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Observations on multi-generational interactions in academic surgical practice and education

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SUMMARY

Although there is a natural passage of responsibilities and duties from one generation to the next in any organization, academic or otherwise, managing intergenerational differences is challenging. In academic surgery, in which there are duties to patients, institutional administrators, faculty colleagues, resident trainees, and medical students are faced with multi-generations of individuals who have their own perspectives of what is “required” of them and what is “fulfilling” to them. The purpose of this essay is to relate our observations of the challenges and opportunities to manage these relationships from the perspective of North and South America in all levels involved with surgical care and teaching.

KEYWORDS: Education, medical. Intergenerational relations. Teaching. General Surgery.

INTRODUCTION

Although there is a natural passage of responsibilities and duties from one generation to the next in any organization, academic or otherwise, managing intergenerational differences is challenging. In academic surgery, in which there are duties to patients, institutional administrators, faculty colleagues, resident trainees, and medical students are faced with multi-generations of individuals who have their own perspectives of what is “required” of them and what is “fulfilling” to them. The purpose of this essay is to relate our observations of the challenges and opportunities to manage these relationships from the perspective of North America (the United States) and

South America (Brasil). Moreover, it does not intend to offend or criticize anyone or any generation but to show how the mores of the world in 2017 are influencing surgical practice in all levels and how doing the possible before the impossible may help to create a better medicine.

THE GENERATIONS

The division of individuals into “generations” is artificial, and some individuals may not fit the stereotypical characterization of the group, but there are some qualities common to most members^{1,2}.

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The Western world (America, Europe, Oceania) has more or less characteristic generations, as described below. Some local variations may occur due to local conditions, such as the generations that came after a country becomes independent like what occurred in Armenia and Poland. There are no good studies on whether African and Asian societies experience similar trends and patterns in generations.

Traditional (Veterans, the Silent Generation, and the Greatest Generation). This is the group born before 1946 and has endured a great depression and a world war. This group respects loyalty and authority. They value stability and are reluctant to question the “system.”³

Baby Boomers. This is the group born approximately between 1946 to 1964. In the United States, this group lived through the cold war and Vietnam War and in Brazil a dictatorship government. They are driven, self-centered, and “live to work.” However, they tend to be judgmental of views different than their own⁴.

Generation X. This is the group born between 1964 and 1980. This group saw the AIDS crisis, women’s rights, gay rights, single-parent homes, and dissemination of the personal computer. They are technologically literate, adaptable, self-reliant, but “work to live.” They are not intimidated by authority and can be cynical⁵.

Millennials (Generation Y). This is the group born between 1980 and 1996. In both the United States and Brazil, this group grew up with the Internet. They are used to having technology as part of their daily lives. Being the children of Baby Boomers, many have been raised with extensive parental involvement. They want to make a difference in the world and expect to have meaningful, fulfilling work. They may be impatient with “climbing the ladder” and think that they have much to teach older generations⁶.

Generation 2020 (Z). This is the group born after 1996. In both the United States and Brazil, powerful hand-held devices with multiple ways to communicate, send and receive information are viewed as mere extensions of themselves. They are now just entering the workforce or higher education. What they will be like is yet to be determined⁷.

Needless to say, these characterizations are woefully simplistic. Nevertheless, this is a good foundation to discuss our observations.

MEDICAL STUDENTS

Although there are a few “older” medical students from Generation X, most are now Millennials. Dr. Robin McLeod in her presidential address to the Society for Surgery of the Alimentary Tract (SSAT) in 2014 recommended that the profession of surgery should adapt to the medical students and resident trainees from generation Y (“Millennials”)⁸. A generation gathers its characteristics from the way the previous generation raised their descendants and from the environment and social status quo. Generation Y was born in a highly technological society and “has also been nurtured, pampered, and programmed by their helicopter parents who made sure they attended the best schools and were given the best opportunities. They have been told they are special and they can achieve anything. They have been rewarded not only for excellence but also for participation. Moreover, they have come to believe that they should be rewarded for what they do”⁸. The Millennials are characterized by “much idealization and few realizations,” “I have rights, and my right is your duty” and an introspective (even selfish) behavior. Although this generation occasionally or frequently clashes with the expectations of Baby Boomers, one must not forget that the previous generation created Generation Y, created the environment for Generation Y and role-modeled their lifestyle.

Moreover, if we consider civilization is improving along time, generations are getting better. Millennials are better than previous generations in a series of characteristics and they have to deal with the changes in pressures—economic, regulatory, social and personal— that this generation faces compared to prior generations. However, it may be not better in ALL aspects. Perhaps medicine, as we have come to know it, may not ideally absorb this new culture.

Medicine is different from many other professions. There are child prodigies in different arts and sciences but not in medicine (especially surgery). It is not a natural gift, not self-taught, and it demands experience, physical presence, hard work and, sometimes bitter, self-reflection. This generation’s high level of confidence without experience, the need for immediacy and belief that everything is accessible online may be detrimental to surgery.

Millennial medical students have different expectations and attitudes in regards to learning, their chosen profession and their future at work and at home. The proportion of female students has increased.

Women have been the majority of medical students since 2009 in Brazil⁹, while in the United States, 47% are women¹⁰.

Medical students show a lack of interest in face-to-face learning. It is not uncommon to have nearly empty lecture halls with students preferring to attend “remotely.” There is the occasional air of disregard for professors and the profession since they believe one can upload knowledge to the mind and surgical skills to the hands by simply connecting to the computer. Students are frequently late, physically absent or absentminded in theoretical classes. Attention is usually caught only by realistic simulators or professors who treat them more as equals than apprentices.

Left-Wing ideology is common because helicopter parents fully supported this generation, why should not the University and the government continue supporting them? In Brazil, protests and strikes are frequent now. Not only fighting for local conditions but also for national medical policies.

A lack of interest in the future is common since a high level of confidence in thriving is omnipresent. Social media contributes to this concept since all posts of peers show achievements, never failures. This led to 20% of Brazilian medical students not applying for residency immediately after medical school in order to give themselves “a break” and have an opportunity to “pursue happiness.”

SURGICAL RESIDENTS

Surgical residents (most of the generation Y individuals with fewer and fewer from Generation X) are similar to medical students. Women represented 47% of the applicant pool for surgical residency in the US in 2017¹¹. There is a definite shift in priorities for both men and women.

We evaluated the attitudes, experiences during training and professional expectations of surgical residents in 2011¹² based on the adaptation of a questionnaire¹³. The main findings were a high satisfaction with the specialty, but sizeable financial concern and conflicting opinions about the future. After 5 years we surveyed new residents again. Interestingly, the findings now pointed out that only 65% of the residents are satisfied working with patients and they present lower job satisfaction and more criticism of teaching techniques compared to the initial study.

In Brazil, a surgical residency program encompasses 2 years of rotation in various surgical specialties, which is a requirement for the following years in specific specialties¹⁴. Similarly to medical students, 20% of residents did not apply to the continuation of residency for surgical specialties immediately after finishing the 2 years rotation in order to dedicate themselves to non-medical activities for a while. A newspaper article, somewhat curiously, called this behavior as “the generation that found success after being fired”¹⁵. It told anecdotal cases of young graduates from prominent Universities that were fired or quit their resident training jobs due to the economic crises and radically changed their lifestyle to live a simple life.

FACULTY

Faculty includes mostly Traditionals at the most senior level (although these are becoming fewer and fewer), Baby Boomers at the mid to senior level and now more and more Generation X’ers at the junior and mid-levels. This “mixing” of generations can lead to conflict as, on the whole, each generation has a different expectation as to what they put into work and what they get from work.

Research faculty is very influenced by the technological advances of the world in 2017. Technology made distances shorter and communication easier. The world is interconnected and immediate. A prospective study with an extended follow-up may not be appealing. This is seen by a decrease in the number of prospective studies in medical meetings and journals. Making multi-generational research groups work in an era where the junior faculty is fluent in forms of communication which are not as familiar to the senior faculty is increasingly challenging.

As funding is becoming harder in both North and South America, the natural tendencies of each generation may be brought into more sharp relief. Traditionals and Baby Boomers will not necessarily question the system that has been the basis of their careers, but instead, focus resources towards more popular subjects. Gen-Xer’s with their natural disregard for authority, cynicism and less internalization of work as part of their identity, may adapt, but will not feel good about it. Millennials want mentors to guide them through the process but feel that success should always come. In an environment where research is believed to be associated with a significant

reduction in clinical work and clinical reimbursement¹⁶ although it is possible to excel in both¹⁷. It is becoming easier to work with non-physicians¹⁸.

In addition to the actual work that is performed, the workplace cultural norms and mores are changing. Professors are now guided by a loss of spontaneity to avoid misinterpretations of speech which may be considered offensive. As Millennials consume information through their devices in a non-traditional way, older faculty who are used to the didactic form of teaching view members of the audience focused on their devices rather than the lecture are disappointed by what appears to be a lack of interest. Unfortunately, financial interests are now surpassing the priesthood of teaching. A “restraint of trade” (I will not teach everything I know to my future competitors) is becoming notorious among some educators.

PATIENTS

Patients, of course, come from all generations. The generational difference affects how physicians communicate with their patients. Because of cultural sensitivities, physicians are facing a loss of spontaneity with Gen-X, Millennials and Gen 2020 patients. Similar to what happens in teaching, words, in the context of Traditionals or Baby Boomers speaking to one another, may be misunderstood as offensive by younger generations. We have experienced patients wishing to record the consultation for their own records. Also, there are anecdotal reports of consultations being recorded secretly. Awareness of being recorded changes physician’s behavior resulting in defensive practice whereby doctors order more investigations, write more prescriptions or refer for more specialist opinions¹⁹. An additional concern is with the ability to readily upload video or voice data to the internet, such recordings of privileged exchanges on social media may cause distress, upset or embarrassment to one or both parties¹⁹.

Technology also allows patients to search for information online before a consultation. Although access to high-quality information will lead to a better-educated patient, we have also had the experience of patients consuming unscientific, unreviewed and even fake data, thereby making informed consent all but impossible. With Generation-Xer’s and Millennial’s tendency to question authority, such access to

dubious information makes the job of counseling the patient all the more difficult.

Medical technology also has two sides. On the one hand, technology allows for new or less aggressive procedures; on the other, some physicians can be enslaved by technology. Part of the Brazilian Engineers oath could be added to our medical vow since Hippocrates did not anticipate this: “I swear that during my duty as Engineer I will not allow me to be blinded by the bright light of technology, as I should not forget that I work for the benefit of the mankind not for the benefit of the machine.”

With respect to medical care, having patients take ownership of their health can be challenging. We have encountered patients having the attitude of “my health is YOUR problem, not mine.” Attending surgeons have to deal with wishes and expectations of patients and their good will to comply with the proposed treatment or not.

We have seen different phases of medical practice over our careers:

Physician medicine: physicians did whatever they wanted without much involvement of patients. This was the period where patients were from the Traditional and Baby Boomer generations. These generations tended to have more respect for authority and physicians were considered authority figures.

Legal medicine: an increasing number of patients, mostly from the Gen-X with their suspicion of authority, participated in their own care decisions, but with the caveat that an adverse event was due to some physician error. This led to more “defensive” practices by physicians to inoculate themselves from potential legal action. This occasionally evolved to a pleasing medicine when physicians allowed patients to choose how to manage their care and avoided conducts to limit the quality of life even if care was compromised.

At present, we face a drive-thru medicine: (a) there is little concern about punctuality. Patients want to be seen as soon as possible even if they are late or early; (b) a personal relationship with the service provider is not pursued; (c) consultation should be as brief as possible due to a busy agenda; (d) the customer chooses the product, not the provider. Patients search for information online and come looking for a specific procedure or medication. Medical care is summarized by an exchange of money for a product but instead of fast food, it is medical care.

HOW SHOULD WE, AS EDUCATORS, RESPOND?

Millennials - who comprise current medical students and residents and the near-future workforce – have different expectations and attitudes from previous generations. Educators must learn how to communicate and understand them. Personal beliefs and opinions, conduct in front of patients, dress codes, attitude towards pets, etc. may be more important to create or destroy a teacher-pupil relationship than medical knowledge and educational skills. This relationship is necessary because they must be guided and mentored. This generation faces a delay in the rites of passage⁸. They must be taught that hierarchy is important in surgery. Not like in the past when residents had to bow before professors, but the hierarchy necessary to coordinate a surgical procedure in which multiple operators perform according to a determined grading. They must be taught that happiness can be found

in the passion for operating and treating patients, as showed by Dr. Nathaniel Soper in his 2017 SSAT presidential address²⁰. They must be taught that resilience is necessary to thrive, citing another SSAT president²¹. If the 10.000-hours rule²² is valid for most professions, it is undoubtedly more valid for surgery. Finally, they may be shown that perhaps those who take the best of their generation but ignores the worse are successful individuals.

Previous generations are affected by the *status quo* too. Technology must be used beneficially. It means that those unfamiliar with it must catch up. It also means that it is a good communication channel with youngsters. Previous generations must extract the best from this moment but are also responsible for keeping ancient knowledge alive.

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PALAVRAS CHAVE: Educação médica. Relação entre gerações. Ensino. Cirurgia geral.

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