

FROM BOSS TO MENTOR TO PARTNER: TRANSITIONING IN MEDICAL EDUCATION

H. Rossinot^{1†*}, A. Brunoni², V. Filipce³, M. Kalejs^{4†}, V. Liyanapathirana^{5†}, F. Senkubuge⁶, G. Toldi⁷, C. Toth⁸, J. Boufford⁹

¹ Department of Public health, Faculty of Medicine, Paris Est University, 94000 Créteil, France;

² Laboratory of Neurosciences (LIM-27), Department and Institute of Psychiatry and Interdisciplinary Center for Applied Neuromodulation, University Hospital University of São Paulo, São Paulo, Brasil;

³ Department of Neurosurgery, University of Skopje, Macedonia;

⁴ Department of Cardiac Surgery, Pauls Stradins University Hospital and Laboratory of Biomechanics, Riga Stradins University, Riga, Latvia;

⁵ Department of Microbiology, Faculty of Medicine, University of Peradeniya, Sri Lanka;

⁶ School of health systems and public health, Faculty of health sciences, University of Pretoria, South Africa;

⁷ Department of Obstetrics and Gynecology, Semmelweis University, Budapest, Hungary and Birmingham Women's Hospital, Birmingham, UK.

⁸ Department of Anatomy, Faculty of Medicine, Vasile Goldis Western university of Arad, Romania

⁹ President of the New York Academy of Medicine, 1216 fifth avenue, New York NY 10029

(Names by alphabetical order)

* Corresponding author:

Hélène Rossinot

Department of Public health, Faculty of Medicine, Paris Est University, 94000 Créteil, France;

E-mail: helene.rossinot@yahoo.fr

† These authors contributed equally to this manuscript

Word count: text: 2882

Introduction

The relationship between the teacher and the student is changing as information becomes more readily available, and the science of education is evolving in parallel. Teachers, irrespective of the specialty are facing a generation of students who, with the touch of a few buttons can gain information from anywhere in the world. Access to information is no longer a privilege of a few, instead technology has opened the floodgates of information to the wider world. But, is knowledge the only thing a teacher should transmit? Michel Serres (a French intellectual and Stanford teacher) in his essay Thumbelina about this new generation says « *We all sense that we urgently need a decisive change in teaching, a change that will eventually have repercussions on the entire space of our global society and its obsolete institutions. Indeed, it will not only affect teaching, but also work, business, health, law and politics—in short, all our institutions¹* ». "

The question then is: what is expected from the modern teacher in medicine? As young physician professionals from all regions of the world, we asked ourselves: how should this question be answered? This paper was motivated by the shared concerns and recommendations that we, as a team of Young Physician Leaders (footnote on the program) presented at the Global Health Summit held in Berlin in October, 2015 and by our subsequent discussions.

Because of the evolution occurring in information technology and teaching practices, the medical world is now facing the challenge of having to adapt itself to young doctors expecting more than a one dimensional teacher-student relationship from a “boss”. Instead, these doctors want a mentor during their period of training that might, in some instances, evolve into important career long partnerships. What might this mean for current physician education? What would the role of physician mentor be? What do young physicians really expect? How can the relationship of mentor and mentee be built and lay the foundation for potential future professional partnerships? These largely unexplored questions can have a strong impact on the doctor’s career in a number of ways affecting their progress, leading them to leave their public

institution for the private sector, or, in some cases, consider migrating to another country for greater professional development. Just as a new paradigm is evolving for the doctor-patient relationship in clinical practice, there is a need to foster a new paradigm for the professor-student relationship in medical education to create doctors in a rapidly changing world.

What it means to be a mentor—a review of the literature

The word mentor has an undeniable symbolical strength. It is thought to be extremely beneficial to have a mentorship program at an institution, to have a wise mentor. Many have heard the story of Mentor, a character from Ancient Greek mythology, advisor to Odysseus' son Telemachus. Even today a lot is expected from a mentor, sometimes unfairly and sometimes just because there is confusion about what mentoring really means. A good definition of mentoring is given by Healy and Welchert: "a dynamic, reciprocal relationship in a work environment between an advanced career incumbent (mentor) and a beginner (mentee), aimed at promoting the development of both" ³. As outlined by Sambunjak and Marusic ², functional mentoring has certain distinct structural, interactional and temporal features ². It only exists between a more senior or more experienced person and a less experienced one. In a career context, the mentor would, ideally, be able to provide the mentee with sponsorship, protection and promotion of his or her visibility. From an interactional point, supervision is very similar to mentorship with the difference that mentorship should not include formal assessment of the mentee. Mentorship is essentially about helping people to help themselves rather than providing them with solutions. Over time, the relationship may change according to the developing needs of the mentee in line with their professional advancement. It is important for successful mentorship to take into account the changing needs and to adjust accordingly in order to provide adequate support and advice at each step. The logical progression is that, at some point the mentor – mentee relationship must come to an end or, in some instances, could transform into another form like a partnership or collaboration.

As it has been pointed out in several studies ⁴, complementarity between the mentee and the mentor is crucial and it involves many predetermining factors; several studies have suggested that gender and race issues also play a significant role in such relationships^{5, 6}. The path of academic progression for women can be so different from their male peers', that advice of an opposite sex mentor might not be efficient and could be inadequate, especially for young women physicians planning to have children ⁷. The possibility of sexual harassment within a mentoring relationship needs to be openly discussed particularly in formal mentoring programs. Though it may be challenging to achieve, many studies still report that congruency in gender, race and ethnicity although often mentioned are not essential ⁸. And sometimes having a mentor of a different ethno-social background can be beneficial for both mentor and mentee, widening the world view and opening eyes to different goals and opportunities not considered before. In a study done by Koopman and Thiedke ⁵ actually a personal quality like sensitivity has been shown to be much more important than the above-mentioned factors.

The perceived prerequisites and characteristics of a successful mentor which most appealed to the authors can be found in a detailed review by Sambunjak et al ⁹. The authors have categorized these into personal, professional and relational characteristics. In our experience, the most important characteristics are personal and relational (altruistic, motivator, accessible) supporting the notion that mentoring should not only be limited to professional support and counselling.

Mentorship vs. the current realities of medical education and practice

The traditional educational model

There is no denying that hierarchy is deeply entrenched not only in the culture but in the very nerve, DNA and functioning of medicine. Most corridor talk in the hospital convey the message that things have always been done in a certain way, and that it is a justification in itself not to change. Many young doctors, however, come from a world where views are shared and where there are as many democratic leadership

opportunities as there are different cultures and models of learning and functioning. The “fraternity” of medicine has been slow to catch up on the evolution of work relationships, and of hierarchy itself. Lempp and Seale ¹⁰ in their study note that the adjectives used by medical students and young doctors to characterize the hierarchy they experience in medical training included : « stressful », « humiliation », « fear », « misery », « being targeted » and « loss of confidence ». Such a fear-based relationship can lead to the burn out of young doctors, which is already highly prevalent among resident doctors ¹¹. A question still remains: is there a continuing role for hierarchy in medicine? The medical profession is on one hand facing numerous challenges such as the changing-profile of diseases, demographic shifts in the population, and, in many countries, inadequate human resources and poor financing of health systems. On the other hand, there are opportunities to take advantage of the fast evolution of technology, more efficient infrastructures, more global “virtual” and real connections to access both knowledge and the latest medical treatments that can be harnessed for better individual, community and global health. To be successful, it is critical to recognize the skill set and contributions that different individuals can make as part of the medical team, including stronger links to other health professionals, not to mention individuals outside of medicine who influence the broader determinants of health. The current hierarchical model, still dominant in the medical world, assumes that one individual physician at the top has all the expertise (« heroic leadership » ¹²) and the others have less to contribute until they finally occupy this place. The invariable muteness that hierarchy can create among medical doctors can have detrimental consequences, as Srivastava¹³ writes, ‘although he saw a myriad of specialists in his last week of life, he died lacking holistic care.’ We now live in a world that should embrace and recognize that every individual has a contribution to make.

The realities of education and practice

In our highly competitive society, medical training, like every other field, is subject to the law of the success of the strongest, and every young doctor is seeking to receive

the best training possible to be able to develop the career he/she will be most interested in, and professionally fulfilled with. The possibility of mobility for doctors around the world has greatly increased in the last twenty years, and physicians often don't hesitate to leave for a while or for their entire careers. This phenomenon can be observed both in developed and developing countries.

Specialist training programs in many developing countries often include a training period spent in a developed country. This opens up opportunities for the trainees to experience efficiently functioning systems and cutting edge technology. Returnees who want to utilize their newly gained skills in their home countries often face obstacles, not only due to the lack of funding and infrastructure, but often due to the inherent inertia of, or worse, the obstacles put forward by senior colleagues who occupy the most senior positions in the hierarchy of the clinical, research and administrative system in medicine. In Sri Lanka, for example, young physicians returning from overseas training are often posted to the more rural medical centers which may lack the infrastructure needed for the optimal utilization of their new skills, while senior positions in the more central medical centers, which actually offer the technical infrastructures they need are occupied by the more senior personnel who lack the training to utilize these resources. The systems of transferring specialists in the government health sector relies more on seniority than on merit systems that take account of the training, competency or skills of the individual. The final result is discouraging to young physicians who then seek to find a professional environment which allows them to utilize their skills, like another country or the private sector within their home country.

An example in a fast developing country where a substantial part of the health care is offered by the private sector, such as Brazil, several young physicians, who graduated in top free, public State and Federal universities and subsequently trained overseas with fellowships also fully paid by the Brazilian government, are "drained" out of public service by private clinics and hospitals. The private sector - although also presenting similar issues of seniority over merit - is more agile in integrating the new

skills acquired abroad by the young physicians to their health care model. These young physicians are also motivated by the greater salary of the private sector and the possibility to use their skills in better resourced practice settings. In this scenario, however, their expensive training, largely subsidized by the state, is effectively used in the private sector. This process, often defined as "internal brain drain" has intensified over time in Brazil; it is interesting to observe that, in the 1980s and 1990s, Brazilian public authorities (such as governors, congressmen and even presidents) would opt for the public health service for treating their illnesses, as its hospitals were always one step ahead compared to the private sector in terms of technology and health care. But nowadays, public officials are more likely to opt for treatment in the private sector.

Although the internal brain drain can be pernicious, external (mostly East to West and South to North medical immigration) brain drain can be devastating to a country. A very concrete example would be that of Romania.

In 2014, the President of the Romanian College of Physicians affirmed that Romania had spent 3.5 billion euros to prepare doctors who have immigrated to the European Union. Since 1990, about 21 000 doctors have immigrated from various specialties, of whom 14 100 during the 2007-2014 period. The profile of those who decide to emigrate are at 98% within the age group of 30-40 year-old ^{14, 15}. This migration has huge implications for the potential for a mentor-mentee relationship. The lack of a "bonding generation", may impede the professional development of resident doctors and even the students who are in their final year, because the gap in age and way of thinking between students and the older remaining generation may create an even higher barrier to such relationships.

Another problem cited is the system of professional advancement. Very often politicians (politically controlled physicians) are installed in key positions, which alter the quality of healthcare. Elena Stancu describes in an article ¹⁶ several cases of doctors who have immigrated because of corruption and nepotism. Although, in 2009,

WHO's Executive Board adopted a code of practice on the movement of healthcare workers; it has not been sufficient to contain the "brain drain" phenomenon in developing countries.

The potential of moving from boss to mentor to partner in medicine

As a group of young physicians embarking on leadership roles, our expectations from a mentoring relationship were in agreement to a great extent. We seek mentors that will provide us with support to cope with the stresses faced in developing our careers. At times, it is easy to lose track and feel overwhelmed, particularly at the transition stage between being a full time trainee to a team member with our own leadership responsibilities or from junior to more senior leadership roles. We seek mentors that can promote our self-awareness in such instances by appreciating our abilities and talents and honestly pointing out our weaknesses, in the end, enabling us to manage these important transitional periods as effectively as possible. Another key challenge many of us face is keeping the balance between the demands of developing a successful career and personal life responsibilities. We were unanimous in wanting mentors who can serve as guides to navigate through this tricky area. It is also important for our mentors to help us build networks with people who may be of help in developing our careers, encouraging and guiding us to reach higher order but realistic goals.

In this paper, we have tried to highlight important, though often complex problems facing young physician professionals coming from multiple countries, especially those seeking to play a leadership role as advocates and actors for better health and health care in their countries and globally. Many of the problems will require significant resources, and, some will need national policy change. But we write this article to bring attention to a gap in medical training that we feel can be addressed right away and potentially make an enormous difference in the process of education

as well as patient care and retention of critical young medical professionals in countries of greatest need.

We see the concept of “mentorship” as offering an important support for the development of faculty and health care leaders who train and create the conditions of learning and practice for the next generation of physicians in their countries. The model is proven to work in other fields and is urgently needed in medicine. Medical education is currently facing a transition period between the classically trained older generation of doctors who have mostly learned from expert consensus statements and who believe that medicine cannot survive without strong hierarchical foundations to a new generation of physicians not merely satisfied by expert views but seeking the evidence base for their practice. Young physicians are no longer just passive information seekers willing to accept all the information professors have to offer to in a lecture, when that information may have already been gathered and compiled and read using portable devices.

While this new generation of doctor might give an impression of arrogance and disrespect to hierarchy, they remain vulnerable and see the importance of senior guidance in their effort to pursue excellence. For the good of patients, the medical world needs to discover and reward new leadership practices in education and practice, recognizing the networks of interdependencies at different levels within the organization, called « post heroic leadership »¹². Evidence-based medicine is now at the center of medicine and while doctors need to learn from experts, they also need to learn from each other, from other members of the health care team and from patients themselves.

The need for evolution of the medical profession and its pedagogy is a reflection of the changes our society faces. The traditional - and almost patriarchal - role of doctors is now challenged by patients who also have access to knowledge and want a more active role in their care. They gather into associations and have a direct effect all over the world on policy making. Doctors, whether they belong to older or

younger generations have to reinvent their place, as we witness a growing democratization of human interactions, from the very beginning of the medical formation to the interaction with the patient. In order to make this transition effectively, there is need to create the opportunity for the traditional relationship of faculty to student to evolve from boss to mentor and, in many instances, partner, in addressing the health challenges of our patients and society.

References

1. Serres M. *Thumbelina : the culture and technology of millennials*. Lanham,USA: Rowman & Littlefield International; 2015.
2. Sambunjak D, Marusic A. Mentoring: what's in a name? *Jama* 2009; **302**(23): 2591-2.
3. Healy CC, Welchert AJ. Mentoring Relations: A Definition to Advance Research and Practice. *Educational Researcher* 1990; **19**(9): 17-21.
4. Sambunjak D. Understanding wider environmental influences on mentoring: Towards an ecological model of mentoring in academic medicine. *Acta medica academica* 2015; **44**(1): 47-57.
5. Koopman RJ, Thiedke CC. Views of family medicine department Chairs about mentoring junior faculty. *Medical teacher* 2005; **27**(8): 734-7.
6. Leslie K, Lingard L, Whyte S. Junior faculty experiences with informal mentoring. *Medical teacher* 2005; **27**(8): 693-8.
7. Morzinski JA, Diehr S, Bower DJ, Simpson DE. A descriptive, cross-sectional study of formal mentoring for faculty. *Family medicine* 1996; **28**(6): 434-8.
8. Jackson VA, Palepu A, Szalacha L, Caswell C, Carr PL, Inui T. "Having the right chemistry": a qualitative study of mentoring in academic medicine. *Academic medicine : journal of the Association of American Medical Colleges* 2003; **78**(3): 328-34.
9. Sambunjak D, Straus SE, Marusic A. A systematic review of qualitative research on the meaning and characteristics of mentoring in academic medicine. *Journal of general internal medicine* 2010; **25**(1): 72-8.
10. Lempp H, Seale C. The hidden curriculum in undergraduate medical education: qualitative study of medical students' perceptions of teaching. *Bmj* 2004; **329**(7469): 770-3.
11. Ogundipe O, Olagunju A, Lasebikan V, Coker A. Burnout among doctors in residency training in a tertiary hospital. *Asian journal of psychiatry* 2014; **10**: 27-32.
12. Fletcher JK. The paradox of postheroic leadership: An essay on gender, power, and transformational change. *The leadership quarterly* 2004; **15**(5): 647-61.

13. Srivastava R. Speaking up--when doctors navigate medical hierarchy. *The New England journal of medicine* 2013; **368**(4): 302-5.
14. Fontanella-Khan J. Romanians despair that wealthy Britain is taking all their doctors. *Financial Times*, 2014. <http://www.ft.com/cms/s/0/f4c0b734-7c70-11e3-b514-00144feabdc0.html> (accessed 10.23.2015).
15. Boncea I. Brain drain in romania: factors influencing physicians'emigration. *Journal of Community Positive Practices* 2014; 14(1): 64.
16. Stancu E. Mass exodus: Why corruption in Romania's healthcare system is forcing its doctors to work abroad. 2014. <http://www.independent.co.uk/news/world/europe/mass-exodus-why-corruption-in-romanias-healthcare-system-is-forcing-its-doctors-to-work-abroad-9035108.html> (accessed 02.12. 2015).

THE YPL PROGRAMME:

YPL (Young Physician Leaders) is a programme run by the InterAcademy Partnership for Health (formerly IAMP) with the aim of building leadership capacity amongst young healthcare professionals. Launched in 2011, participants are chosen by a competitive process after being nominated by their national academies. The event is held every October in Berlin, German, in conjunction with the World Health Summit and to date, the programme has trained 107 YPL, all of whom are top young professionals under the age of 40. A 5th year reunion was held recently in Geneva, Switzerland, in conjunction with the 2016 World Health Assembly. For more information please see here: <http://www.iamp-online.org/node/7>