PROFESSIONAL IDENTITY FORMATION: A TRIPARTITE TAXONOMY OF CHARACTER STRENGTHS & VIRTUES IN PHYSICIANS & MEDICAL STUDENTS

SG Post, M Basile, R Iuli, P Migdal, JS Trilling, A Wackett, L Strano-Paul

Recent literature reviews indicate that there exists no comprehensive taxonomy of character strengths and virtues specific to the professional identity formation (PIF) of medical students (Sarraf-Yazdi, 2021; DeLoughery, 2018; Kim et al., 2023). This documented absence of a satisfactory summation of virtues has stimulated our team at the Renaissance School of Medicine (RSOM) at Stony Brook University to attempt a conceptual advance with regard to a new tripartite taxonomy of the virtues. This model reflects moral progress regarding the importance of justice and the care of the self over the last decade. Our previously published overview of the methods used here to nurture excellence and virtue in medical students has garnered national attention (Cohen, 2007; Chandran, 2019) and received the *Alpha Omega Alpha* annual award for PIF curricula in 2019. Herein we offer a definition of the core virtues of the well-formed student, and by implication, medical practitioner.

We are innovating within a perennial tradition of medical ethics that focuses on the moral "excellences" (Greek *arêt*e) or "virtues" that form the character (Greek *hexis*) of a good doctor, as acquired over time within a community of practice. Character refers to the whole set of excellences of a practitioner – in this case a physician – as a member of the medical community (Koch, 2012; Marcum, 2012). Character or "virtue" ethics has traditionally formed the foundations of medical ethics. To consider ethics as merely concerned with principles and

quandaries is generally viewed as a modern day reduction (Pincoffs, 1986; Pellegrino, 1995; Pellegrino & Thomasma, 1993; Drane, 1988).

Virtues are taught less through didactics than through transmission from role model to student, and through reflection so as to involve the "whole self." As Pellegrino wrote, "I define a virtue as a trait of character that disposes its possessor habitually to excellence of intent and performance with respect to the *telos* specific to a human activity" (1995). Virtues are transmitted by members of a community of practice when that community is clear and explicit about the qualities of character that constitute excellence and allows ample opportunity for these virtues to be modeled across the generations (Chandran, 2019). Virtues are always culturally shaped although some have a clear natural substrate.

In this paper we offer a comprehensive virtue taxonomy for medical education that is shaped by important positive developments in moral consciousness using a tripartite framework.

A TRIPARTITE TAXONOMY

We propose an innovative tripartite taxonomical classification as follows:

1. Other-Regarding Virtues (ORV)

2. Self-Regarding Virtues (SRV)

3. Equal-Regarding Virtues (ERV)

Though synergistic each of these three categories is readily distinguishable with regard to fundamental mindset. This taxonomy classifies the virtues into their primary category. To flourish a medical student must develop character strengths that encompass all three categories. For medical students, OVRs seem to interweave somewhat with SRVs and ERVs. For example, "a higher reported level of empathy during medical school was associated with a lower risk of burnout during residency (RR. 0.99 per 1-point increase)" (Dyrbye LN, Burke SA, Hardeman RR, et al. 2018). Additionally, few medical students today feel that they fulfill the OVRs without

some strong sense of equal access and equity. In other words, these categories of virtues are interwoven.

Category One: Other-Regarding Virtues (ORV)

We have in mind here virtues related to the patient's good (Pellegrino, 1988). The very word "professional" comes from the Latin "professio," meaning to profess by public oath a commitment to the good of an identifiable constituency, in this instance the good of patients. As for each of the three categories, ORVs reflect a particular cultural evolution in the western world. We can identify the emergence of a benevolent passion for the patient with the great Muslim and Jewish doctors of the medieval period, and the Christians who readily treated patients in the leper colonies and formed the first hospitals in Europe. These ORVs are also explicit in eastern philosophies, especially as shaped around Hinduism and Buddhism. Such universality suggests that the ORVs emerge from the very "telos*"* or purpose of medicine as a healing and therapeutic art. The great Iranian physician Avicenna (980-1037 CE), otherwise known as *Ibn Sina*, is widely counted among the most significant healers in history, both for his advances in medical science and for his moral emphasis on medicine as a service to all humanity without exception, as captured in his two major works *The Canon of Medicine* and *The Book of Healing*, both of which are considered foundational to modern medicine. Avicenna influenced the rabbinic philosopher and physician Moses Maimonides (1138-1204 CE), who articulated the primacy of the care of the patient under any circumstance and who also emphasized the importance of self-care in order for physicians to be effective agents of benevolence. It was this ascent of ORVs to form the core of western medical ethics that created fertile ground for the likes of Albert Schweitzer, Paul Farmer, Dame Cicely Saunders, and many other altruistic exemplars.

The ORVs include four basic virtue sub-groups: 1. benevolence, 2. commitment, 3. generativity, 4. diligent learning

1. Benevolence: kindness, gentle curiosity, empathy, compassion, acceptance, listening

     Kindness: The simplest virtue that is often expressed through interest in the patient that leaves them feeling acknowledged. Kindness involves no special knowledge of the patient, and is significant in every encounter.

     Gentle Curiosity: This implies light-handed curiosity with a sense of awe and respect for the whole patient. Curiosity is a benevolent quality when coupled with gentleness. (Trilling 2023).

     Empathy: This is more elaborate than kindness. It requires dialogue and attentive listening to the patient's subjective experience of illness, as well as reflecting this back to the patient for accuracy. Cognitive empathy can be limited to a rational understanding with little or no affective presence. At its fullest, empathy involves an affective presence felt by the patient that builds connection.

     Compassion: This is affective empathy in the special context of suffering, and includes the desire to act to alleviate that suffering.

     Acceptance: Openness to all patients even those deemed "difficult." Furthermore, perhaps there are no "difficult" patients, just difficult circumstances and challenges of the healthcare system or the illness experience.

     Listening: Human beings have an absolute need to talk about their health challenges and feel that they are being listened to.

2. Commitment: loyalty, fidelity, fiduciary responsibility

     Loyalty: Continuity of care remains an important element of good clinical care, and loyalty is at its heart. Patients need to feel that they are being cared for by someone they know

and are known by. This builds trust.

Fidelity: Doctors need to keep their word as a matter of integrity in the role of a healer. They need to be faithful to the good of their patients.

Fiduciary responsibility: The doctor is a fiduciary to every patient. As such, they act solely in the interests of the patient, and no one else. This is both a moral as well as a legal norm.

3. Generativity: *teaching, mentoring, role-modeling*

Teaching: Education occurs though doctors who are highly engaged with teaching, both didactically and at the bedside. The famous "teaching paragraph" of the Hippocratic Oath makes education a primary responsibility for every doctor. Indeed, the word "doctor" comes from the Latin word *docera*, meaning to teach.

Mentoring: A mentor is a trusted guide or counselor who acts solely for the benefit of their students and advocates for them as they develop professional identity and depth. A mentor always nurtures the mentee, and never takes advantage of them for personal or professional gain.

Role-modeling: Virtues are not "taught" didactically, but are passed down to new generations of medical students by good role models who manifest the virtues we include herein.

4. Diligent Learning: *life-long learning, intellectual curiosity, wisdom*

Life-long learning: A physician must be eager to learn over the entire course of a career. The love of learning is driven by care for patients. Medical knowledge changes quickly. *Open-mindedness* and a willingness to acknowledge uncertainties are essential.

Intellectual curiosity: Curiosity and love of learning are keys to the successful treatment of patients. Physicians must stay current, and not simply rely on the old adage "Neither the first nor the last."

Wisdom: Wisdom is a quality of physicians who are considered likely to contribute to optimal ethical and clinical decisions based on accumulated knowledge and practical experience. "Phronesis" is a type of wisdom or intelligence relevant to practical action in particular situations

and implies excellence of character and good judgment.

Category Two: Self-Regarding Virtues (SRVs)

In recent years, the medical profession has become more focused on the self-care of the physician. It was only in 2018 that the American Medical Association published its "Charter on Physician Well-Being" (Thomas, Ripp, West 2018), which recommends the following:

1. "Effective Patient Care Promotes and Requires Physician Well-Being"

2. "Physician Well-Being is Related with the Well-Being of All Members of the Health Care Team"

3. "Physician Well-Being is a Quality Marker"

4. "Physician Well-Being is a Shared Responsibility"

These assertions are beyond controversy. It is worth noting that the operating term in the AMA statement is "well-being," which includes wellness but is much broader in pertaining to the "whole self" with regard to flourishing and meaning.

The care of the self was central in all of ancient Greek and Roman medical ethics, prior to the emergence of the Abrahamic (Islam, Judaism, Christianity) spiritual and moral traditions in the West. Famously, there is the oft-cited Epitaph of an Athenian Doctor (est. 200 BCE): *"These are the duties of a physician: First…to heal his mind and to give help to himself before giving it to anyone else."* While this core area of SRV is crucial, it cannot provide the stimulus for intense ORVs, and among the Greek and Roman physicians we find no examples of doctors putting themselves at risk for patients, or demonstrating the benevolence that would enable a physician to do so. This development is rooted in the influence of the Abrahamic traditions (see Hauerwas, 2004). While selfless practice at considerable risk is considered virtuous under the influence of the Abrahamic faiths, this ignores the SRVs emphasized in the Hippocratic tradition.

Today some physicians do not take the time to care for their own health, and are sometimes even ashamed to fall ill because as physicians they are somehow "superheroes" beyond the grasp of vulnerability. Self-care has *never* come up when medical students identity the qualities of the "good" doctor on surveys (cite surveys). Relatively few physicians have designated primary care doctors and pursue age-appropriate preventative care. (Shanafelt et al., 2012).

How serious is the problem of lack of SRV in physicians? A 2018 *JAMA* editorial sizes up the best meta-analysis of existing data based on 182 studies of burnout in 109,628 physicians. Though the studies were extremely heterogeneous in design and methods, the authors concluded that "perhaps 20 percent" would fit in the category of burnout (Schwenk and Gold, 2018), although many others are not flourishing.

To drill down into the dynamics of burnout, many generalist medical journals are publishing surveys of what most contributes to resident burnout (Hipp et al. 2017), including these elements:

1. Decline in personal meaning from the loss of empathic relationships with patients

2. High ratio of administrative duties to actual bedside care (2:1 or as much as 4:1 for residents)

3. Family and personal life hard to balance (many physicians will work 12 hours and then go home to spend considerable time completing their charting and communications).

4. Low self-determination ("feeling like a cog in the wheel," lack of autonomy)

5. Excessive workload

All of the above elements require institutional and managerial attention and must be addressed in order for the physician to implement self-care. The concern that focusing on self-care diminishes the energy of physician benevolence (and productivity) is unfounded (Shanafelt 2012). On the contrary, the two categories of self-regard and other-regard are highly synergistic.

Medical schools such as our own that focus on individual well-being and resilience practices (yoga, meditation), and on dialogical community building (via Schwartz Rounds, Medical Student Reflection Rounds, and Residency Reflection Groups) find evidence that the energy of benevolence is enhanced (Chandran et al, 2019; Imperato & Strano-Paul, 2021).

The SRVs include *five* basic virtue sub-groups: 1. self-compassion, 2. balance, 3. preventive care, 4. strength, 5. integrity

1. Self-Compassion: self-compassion, self-forgiveness, self-acceptance

Self-compassion: Compassion that does not include compassion for self is incomplete. Physicians need to be self-aware of their own suffering and acknowledge it in supportive relationships, spiritualties, and emotional self-care. They can express gratitude for one another in their lives of healing purpose.

Self-forgiveness: Physicians like all human beings, make mistakes. As Martin Luther King Jr. said, "Those who make no mistakes make nothing." Resignation and even suicide have resulted from physician guilt. Self-forgiveness is generally not a solitary act, but requires communication with trusted peers, the wisdom of good counselors, and resilience.

Self-acceptance: Self-acceptance is rooted in humility as the acknowledgement of universal human imperfection. Physicians hold themselves to the very highest standards, functioning within an informal social contract that society expects of them, and the oath to which they adhere. Nevertheless, there must be an underlying acceptance of imperfection and a shared realization that even the most "perfect" role models have their struggles and their flaws.

2. Balance: balance, entrustment, well-roundedness

 Balance: In the history of philosophy no one has ever come up with an objective and universal formula for work-life balance. This balance is especially challenging because physicians have such a strong sense of calling. Many have found that the secret of life is to be completely engaged with what they are doing, and instead of calling it work they realize it as a calling. As Mark Twain put it, "The two most important days in your life are the day you are born and the day you find out why." Balance is crucial to professional well-being, wellness, and longevity.

 Entrustment: It is a strength for physicians to entrust patients to their peers and to other professionals. No one healer can do it all. Unlike the Greek gods and goddesses, physicians are finite creatures involved in various teams, and they must be able to relinquish care to trusted colleagues. Entrustment is imperative because physicians who delegate responsibility well can claim time for self-care and successful personal relationships outside of work.

 Well-roundedness: Well-roundedness is the essence of a full and gratifying life, one in which we can look back over the years and feel that we lived well. This is the ultimate form of self-care. In Dr. Paul Kalanithi's *When Breath Becomes Air,* we see a resident neurosurgeon who was "successful" by every standard definition, yet his personal life was in shambles. When Paul falls ill with terminal cancer he finds meaning as a writer, a loving husband, and as the father of a newborn, and in this he experienced his ultimate success.

3. Preventive Care:

 Physicians need to take care of themselves both as an end in itself and also as a means toward the optimal care of patients. Many physicians delay treatment for their own physical and

mental conditions. To cite again the Epitaph of an Athenian Doctor (est. 200 BCE): "These are the duties of a physician: *First*…to heal his mind and to give help to himself *before* giving it to anyone else." We must all avoid the spirit of invincibility, for no one is "super human" and invincible to need medical attention themselves.

4. Strength: *Strength, courage, resilience, self-control*

Strength: Strength is the internal capacity to withstand great pressure. It encompasses all the virtues described below. Strength is not the antithesis of kindness or compassion. As Gandhi wrote, compassion is a virtue for the strong and the courageous.

Courage: Courage is the willingness to act in the face of the challenges inherent in medical practice, such as dangers of infection, fear of making a medical error, or threats of personal harm in health care settings.

Resilience: Resilience is the ability to persist and endure with grace and professionalism in difficult circumstances.

Self-Control: Self-control is an awareness and management of one's emotions and demeanor.

5. Integrity: *Honesty, humility, responsibility*

Honesty: Honesty grounds professional integrity. Even in the most difficult of situations, honesty remains the best policy when practiced with sensitivity, wisdom and kindness.

Humility: Humility is not humiliation. It is a form of objectivity, the objective assessment of the equal worth in relation to others, devoid of arrogance or self-deprecation. It is said, "Humility is not to think less of oneself but to think of oneself less."

Responsibility: Responsibility is accepting the duties of being a doctor, which include fulfilling obligations to patients and colleagues.

Category Three: Equal-Regarding virtues (ERVs)

Medical students and physicians are now keenly aware of the issues around social justice, equality, equity, implicit and explicit biases, social determinants of health, discrimination, advocacy, and the like. These concerns fall under the virtue category of "equal regard," a category that holds status in the language of contemporary moral philosophy. Like the SRVs, the ERVs have come more clearly into the consciousness of physicians and medical students.

The ERVs include three basic virtue sub-groups: 1. justice as fairness, 2. respect, 3. self-awareness

1. Justice/Fairness: Equality, equity, access to care, advocacy

Equality: A just doctor is committed to equality in the workplace, in patient care, and in society. Medical ethics has always been focused on providing treatment according to need, although primarily through charitable care for the uninsured. However, justice focuses on addressing structural disparities and their systemic correction as captured in language such as "the right to healthcare." Physicians treat equally according to need, and the inability to operationalize this duty causes moral injury.

Equity: Equality does not guarantee equity. Equity means recognizing that we do not all start from the same place, and to achieve justice, adjustments may be required to correct historical and ongoing imbalances.

Access to care: Patients deserve access to care based on need, regardless of social status or ability to pay.

Advocacy: The excellent doctor will take the time to advocate for a patient's needs. A patient might not be able to afford a medication, for example, but an advocate will write a letter to an insurer and make a case for the medication being covered. Advocacy can also occur at the community, national, and global levels.

2. Respect: *Respect, confidentiality, autonomy, teamwork*

Respect: Literally from the Latin *respectare*, or "to look more deeply," or "to look again." Respect is the appreciation of the full humanity of each person as being worthy of our attention, understanding, and care.

Confidentiality: To hold facts and truths as protected from the knowledge of those outside the doctor-patient dyad. Confidentiality, literally "with faith," fosters trust as a relational norm and prevents harm to patients who could be adversely affected in the absence of such trust.

Autonomy: A form of self-determination, is a principle of modern medical ethics that must be taken seriously. In the final analysis, autonomy is sacrosanct and essential to good medical practice. Autonomy does not justify abandonment of patients.

Teamwork: A patient-centered care approach in which a team acts together so that each member contributes synergistically to achieve optimal outcomes. Teamwork requires diligence, humility and equal regard.

3. Self-awareness: *self-awareness, mindfulness, equanimity*

Self-awareness: The physician needs to be aware of their emotions, biases, thoughts, and actions in order to be aligned with the goals of healing and providing treatment and care.

Mindfulness: Focusing awareness on the present moment so as to be keenly aware of pertinent details for optimal patient care. This contributes to accurate differential diagnosis and management because it enhances attentiveness to details.

Equanimity: Staying balanced and calm, even under stressful circumstances. Self-awareness and mindfulness are necessary virtues to achieve equanimity.

CONCLUSIONS

This paper is the first to introduce a tripartite taxonomy for medical virtues - a taxonomy of character strengths and virtues that provides a framework for lifelong development of professionalism in medical students and physicians. These are the explicit and synergistic qualities of character to be modeled, taught, and internalized to become second nature, bringing excellence to the practice of medicine.

With the passing of recent decades and especially in the last ten years, the practice of medicine has expanded and requires the consideration of equal and self-regarding virtues. Each category of the tripartite taxonomy (ORV, SRV, and ERV) has multiple, related, well-defined

subcategories. We are responding to the heightened awareness of SRVs and ERVs that we identify with current medical students.

While the ORVs have been well-described, what is novel in the tripartite taxonomy is the inclusion of SRVs, which until recently have not been equally valued as a component of PIF. The SRV sub-groups of self-compassion, balance, preventive care, strength, and integrity focus on the self-care and well-being of the physician. While seemingly in contrast, SRV and ORV are highly synergistic; physician well-being is essential to sustainable and meaningful practice, ultimately fostering good patient outcomes.

ERVs represent inclusivity. Their importance has recently been acknowledged in the intensified quest for healthcare justice, equality, equity, and the addressing of social determinants of health. The ERV subgroups of justice as fairness, respect, and self-awareness reflect a consciousness germane and ethically vital to today's medical student and physician.

Our goal in introducing this tripartite taxonomy is to provide a framework of virtues to contribute to the definition of professional identity. We envision the taxonomy will provide a structure for PIF curriculum development and organize the ever-elusive assessment of professionalism in learners. This taxonomy can also be viewed as an aspirational roadmap for practicing physicians as clinicians and educators, and as a compass for their daily consciousness. We believe that this taxonomy will enhance the well-being, development and flourishing of physicians and students, and the patients in their care.

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