

Overcoming challenges in primary care in Brazil: successful experiences in family medicine education

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ABSTRACT

Since 1988, Brazil has built a national health system procuring a response that meets universal health care. The government created the Family Health Strategy (FHS) to help improve access to health services through primary health care teams developing interdisciplinary actions. Scarcity of doctors with family medicine (FM) competencies in Brazil limits the FHS effectiveness. The lack of family physicians can be traced primarily to the medical schools where training supports other specialties besides FM. Innovation is required to bring students to the specialty and medical marketplace. The authors relate their experience and advances in designing alternatives to seize solutions to address challenges related to strategic aspects of FM that can improve medical education practices. Challenges presented exemplify means to expose students to key principles of FM practice such as continuity, commitment and longitudinal care, together with other attributes of FM practice such as team work and interprofessional action. A key asset in overcoming the challenges for primary health care through improved FM practice is the exposure of students to FM practitioners that mentor student practices as role models in different settings where health care is provided.

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1. Introduction

Brazil, a country with the fifth largest population and territory of the world has expanded access to health care for all citizens since 1988, a constitutional mandate and a clear goal for the national health system, the Sistema Único de Saúde (SUS). Economic growth and the challenge of qualified health services, created the conditions for citizens having to decide upon supplementing or adding benefits to what is publicly provided by the health system, with what can be privately purchased in health insurances and services.

Brazil continues to move within a transitional epidemiology with cardiovascular diseases being the leading cause of death, and infectious diseases, still representing a hazard in rural, remote and economically deprived urban areas [1]. These conditions have created a growing demand for a wide spectrum of health services for diverse ill conditions across the life cycle, all over the extended pluri-ethnic and multicultural Brazil [2,3].

The dimension and complexity of the challenges that the SUS faces, has demanded a flexible mix of public and

private health care providers, financed primarily by contributions coming from tax funds at the federal, state and municipal levels; also, supplemented with private complementary services that purchasing power can procure for those that can afford them. The Brazilian private health market for 2010 was estimated to be around US\$36 billion, compared to the US \$38 billion spent in health by all states and municipalities, with an estimated health care expenditure as percentage of Gross Domestic product (GDP) for 2013 of 9.1% [4].

Since 1994, the government created the Family Health Strategy (FHS) to help improve access to health care through primary health care teams developing interdisciplinary actions. A FHS team includes a physician, a nurse, a nurse assistant and up to six community health agents. Teams are organized geographically, covering population groups of up to 1000 households [5]. The FHS has had a remarkable growth passing from 2195 FHS teams and 61,303 community health agents accredited by the Ministry of Health in 1998, to 48,850 FHS teams and 332,289 community health agents by the end of 2016. That growth represented an increase in primary health care

coverage that went from 4.4% to 63.7% of the population in the 18-year period [6]. The FHS has been recognised for its contribution to the reduction in hospital admissions, and improved access to primary health care for the different age groups particularly in the rural and remote areas of the country, with special progress in maternal and child care almost reaching universal coverage, thanks to the primary health care structure [7].

However, scarcity of family physicians or general practitioners with family practice competencies in Brazil limits the FHS effectiveness.

The lack of family physicians can be traced primarily to the medical schools in which medical training supports specialists and discourages generalists. Currently, in Brazil there are about 300 Medical Schools [8]. Although many of them are theoretically committed to enhance and strengthen primary care, the results so far fall short of these goals. Medical students are often confused regarding what family medicine is all about. Part of this confusion may be due to their lack of exposure to family physicians acting as role models. Another misleading cause could be that they have the impression that to be a generalist and to do family practice is to be dealing with a 'non-scientific specialty', intended for those unable to succeed becoming a 'true specialist'. If the academic knowledge of primary care is absent as a model in the undergraduate curriculum it will be difficult to promote real family doctors among the students and to encourage them to choose family practice as their future career path [9,10].

Although newer medical schools (150 opened over the past 15 years) include primary care in the undergraduate curriculum, rarely do they have academic family doctors teaching it. The focus is more related to public health, epidemiology, or social medicine rather than a training scenario where students are exposed to family practice within a community oriented primary care, patient centered, team based model, where relationships are at the core of the clinical experience [11–13].

Added to these, the primary care practice to which students are exposed to, is based in public health facilities, where they don't necessarily experience what family doctors do in their regular practice.

Nevertheless, there is a growing range of diverse opportunities for family doctors to be involved in family practice, supported both by the SUS, as well as by private Insurance Health Companies in São Paulo, Brazil. These contrasting new realities pose growing opportunities for students to have exposure to competent family practitioners acting as role models. Mentorship by role models may allow new generations of physicians to experience family medicine as a practice that accounts for effective health problem resolution and patients' satisfaction, with the added benefit of controlling costs and expenditures, something essential for the sustainability of the health system.

Updating a predominantly classic, specialty based rotational system within Brazilian medical schools is still a challenge to be met, by integrating new ways to approach the diverse growing demand of primary care services, where the needs of a transitional epidemiology can be matched with professional competencies that provide students with the skills and confidence to assume these opportunities [14].

2. Addressing challenges in primary care in Brazil through family medicine education

SOBRAMFA – Medical Education and Humanism [15] (originally, the former Brazilian Society for Family Medicine), is an organization that was established in São Paulo in 1992, with the purpose of fostering medical education through the promotion of the humanistic dimensions of doctoring, together with the scientific basis for the practice of family medicine, all within the development of a teaching portfolio. SOBRAMFA's twenty-five-year experience in Brazil shows that when students get in contact with family medicine in medical schools –which usually lacks the academic component of the discipline and the exposure to real practice of a family doctor in different scenarios – they don't want to be part of it.

2.1. Medical students

To address this challenge, SOBRAMFA has tailored a teaching-learning model to involve young undergraduate medical students in family medicine contexts so that they can better understand the knowledge bases of family medicine, what the specialty stands for, and how it is practiced, so that they may consider it as a possibility for their future. This 'Tag along model', which basically is about accompanying family physicians in their practice, portrays a longitudinal integrated clerkship which brings also resources to grow up as human beings, with well-rounded qualities and facilitates to develop professionally as physicians with the capacity to serve patients and families in different contexts within a community [16,17].

A core assumption of SOBRAMFA to overcome the challenge, is that students need to see family doctors working in their regular daily practice. And this is something that can be done by SOBRAMFA because professors relate with residents and students in several scenarios acting as mentors and role models of family practice. Thus, a 'Tag Along' formal program (see the MF2 described below), opened for students from all medical schools with proper mentoring by the faculty members, results as a successful path to demonstrate to medical students what family medicine is about, resulting in the gain of new skilled leaders for the specialty.

One of the most effective family practice exposures for medical students occurs in the Mini-Fellowship in Family

Medicine (MF2) program, an elective clerkship for medical students. Students experience family medicine by seeing patients under the supervision of SOBRAMFA faculty and residents in a range of practice settings such as: different hospital facilities, family medicine clinics, ambulatory treatment units, palliative care scenarios, home visiting programs and elderly and disabled homes. Acknowledging the complexity of the family medical practitioner in these different scenarios with skilled mentors, makes the difference in students' significant learning of FM, as well as, their affiliation to the specialty as a field of future professional specialization and lifelong practice [18,19].

The MF2 Program is a one to two week set of activities that includes several exposures to supervised practice in different FM scenarios. By having the experience of the broad perspective of a SOBRAMFA family doctor in practice, they can acknowledge the value of key principles of family practice such as continuity, commitment, interdisciplinary team work and longitudinal care, having a first-hand experience about how these core elements of family practice are related to patient outcomes. Many of these attributes displayed in the MF2 program at SOBRAMFA, have been highlighted and recovered by the longitudinal integrated clerkship medical education movement [20].

2.2. Training young doctors in family practice

Integrity of healthcare is a major challenge for the SUS in Brazil at it is for other healthcare systems. Training young doctors to meet the requirements of an integral FM practice, requires exposure to a variety of teaching-learning scenarios. Within a 14 million people city (São Paulo) SOBRAMFA has developed an innovative program (called The Pacemaker Agenda) in which several components are combined in an agenda that allows the exposure of students to role model skills in team work, inter-professional education, and longitudinal care to patients and families, all of them key assets to achieve integrity of care within the health care system.

The cornerstone of the Agenda is the Weekly Scientific Pacemaker, a 2-h meeting, including case-base discussion and article reviews. As the case discussions are based on real patients, the young doctors realise how they can get better prepared for a systemic approach to comprehensive primary care of patients regardless of the insurance or payment system they belong too (public or private).

Monthly meetings include the 'Construction Pacemaker', a 2-h meeting designed as a workshop, in which participants must read in advance some papers selected by the facilitator. The topics for discussion include reflective practice: professionalism, medical education, humanism, family medicine core values, personal development, teamwork, and leadership.

The Agenda also includes Cultural monthly meetings with leaders coming from other fields, beyond medicine such as philosophers, journalists, educators, lawyers, artists, musicians and entrepreneurs. With this routine including monthly meetings regarding philosophical, educational and cultural issues, we obtain broad educational effects with the trainees, enhancing open mindedness and commitment to meet peoples' needs and family medicine core values. Finally, monthly 'Clinical Reasoning' meetings, led by medical students and supervised mentors improves their skills as future medical educators.

2.3. Outcomes

2.3.1. Medical students – the mini fellowship in FM (MF2)

The MF2 started in 2004. So far, 220 students from 51 medical schools have joined the program, coming from 30 different cities of 11 of the Brazilian States. Highlights of students exposed to this program include the improvement in students' capacity to take care of patients with proper supervision. Even those young students (in the very first years of medical school) can see patients under supervision, performing clinical examinations, discussing prescriptions, and participating in the usual activities that health care teams conduct for patient care.

A relevant outcome to share with international primary care educators is that 'when supervised and guided by a professional facilitator with teaching abilities, there are very few requirements for young students seeing patients. They acknowledge that empathy is at the core of patient treatment, interpersonal interaction and social cognition. Supervised interaction with patients by preceptors facilitates the reflective processes of observing, reflecting and sharing awareness of the distinction of experiences of the self and others, as well as the perception of pain and suffering in others; all this within an academic environment where participants can feel safe and protected. Regardless of how much medicine they know, they realise that understanding the person as a human being, comes together with the clinical action [21].

Students highlight the following as core learning issues: how to develop communication skills, understanding individuals together with their family context, continuity of care, solving complicated problems with inpatients for outpatient conditions, dealing with other physicians and the interaction with other health professionals in teams to provide better health care. Also, they address self-knowledge and insight as a surprising outcome of the program. The students gain respect for the specialty and spread this 'discovery' to their peers.

Beside these, the MF2 Program emphasises the mentoring role family doctors could have among medical

students. The students understand that the core values of family medicine are important and useful in becoming a better doctor and developing a more humanistic way of doctoring [22]. When accompanying family doctors in their practice they recognise and learn how they can put these values and skills into practice, so family medicine doesn't remain just as a philosophy, in the realm of dreams, but they find the way to move from the theoretical and abstract ideas to practice. This Program also provides an individual assessment of each student, allowing a balance between theory and practice that provides tutorial guides, and promotes leadership and team work among students. This educational strategy fosters students' interest in family medicine and encourages those who will be able to apply for the residency program. There is also an international version of the MF2 Program, for medicals students coming from abroad [23].

2.3.2. Training young doctors through the Pacemaker agenda

The trainees never feel alone in their practice, because the faculty and mentors are always accessible at every time. Beside this, as they work with clear objectives and surrounded by an atmosphere of collaboration, without the usual competition found in some of the conventional residency programs, they develop outstanding communication skills and openness, with repercussions in better patient care. They also succeed in leading with uncertainty which is a common issue in our practice.

The main outcomes of the Pacemaker agenda could be outlined in three core areas of education. First, they get effective training in clinical competence, in which the trainees develop expertise in 'doctoring', as well as skills to manage complicated patients and lead health teams. Second, they improve their communication skills with patients, families and their peers. Finally, they are valued as good physicians and colleagues by their patients and peers in the clinical setting; as well as by public and private health insurance providers. This brings respect, credibility and satisfaction for the field of family practice as a natural result.

Medical students live simultaneously in two worlds, one technological and the other much less clearly-defined that includes feelings, values, and the context of illness in patient's life experience.

Professors from SOBRAMFA are currently influencing 2 medical schools in São Paulo, guiding family practice opportunities for medical interns: In these scenarios, they see patients from the SUS.

3. Conclusions

SOBRAMFAS' experience in Brazil shows that when medical students get in contact with family medicine they

require an experiential exposure to family practice scenarios that facilitate their understanding of the field. Thus, innovation is required to provide such scenarios, to attract new leaders to the specialty and to Primary Health Care, something that the medical marketplace in Brazil is asking for. These kinds of academic experiences can contribute to overcome primary health care teaching challenges.

First, about how to involve medicals students in a family medicine environment. The value of exposing medical students to the real world of family practice, can demonstrate the breadth of family medicine, and the scope of services they are responsible for. Students connect family medicine core values with primary health principles, and how they are essential for medical and other health professions practice. Despite the specialty they will choose in the future, they get to consider family doctors as remarkable role models and teachers that make the difference in their education. While the academic set provides these changes and opportunities, initiatives involving medical students as the MF2 Program allow students to acknowledge other patient contexts, other health professional disciplines and the cultures of other students coming from different countries. Exposure to such contrast and diversity, contributes to spreading the universality of family medicine core values and use, as well as a better understanding of the complexity of primary care.

Second, an innovative learning agenda composed by an assorted routine of regular meetings combining a busy work schedule with scientific learning scenarios, to develop competences, professionalism and reflection over perceived personal success are provided. The Pacemaker agenda is set for training young family doctors for the wide basket of services and the growing diversity of opportunities in family practice in Brazil.

Disclosure statement

No potential conflict of interest was reported by the authors.

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