Orthopedic surgery is a challenging profession, both at the diagnostic and therapeutic level. Successful treatment of patients requires teamwork with different stakeholders, with various personalities and motives. Coping with the stress of the quest for the ultimate surgical result might not be easy for everyone. While some surgeons see their activities as a job or at best as a career, others who face similar difficulties seem to respond to a higher calling. They are the ones striving for continuous improvement and excellence, and are committed to serving their patients with a deep sense of caring. In this article, we introduce a surgeon typology based on these two variables. We also introduce global coaching as a novel approach to help surgeons on this potentially transformational journey. We focus on the qualities that global coaching can help to develop as well as briefly mention some of the models and tools that can be called upon. Evidence from the Harvard Grant longitudinal study confirms that humans continue to develop during their adulthood and suggests that the following hypothesis is likely to be accurate: remarkable surgeons committed to technical excellence and caring deeply for their patients are likely to be most successful both in their careers and in their lives. If necessary, surgeons have a chance, a choice and a responsibility to change course, to reconnect with their profession and to establish more intimate relationships with their patients, colleagues as well as in their personal lives. By growing into becoming remarkable surgeons, they will serve others as well as themselves.

Keywords: global coaching; remarkable surgeon; disconnected surgeon; knee, surgeons; coaching; excellence.

INTRODUCTION

Becoming an orthopedic surgeon is a long and arduous journey: many years of difficult studies followed by demanding internships typically for a meager pay. Often these are lonely years where residents are in competition with their colleagues to get access to the best training centers and to be allowed to perform enough surgical procedures to obtain case experience. This is habitually a period during which individualism, if not egocentrism, is developed as a survival skill. But in reality, it is only the beginning. Orthopedic surgery is a challenging profession, both at the diagnostic and therapeutic level. It requires current knowledge of the latest research findings and surgical techniques, an understanding of tribology and engineering, great dexterity and mastery, the ability to devote sustained and full attention to the task at hand, and the capacity to work in teams. The team consists of four stakeholders with separate feelings and understanding of
what healthcare is all about. Setting up a well-functioning team with this mix of administrative people (secretaries), nurses, anesthetists and surgeons requires a lot of attention. Patients’ quality of life, if not their life itself, is on the line each time. A small mistake can have tragic consequences both for patient and surgeon.

To deal with such high responsibility time and time again, often in the midst of heavy workloads, can generate significant stress. A common coping mechanism adopted by orthopedic surgeons and other physicians alike is to distance oneself emotionally from patients. Ultimately, surgery becomes a mere technical act and medicine a business with its habitual key performance indicators (KPI): number of operations, total revenue, infection rates et cetera. This type of surgeons does not have to spend time connecting with patients or feel the pain they are going through. Instead they can focus their energy on performing surgery and the technical aspects of the job. Therefore the chase of mathematical results becomes a goal on its own. Obtaining perfect limb alignment (exactly 180° HKA-angle) or the new time record can become the primary motivation. Faster surgery can increase the daily case-load and allow an optimal use of time from a financial standpoint. After having invested years of their time in studies and internships, surgeons can at last reap some financial rewards for themselves while bringing revenues for their hospitals.

This being said, the quest for technical excellence and financial performance does not concern all surgeons, let alone all other stakeholders. In particular, those who only have rare and superficial contacts with each individual patient might not have the same desire to achieve perfection.

A detached medical approach makes sense to reduce stress but it violates the Hippocratic oath, which the physician has sworn to fulfill in these terms according to the modern version written by Louis Lasagna in 1964: “… I will apply, for the benefit of the sick, all measures that are required, avoiding those twin traps of overtreatment and therapeutic nihilism. I will remember that there is art to medicine as well as science, and that warmth, sympathy, and understanding may outweigh the surgeon’s knife or the chemist’s drug…”.

It might miss the mark on two accounts. First, the chase for technical performance and non-stop increasing numbers might lead to unnecessary operations. Conservative treatment often requires the surgeon to spend more time with patients listening and explaining what to do and not to do. It can lead to more visits, which reduce access for new surgical patients. However, aggressive surgical interventions might make matters worse for the patients and lead to high costs for our society. Second, the lack of human connection can also be problematic. It prevents the patient from fully playing his part to make an informed decision about the best treatment in his situation and to actively participate in his rehabilitation post-surgery.

While some surgeons see their activities as a job or at best as a career, others who face similar difficulties seem to respond to a higher calling. They are the ones striving for continuous improvement and excellence, and are committed to serving their patients with a deep sense of caring.

The matrix below represents various scenarios. It would be interesting to conduct a research survey among surgeons themselves as well as among their patients to determine how orthopedic surgeons can be distributed among these four quadrants.

Some surgeons seem to go through the motions, possibly resting on their laurels without proactively upgrading their skills and learning the latest most effective techniques. Furthermore, they don’t seem to be overly concerned about their patients. They will certainly try to make each intervention a success but without really taking to heart the difference it will make for their patients, for better or worse. These are the disconnected surgeons, in the first quadrant, relatively low on caring and low on technical excellence compared to their peers.

Table I. — Surgeon typology

<table>
<thead>
<tr>
<th>Sense of caring/service</th>
<th>Technical excellence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nice surgeon</td>
<td>Remarkable surgeon</td>
</tr>
<tr>
<td>Disconnected surgeon</td>
<td>Competent surgeon</td>
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</tbody>
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Other surgeons do strive to achieve technical excellence and have built a reputation as competent surgeons. However, because they lack a real sense of caring, they may for example perform an operation that is not really necessary (as could have been revealed during a deeper dialogue with their patients). They could also fail to follow up a successful operation. Consequently, a botched post-surgery rehabilitation might partially ruin their surgery.

The nice surgeons do care about their patients and are able to establish good relationships with them. However, despite their best intentions, they might lead their patients to trust them more than they should. A combination of “halo effect” (patients forming a general picture of the surgeon from limited impressions such as a confident demeanor and an affable personality) and “affect heuristic” (likes and dislikes determining patients’ belief about the surgeon’s competence (7)) may imply that the patients overestimate the surgeon’s technical expertise.

The combination of high technical excellence and great sense of caring characterizes the remarkable surgeon. What is different about these surgeons that makes them go the extra mile? More importantly, what can be done to promote this noble attitude, which not only benefits the patients but also is ultimately more fulfilling for the physicians?

In the experience of the first author of coaching executives and training leaders across the globe for almost 25 years, a few lessons have been learned which apply to orthopedic surgeons as well.

The first insight is that the ethical discourse and the “should’s” are of limited impact here. Behaviors are unlikely to change because coping mechanisms unconsciously at play serve a purpose: avoiding negative emotions and reducing stress. Who can blame surgeons for finding ways to deal with their strenuous occupation?

We have more energy when we want rather than have to do something. Therefore, what can have a greater impact is to invite surgeons to reflect on what they truly want, to create the space for a personal exploration. Helping people to tap into their authentic desires and needs is at the core of the coaching approach. What does success mean to you? What is the legacy you want to leave behind? How do you want to be remembered? Surprisingly, many executives the first author worked with had not seriously asked themselves those questions. We suspect the same could be true for physicians in general and orthopedic surgeons in particular. Life is lived out of habit and the frenetic pace often prevents this deeper reflection. Mind full replaces mindful living.

GLOBAL COACHING FOR SURGEONS

Coaching is a fairly recent discipline, which started with practitioners in the last part of the 20th century. Coaching found its way into the academic world both in education and research projects at the beginning of the 21st century. In the medical field, let us mention that in 2009 an Institute of Coaching was established at the Harvard Medical School building upon the Coaching and Positive Psychology Initiative at McLean Hospital, which had started in 2007 (5). The vision was “to empower individuals to reach their peak health and performance”. While it is beneficial to direct coaching at patients, we suggest in this article that physicians could benefit from coaching as well. We also argue that global coaching, which is an integrated multiple-perspective coaching approach, is required to help surgeons best address the complex challenges they face.

Global coaching usually takes the form of one-to-one confidential sessions over a period of time (typically between six months and one year). An introductory seminar aimed at a group of professionals can also be very beneficial to initiate the personal exploration and goal setting process, through various reflective and experiential activities. Until you go through such a developmental seminar and experience coaching first hand, it is really difficult to grasp the power of this approach, which can be transformational. In his books “Coaching Across Cultures” and “Global Coaching” (9,10), the first author has shared various experiences and stories that could give the reader a better sense of what can be done in practice.

Global coaching will not allow turning all surgeons into champions of their discipline. Likewise, not every tennis player can reach Roger Federer’s
Their attitude contrasts with complacency and staying in one’s comfort zone. Even if reputation can outlast actual performance, achieving excellence has to be obtained over and over again.

RS have the courage to solicit feedback and the humility to participate in evaluations, both regarding their technical performance as surgeons and their behaviors vis-à-vis hospital staff and patients. This allows them to avoid possible blindspots and to discover avenues for improvement from these assessments.

Feedback exchanges have become more common among corporate executives. Research has shown that leaders soliciting feedback on various aspects of their leadership behaviors tend to be viewed as more effective than those who don’t (2). Concerning physicians, this practice still seems far from the norm today. Without this form of challenge, some surgeons can unfortunately get away with lasting sub-par performance.

Leadership versatility

RS are able to effectively manage their team of assistants, anesthetists, nurses, physical therapists, secretaries et cetera. RS are able to use a variety of leadership styles to match the readiness level (ability and willingness) of their collaborators for various tasks.

By adapting their leadership style to each situation, RS are constantly raising competencies, motivations and senses of responsibility. This allows them to promote engagement of all staff and to run an efficient unit.

Moreover RS are also able to manage their own time productively (9), notably by avoiding the infamous “time eaters” and through rigorous personal organization.

Emotional and relational competence

Certain personalities are more likely to end up in surgical sections than in a medical department. “The surgeons” have high visibility and are usually identified as a particular crowd by the rest of the hospital staff. “Type A” or “Alpha males” (female orthopedic surgeons still being a minority) are some
For example, it might be important to create cross-department alliances among doctors. There is often a medical council (MC) that takes care of the medical peer quality review. RS know how to positively influence the dynamics among members of that MC, which in turn can determine the future of an institution.

As suggested earlier, RS typically strive to promote the highest standards of technical excellence and sense of caring for the patients. This ambition can be the basis for building alliances that ultimately serve everyone: better healthcare for the patients, better reputation for the hospital attracting more patients and generating more financial income, pride for all staff who made a difference: nurses who comforted the patients, secretaries who treated them kindly and janitors who minimized the incidences of infection by properly cleaning the environment. The concept of “Magnet hospitals” where people who strive for excellence find each other has been introduced as a concept in the last few years. RS try to motivate their hospital management to choose that path, even if initially this might ask for investments and team education without a direct and immediate financial return on investment. They can make the case that creating sustainable quality of care ultimately serves all stakeholders, including enabling sustainable financial performance.

Cultural inclusiveness

The culture of an enterprise affects the spirit of the group. New people starting to work in a hospital typically behave how the group tells them to act. Hospitals often publish their mission and vision statements on their website but those words are not necessarily translated into actions. Staff might not even know where to find these messages, let alone understand the meaning.

There is no substitute for leading by example, for instilling norms and values through the leaders’ actions. The problem in hospitals is that the four different categories of stakeholders can each have conflicting norms and values. A surgeon searching for excellence can be considered annoying and disturbing by those who just want to finish the job and leave the hospital promptly. Cultural inclusive-
ness involves the ability to bring together conflicting cultural viewpoints.

RS appreciate the legitimacy and merits of alternative cultural perspectives. They treat cultural differences as a source of richness and as an opportunity to go beyond current cultural limitations. RS have a broad, inclusive and dynamic concept of culture that contrasts with the traditional static and binary view. They master a vocabulary to describe cultural orientations in areas of practical importance such as sense of power and responsibility, time management, definitions of identity and purpose, organizational arrangements, notions of territory and boundaries, communication and thinking. RS are aware of their own cultural norms, values and fundamental assumptions and can leverage cultural differences. This allows them to build unity in diversity, when working across cultures and for their own personal development.

In practice, RS have learned how to bridge cultural gaps between various stakeholders. They know that seemingly contradictory perspectives are not necessarily incompatible. They are often able to find a creative synthesis of the various viewpoints and make the most of cultural diversity. RS are able to embrace complexity.

**Spiritual awakening**

As Jonathan Haidt explains (1,4), “most people approach their work in one of three ways: as a job, a career, or a calling. If you see your work as a job, you do it only for the money, you look at the clock frequently while dreaming about the weekend ahead, and you probably pursue hobbies, which satisfy your effectance needs (drive to develop competence through interacting with and controlling one’s environment) more thoroughly than does your work. If you see your work as a career, you have larger goals of advancement, promotion, and prestige. The pursuit of these goals often energizes you, and you sometimes take work home with you because you want to get the job done properly. Yet, at times, you wonder why you work so hard. You might occasionally see your work as a rat race where people are competing for the sake of competing. If you see your work as a calling, however, you find your work intrinsically fulfilling – you are not doing it to achieve something else. You see your work as contributing to the greater good or as playing a role in some larger enterprise the worth of which seems obvious to you. You have experiences of flow during the workday…”

RS have an increased awareness of a connection with themselves, others, nature, with the immanent and transcendent “divine” (understood in a religious, mystical and/or secular fashion). They find meaning in their lives and discern what is truly important. Living purposefully and mindfully, they are united with themselves and with others.

Wisdom combined with lightness allows them to appreciate and savor life, and to accept suffering that cannot be avoided with courage and dignity, building resilience.

RS reflect on crucial questions e.g.: “What is truly important for me?” and “What is the legacy I want to leave behind?”. They use meditation (which can be combined with physical exercise) and artistic exploration to circumvent rational thinking and tap into deep unconscious aspirations. By cultivating an attitude of gratitude, RS welcome the beauties life offers and radiate this energy toward others.

In my experience, a calling is not necessarily something that you either have or don’t have, something that happens to you miraculously. A calling is rather something that needs to be unfolded and cultivated. Through deep questioning and artistic exploration (as simple as creating collages)(9), global coaches can help you reconnect with a sense of purpose and find the calling.

RS also instill meaning to their teams, reminding everyone that she has a role to play, that his efforts will make a difference for the patients.

**Deep interconnectedness**

We live in a fragmented world with silos in organizations and experts knowledgeable about their particular fields. This traditional mechanistic worldview is insufficient to address today’s complexity. Expert physicians, much like other professionals and leaders, need to understand the emerging holographic organic worldview and complexity theory.

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Concretely, they need to move beyond fragmentation and over-specialization, and appreciate the interconnections and broader implications of everything they do. RS are eager to acquire knowledge beyond their discipline and they know that this will give them valuable insights, which will serve in their profession too.

Appreciating interconnections also means that they are unsatisfied with mere superficial and instrumental human relations. Martin Buber once compared I-It relations with I-Thou relationships (8). I-It refers to superficial, instrumental relations, in which we tend to objectify the other. This could happen when the surgeon views the patient as someone merely characterized by a certain condition, injury, or as some body in the process of undergoing a surgical procedure. “Without It, a person cannot live” said Martin Buber. To paraphrase him, we could say that without It a surgeon cannot exercise his profession. On the other hand, I-Thou refers to authentic relationships in which we strive to establish genuine human bonds and to be fully present. Martin Buber talks about turning from separation toward deep bonding. We certainly need It but Buber goes on stating that “one who lives with It alone is not a person.” Similarly, we would say that a surgeon who operates with It alone is not a surgeon in the noblest sense. In other words, he may be a very competent surgeon and, although his technical excellence is most important, his lack of humanity still prevents him from being a remarkable surgeon.

REMARKABLE SURGEONS, ADULT DEVELOPMENT AND HAPPINESS

At this point, you might wonder: why should this matter? Actually, turning toward deep interconnectedness is likely to make you happier and more fulfilled (in addition to making a positive difference for those you touch)!

Jonathan Haidt argues: “Happiness is not something that you can find, acquire, or achieve directly. You have to get the conditions right and then wait. Some of those conditions are within you […]. Other conditions require relationships to things beyond you: Just as plants need sun, water, and good soil to thrive, people need love, work, and a connection to something larger. It is worth striving to get the right relationships between yourself and others, between yourself and your work, and between yourself and something larger than yourself. If you get these relationships right, a sense of purpose and meaning will emerge” (4).

Evidence from an amazing 75-year Harvard University longitudinal study is pointing in the same direction. The Grant Study of Adult Development is a prospective longitudinal study, which started in 1938 with 268 sophomores from Harvard College classes of 1939 to 1941 (11). With multidisciplinary aims, it started with an intensive battery of tests and interviews. The tests and in-depth interviews have continued regularly since then. Many participants are still alive and currently living into their tenth decade. George Vaillant, professor of psychiatry at Harvard Medical School, arrived at the Study in 1966 and has been involved since then. He was the director of the Study from 1966 until Robert Waldinger, M.D., took over in 2005. The Study showed the paramount importance of human relationships, of intimacy and warmth. Vaillant established a Decathlon of Flourishing—a set of ten accomplishments in late life that covered many different facets of success (in areas including professional reputation, high income, success and enjoyment in work, love and play, good subjective and objective physical and mental health, good marriage, close to kids, availability of social support, mastery of the Eriksonian task of Generativity (3,11), which will be explained on page 8). Among other findings, Vaillant reported a very significant correlation (i.e., $p < .001$) between “warm adult relationships at age 30-45” and a high Decathlon score at age 60-80.

Incidentally, the Study also evidenced how adults continue to develop as human beings. Vaillant explains in particular:

- “The first contribution [of the Grant longitudinal prospective study] is the absoluteness of the Study’s demonstration that adult development continues long after adolescence, that character is not set in plaster, and that people do change.
Even a hopeless midlife can blossom into a joyous old age. Such dramatic transformations are invisible to pencil-and-paper explorations or even ten-year studies of adult development (11).”

- Erik Erikson’s “appreciation of adult development as dynamic growth rather than decay” has been a “major paradigm shift”. “But without empirical evidence to back it up, it gave rise to more theory and speculation than knowledge. The Grant Study has changed that (II).”

George Vaillant built upon his previous work (particularly “Wisdom of the Ego (1993)”) to show how adult development goes hand in hand with:

- The maturation of involuntary coping mechanisms (unconscious ego defenses)
- Progression to the more advanced Eriksonian stages of adult development

For an orthopedic surgeon, this would mean for example that:

- Remarkable surgeons may tend to unconsciously rely on mature defenses such as altruism (service to others that brings satisfaction), suppression (semi-conscious decision to postpone paying attention to an emotion or need in order to attend to the important task at hand) and anticipation (realistic and affect-laden planning for future discomfort – self-inoculation of taking one’s affective pain in small, anticipatory doses).
- Nice surgeons may use mature defenses but also be inclined to employ neurotic (intermediate) defenses such as repression (buries painful or dangerous thoughts in the unconscious; the emotion is conscious but the idea behind it is absent). In this instance, the surgeon might feel very upset without knowing why. The idea that his competence is lower than he would like to think might damage his self-esteem. The defense mechanism of repression allows the unconscious burying of this distressing notion. However, the downside is that the surgeon will not take actions to deal with the issue.
- Likewise, competent surgeons may rely on mature as well as neurotic defenses such as isolation of affect (separates the emotion – that accompanies ideas). This way, surgeons shun unpleasant affects such as sadness. However, this isolation prevents them from expressing compassion and truly connecting with their patients.

- Of all surgeons, the disconnected are most likely to rely on immature defenses1 such as projection (attributes one’s own unacknowledged, unacceptable, unwanted thoughts and emotions to another) (II). By projecting his own incompetence onto others, the surgeon can preserve his self-esteem. This self-deception will alienate his colleagues who might take the criticism personally. Moreover, sooner or later reality will undoubtedly catch up with the surgeon.

Regarding adult development, progression would imply reaching advanced stages:

- «Career Consolidation» in which you bring commitment, competence and contentment to the tasks at hand (II).
- «Generativity» which implies sustained responsibility for the growth and well-being of others. “Generative people care for others in a direct, forward-oriented relationship” such as doctor to patient. Generativity implies “looking after others” and caregiving (II).

CONCLUSIONS

Although further research would be needed to demonstrate this, evidence from the Grant longitudinal study suggests that the following hypothesis is likely to be accurate.

Remarkable surgeons, committed to technical excellence and caring deeply for their patients, are likely to be most successful both in their careers and in their lives. They will flourish into old age more so than their other colleagues.

Humans continue to develop in their adulthood. If necessary, surgeons have a chance, a choice and a responsibility to change course, to reconnect with

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1As Vaillant explains, «immature» and «mature» are not meant as value judgments but to underscore the fact that the ego develops into adult life.
their profession and to establish more intimate relationships with their patients, colleagues as well as in their personal lives. By growing into becoming remarkable surgeons, they will serve others as well as themselves.

Global coaching, which we have presented in this article, can be invaluable to help orthopedic surgeons on that developmental or possibly transformational path if they have the courage, humility and discipline to embark on the journey.

REFERENCES