medicine?"

A good doctor is not necessarily a good professor (WFEM, 1990).

**E19:** why members of the faculty withdrawal, as a result of the resistance of the students. Because not only professors resist to understand what happens in medical care centers, the complexity of basic care.

Brazilian medical education bumps into limited conceptions, inadequate practice scenarios, difficulties to break the logic of courses, lack of pedagogical training of professors. It is very important to understand and discuss the process of building, guiding and implementing change in medical education (Feuerwerker, 2002).

3) The process under development

The process under development puts the attention on several factors that result in a permanent nonexistent training.

**E12:** we performed training with tutors in some courses and it was a very interesting experience.

This reflects as in many previous studies the need to maintain a continuing education, as a process of establishment with curriculum changes that allow professors to perform their role, the training of professionals that contribute to the reorientation of the health care system (Perim, 2009).

**E7:** teacher training within this curriculum reform was initially through courses. Then many courses were created within the methodology. We seek to develop continuing education every week, based on professors' difficulties, what is found in their daily routine.

**E13:** (integration of the area and basic-clinical faculty) is a learning lesson because it has been important for both areas. One of the most important challenges is the change of posture of the faculty regarding curriculum proposal.

In a survey conducted in a school on curriculum change, the coordinator of the medical school, in turn, considers concerns of professors legitimate, but attributes much of the criticism to misinformation and lack of dialogue among departments. Absence of some professors at meetings where they organize themselves, schedules and term programs, and there is no doubt there was no consensus on the new curriculum (Koifman, 2001).

There is a national involvement for this change, but the distortions and difficulties are enhanced by the existing economic model, as well as by power struggles, factors that are acknowledged but not used in this research.

#### 4. Conclusion

For a curriculum change to be consolidated it is necessary to overcome several barriers, as the starting point teaching practices, contents and teaching manners and processes are deeply rooted. It is necessary to change the teaching practice and understand that the traditional model of teaching must overcome the simple role of reproduction and transmission of knowledge and become the engine of changes and disseminator of postures.

The relationship among groups and individuals involved in the training of doctors also reflects delicate and large proportions changes both in the institution and in the way each individual works for the professional education to meet the real needs established.

The reciprocal interaction among managers of Education Systems and SUS will enable the creation of real conditions for the use of both systems with better technical quality care and teaching-learning process (Souza et al., 2012).

There are common and important points to be highlighted in schools. The Medical Schools that received PROMED already had a history of change, participating in other programs involving courses in the area of primary health care and actions in the field of Public Health (Souza et al., 2011).

With the new curriculum guidelines, “learning with hands-on” refers to the need for a greater number of professors/supervisors for students that will carry out activities in the community, as well as reducing class size for practical activities. This saves a huge cost to the institution that often does not include such change.

The education of health care professionals should be understood as an ongoing process that begins during undergraduate studies and continues in the professional life, through the establishment of partnership relations among institutions of higher education, health care services, the community, entities and other sectors of civil society (Souza et al., 2012).

The changes of the new way of teaching lead professors to a resistance generated by several factors. One of the existing factors is the “loss” of power in the classroom, as teaching should be student-centered, taking away the “focus” from the professor. Professors go from knowledge holder to learning facilitators, allowing students to learn by doing themselves.

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