ABSTRACT

Physician Burnout: The Need for Medical Humanities

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While the U.S. health care system aims to cure patients efficiently, the way in which society approaches the practice of medicine dehumanizes both physicians and patients. This thesis looks at the issue of physician burnout while claiming that in order to restore the broken system, medical education needs to balance the humanities with the sciences within the medical curriculum. Both the content and pedagogy of medical education needs to form the characters of future physicians. Educating in this way may provide a strong foundation for professionalism that is grounded in the virtues. Chapter one provides an overview of the United States' current health care system. Chapter two is a literary review of physician burnout. This chapter summarizes the data available about physician burnout including its factors, consequences, costs, and current solutions implemented in hospitals. Chapter three presents a potential solution to physician burnout beginning in undergraduate pre-medical education.

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"Not to us, Lord, not to us but to your name give glory because of your mercy and faithfulness" (Psalm 115:1).

INTRODUCTION

The competing interests between doctors, nurses, administrators, health care insurers, pharmaceutical companies, and more have caused fragmentation and confusion within the U.S. health care system as a whole.[1] As Leon Kass, former chairman of the President's Council on Bioethics from 2001 to 2005 claims, "American medicine is not well."[2] It is a broken system due to a variety of internal and external factors that stem from societal expectations and pressures. At the heart is physician burnout. In order to positively impact America's health care system, it is necessary to explore and understand the pressures that negatively impact doctors. Change begins on an individual level, yet there is a shared responsibility between organizations and individuals to rediscover meaning in the medical profession and help reduce the rate of physician burnout.

Burnout is endemic among U.S. physicians. Burnout is "a syndrome characterized by emotional exhaustion and depersonalization (which includes negativity, cynicism, and the inability to express empathy or grief), a feeling of reduced personal

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[1] Nussbaum, Abraham M. *The Finest Traditions of My Calling: One Physicians Search for the Renewal of Medicine*. New Haven: Yale University Press, 2016, 13.

[2] Kass, Leon R. "Regarding the End of Medicine and the Pursuit of Health." *The Public Interest* 40, (Summer, 1975): 11. http://ezproxy.baylor.edu/login?url=https://search.proquest.com/docview/1298126074?accountid=7014.

accomplishment, loss of work fulfillment, and reduced effectiveness."[3] In the United States today, "more than half" of doctors report feeling symptoms of burnout, while as many as four-hundred doctors commit suicide every year.[4] Physician burnout impacts not only doctors, but also has consequences for "human cost and system inefficiency."[5] There are both personal and professional effects to physician burnout. On a personal level, burnout contributes to "broken relationships, alcoholism, depression, and suicide."[6] From a professional standpoint, physician burnout decreases quality of care and patient satisfaction while increasing medical errors and physician turnover.[7]

Since our health care system is broken, it is necessary to go back to the basics and explore medicine's past and its future purpose. Understanding the purpose of medicine and the role of a physician can shed light on the problem of physician burnout while revealing potential solutions.

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[3] Dzau, Victor J., Kirch, Darrell G., and Nasca, Thomas J. "To Care Is Human — Collectively Confronting the Clinician-Burnout Crisis." *The New England Journal of Medicine* 378, no. 4 (January 25, 2018): 312.

[4] Ibid.

[5] Ibid.

[6] Shanafelt, Tait D, and Noseworthy, John H. "Executive Leadership and Physician Well-Being." *Mayo Clinic Proceedings* 92, no. 1 (January 2017): 130.

[7] Ibid.

Outline

Chapter One provides an overview of the U.S. health care system, including its historical past, as well as its present difficulties. Chapter Two is a literary review of the literature available about physician burnout. This chapter analyzes the rates of burnout, as well as its factors, consequences, and potential solutions that are currently implemented in hospitals. Chapter Three argues that the philosophical and pedagogical approach to the medical practice is flawed, stemming from undergraduate pre-medical education. There is a need to balance humanities with science to provide a thorough medical education. In order to combat burnout and engage future physicians, undergraduate pre-medical curriculum needs to incorporate challenging humanities courses. Both the content and the pedagogy of the sciences and humanities courses need to form the characters of the students. In this way, medical education might be able to cultivate future health care leaders who have passion and purpose in their role as a physician.

CHAPTER ONE

Overview of the U.S. Health Care System

The Problem

There are multiple factors that contribute to the escalating rate of physician burnout, one of which being the way society views health care. In his book, *The Finest Traditions of My Calling*, Abraham Nussbaum writes, "Physician burnout, early retirement, and suicide are increasing. Most physicians report that they would discourage a student from joining the profession."[1] He states that reforms are constantly being "proposed, studied, implemented, and abandoned."[2] He contends, however, that "Few of these reforms address the problem I consider fundamental: that we no longer see our patients as people."[3] Doctors are trained to view patients as consumers bringing body parts that need to be fixed. This depersonalization detracts from a doctor's ability to find meaning in his work. As Victoria Sweet writes, in today's health care system, medical practice is not a "craft," "science," or "art" but rather a "commodity, bought and sold on

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[1] Nussbaum, Abraham M. *The Finest Traditions of My Calling: One Physicians Search for the Renewal of Medicine*. New Haven: Yale University Press, 2016, 7.

[2] Nussbaum, 7.

[3] Nussbaum, 7.

Wall Street."[4] By dehumanizing medicine, the doctor's office operates as a business where a physician's job is to fix his patient to whom he provides his services. When a doctor is exhausted from his work, contributing to his feelings of burnout, he is hindered from seeing his patient as a person in need of healing.

Electronic Health Records

Since medical practice is now operated as a business, electronic patient records contribute to increased efficiency. Electronic Health Records (EHRs) were implemented to consolidate and streamline patient information to improve efficiency. In this technological era, it is necessary for hospitals to use EHRs to improve the quality and organization of patient care. However, EHRs are a contributing factor to physician burnout. While they are not the root problem of burnout, they are an example of a technology that hinders physician-patient relationships. This alienation between the physician and his patient reflects the loss of purpose within the role of a physician: to be present while caring for his patient.

As Nussbaum states, most recent industry reforms have not addressed the fundamental problem of how society views health care. Rather, certain reforms sought to improve medical care by standardizing medicine through the use of EHRs and checklists to determine and implement the best course of treatments. EHRs were created to replace

[4] Sweet, Victoria. *Slow Medicine: the Way to Healing*. New York: Riverhead Books, 2018, 202.

"traditional paper medical records."[5] A developed EHR system collects and stores patient health information, allows immediate electronic access to authorized users, contributes knowledge and decision support, and provides efficient processes for the delivery of health care.[6] The Affordable Care Act (ACA) included certain financial incentives for hospitals to adopt EHR systems. EHRs were intended to improve patient outcomes, cut costs, and streamline information from the doctor's office to billing. In this way, nurses, doctors, insurers, patients, and health care providers could succinctly record patient interactions and update patient information easily and efficiently. EHRs eliminated wasted time of recording and filing patient information by hand, while enabling health care providers to access patient records online within certain networks.[7] There is some evidence that using EHRs improves patient care since doctors are able to easily access records online, and the system alerts them to potential mistakes.[8] When it came to implementing EHRs across the entire health care system, the benefits outweighed the costs.[9]

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[5] Shi, Leiyu, and Douglas A. Singh. *Essentials of the U.S. Health Care System*. Burlington, MA: Jones & Bartlett Learning, 2017, 111.

[6] Shi, 112.

[7] Shi, 111.

[8] Shi, 111-112.

[9] Girosi, Federico, Robin Meili, and Richard Scoville. "Conclusion and Summary." In *Extrapolating Evidence of Health Information Technology Savings and Costs*, 65-68. Santa Monica, CA; Arlington, VA; Pittsburgh, PA: RAND Corporation, 2005. http://www.jstor.org/stable/10.7249/mg410hlth.12.

However, while EHRs were created to be a positive change to health care, they also serve as an example of how reforms meant for efficiency also had unforeseen consequences. EHRs contribute to physician burnout by reducing a doctor's day to a series of codes and notes. For example, Nussbaum recounts his first day with a family medicine doctor who had memorized billing codes for EHRs. Nussbaum describes that these codes "monetized every minute of his day."[10] The physician knew this as well. Nussbaum continues, "[The physician] later told me that if he spent ten minutes with a return patient, he generated a profit. If he spent twelve minutes, he broke even. If he spent fourteen minutes, he lost money. His profits depended on efficiently moving patients through the clinic."[11] Nussbaum believes that the use of EHRs only adds to the problem: doctors viewing patients as "parts and money."[12] He laments that he spends more time during the day documenting time with patients than actually being with his patients.[13]

Another example of the negative effects of EHRs is seen in primary care physician offices. For primary care physicians, EHRs are a burden in the workplace since doctors spend most of their time documenting patient encounters. For example, one study found that primary care physicians spend "nearly two hours on EHR tasks per hour

[10] Nussbaum, 2.

[11] Nussbaum, 2.

[12] Nussbaum, 4.

[13] Nussbaum, 59.

of direct patient care."[14] The study, conducted by Arndt, Beasly, Watkinson, et al., found that primary care physicians spend "more than one-half of their work day, nearly six hours, interacting with the EHR during and after clinic hours."[15] The increase of documentation means that doctors spend more time working on the computer, instead of in "direct face time with patients."[16] While EHRs were created to be a helpful technology, at times they hinder physicians from interacting with their patients. Doctors spend a disproportionate amount of time during the day, and even after work hours, charting and clicking through the EHRs. Thus, an unforeseen consequence of the use of EHRs is that they are overly time consuming for health care providers. Physicians today spend most of their time electronically recording patient interactions for medical documentation and billing purposes.[17] Thus, one of the solutions to finding ways to help fix physician burnout, "requires thoughtful EHR system application."[18]

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[14] Arndt, Brian G, Beasley, John W, Watkinson, Michelle D, Temte, Jonathan L, Tuan, Wen-Jan, Sinsky, Christine A, and Gilchrist, Valerie J. "Tethered to the EHR: Primary Care Physician Workload Assessment Using EHR Event Log Data and Time-Motion Observations." *Annals of family medicine* 15, no. 5 (September 2017): 419.

[15] Arndt, 419.

[16] Arndt, 420.

[17] This study contained some limitations, since at times it was difficult for researchers to differentiate between time doctors spent using the EHR during interactions with patients, or when the EHR was open but not being used. Nevertheless, this study enabled the authors to see where doctors were wasting time on the EHR, such as security log on, in order to provide faster solutions.

[18] Arndt, 425.

From the perspective of medicine as a business industry, the solution is to streamline and reorganize EHRs so that doctors do not spend their day clicking through charts. Moreover, since EHRs are completely integrated into America's health care system, it might be too expensive to start over with new EHRs. Melinda Ashton, executive vice president and chief quality officer at Hawaii Pacific Health, concurs that while EHRs benefit the health care system, the way EHRs are used and formatted contribute to physician burnout by wasting physician's time. She says that EHRs contain many tedious and unnecessary pages and questions that doctors must click through in order to record even the smallest patient interactions. In her article titled "Getting Rid of Stupid Stuff," Ashton claims that small improvements go a long way in improving job satisfaction. Ashton says that when documentation is needed, it could be "completed more effectively."[19] At her hospital, efficiency experts tracked how doctors used the EHRs and found that many doctors skip parts of the EHRs. In an effort to improve work life for their physicians, they removed "10 of the 12 most frequent alerts for physicians" because "they were being ignored."[20] As Ashton says, while these small things may seem irrelevant to the big picture of physician burnout, any change to improve daily work lives for physicians matters. She charges other health care providers to get rid of the "stupid stuff" that burdens physicians and in doing so, improve the work lives of the

[19] Berg , Sara. "Ditch the 'Stupid Stuff' That Drives Doctors Crazy." American Medical Association, February 19, 2019. https://www.ama-assn.org/practice-management/physician-health/ditch-stupid-stuff-drives-doctors-crazy.

[20] Berg.

physicians and the use of EHR. EHRs contribute to burnout by becoming a barrier between physicians and their patients.

Business Pressures

While EHRs enable physicians to track and manage their time and efficiency, additional business pressures increased on health care providers to maximize their profits. One is administrative burdens. Pressure from these administrative burdens may also contribute to physician burnout, as it undermines the distinct calling of health care. Jerome Groopman writes in his book, *How Doctors Think*, that people who see "medicine as a business rather than a calling push for care to be apportioned in fixed units and tout efficiency."[21] He goes on to say that a doctor's office is not "an assembly line. Turning it into one is a sure way to blunt communication, foster mistakes, and rupture the partnership between patient and physician."[22] Victoria Sweet might agree with Groopman as she traces her experience as a physician surviving health care reforms in the 1980s. For Sweet, good medicine should not be viewed as a profession but an art. She writes that when her hospital shifted into functioning as a business, personnel were cut to save money, which in turn placed extra pressure and stress to improve efficiency on the remaining staff. Consequently, this created a negative work environment and increased

[21] Groopman, Jerome E. *How Doctors Think*. Boston: Houghton Mifflin, 2011, 268.

[22] Groopman, 268.

mistakes within the hospital, raising health care costs. Sweet asserts that time and cost efficiency reforms are only effective on paper.[23]

Another consequence of business pressures is the loss of physician autonomy. The demands of billing, electronic medical records, and costs caused many physicians to move from private practice to work for large hospital systems or networks. These reforms "have resulted in large capital expenditures and dramatically increased clerical burden for staff."[24] Certain financial challenges for the system have led to "increasing productivity expectations for physicians."[25] For example, doctors are pressured to care for more "patients with the same amount of time and resources."[26] Physician burnout is "closely linked to low self-compassion; not just the workload and work conditions, but the physician's perception of their ability to deliver well on that workload within those conditions."[27] Doctors "hold themselves to high standards and become stressed when they can't live up to them. This situation is exacerbated when they do not have a voice, must work within inefficient systems, and face non-stop changes in their day-to-day."[28]

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[23] Sweet, Victoria. *Gods Hotel: a Doctor, a Hospital, and a Pilgrimage to the Heart of Medicine*. New York: Riverhead Books, 2013, 84.

[24] Shanafelt, Tait D, and Noseworthy, John H. "Executive Leadership and Physician Well-Being." *Mayo Clinic Proceedings* 92, no. 1 (January 2017), 129.

[25] Shanafelt, 129.

[26] Shanafelt, 129.

[27] Andrieni, Julia. "How One ACO Took On Burnout. (Policy)(Accountable Care Organizations)." *Medical Economics* 96, no. 2 (January 25, 2019): 24.

[28] Andrieni, 24.

This, in turn, impacts doctors as they then lose meaning in their work and report symptoms of burnout.

Sean Gregory analyzed the impact of administrative and organizational leadership on primary care physician burnout. Some program researchers focus on building physician resilience to work pressures by providing personal interventions as a solution to burnout. Gregory claims that while these personal programs may help some doctors, it is necessary to try to fix the underlying problem: the system.[29] He states that improvements vary across hospitals, but that "Intentional organizational improvement" is vital in an effort to "engage and increase the wellness of providers" to prevent physician burnout.[30]

EHRs, loss of physician autonomy, and administrative burdens are all factors that contribute to physician burnout since they ultimately separate the physician from the patient, thus contributing to dehumanization. As Nussbaum claims, the main "disease" of the current health care system is the dehumanization of medicine. When health care consolidated into different systems, doctors became "users" within the system as a whole—thus becoming technicians rather than healers.[31] Problems stemming from EHRs and other sources are only symptoms of this disease. In order to treat this disease, it is

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[29] Gregory, Sean T, Menser, Terri, and Gregory, Brian T. "An Organizational Intervention to Reduce Physician Burnout." *Journal of healthcare management / American College of Healthcare Executives* 63, no. 5 (2018): 348.

[30] Gregory, 349.

[31] Ivan Illich, *Medical Nemesis: The Expropriation of Health* (New York: Pantheon, 1976).

valuable to understand the purpose of medicine and how to restore this meaning in health care.

Historical Background

In order to understand our current health care system, it is important to look to the past and observe how the role of hospitals and physicians has changed over time.

First Hospitals

Historically, as seen in the first hospital, medicine was a calling to the art of healing. St. Basil was a wealthy man who experienced a spiritual awakening, leading him to sell all of his possessions and enter into monastic life. St. Basil later became the bishop of Caesarea, and during the fourth century, he established the first public hospital on the outskirts of Caesarea.[32] This hospital, known as a "*ptochotropeion,*" was a "house for the poor, the ill, and the dispossessed..."[33] He chose the location so that it would be accessible to those in need. When patients arrived, those who "supervised the ptochotropeion gave them rest, regular meals, and nursing care."[34] Then, if needed,

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[32] Balboni, M.J., and Balboni, T.A. "Spirituality and Biomedicine: A History of Harmony and Discord." In *The Soul of Medicine: Spiritual Perspectives and Clinical Practice*, 3–22. The Johns Hopkins University Press, 2011, 7.

[33] Nussbaum, 204.

[34] Nussbaum, 205.

physicians administered medicine. Basil's model for the first public hospital sparked efforts across the West to build places for the poor and the sick.[35]

The practice of medicine during Basil's time was a holistic form of care that was connected to spirituality. Charity and compassion were integral virtues when encountering the sick and the dying. In Basil's hospital, spiritual healing for the soul was primary, while physical healing was secondary.[36] Basil saw medicine as a gift from God, and because of this gift he believed that all people were entitled to receive care and the "benefits of the art of medicine."[37] St. Gregory of Nyssa, St. Basil's brother, also took up this calling by caring for the outcast of society, especially those who suffered from leprosy. Gregory believed that to encounter those who are suffering is to encounter one's own humanity. Caring for the poor and the sick involved fellowship between the patient and the caregiver. Susan Holman, a scholar of St. Gregory of Nyssa, summarizes his philosophy by emphasizing this doctor-patient relationship. According to Holman, Gregory believed that those who cared for the physically ill "may receive healing of their own 'diseases' of wealth and greed."[38] Both Basil and Gregory emphasized the love of neighbor as their motivating factor by creating places of healing for people who were ill

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[35] Nussbaum, 205.

[36] Balboni, 7.

[37] Balboni, 7.

[38] Billings, J. Todd. "On Giving and Receiving: How Can Christians Live Out the Commands of Matthew 25--Without the Pity?" *Sojourners Magazine* 36, no. 4 (April 1, 2007).

as a way to live out their Christian duty.[39] These first hospitals had a distinct purpose: to care for the sick and love them as God loves humanity. Thus, caring for the sick was not simply a task to complete but a way of life that impacted both the caregiver and the receiver.

Today, some might argue that the purpose of medicine is to cure, not heal, patients from disease. While our health care system is more effective than it was during the times of Basil and Gregory, the goal to cure all patients breaks down when a patient is cured from disease but is not fully healed. To be healed involves a level of wholeness. In the Platonic dialogue *Charmides*, Socrates criticizes Greek doctors "for foolishly neglecting the whole when attempting to heal a part."[40] In seeking to reclaim this idea of healing as medicine's aim, Leon Kass argues that the goal of medicine is "the healthy human being."[41] As Farr Curlin writes, "Kass' point is to emphasize that the pursuit of health is *for* something. Medicine is there to restore what can be restored of health so that the person can continue to seek the fullness of life. Toward that end, a healthy body is a great asset, but the goal is to live a good life."[42] Furthermore, medicine as an art

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[39] Miller, Timothy S. *The Birth of the Hospital in the Byzantine Empire*. Johns Hopkins pbk. Ed. Baltimore: Johns Hopkins University Press, 1997, 120.

[40] Kass, Leon R. "Regarding the End of Medicine and the Pursuit of Health." *The Public Interest* 40, (Summer, 1975): 11. http://ezproxy.baylor.edu/login?url=https://search.proquest.com/docview/1298126074?accountid=7014, 30.

[41] Kass, 13.

[42] Curlin, Farr A. "Resources." Christian Community Health Fellowship, January 1, 2007. https://www.cchf.org/resources/h-and-dhow-shall-we-then-practice/.

means that a patient is not just parts to fix, but "a mystery in whose presence the clinician is privileged to dwell."[43] The physician's purpose is to heal and restore wholeness for the patient to flourish. Consequently, there is a need for a partnership and fellowship between patients and doctors.

The Corporatization of Medicine

Medicine was considered an art, a form of healing. When describing medicine, Hippocrates stated: "The art has three factors, the disease, the patient, the physician. The physician is the servant of the art. The patient must cooperate with the physician in combatting the disease."[44] There was a unique relationship and partnership between physicians and their patients. When hospitals were founded their mission was tied to the religious duty to care for one's neighbor, especially the sick and the dying.[45] As time progressed, society and medicine slowly transitioned away from this mindset as religion became separated from professions and technology improved. Medicine then became a science, rather than an art. During the 19th century, medicine benefited from industrialization and urbanization. As people moved to cities, doctors were able to treat

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[43] Sulmasy, Daniel P. *The Healer's Calling : a Spirituality for Physicians and Other Health Care Professionals* New York: Paulist Press, 1997, 118.

[44] Duffin, Jacalyn. *History of Medicine: a Scandalously Short Introduction*. 2nd ed. Toronto: University of Toronto Press, 2010, 68.

[45] Sweet, *Gods Hotel*, 39.

more patients and thus, enhanced their medical experience. Experiments furthered scientific discovery and positively impacted medicine as the understanding of the human body advanced. Education improved for medical students as doctors trained them in hospitals. Medicine became organized, technology progressed, and hospitals developed into medical centers.[46]

Around the 1970s medicine entered into the "corporate era," when organizations modified the structure, delivery, and financing of health care.[47] American health care changed from an art of healing into a business to provide health care services. Patients came to be seen as customers, and doctors as providers of health care services. In this context, most doctors spend an average of seventeen minutes per patient,[48] and "interrupt patients within eighteen seconds" of when they begin to speak.[49]

Individual hospitals merged into large corporations and systems. In turn, individual physicians consolidated into networks in an effort to preserve their autonomy. Globalization and technology transformed the delivery of health care, while large insurance companies controlled its financing.[50]

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[46] Shi, 55, 59.

[47] Shi, 72.

[48] Hobson, Katherine. "Doctors Vanish From View." *U.S. News & World Report* 138, no. 4 (January 31, 2005): 48. http://search.ebscohost.com/login.aspx?direct=true&db=tth&AN=15791727&site=ehost-live&scope=site.

[49] Groopman, *How Doctors Think*, 17.

[50] Shi, 72-73.

Health Care Reform

Currently, health care is marked by an era of major reforms from the government and industry, such as the Affordable Care Act. New policies aim to reduce the cost of health care, expand health insurance coverage to the uninsured, and regulate the delivery of health care services.[51] Since most patients pay for health care services through insurance, rather than from their personal savings, consumers are desensitized to the actual cost of health care services. Likewise, doctors are also desensitized to the cost of health care services by ordering more tests and practicing defensive medicine. This desensitization causes both doctors and patients to utilize more health care services without being mindful of the cost, which then increases the total cost of health care spending. Reforms seek to improve the quality of patient care, while maintaining an economically sustainable system for individuals and the nation. The ACA "promoted greater corporatization of American medicine by authorizing the formation of accountable care organizations (ACOs)," and proposed changes in the way health care providers are paid.[52] Consequently, private practice for doctors has decreased since it is increasingly challenging to "manage information technology and other regulatory demands" such as the Electronic Health Records.[53] Fast-paced, modern medicine has lost its mystery and its art, significantly impacting both doctors and patients.

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[51] Shi, 74-75.

[52] Shi, 76.

[53] Shi, 77.

Efficiency, to some extent, is beneficial to the health care system overall. When doctors are efficient it means they can treat more patients, which is valuable to the health of society. However, when health care became an industry and a science, its end goal shifted from healing patients to curing patients. New technology advanced the speed and efficacy of curing individuals, which in turn increased health care providers' profits. However, specialization, standardization, and efficiency slowly turned doctors into technicians who fix parts of people, thus slowly losing the art and changing the purpose of medicine.[54] The negative aspect of this model is that patients may be seen as numbers on a bottom line, rather than people in need of healing.

Furthermore, external, societal demands on medicine can be unreasonable. Today, patients want to control medicine as the consumer. This model assumes that patients choose health care services, and that medicine is a commodity. Yet, health care is driven by need not choice. Patients demand the best health care out of fear and necessity, yet these consumer demands "run the risk of transforming the physician into a mere public servant, into a technician or helper for hire."[55] When society and the government define the physician as a provider of a service, he becomes "a mere technician."[56] But "health is not a commodity which can be delivered"[57] but rather it is a

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[54] Kass, 35.

[55] Kass, 35.

[56] Kass, 35.

[57] Kass, 37.

"state of being."[58] As the doctor's role becomes more that of a technician, there is a loss of a clear sense of purpose. While this change in mindset was being formulated even before the implementation of the ACA, these reforms and changes in the industry only accelerated the transition. As society turns physicians into technicians, they might struggle to find their purpose as healers within corporate medicine. Basil and Gregory had a clear purpose to their medicine which was to holistically heal the suffering patient. To heal someone is an art, and it cannot reduce the person to parts that need to be fixed. As an art, health care involves meaning.

Medicine, as an art, has an end goal that is outside of the realm of standardized checklists.[59] Medicine is not just a checklist, but a dance. Nussbaum claims that when medicine is viewed as art, the roles of patients and physicians are fluid and formed through relationship. Checklists do not account for all uncommon errors because every patient is different. It is an art to "establish a positive relationship between physician and patient" in which "the rules could begin to seem more like fluid steps of a dance than the measured steps" of checklists.[60] While results and cures are important aspects of health care, they are not its end goal. Health care is "primarily about relationships of knowledge, of trust, and of care."[61] Relationships are integral to healing the patient.

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[58] Kass, 39.

[59] Kass, 21.

[60] Nussbaum, 112.

[61] Sulmasy, 35.

Current Medical Education

Current medical education reflects the specialization and corporatization of fast-paced, health care practice. Pre-medical students are trained to view patients as machines by overemphasizing science by removing humanities from medical curriculum. This change in education is relatively new.

Abraham Flexner's report in 1910 transformed medical education. Before Flexner's *Report*, many doctors trained in proprietary medical schools that were owned by doctors interested in making a profit and operating the medical school as a trade.[62] Flexner toured and evaluated all American medical schools, deeming "all but 6...of 155 medical schools inadequate."[63] His report spurred doctors to become scientists, as medical students were then required to work in laboratories, research, and learn new scientific subjects.[64] This *Report* marks a change in the way physicians were trained by emphasizing science as the foundation of medicine. The Flexner Report changed this education "by encouraging mastery through repeated experience."[65] Osler's dictum was that he "see much and see wisely." Students learn by constantly seeing high volumes of

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[62] Ludmerer, Kenneth M. "Abraham Flexner and Medical Education." *Perspectives in Biology and Medicine* 54, no. 1(March 11, 2011): 8–16. https://doi.org/10.1353/pbm.2011.0009, 9.

[63] Nussbaum, 14.

[64] Ludmerer, 9.

[65] Nussbaum, 14.

patients. This new scientific medical education emphasized "procedural rather than substantive emphasis" since science evolves as new information becomes available.[66]

This practice continues today as students train at "centralized research universities and teaching hospitals, where they work as part of shifting teams of physicians, before practicing in a particular community."[67] As students progress in their training, they become more specialized and focused on a particular part of the body. Over time, due to the corporatization of health care, medical education succumbed to the pressures of the industry. Physicians are trained to view the human body as a machine, changing their own role as physician from healer, to scientist, to technician. Medicine was transformed "when physicians changed how they saw other people."[68] This is why it is important not just to "see much" but also to "see wisely."[69]

In 2010, as a tribute to the 100th anniversary of the Flexner Report, the Carnegie Foundation for the Advancement of Teaching funded another study to examine today's medical education. The researchers concluded that "a new model is needed that builds on

[66] Ludmerer, 10.

[67] Nussbaum, 15.

[68] Nussbaum, 24.

[69] Nussbaum, 18.

the old but offers a new vision for curriculum, pedagogy, and assessment."[70] This report found that medical education is:

> inflexible, overly long, and not learner-centered. Clinical education for both students and residents excessively emphasizes mastery of facts…[there are] poor connections between formal knowledge and experiential learning...Learners lack a holistic view of patient experience and poorly understand the broader civic and advocacy roles of physicians. Finally, the pace and commercial nature of health care often impeded the inculcation of fundamental values of the profession.[71]

Some of the researchers' solutions include the need to give students opportunity to understand and experience professional roles of physicians, engage students in challenging situations, foster inquiry, and teach students patient care in clinical settings.[72] The researchers also claim that students need a strong foundation for professionalism, relationships with faculty who "hold them to high standards" while fostering learning, and "collaborative learning environments committed to excellence and continuous improvements."[73]

Flexner, even while promoting the change of education to emphasize science, maintained the notion that medical schools should "produce medical professionals, not medical workers, and that the responsibility of the medical school is to provide a

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[70] Irby, David M., Molly Cooke, and Bridget C. O'Brien. "Calls for Reform of Medical Education by the Carnegie Foundation for the Advancement of Teaching: 1910 and 2010:" *Academic Medicine* 85, no. 2 (February 2010): 220–27. https://doi.org/10.1097/ACM.0b013e3181c88449, 223.

[71] Irby, 223.

[72] Irby, 225.

[73] Irby, 225.

university education, not job training."[74] The current undergraduate and medical education seems to overly emphasize science, technical skills, and knowledge—in other words, job training—rather than a well-rounded education since there was a separation between the humanities and science.

Separation between Humanities and Science

Sir William Osler (1849-1919) was a Canadian physician and professor. Osler lived during a pivotal time in medicine: he helped establish new medical schools, including Johns Hopkins, served as a medical professor, and created residency specialties. Osler's approach to the teaching of medicine became the ideal model for medical education. Osler always maintained the need for the physician to be at the patient's bedside. In his book, *The Old Humanities and the New Science*, Osler argues for a balance between humanities and science within medicine. According to Osler, science and the humanities are "twin berries on one stem." He continues, noting that "grievous damage has been done to both in regarding the Humanities and Science in any other light than complemental."[75] He laments that the "Humanists have not enough Science, and Science sadly lacks the Humanities...this unhappy divorce...should never

[74] Ludmerer, 15.

[75] Osler, William. *The Old Humanities and the New Science: An Address before the Classical Association, Oxford, May 16th, 1919 /*. London :, 1919. http://hdl.handle.net/2027/uiug.30112037940589, 18.

have taken place."[76] Yet, Osler maintains hope for the future of science saying that its "salvation...lies in a recognition of a new philosophy" when humanities and science are connected with one another.[77]

Medicine = A Science and an Art

As Mangione states, "the humanities are in fact a fundamental component of the physician's skill set."[78] Humanities and science together make up the practice of medicine. Thus, the foundation of medical education in undergraduate and medical school should be grounded in both the humanities and science. As an art, physicians practice to heal and care for the person with a disease, not merely focusing solely on the science of the disease at the expense of the person. Osler warned against turning medicine into a machine that treats broken parts of a body. The humanities, according to Osler, should have been "absorbed" into the new science of medicine, not "replaced" by it.[79] There is a need to reconcile and balance the two, otherwise as Mangione fears "the

[76] Osler, 18.

[77] Osler, 27.

[78] Mangione, S., and M. J. Kahn. "The Old Humanities and the New Science at 100: Osler's Enduring Message." *Cleveland Clinic Journal of Medicine* 86, no. 4 (April 1, 2019): 232–35. https://doi.org/10.3949/ccjm.86a.19019, 232.

[79] Mangione, 234.

alternative is a future full of tricorders and burned-out technicians, but sorely lacking in healers."[80]

Conclusion

Thus, while organizational changes such as improvements to EHRs, checklists, and reforms might improve the quality of work life for physicians, the fundamental issue is the way that society is currently defining the role of physician. There is a need to go back to the mindsets outlined by St. Basil, Gregory, Aristotle, and Hippocrates for physicians to heal and care for the whole person. Medicine is an art. As an art, doctors have an intrinsic purpose to heal and care for the whole patient as a person, not as a part to fix. It is necessary, in order to get to the root of the problem to change how we evaluate the role of physicians to make a positive change.

It may be that reducing physician burnout is the responsibility of both individuals and organizations. Organizations can provide programs and information to help promote healthy workplaces and individual lifestyles. For example, programs that promote self-care and resilience can be the first steps in demonstrating that the organization wants to reduce burnout and cares about its staff.[81] Additionally, organizations can foster

[80] Mangione, 234.

[81] Shanafelt, 141.

partnerships and engage physicians through various discussions. In this way, it will be possible to strive to reduce burnout by creating meaning in work.

For individual physicians who experience burnout, there is a loss of meaning in their work environment. Fixing problems with EHRs, creating partnerships, open communication, and engagement, all will hopefully target ways to improve individual hospitals. By making small changes on individual levels, improvements can be made to benefit the system overall. Health care systems such as Ascension and Mission Health have both implemented surveys, data gathering, and teams to reduce hassles and try to improve the daily work life of their staff. These two systems "understand that investing in the men and women who deliver care is essential to building the sustainable care systems of the future."[82] There is a need for organizational and individual changes that address the problem of physician burnout, and thus, ensure that the best care possible is provided to patients.

As individuals prepare to enter into the medical field, with the system's many pressures and tensions, there is a need for one's character to be properly formed. Since health care is currently viewed as a business, doctors might "understand themselves as technicians instead of artisans."[83] The education systems trains them to see patients as machines and teaches them knowledge and skills to fix the broken part of the machine.

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[82] Boehm, L., Collins, R., and Duffy, B. "How to Foster Joy, Resilience and Well-Being as an Antidote to Clinician Burnout." *Online Journal of Nursing Informatics* 21, no. 2 (June 1, 2017). http://search.proquest.com/docview/1917339044/?pq-origsite=primo.

[83] Nussbaum, 125.

Nussbaum claims that with this understanding, doctors have abandoned "traditional ethical models intended for artisans and embraced the ethics of technicians."[84] As a way to restore one's sense of meaning in work, it is important to know why one entered the profession. Changing the way future doctors are trained to see patients by implementing humanities classes in undergraduate education creates the space for reflection to see the patient as a person.

[84] Nussbaum, 125.

CHAPTER TWO

Literary Review of Physician Burnout

This chapter will explore the numbers related to physician burnout through studies that analyze physician burnout in the United States. While the literature is growing, it does not encompass the whole physician workforce in the United States. As a reference point, it is important to note that the rate of burnout for the general working U.S. population is around 28.4%.[1] First, I will look at the rates of physician burnout. Then I will look at the contributing factors to burnout, as well as the impact of burnout on the professional and personal lives of physicians. Next, I will analyze the financial cost of burnout, and finally look at some solutions that health systems are implementing to reduce burnout.

The Maslach Burnout Inventory (MBI), developed by Maslach, et al., is the standard measure of physician burnout. There are different versions of the MBI that target different groups, from medical personnel to human service workers. It is used in 88% of burnout research and measures burnout as it is defined by the World Health

[1] Shanafelt, Tait D., Omar Hasan, Lotte N. Dyrbye, Christine Sinsky, Daniel Satele, Jeff Sloan, and Colin P. West. "Changes in Burnout and Satisfaction With Work-Life Balance in Physicians and the General US Working Population Between 2011 and 2014." *Mayo Clinic Proceedings* 90, no. 12 (December 1, 2015): 1600–1613. https://doi.org/10.1016/j.mayocp.2015.08.023, 1605.

Organization (WHO).[2] The WHO defines burnout as a "syndrome conceptualized as resulting from chronic workplace stress that has not been successfully managed."[3] WHO assigns three, main characteristics to burnout: 1) emotions associated with exhaustion from work, 2) increased negative feelings or cynicism related to one's profession, and 3) reduced efficacy in work.[4] The MBI seeks to evaluate these three dimensions of burnout through a 22-item survey, with a response scale from 0 (never) to 6 (every day).[5]

By following the definition of WHO and its three main factors of burnout, the MBI measures three general scales: emotional exhaustion (EE), depersonalization (DP), and personal accomplishment (PA).[6] Analyzing a physician's EE, DP, and PA is a way to look at his emotions—stemming from exhaustion and resulting in negative behavior and reduced efficacy at work. When measuring for emotional exhaustion, the MBI analyzes how often physicians report feelings of "being emotionally overextended and exhausted" by their work.[7] Additionally, the MBI classifies depersonalization as

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[2] "Maslach Burnout Inventory (MBI) - Assessments, Tests: Mind Garden." Mind Garden. Accessed March 11, 2020. https://www.mindgarden.com/117-maslach-burnout-inventory.

[3] "Burn-out an 'Occupational Phenomenon': International Classification of Diseases." World Health Organization. World Health Organization, May 28, 2019. https://www.who.int/mental_health/evidence/burn-out/en/.

[4] "Burn-out an 'Occupational Phenomenon': International Classification of Diseases."

[5] "Maslach Burnout Inventory (MBI)." Statistics Solutions. Accessed March 11, 2020. https://www.statisticssolutions.com/maslach-burnout-inventory-mbi/.

[6] "Maslach Burnout Inventory (MBI)." Statistics Solutions.

[7] "Maslach Burnout Inventory (MBI)." Statistics Solutions.

experiencing feelings of "impersonal response" toward one's patients and work.[8] When evaluating a physician's sense of personal accomplishment, the MBI "measures feelings of competence and successful achievement in one's work."[9]

Since the MBI is a survey, burnout is measured according to how often physicians report such feelings due to their work. Individuals who are experiencing burnout "have high scores on either the EE (total score of 27 or higher) or DP (total score of 10 or higher) subscales."[10] This approach separates those who are suffering from burnout in an effort to identify physicians whose level of burnout puts them at an "increased risk of potentially serious personal and professional consequences."[11]

Rates of Physician Burnout

While effects of physician burnout include emotional exhaustion, "depersonalization may actually align more strongly with the most negative consequences of burnout."[12] In Europe and the United States, "about one in three

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[8] "Maslach Burnout Inventory (MBI)." Statistics Solutions

[9] "Maslach Burnout Inventory (MBI)." Statistics Solutions.

[10] "Valid and Reliable Survey Instruments to Measure Burnout, Well-Being, and Other Work-Related Dimensions." National Academy of Medicine. Accessed March 11, 2020. https://nam.edu/valid-reliable-survey-instruments-measure-burnout-well-work-related-dimensions/.

[11] "Valid and Reliable Survey Instruments to Measure Burnout, Well-Being, and Other Work-Related Dimensions."

[12] West, C. P., L. N. Dyrbye, and T. D. Shanafelt. "Physician Burnout: Contributors, Consequences and Solutions." *Journal of Internal Medicine* 283, no. 6 (2018): 516–29. https://doi.org/10.1111/joim.12752, 517.

[General Practitioners have] experienced exhaustion and burnout."[13] Rates of physician burnout are near and almost exceeding 50%.[14] When a physician experiences burnout, he has decreased productivity, lower job satisfaction, and a "doubled" intent to leave his current medical practice.[15]

In the study "Changes in Burnout and Satisfaction With Work-Life Balance in Physicians and the General U.S. Working Population Between 2011 and 2014," authors Tait Shanafelt, et. al., compared burnout in the medical field with the rates of burnout in other professions. This is the largest study conducted in the U.S. that analyzes physician burnout. They first conducted this study in 2011, and followed up in 2014 to compare results. This study was probability-based, using a sample of the U.S. population. They used the Maslach Burnout Inventory (MBI) to measure burnout.[16]

Shanafelt and his colleagues invited 35,922 physicians to participate in the study; 6,880 physicians completed the surveys for a 19.2% response rate. They measured work hours per week, burnout, depression indicators, suicidal thoughts, and work-life balance satisfaction.[17] Since they used the MBI, they looked at physicians who reported high

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[13] Zenasni, Franck, Emilie Boujut, Aude Woerner, and Serge Sultan. "Burnout and Empathy in Primary Care: Three Hypotheses." *The British Journal of General Practice: The Journal of the Royal College of General Practitioners* 62, no. 600 (July 2012): 346–47. https://doi.org/10.3399/bjgp12X652193, 346.

[14] West, "Physician Burnout: Contributors, Consequences and Solutions," 518.

[15] West, "Physician Burnout: Contributors, Consequences and Solutions," 519.

[16] West, "Physician Burnout: Contributors, Consequences and Solutions," 517.

[17] Shanafelt, "Changes in Burnout," 1.

levels of emotional exhaustion and depersonalization. In regard to symptoms of depression and suicidal ideation, the study used the Primary Care Evaluation of Mental Disorders, which is a standardized assessment for screening depression. Suicidal ideation was assessed by asking participants, "During the past 12 months, have you had thoughts of taking your own life?"[18] The study notes that this question was asked in order to assess physicians who are not actively contemplating suicide, but who have had recent thoughts. The study also analyzed physician satisfaction with work life balance by asking participants how strongly they agree with the following statement: "My work schedule leaves me enough time for my personal/family life."[19] Their control group in both of these studies were individuals across the general, working U.S. population.

In 2011, Shanafelt, et al. found that about 45% of U.S. physicians "met criteria for burnout."[20] Shanafelt found that there were major differences in the rates of burnout by specialty.[21] When they looked at the rates of burnout by specialty, they noticed that the highest rates of burnout were those physicians at the front line of care.[22] These specialties include emergency medicine, urology, physical medicine and rehabilitation, and family medicine.[23] In 2014, Shanafelt used similar methods as in 2011 in order to

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[18] Shanafelt, "Changes in Burnout," 1602.

[19] Shanafelt, "Changes in Burnout," 1602.

[20] Shanafelt, "Changes in Burnout," 1601.

[21] Shanafelt, "Changes in Burnout," 1600.

[22] Shanafelt, "Changes in Burnout," 1601.

[23] Shanafelt, "Changes in Burnout," 1605-1606.

compare the results. They found that 54.4% of the physicians "reported at least 1 symptom of burnout in 2014 compared with 45.5% in 2011."[24] This measure of burnout, according to the MBI, was based on high emotional exhaustion and depersonalization scores. When using the MBI, the study found that 46.9% of physicians reported high emotional exhaustion, 34.6% reported high levels of depersonalization, and 16.3% of physicians had a low sense of personal accomplishment.[25] In regard to work life balance, "only 40.9% of the physicians felt that their work schedule left enough time for personal/family life, with 14.6% neutral and 44.5% disagreeing with this assertion."[26] Consequently, physicians have higher rates of emotional exhaustion, depersonalization, lower work-life balance satisfaction, and increased risk for burnout than the general working population. This study concluded that physician burnout only continues to worsen with time, compared to the U.S. general working population.

There were several limitations declared by the authors, such as response bias. Many physicians who received the invitation to participate in the study did not complete the survey, with a 19.2% response rate.[27] Despite these limitations, there were "minimal differences by age" and no "statistically significant differences between early responders and late responders."[28] Thus, the authors concluded that their survey was representative

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[24] Shanafelt, "Changes in Burnout," 1600.

[25] Shanafelt, "Changes in Burnout," 1604.

[26] Shanafelt, "Changes in Burnout," 1604.

[27] Shanafelt, "Changes in Burnout," 1608, 1610.

[28] Shanafelt, "Changes in Burnout," 1610.

of U.S. physicians. Strengths of the study included that the physician sample came from the AMA's registry of nearly all U.S. physicians.[29] Also, the sample includes doctors from various practices, employers, and specialties. Since Shanafelt's study is the largest national study to be conducted in the United States, there is a need for larger-scale, longitudinal studies to accurately show the prevalence of physician burnout.

The rates of physician burnout continue to increase. Furthermore, "burnout rates are markedly higher amongst practicing physicians than individuals in other careers, even after adjusting for work hours and other factors."[30] In addition to Shanafelt's study, one observational study evaluated physicians in the emergency department of a particular hospital. The study surveyed 67 employees and 167 patients to analyze the effects of burnout on physician-patient communication. Researchers found that in this sample of physicians, 70% reported burnout.[31] The outcomes related to burnout are linked with "job absenteeism" and "increased medical errors."[32] This impacts patient satisfaction, which is partly based on "perceived clinician-patient communication."[33] The researchers correlated these higher rates of burnout with poorer perceived communication with

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[29] Shanafelt, "Changes in Burnout," 1611.

[30] West, 518.

[31] Chang, Bernard P., Eileen Carter, Nina Ng, Caitlin Flynn, and Timothy Tan. "Association of Clinician Burnout and Perceived Clinician-Patient Communication." *The American Journal of Emergency Medicine* 36, no. 1 (January 2018): 156–58. https://doi.org/10.1016/j.ajem.2017.07.031, 1.

[32] Chang, 1.

[33] Chang, 2.

patients.[34] While this is a small sample size, it agrees with Shanafelt's findings that physicians in the front line of patient care experience higher rates of burnout.

In August 2012, a study surveyed 7,288 U.S. physicians, finding that "46% had at least one symptom of burnout."[35] Current estimates, however, "suggest that the prevalence of burnout among practicing physicians in the United States exceeds 50%."[36] Another study, "The Impact of Program-Driven Wellness Initiatives on Burnout and Depression among Surgical Trainees," evaluated the impact of burnout among surgical residents. The study surveyed 369 residents and fellows in an academic health system with a response rate of 44%. It found that 63.2% were suffering burnout, and 36.7% indicated being depressed.[37] If these numbers were applied on a national scale in the U.S., "the effective result on lost productivity annually is estimated to equate to the loss of the graduating classes of seven medical schools."[38]

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[34] Chang, 2.

[35] Leong, Lucille A. "Achieving Physician Well-Being: The Best Physicians Are Well Physicians." *Journal of the National Comprehensive Cancer Network: JNCCN* 12, no. 8 (August 2014): 1196–98. https://doi.org/10.6004/jnccn.2014.0114.

[36] Leong.

[37] Bui, Anthony H., Jonathan A. Ripp, Kyu Young Oh, Frank Basloe, Dahlia Hassan, Saadia Akhtar, and I. Michael Leitman. "The Impact of Program-Driven Wellness Initiatives on Burnout and Depression among Surgical Trainees." *The American Journal of Surgery*, October 20, 2019. https://doi.org/10.1016/j.amjsurg.2019.10.027, 1.

[38] West, 519.

Contributing Factors to Burnout

The major contributing factors to burnout that remain consistent across the literature include time spent using electronic health records (EHRs), stress, hours worked, and work-life balance.

For example, one study mentioned in chapter one analyzed the association between burnout of primary care physicians and time spent using EHRs. The study concluded that "Primary care physicians spend more than one-half of their work-day, nearly 6 hours," using the EHR.[39] While EHRs are necessary in today's fast-paced, modern medicine, the hours spent using computers and EHRs only adds to the problem of low work-life balance, high work dissatisfaction, and increasing rates of burnout among physicians.[40]

Another study sought to examine the different levels of burnout stemming from stress among women's health care providers such as OB-GYNS. Researchers surveyed 500 physician members of the American College of OB-GYN. Over half, 287 physicians responded indicating high levels of stress. In this 2011 survey, 86% of physicians "reported being moderately or severely stressed on an average day, which by 2015 had

[39] Arndt, Brian G., John W. Beasley, Michelle D. Watkinson, Jonathan L. Temte, Wen-Jan Tuan, Christine A. Sinsky, and Valerie J. Gilchrist. "Tethered to the EHR: Primary Care Physician Workload Assessment Using EHR Event Log Data and Time-Motion Observations." *Annals of Family Medicine* 15, no. 5 (October 9, 2017): 419–26. https://doi.org/10.1370/afm.2121, 1

[40] Arndt, 1.

increased to 88%."[41] The high levels of stress were caused by "average hours worked, perception of working too many hours, colleague support for work-home balance, isolation due to gender/cultural differences, and perception of workplace control."[42]

One of the factors of high stress noted above is a decrease in work-life balance. In addition to EHRs and increased level of stress, physicians feel that they do not have adequate work-life balance. According to Shanafelt (2015), physicians work a medium of 10 hours more per week than those in the general working population.[43] There are business pressures placed upon physicians by the health care system that decreases their autonomy while demanding more work from them. Doctors in both hospitals and private practice are currently pressured by regulations and productivity measures to treat more patients "with the same amount of time and resources."[44]

Personal and Professional Effects of Burnout

Physician burnout also impacts physicians' personal lives. Physicians who are experiencing burnout have a 25% greater chance of substance abuse, as well as "a

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[41] Farrow, Victoria A., Anthony Ahrens, Kathleen C. Gunthert, and Jay Schulkin. "Women's Healthcare Providers: Work Factors, Personality, and Stress." *Social Behavior and Personality; Palmerston North* 47, no. 7 (2019): 1–11. http://dx.doi.org/10.2224/sbp.8121, 1.

[42] Farrow, 1.

[43] Shanafelt, "Changes in Burnout," 1605.

[44] Shanafelt, Tait D, and Noseworthy, John H. "Executive Leadership and Physician Well-Being." *Mayo Clinic Proceedings* 92, no. 1 (January 2017), 129.

doubled risk of suicidal ideation."[45] Compared to working men and women in other fields, the suicide rate among male physicians is 40% higher, and female physicians 130% higher.[46] Furthermore, burnout "is associated with increased risk for cardiovascular disease and shorter life expectancy, problematic alcohol use, broken relationships, depression, and suicide."[47]

Likewise, burnout negatively impacts physicians' professional work. When physicians are experiencing burnout, they are "more likely to report making recent medical errors, score lower on instruments measuring empathy, and plan to retire early."[48] These physicians "have higher job dissatisfaction, which has been associated with reduced patient satisfaction with medical care and patient adherence to treatment plans."[49]

Additionally, when a physician is suffering from burnout, he exhibits less professionalism. Physician professionalism is a type of behavior—it is "a skill that can

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[45] West, 519.

[46] West, 519.

[47] Panagioti, Maria, Keith Geraghty, Judith Johnson, Anli Zhou, Efharis Panagopoulou, Carolyn Chew-Graham, David Peters, Alexander Hodkinson, Ruth Riley, and Aneez Esmail. "Association Between Physician Burnout and Patient Safety, Professionalism, and Patient Satisfaction: A Systematic Review and Meta-Analysis." *JAMA Internal Medicine* 178, no. 10 (October 1, 2018): 1317–31. https://doi.org/10.1001/jamainternmed.2018.3713, 1318.

[48] Dyrbye, Liselotte N., and Tait D. Shanafelt. "Physician Burnout: A Potential Threat to Successful Health Care Reform." *JAMA* 305, no. 19 (May 18, 2011): 2009–10. https://doi.org/10.1001/jama.2011.652.

[49] Dyrbye (2011).

be practiced and learned over time."[50] One may always improve in one's professionalism since it is "about accountability and the need for physicians to work in teams and systems that may override physician autonomy for the greater good of the patient or society."[51] The Working Party of the Royal College of Physicians stated: "Medical professionalism signifies a set of values, behaviors, and relationships that underpins the trust the public has in doctors."[52] The development of professionalism will be analyzed more in a later chapter.

Physician professionalism is a contributing factor in the quality of patient care and patient satisfaction.[53] One study, "Association Between Physician Burnout and Patient Safety, Professionalism, and Patient Satisfaction" by Maria Panagioti, et al., investigated the relationship between physician burnout and increased medical errors, lower professionalism, and reduced patient satisfaction. The researchers sought to answer the question, "Is physician burnout associated with low-quality, unsafe patient care?"[54] The study was a meta-analysis review of the current literature over burnout. The researchers looked at 5,234 records and 47 quantitative observational studies on 42,473 physicians.[55]

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[50] Kanter, Michael H, Miki Nguyen, Marc H Klau, Nancy H Spiegel, and Virginia L Ambrosini. "What Does Professionalism Mean to the Physician?" *The Permanente Journal* 17, no. 3 (2013): 87–90. https://doi.org/10.7812/TPP/12-120, 87.

[51] Kanter, 87.

[52] Yang, Homer. "Professionalism in Anesthesia." *Canadian Journal of Anesthesia/Journal Canadien d'anesthésie* 64, no. 2 (February 2017): 149–57. https://doi.org/10.1007/s12630-016-0738-3, 150.

[53] Panagioti, 1318.

[54] Panagioti, 1318.

[55] Panagioti, 1317.

When evaluating physician professionalism, the study found "suboptimal adherence to treatment guidelines...reduced professional integrity, poor communication practices, and low empathy."[56] The study concluded that physicians who were suffering from burnout exhibited low traits of professionalism. Symptoms of burnout, such as increased rates of emotional exhaustion, depression, and personal accomplishment were also linked with an increased risk for exhibiting lower traits of professionalism.[57] Lower attributes of professionalism were also correlated with decreased rates of patient satisfaction.[58] When analyzing the literature, the study further discovered a trend of increased rates of burnout in residents. The researchers found that "studies based on resident and early-career physicians reported stronger links between burnout and low professionalism compared with studies based on middle and late-career physicians."[59] It is especially concerning that young, early career physicians already suffer from burnout since this impacts their patient-care and professionalism for the rest of their career.

Thus, these high rates of physician burnout in the United States "can be considered both a marker of dysfunction in the health care delivery system and a factor contributing to dysfunction."[60] Consequently, physician burnout negatively affects physicians' personal and professional lives.

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[56] Panagioti, 1318-1319.

[57] Panagioti, 1320.

[58] Panagioti, 1320.

[59] Panagioti, 1328.

[60] Shanafelt, Tait D., Lotte N. Dyrbye, and Colin P. West. "Addressing Physician Burnout: The Way Forward." *JAMA* 317, no. 9 (March 7, 2017): 901–2. https://doi.org/10.1001/jama.2017.0076.

Physician-Patient Relationship and Burnout

Physician burnout likewise negatively impacts the physician-patient relationship. While no studies show a definitive cause-effect relationship between physician-burnout and decreased quality of patient care, current studies suggest a correlation between the two. For example, one study evaluated physician burnout and physician-patient communication in the emergency department. It found that strong physician communication with patients was associated with positive outcomes.[61] Researchers concluded that there was a link between physician burnout and "poorer perceived clinician-patient communication in the ED."[62] Furthermore, physicians who are experiencing burnout have increased rates of recent medical errors and "decreased empathy for patients."[63] Another study complimented this finding, saying that "physician burnout has been linked to self-reported errors, turnover, and higher mortality ratios in hospitalized patients."[64] The authors continue, stating that "studies suggest a link between burnout and a reduction in the amount of time physicians devote to providing clinical care to patients."[65] Another article, "Physician Burnout: contributors, consequences and solutions" from the Department of Health Sciences Research at the

[61] Chang, 1.

[62] Chang, 2.

[63] Leong.

[64] Shanafelt, "Addressing Physician Burnout."

[65] Shanafelt, "Addressing physician burnout."

Mayo Clinic evaluated cross sectional studies, looking at the impact of burnout on patients. They found that these studies "linked physician burnout with suboptimal patient care practices, as well as with a doubled risk of medical error and a 17% increased odds of being named in a medical malpractice suit."[66] Thus, it is necessary to alleviate physician burnout to restore the physician-patient relationship, since this would "enhance the quality of patient care and benefit patients and physicians and reduce cost."[67]

Economic Costs Associated with Burnout

The financial benefits of reducing burnout outweigh the costs. The U.S. health care system is projected to experience a major shortage of physicians due to retirement coupled with the increase of the elderly population. Burnout only adds to this expected shortage. Replacing a physician "may cost as much as $200,000. Hence, returning even 5 physicians to the safe and full practice of medicine can save $1 million."[68] In their study, "Estimating the Attributable Cost of Physician Burnout in the United States," researchers Shasha Han and Tait Shanafelt, et al. conducted a cost-consequence analysis with a simulated population of U.S. physicians. They found that on a "national scale, the conservative base-case model estimates that approximately $4.6 billion in costs related to physician turnover and reduced clinical hours is attributable to burnout each year in the

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[66] West, 518.

[67] Sergay, Stephen M. "Charter on Physician Professional Flourishing." *Neurology* 87, no. 21 (November 22, 2016): 2259–65. https://doi.org/10.1212/WNL.0000000000003266.

[68] Leong.

United States."[69] Their estimate ranged from $2.6 billion to $6.3 billion in the "multivariate probabilistic sensitivity analyses."[70] This type of analysis is a technique used in health economics when calculating probability. Since there is a level of uncertainty, probability sensitivity analysis helps researchers quantify the confidence of their output of the model to help others with decision-making.[71] This study also evaluated the cost of physician burnout at an organizational level. They found that the "annual economic cost associated with burnout related to turnover and reduced clinical hours is approximately $7,600 per employed physicians each year."[72] There were several limitations to this study, such as non-response bias, and that some of the parameters were extrapolated. Additionally, "a conservative estimate of the cost of burnout-related turnover exceeds 5,000-10,000 U.S. dollars per physician per year, with the actual figure almost certainly running much higher due to additional costs related to these indirect factors."[73] These indirect factors include loss of productivity and patient quality of care.

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[69] Han, Shasha, Tait D. Shanafelt, Christine A. Sinsky, Karim M. Awad, Liselotte N. Dyrbye, Lynne C. Fiscus, Mickey Trockel, and Joel Goh. "Estimating the Attributable Cost of Physician Burnout in the United States." *Annals of Internal Medicine* 170, no. 11 (June 4, 2019): 784. https://doi.org/10.7326/M18-1422.

[70] Han.

[71] Hatswell, Anthony J., Ash Bullement, Andrew Briggs, Mike Paulden, and Matthew D. Stevenson. "Probabilistic Sensitivity Analysis in Cost-Effectiveness Models: Determining Model Convergence in Cohort Models." *PharmacoEconomics* 36, no. 12 (December 2018): 1421–26. https://doi.org/10.1007/s40273-018-0697-3.

[72] Han.

[73] West, 519.

In another study, "The Business Case for Investing in Physician Well-Being," Tait Shanafelt (2019) looked at the costs of burnout such as return on investments, costs associated with turnover, loss of productivity, and effects of burnout on quality of patient care. He and his co-researchers found that in a 2012 report from the Association of Staff Physician Recruiters, the average

> 'hard costs' associated with recruiting a physician are $88,000 before factoring in lost revenue during the recruitment and onboarding process. The actual lost revenue for 1 Association of Staff Physician Recruiters client was $990,000 per full-time-equivalent physician, similar to Atrius Health's recent report that their organizational cost to replace a physician was $500,00 to $1,000,000.[74]

Additionally, a different study adds to these numbers stating, "Estimated costs to replace one physician range from hundreds of thousands to well over one million U.S. dollars, depending on specialty, practice location and the duration of the unfilled vacancy."[75] The fixed costs of operating a hospital and providing health care services are extremely high, so even a small decrease in productivity can hurt the organization.[76] Furthermore, burnout affects the quality of patient care; lower patient quality of care can impact the health organization, particularly in terms of "patient satisfaction, quality metrics, contracting, costs to compensate and provide care for injured patients, and litigation-

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[74] "The Business Case for Investing in Physician Well-Being | JAMA Internal Medicine | JAMA Network." Accessed December 4, 2019. https://jamanetwork.com/journals/jamainternalmedicine/fullarticle/2653912, 1827.

[75] West, 519.

[76] "The Business Case," 1828.

related expenses."[77] Thus, burnout also indirectly impacts the costs of health care since it increases medical mistakes and malpractice claims, while lowering productivity.[78]

System Efforts at Reducing Burnout

There are various approaches to reduce physician burnout. Shanafelt (2017) claims that in order to prevent burnout, it is necessary to engage doctors in their work. Engagement "is the positive antithesis of burnout and is characterized by vigor, dedication, and absorption in work."[79] Creating engagement is not just the job of individual physicians, but also the organization, and legislatures as well.

Organizational Efforts

Hospital leadership can seek to create an environment of engagement in their health care providers by first acknowledging and assessing the problems in their own organization. Open communication between administrators and doctors creates a relationship of trust which is necessary in order to create a partnership.[80] From there, it is important to foster a sense of community at work.

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[77] "The Business Case," 1828.

[78] West, 519.

[79] Shanafelt, "Executive Leadership," 131.

[80] Shanafelt, "Executive Leadership," 133.

One Accountable Care Organization (ACO) at Houston Methodist made physicians their stakeholders and partners by creating the Physician Engagement Resiliency Taskforce (PERT). PERT meets quarterly with doctors from all fields to listen to everyone's perspectives and help them provide the best care possible by implementing changes suggested in the meetings. The ACO seeks to create an environment of ownership, autonomy, and partnership to improve focus on the patient.[81]

Another example of an organization seeking to engage health care providers is the Mayo Clinic. The Mayo Clinic experimented with physician lounges and peer groups in an effort to foster community. Due to health care reform and the emphasis on efficiency, some hospitals have removed these spaces to save money. Mayo Clinic, however, found that providing a designated meeting area with food and drinks for administrators and doctors was extremely successful for building community. Additionally, the Mayo Clinic conducted a randomized trial and found that "providing physicians with one hour of protected time every other week to meet with a small group of colleagues and discuss topics related to the experience of physicianhood cultivated community, improving meaning in work and reduced burnout."[82] In order to engage doctors, it is necessary to create community among them. Providing casual outlets for open communication and sharing of ideas fosters this partnership and engagement.

Another way to engage physicians is to evaluate how the organization is living out its mission. According to Shanafelt (2017) an organization's "culture, values, and

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[81] Andrieni, Julia. "How One ACO Took On Burnout. (Policy)(Accountable Care Organizations)." *Medical Economics* 96, no. 2 (January 25, 2019), 2

[82] Shanafelt, "Executive Leadership and Physician Well-Being," 138.

principles in large part determine whether it will achieve its mission. It is critical for organizations to be mindful of factors that influence culture, assess ways to keep values fresh, and periodically take stock of whether actions and values are aligned."[83] In order to cultivate meaning in work, it is important for a hospital to not just have its mission as its motto, but to take strides to fully live out its mission statement.

Resilience and Grit: Personal Interventions

Some health care organizations turn to individual physicians to foster well-being by talking about physician resilience and grit. These solutions, however, are to change the way that physicians handle high levels of stress to reduce burnout. Such solutions implement wellness strategies for individual physicians to foster resilience. Resilience is defined as "an ability to overcome exposure to stress that may otherwise lead to burnout."[84] Researchers such as Balch and Shanafelt (2010) write that "personal growth and renewal involves optimizing meaning, both in work and personal life."[85] These strategies promote self-reflection, personal goals, time management, and self-care.[86]

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[83] Shanafelt, "Executive Leadership and Physician Well-Being," 139.

[84] Squiers, John J., Kevin W. Lobdell, James I. Fann, and J. Michael DiMaio. "Physician Burnout: Are We Treating the Symptoms Instead of the Disease?" *The Annals of Thoracic Surgery* 104, no. 4 (October 1, 2017): 1117–22. https://doi.org/10.1016/j.athoracsur.2017.08.009, 1118.

[85] Balch, Charles M., and Tait Shanafelt. "Combating Stress and Burnout in Surgical Practice: A Review." *Advances in Surgery* 44, no. 1 (September 2010): 29–47. https://doi.org/10.1016/j.yasu.2010.05.018, 39.

[86] Balch, 44.

Other researchers, such as Salles, et al., looked at grit as a measure to identify residents at risk for burnout. Grit is "a psychological factor defined as perseverance and passion for long-term goals."[87] In this study, "The Relationship between Grit and Resident Well-Being," Salles surveyed 141 residents across nine specialties at one institution, with a response rate of 84%.[88] To measure burnout, they utilized the MBI. The researchers concluded that "grit was predictive of psychological health," and identifying residents with low levels of grit could benefit them by giving these residents more support in their training.[89] However, their study was a small sample size and only measured grit at one institution.

Since physician burnout is "an inappropriate response to stress," personal wellness strategies seem to seek to change the behavior of physicians by promoting self-care.[90] However, "Most likely, the characteristics of individuals who choose to pursue a career in medicine have not changed significantly over time. Medicine continues to attract intelligent, hard-working, compassionate individuals who are drawn to the challenges and lifelong learning required to expertly care for patients."[91] The health care reforms increased administrative and clerical tasks which interferes with what physicians

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[87] Salles, Arghavan, Geoffrey L. Cohen, and Claudia M. Mueller. "The Relationship between Grit and Resident Well-Being." *The American Journal of Surgery* 207, no. 2 (February 1, 2014): 251–54. https://doi.org/10.1016/j.amjsurg.2013.09.006, 251.

[88] Salles, 251.

[89] Salles, 253.

[90] Squiers, 1120.

[91] Squiers, 1120.

are passionate about: patients.[92] The language of grit and resilience seeks to reinvigorate physicians by changing their behavior. Yet, the key of this issue is the breakdown of professionalism among physicians who are experiencing burnout.

Policy Solutions

From a legal standpoint, in California, legislators took an approach to burnout by implementing a new legal policy. California Title 22 requires "each hospital medical staff to include a provision in its bylaws for the assistance of 'medical staff members impaired by chemical dependency and/or mental illness to obtain necessary rehabilitation services.'"[93] In order to be compliant with this new regulation, some hospitals implemented a Well-Being Committee (WBC) to include physician wellness as a quality indicator for patient care.

Conclusion

Physician burnout only continues to escalate, harming the sustainability of the health care system and escalating costs for health care overall. The next chapter will explore how physician burnout relates to the negative culture that exists in hospitals. The hidden curriculum of how to treat one another in medical school and beyond undermines physician professionalism, which contributes to burnout by harming physician

[92] Squiers, 1120.

[93] Leong.

engagement. Therefore, the next chapter will look at different virtues that can be instilled in physicians as the basis for professionalism which can help engage physicians in their work by changing the culture of hospitals and improve physician relationships.

CHAPTER THREE

Medical Education Reform

Shift in Focus

In his book, *The Finest Traditions of My Calling*, Abraham Nussbaum makes the point that hospitals want to hire virtuous physicians. He recounts that in medical school, when applying to residency programs, the assessments change from written tests of abstract knowledge to the application of this knowledge with one's behavior. Hospitals look not only for intelligent physicians, but also for those who act in a professional manner towards other health care providers and patients. Nussbaum explains that he evaluates students by asking himself: "Does the student exhibit fortitude and self-discipline, the characteristics of a physician?"[1] In other words, hospitals are concerned with both one's ability to apply knowledge and one's character. Nussbaum continues, saying that "During the resident selection process, just as during the medical school success team meetings, it becomes clear that physicians still perceive medicine as a calling, and that we still want and select for virtuous physicians."[2] Yet, he laments that while hospitals seek virtuous physicians, the American health care system does nothing

[1] Nussbaum, Abraham M. *The Finest Traditions of My Calling: One Physicians Search for the Renewal of Medicine*. New Haven: Yale University Press, 2016, 156.

[2] Nussbaum, 159.

to "actively" develop virtues.[3] Nussbaum states that "professionalism deficits were the best predictors that a student would end up on probation during clinical work."[4] Within medicine, there is an informal education that is learned through relationships about how to treat others. In this informal education, virtues are formed through good habits, while vices are formed through bad ones.[5] Nussbaum argues that there needs to be a shift in the focus of health care. The current health care system focuses on "reliable outcomes" so physicians "develop systems and scripts."[6] There is a need to shift the focus of health care education to include actively developing "virtuous people who care for patients" and who see their work as a physician as a calling.[7]

This chapter will first explore the difficulties involved in shifting the focus of actively developing virtuous physicians by summarizing burnout, hidden curriculum, and disillusionment. These difficulties, however, are only the symptoms of a disease. The way in which the U.S. health care system is organized and operated dehumanizes both patients and physicians. This approach to medical care is reflected in medical education as students are trained to view patients as machines to fix, rather than people to holistically heal. This chapter will analyze one potential solution which begins in the way in which pre-medical students are educated in undergraduate studies. There is a need to balance the humanities with the sciences in order to train well-rounded

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[3] Nussbaum, 161.

[4] Nussbaum, 158.

[5] Nussbaum, 159.

[6] Nussbaum, 125.

[7] Nussbaum, 125.

physicians. By spending time learning in the humanities, undergraduate pre-medical students will have the opportunity for their characters to be formed through coursework that fosters certain virtues. This education partly focuses on understanding the *telos* of medicine and their role as future physicians, providing meaning in their work. This type of education is best exemplified through medical humanities programs that challenge students by drawing from liberal arts education. Finally, this chapter will analyze the benefits of humanities programs, the importance of meaning in work, and how these programs can cultivate the character of students in the classroom by teaching them necessary virtues as the foundation for physician professionalism. In this way, there is a proposed link between the virtues fostered within the humanities classes, which can be integrated into the science classes as well, in order to reduce physician burnout.

Difficulties of Shifting the Focus

Burnout

As seen in chapter two, the increasing prevalence of physician burnout in practicing physicians diminishes physicians' professional conduct. One study, "Relationship Between Burnout and Professional Conduct and Attitudes Among U.S. Medical Students," by Dyrbye and Massie, et al., found that burnout impacts medical students. Burnout in medical students reduces their professional conduct at an early age. The researchers conducted a large, multi-institutional study "that measured multiple

dimensions of professionalism and assessed its relationship to burnout."[8] They invited participation of all medical students at Mayo Medical School, University of Washington School of Medicine, University of Chicago Pritzker School of Medicine, University of Minnesota Medical School, University of Alabama School of Medicine, University of California-San Diego School of Medicine, and the Uniformed Services University of the Health Sciences. The researchers measured burnout using the Maslach Burnout Inventory (MBI). 2,682 of 4,400 eligible students completed the survey, for a 61% response rate. The researchers found that "Students with burnout were significantly more likely to have engaged in each of the cheating/dishonest clinical behaviors evaluated."[9] Furthermore, students who experienced burnout were "also less likely to hold altruistic views regarding physicians' responsibility to society, including personally wanting to provide for the medically underserved."[10]

Dyrbye's study further suggests that burnout "is associated with self-reported unprofessional behaviors and less favorable cost-conscious attitudes among physicians."[11] Those around physicians suffering from burnout may notice

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[8] Dyrbye, Liselotte N., F. Stanford Massie, Anne Eacker, William Harper, David Power, Steven J. Durning, Matthew R. Thomas, et al. "Relationship Between Burnout and Professional Conduct and Attitudes Among US Medical Students." *JAMA* 304, no. 11 (September 15, 2010): 1173–80. https://doi.org/10.1001/jama.2010.1318, 1174.

[9] Dyrbye (2010), 1176.

[10] Dyrbye (2010), 1177.

[11] Dyrbye, Liselotte N., Colin P. West, Andrea Leep Hunderfund, Christine A. Sinsky, Mickey Trockel, Michael Tutty, Lindsey Carlasare, Daniel Satele, and Tait Shanafelt. "Relationship Between Burnout, Professional Behaviors, and Cost-Conscious Attitudes Among US Physicians." *Journal of General Internal Medicine*, November 16, 2019. https://doi.org/10.1007/s11606-019-05376-x, 1.

"unpredictable behavior, mood swings...[and] nonprofessional interactions including verbal abuse."[12] As seen through Dyrbye's study, burnout begins as early as medical school and worsens over time. These traits of burnout are detrimental to a physician's engagement in work and professional behavior.

Hidden Curriculum

Nussbaum wrote about the informal education that is learned through the culture of health care environments. Peer pressure and conforming to the social norms are learned from "our teachers and associates, from our reading, from the social atmosphere about us." He continues, noting, "we catch the beliefs of the day, and they become ingrained—part of our nature."[13] When these beliefs and behaviors are negative, a negative cultural environment is fostered and may contribute to the loss of meaning in work, loss of engagement, and loss of professionalism—symptoms of burnout—that are currently seen in health care today.

Physician engagement and professional behavior can be further undermined by the "hidden curriculum" in medicine. This "hidden curriculum" is the lessons physicians learn early in their education by observing other physicians and how they treat one another and their patients. In medical schools, students are taught the knowledge and the

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[12] Rothenberger, David A. "Physician Burnout and Well-Being: A Systematic Review and Framework for Action." *Diseases of the Colon & Rectum* 60, no. 6 (June 2017): 567–76. https://doi.org/10.1097/DCR.0000000000000844, 569.

[13] Osler, William, Mark E. Silverman, T. J. Murray, and Charles S. Bryan. *The Quotable Osler*. Philadelphia: American College of Physicians, 2008, 12.

skills necessary to treat patients' diseases. Yet, while positive personal traits such as compassion and respect for patients are modeled and presented as desirable attitudes, medical students also learn negative behaviors from the hidden curriculum. These negative behaviors go against professionalism and ethics and are "the hidden curricula conveyed in medical schools, residency programs, hospitals, and clinics."[14] For example, "More than half of 2016 medical school graduates said that they experienced 'disconnects between what [they were] taught about professional behaviors/attitudes and what [they saw] being demonstrated by faculty.'"[15] The culture of a medical organization is modeled by physician leaders and passed down to residents and finally to medical school students.

When the role-models of young physicians "do not practice the virtues, the result is traumatic and stressful experiences during medical school that negatively impact students' professional formation."[16] This hidden curriculum continues to add to the problem by subconsciously teaching young physicians that these negative behaviors are acceptable, and the mistreatment of peers and patients continues to increase.[17] Young

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[14] Lehmann, Lisa Soleymani, Lois Snyder Sulmasy, Sanjay Desai, and for the ACP Ethics, Professionalism and Human Rights Committee. "Hidden Curricula, Ethics, and Professionalism: Optimizing Clinical Learning Environments in Becoming and Being a Physician: A Position Paper of the American College of Physicians." *Annals of Internal Medicine* 168, no. 7 (April 3, 2018): 506. https://doi.org/10.7326/M17-2058.

[15] Lehmann.

[16] Seoane, Leonardo, Lisa M. Tompkins, Anthony De Conciliis, and Philip G. Boysen. "Virtues Education in Medical School: The Foundation for Professional Formation." *Ochsner Journal* 16, no. 1 (March 20, 2016): 50–55. http://www.ochsnerjournal.org/content/16/1/50, 53.

[17] Seoane, 53.

physicians are most vulnerable to these negative qualities since they are still learning their trade and acclimating to the practice of medicine. Since they are most vulnerable, this contributes to the increasing level of burnout among medical students, which in turn "can lead to a spiral of unprofessional behaviors."[18]

Disillusionment

Physicians are disillusioned and disenchanted about the nature of what it means to be a physician. This disillusionment stems from the corporatization of health care and technologizing modern medicine. Disenchantment means that humans view the world as a machine that they can control and dominate through scientific knowledge, economic markets, technology, and calculations.[19] This paradigm influences medicine since the human body is explained and viewed as a machine that physicians fix.[20] Physicians are educated in "a system that indoctrinates this disenchanted way of viewing the body with the aim of creating efficient, competent mechanic-physicians."[21] Yet, there are dangers

[18] Seoane, 53.

[19] Whitt, Jason D. "Calling, Virtue, and the Practice of Medicine." *Christian Bioethics: Non-Ecumenical Studies in Medical Morality* 25, no. 3 (November 5, 2019): 315–30. https://doi.org/10.1093/cb/cbz012, 315-316.

[20] Couch, Tyler J. "A Re-Enchanted Response to a Communal Call: Toward a Christian Understanding of Medicine as Vocation." *Christian Bioethics: Non-Ecumenical Studies in Medical Morality* 25, no. 3 (November 5, 2019): 331–52. https://doi.org/10.1093/cb/cbz008, 339.

[21] Couch, 341.

to this disillusionment, part of which is the dehumanizing aspect of today's medical practice. Physicians are disenchanted with the nature of being a physician since there is a gap between their role of technician, fixing a part of a mechanical body, and their goal to heal the person who is suffering from the illness. Because of this gap between the reality and ideal of medical practice, physicians are slowly losing their meaning and engagement in work. Thus, this modern worldview and training undermines the calling of being a physician.[22]

Education solely focused on the techniques of medicine erodes the meaning in medicine, as well as the overarching purpose of the role of physician. There is a gap for physicians between mechanical training and their calling. This tension between the actual and ideal practice of medicine leads to "discontentedness" and is a "significant factor in an increasing number of physicians leaving the profession."[23] The world of medicine has become "disenchanted," and this disenchantment is the "source of high rates of physician burnout and patient dissatisfaction."[24] As a result, "medicine is merely a science of cause and effect that acts on bodies approached as so many systems to be managed."[25]

[22] Couch, 332.

[23] Couch, 343-344.

[24] Whitt (2019), 315-316.

[25] Whitt (2019), 316.

Symptoms of the Disease

The way in which society currently approaches medicine dehumanizes both patients and physicians. According to Hippocrates, "It is well to superintend the sick to make them well, to care for the healthy to keep them well, but also to care for one's self…"[26] Those who are at risk for burnout are not failures or deficient in any way, as was once believed. Rather than being weak, these physicians gave entirely of themselves until there was nothing left to give. However, reducing burnout is not just a problem for individual physicians experiencing symptoms of burnout. The practice of medicine today, with its business pressures, incentivizes physicians to work without ceasing. The system itself continues to use physicians as tools rather than as people.[27]

Medicine is suffering from a disease. Physician burnout, accompanied by its emotional exhaustion, depersonalization, decreased engagement, and low work satisfaction; disillusionment and disenchantment, and the loss of professionalism and virtues are all symptoms of this disease. There is a larger problem: physicians, due to the dehumanization of our health care system, are losing the necessary traits that are essential to the role of physician.

The way society approaches medicine is flawed and the consequences of this are being revealed. As Mangione writes, "...is it possible that something more personal may have been lost in the way we now select and educate physicians? Could this, in turn,

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[26] Mangione, S., and M. J. Kahn. "The Old Humanities and the New Science at 100: Osler's Enduring Message." *Cleveland Clinic Journal of Medicine* 86, no. 4 (April 1, 2019): 232–35. https://doi.org/10.3949/ccjm.86a.19019, 233.

[27] Rothenberger, 570.

make us less resilient?"[28] Mangione argues for the need to implement a new curriculum, a new approach to medicine, in order to restore what was lost in this profession.

Medicine is an art since it possesses a distinct end-goal, *telos*, which is greater than just technical skill. As an art, medicine needs to balance science and the humanities. Overemphasizing science and technical skill to fix parts of people at the expense of humanities may be detrimental to one's later work since it contributes to the dehumanization of medical practice. This, in turn, later manifests itself when a physician is burned out.

Proposed Solution

While physician burnout is caused by numerous factors, as seen in chapter two, the fundamental issue is that the U.S. health care system dehumanizes patients and physicians.

Current medical education trains physicians to be technicians by emphasizing science and technical skill to fix parts of people. In order to combat burnout, there is a need to rethink medical education to balance humanities and science since medicine is a healing art. By balancing humanities with science, starting in undergraduate pre-medical curriculum, future physicians can be trained to see patients as people and their role of physician as healer not just technician.

Medical humanities programs are growing in the U.S. These programs, in both undergraduate and medical schools, provide the space to allow future health care

[28] Mangione (2019), 232.

providers to reflect and discover the meaning and purpose of medicine and the role of the physician. Humanities classes foster traits and behaviors that are the antithesis to behaviors seen in physicians who are burnout. Through these programs, character is cultivated in the classroom with virtues as the basis for physician professionalism. These virtues, as Nussbaum argues, are integral to the future practice of medicine. Discovering meaning in their work and practicing virtues as the basis of professionalism will hopefully sustain them later on in their profession.

By thinking about various themes such as purpose and character formation through the lens of humanities, future health care leaders and providers may be able to approach the practice of medicine in a different way to combat this dehumanization and reduce their risk of burnout. As individuals, over time, they can change the culture of organizations and health care as a whole while restoring physician-patient relationships, professionalism, and reducing burnout.

Medical Humanities Programs

Medical humanities provides the space for which students interested in pursuing a medical education can balance humanities with science. While the number of medical humanities programs in the U.S. is growing, there are few programs that offer medical humanities for undergraduates. The well-developed undergraduate medical humanities programs are at Baylor University and Stanford University. Other programs, offered at medical schools, include schools such as Columbia, Duke, Penn State, and Yale. Reoccurring themes in these programs include: attentive listening, holistic medicine,

healing versus curing, meaning in medicine, the role of physician, personhood of patients, physician-patient relationships, virtue formation, and the meaning of illness and suffering. For example, Baylor University writes on their website for medical humanities that

> The medical humanities heighten our awareness and appreciation for the 'whole person' in medicine. Students come away with a greater understanding of the art of medicine, the importance of the doctor-patient relationship, the spiritual and emotional dimensions of disease and the human experience of illness.[29]

Other schools echo this thought as the classes offered try to integrate science and humanities. Baylor offers courses such as Christian Spirituality in Health Care, Medical Ethics, History of Medicine, U.S. Health Care System, Disability and Society, and End-of-life-care and Bereavement.[30] Columbia offers a program of Narrative Medicine. Through reading, writing, and reflecting during workshops, students foster "close attention skills, which are directly transferable to clinical practice."[31] Stanford's Medicine and Muse Program offers courses about the healer's art, looking into topics of "deep listening, presence, acceptance, loss, grief, healing, relationship, encounters with awe and mystery, finding meaning, service, and self-care practices."[32]

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[29] "Medical Humanities." Medical Humanities | Baylor University. Accessed March 11, 2020. https://www.baylor.edu/medical_humanities/.

[30] "Medical Humanities."

[31] "Education and Narrative Medicine." Department of Medical Humanities and Ethics, February 20, 2020. https://www.mhe.cuimc.columbia.edu/our-divisions/division-narrative-medicine/education-and-narrative-medicine.

[32] Stanford Center for Biomedical Ethics. "About." Stanford Center for Biomedical Ethics. Accessed March 11, 2020. http://med.stanford.edu/medicineandthemuse/about.html.

These programs also seek to develop ethically conscious physicians. Duke states that they want to cultivate students who are more "knowledgeable, insightful, humane, and effective."[33] Penn State College of Medicine Department of Humanities says that they want to "reach into the health-care setting to improve patient and provider experience with programs focusing on compassion and empathy, often utilizing arts and music."[34] Stanford also wants to develop traits such as "compassion" and "empathy skills" in their students so that their students learn to see every patient with dignity and justice within "meaningful practice."[35]

Critique of Programs

One fear, however, is that these programs might not be forming students' characters in the classroom. Rather, the programs emphasize reflection and attentive listening. For example, the Narrative Medicine program at Columbia University emphasizes "close attention skills" and seeks to be a place "where participants can pause and reflect on their lives and their work."[36] Penn State College of Medicine Department of Humanities states that their classes focus on "compassion and empathy, often utilizing

[33] "Trent Center." Humanities | Trent Center. Accessed March 11, 2020. https://trentcenter.duke.edu/scholarship/humanities.

[34] "Department of Humanities." Department of Humanities - Penn State College of Medicine. Accessed March 11, 2020. https://med.psu.edu/humanities.

[35] Stanford Center for Biomedical Ethics.

[36] "Education and Narrative Medicine."

arts and music."[37] The problem is that these courses should not just talk about virtues. Rather, through pedagogical practices, these courses should promote habits that foster virtues and form the character of students.

While these courses are still positive experiences that engage students, they do not reach the necessary depth of a humanities education that Osler, who was discussed in chapter one, had in mind. These programs are grasping at the liberal arts education without fully incorporating it into the curriculum. In order to cultivate character in the classroom, integrating the humanities into medical education needs to involve more of a liberal arts education where students are challenged to think critically about issues within the health care setting.

Liberal Arts Education

In order to truly form the character of students, both the content and pedagogy of these humanities classes are vital. While it is difficult to succinctly define the term "liberal arts education," this type of education is usually less specialized and not tied to a particular technical study. When someone is well-rounded through a liberal arts education, it refers to a student who has "expanded knowledge, wisdom, desirable qualities of mind or character...or general competence."[38] The curriculum of liberal arts

[37] "Department of Humanities."

[38] Ferrall, Victor E. *Liberal Arts at the Brink:* Cambridge, MA and London, England: Harvard University Press, 2011. https://doi.org/10.4159/harvard.9780674060883, 8.

usually involves a range of subjects: from history, philosophy, theology, and great books courses to psychology, social science, biology, and foreign languages.[39] In these classes, students wrestle with hard questions through reading challenging content, reflecting on this content and applying it to their lives. A liberal arts education offers "Thoughtfulness as a 'habit of mind.'"[40] A student who participates in a liberal arts education is trained to critically examine himself, possesses effective communication skills learned through writing, has "a well-developed understanding of the human condition," an eagerness to continue learning, "commitment to service to others," as well as "an examined life."[41]

These lessons are taught to students by having them engage with classical texts and significant themes of tradition. Liberal arts education allows students to bring the disciplines together to answer overarching questions of life, such as the *telos* of medicine. One example of this type of learning practice is demonstrated when medical humanities students read *The Death of Ivan Illyich* by Tolstoy. By reading this work, future physicians can engage early on about the meaning of suffering, the process of dying, and the meaning of death—an important topic which they will be faced with in their future work. When reading this work, a student is able to learn from the text by applying knowledge from other classes, such as history and biology, to the text. A liberal arts education teaches the student how to critically think through this application of knowledge, which also reveals the complementarity of various subjects. By engaging with works such as this, reflecting and discussing with peers, students are then able to

[39] Ferrell, 9.

[40] Ferrell, 17.

[41] Ferrell, 18.

critically think about challenging, yet important questions before they become practicing physicians.

Benefits of Humanities

According to Lauren Barron, M.D., Director of the Medical Humanities Program at Baylor University, there are five areas that humanities classes help medical practitioners. In her article, "The Impact of Baccalaureate Medical Humanities on Subsequent Medical Training and Practice: A Physician-Educator's Perspective," Barron focused on alumni of Baylor's Medical Humanities Program who are current clinical practitioners. These five areas are 1) context and complementarity, 2) clinical relevance, 3) reflective practices, 4) professional preparedness, and 5) vocational calling.

Barron argues that the humanities provide context for medicine, while complementing the work of basic science. She claims that in basic science classes, students are taught to memorize information for tests. Medical humanities "provide students with a context and framework for the way in which those memorized facts will be used."[42] Students are taught to broaden their perspective through reading, reflection, and discussion rather than just memorizing information.[43] Medical Humanities, thus, provides a balance between the humanities and the science of medicine.

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[42] Barron, Lauren. "The Impact of Baccalaureate Medical Humanities on Subsequent Medical Training and Practice: A Physician-Educator's Perspective." *Journal of Medical Humanities* 38, no. 4 (December 1, 2017): 473–83. https://doi.org/10.1007/s10912-017-9457-1, 475.

[43] Barron, 475.

Medical humanities also teaches students the importance of holistic medicine. Physicians are responsible not only for technical skill, but also fostering relationships with their patients. It is important to note that "physician satisfaction was derived primarily from patient relationships—and not compensation."[44] Physicians should be compassionate, create a partnership with their patients, seek holistic healing rather than fix parts of people, and treat every patient as a person.[45] Barron states, "We learn about the nature of persons through the medium of the humanities. We learn about the nature of sick persons through the medium of the medical humanities."[46]

Additionally, through class discussions and writings, medical humanities creates space for students to learn, early on in their education, the importance of reflection. Self-reflection helps one understand one's self, others, and one's situation; as well as learning from past and present. This especially helps students mature and develop to be conscious of themselves and others. Medical humanities classes emphasize critical thinking, while providing opportunities for students to read, reflect, discuss, and write about topics within health care.[47] Furthermore, learning how to reflect in the humanities classes is a way to care for self. Health care organizations "should build in time for physicians to think, reflect, and flexibly adjust their work to make good decisions that will achieve the goal of restoring health and alleviating human suffering."[48] Reflection skills learned in medical

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[44] Rothenberger, 571.

[45] Barron, 476-477.

[46] Barron, 477.

[47] Barron, 477.

[48] Rothenberger, 573.

humanities helps students slow down and think deeply—lessons that will continue to be cultivated through their education and career in medicine.[49]

Additionally, medical humanities prepares students for professional school and work. One student alumnus of medical humanities stated,

> The work I currently do leaves me and the members of my organization mentally and emotionally exhausted at times...However, my medical humanities experience has given me solid footing to stay the course...Burnout is a scary and ever-present reality. Unless you actively equip yourself to combat the causes and manifestations of burnout, medical school becomes a daunting task. I have watched my classmates struggle with their emotional and mental health because they didn't have the tools to cope with the stress. Having awareness of the danger and tools to safeguard yourself from burnout is something I learned in my time as a medical humanities student at Baylor before I started medical school and has made the experience more enriching, rewarding, and joyful.[50]

Creating space for humanities as well as science as the basis for medical education is essential. Overemphasizing the scientific aspect of medicine to the detriment of the humanities has negative consequences which is seen through the growing rates of burnout.

Finally, according to Barron, medical humanities helps future physicians discern their vocational calling. In other words, medical humanities courses challenge students to find their purpose for their career as a physician. Since illness belongs to the patient's story of her disease, it involves not only her body, but her soul and mind as well. There is a unique, spiritual side to medicine. Because of this element of spirituality, calling or meaning in health care is vital. Undergraduate medical humanities students are able to explore health care professions as a calling—cultivating meaning in their work by

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[49] Barron, 478.

[50] Barron, 479.

reflecting, reading, and discussing in their classes.[51] Another Baylor medical humanities alumnus wrote,

> The service we provide to others comes from the heart, and my medical humanities background gave me the tools to cultivate that. Having a sense of calling to the work I do and will do in the future connects me to my service in a way that benefits both me and the people whom I serve. My classes in medical humanities have affirmed that medicine is a vocation because of the spiritual nature of the work of healing fellow humans...This understanding of vocation informs why we do what we do and gives future health care professionals a deeper reason for their work than money or a certain lifestyle.[52]

Osler stated that, "You are in this profession as a calling, not as a business; as a calling which exacts from you at every turn self-sacrifice, devotion, love and tenderness to your fellow men."[53]

Importance of Meaning in Future Work

As already shown in chapter two, when physicians are burned out they are not engaged in their work and feel that they lack purpose and meaning in their medical practice. In "Combating Burnout, Back to Medicine as a Calling," Katherine Gold, M.D. claims that "medicine must return to prioritizing care and relationships."[54] She states that "newer research suggests that physicians who identify their profession as 'a calling'

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[51] Barron, 480.

[52] Barron, 480.

[53] Osler (2008), 61.

[54] Gold, Katherine J. "Combating Burnout: Back to Medicine as a Calling." *The Annals of Family Medicine* 17, no. 6 (November 2019): 485–86. https://doi.org/10.1370/afm.2476.

experience less burnout."[55] By being able to discuss this early on through the balance of humanities and science, aspiring physicians may discover their true purpose and the overarching meaning of medicine and the role of the physician. As Osler articulates, medicine is unique since the "...love of humanity [is] associated with the love of his craft...the joy of working [is] joined in each one to a true love of his brother."[56] Physicians need "to focus on their sacred calling as doctors rather than burnout in a vain, even unethical, attempt to also do the bidding of leaders in public health, marketing, health care policy, and organizational finances."[57]

Particularly for Christian physicians, this calling is to be "Christ-like" which "places moral formation at the forefront of vocation such that what is central is not the individual's profession but the character of the one who works."[58] The character of the physician, "marked by deeply formed virtues, sustains him or her instead of a faintly remembered sense of calling that offers no means to make sense of the moral and ethical challenges that mark the practice of medicine."[59] By rediscovering the meaning and purpose of medicine as love of one's neighbor, to be Christ-like, through the cultivation of character in the humanities classroom, medicine may be able to be re-enchanted and

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[55] Gold.

[56] Osler, William. *The Old Humanities and the New Science :An Address before the Classical Association, Oxford, May 16th, 1919 /.* London :, 1919. http://hdl.handle.net/2027/uiug.30112037940589, 31.

[57] Rothenberger, 574.

[58] Whitt (2019), 322.

[59] Whitt (2019), 322.

counter the dehumanizing practices that result in physician burnout.[60] Yet, the person, in order to understand his calling and meaning in his work, must be the "...kind of person who is morally formed in Christ-like virtue: the virtue of healing certainly, but also virtues such as practical wisdom, justice, charity, kindness, humility, and all manner of other moral virtues that inform what it is to heal."[61] This is why it is vital that virtue be formulated as the foundation of professionalism and cultivated in the character of the student in the space of the humanities.

Physician Professionalism

Physician professionalism is more than a behavior; it is "a skill that can be practiced and learned over time."[62] One may always improve in one's professionalism since it is "about accountability and the need for physicians to work in teams and systems that may override physician autonomy for the greater good of the patient or society."[63] The Working Party of the Royal College of Physicians stated, "Medical professionalism signifies a set of values, behaviors, and relationships that underpins the trust the public

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[60] Whitt (2019), 316.

[61] Whitt (2019), 325.

[62] Kanter, Michael H, Miki Nguyen, Marc H Klau, Nancy H Spiegel, and Virginia L Ambrosini. "What Does Professionalism Mean to the Physician?" *The Permanente Journal* 17, no. 3 (2013): 87–90. https://doi.org/10.7812/TPP/12-120, 87.

[63] Kanter, 87.

has in Doctors."[64] Professionalism is necessary to retain "…the public's trust in health care. Integrity, accountability, empathy, commitment to professional competency, and adhering to ethical standards are among the core tenets of professionalism."[65]

According to Michael Kanter, M.D., professionalism involves four core principles: "excellence, accountability, altruism, and humanism."[66] Excellence means that during their career, physicians will continue to improve in their skills, knowledge, and quality of care.[67] To strive for excellence means that physicians need to self-reflect on a daily basis and continue to improve in communication, patient care, and competence within the system as a whole.[68] Accountability "requires the physician to avoid letting self-interest override the patient's interest."[69] Additionally, accountability among colleagues and as a team is needed to work well together to serve the good of the organization.[70] Furthermore, altruism "signifies advocating the interests of one's patients over one's own interest" which also involves reporting medical errors to the hospital.[71]

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[64] Yang, Homer. "Professionalism in Anesthesia." *Canadian Journal of Anesthesia/Journal Canadien d'anesthésie* 64, no. 2 (February 2017): 149–57. https://doi.org/10.1007/s12630-016-0738-3, 150.

[65] Dyrbye (2019), 1.

[66] Kanter, 88.

[67] Kanter, 88.

[68] Kanter, 88.

[69] Kanter, 88.

[70] Kanter, 88.

[71] Kanter, 88.

Finally, humanitarianism "refers to the physician's commitment to service."[72] Professionalism also consists of respecting others who are at all the different aspects of the health care system: from patients and their families, to teams, colleagues, nurses, and administration.[73] Honor and personal integrity are key values of professionalism that are expected of physicians. During the day, there are different opportunities for physicians to be dishonest or to treat others in a negative manner.[74] To be a professional physician, one needs to uphold personal integrity and other virtues as the basis of personal professionalism.

Controversy about the definition of professionalism exists across hospitals and organizations in America. For example, The Accreditation Council for Graduate Medical Education, the American Board of Internal Medicine, and the National Board of Medical Educators have different definitions of physician professionalism.[75] Other authors "have sought to measure professionalism using checklists that note whether, for example, trainees shake hands and make eye contact with patients."[76] However, this method might encourage medical students to "appear professional instead of developing their character."[77] To solve this lack of consensus on the definition of professionalism, some

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[72] Kanter, 88.

[73] Kanter, 88.

[74] Kanter, 88-89.

[75] Karches, 511.

[76] Karches, 511.

[77] Karches, 511.

physicians and health care leaders are turning to virtue ethics as the foundation of professionalism to develop physicians' character.

Definition of Virtue Ethics

Virtue ethics is "one of three major approaches in normative ethics."[78] Virtue can be fostered through right habits over time. A virtue "is an excellent trait of character" and "possessing a virtue is a matter of degree."[79] Virtues are learned by practice and they are "guided in their use by practical wisdom."[80] By facing problems or dilemmas, the good person is able to confront the problem by practicing virtue and thus, foster more virtue. For example, students "first emulate the ethical conduct of a more experienced teacher, who in turn reinforces the behavior until the student begins to exhibit it freely."[81] Over time, virtues are instilled by habit and when faced with a stressful or moral dilemma, the student instinctively knows how to react and respond in a virtuous manner.[82]

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[78] Hursthouse, Rosalind, and Glen Pettigrove. "Virtue Ethics." In *The Stanford Encyclopedia of Philosophy*, edited by Edward N. Zalta, Winter 2018. Metaphysics Research Lab, Stanford University, 2018. https://plato.stanford.edu/archives/win2018/entries/ethics-virtue/.

[79] Hursthouse.

[80] Pellegrino, Edmund D., David C. Thomasma, and David G. Miller. *The Christian Virtues in Medical Practice*. Washington: Georgetown University Press, 1996, 7.

[81] Karches, 512.

[82] Karches, 512.

It is impossible to be a perfectly virtuous person. Yet the character of a person is revealed through his virtues and his vices. Someone who has a well-developed character does not give in to self-interest but looks long-term to the interest of others.[83] Virtuous persons act as "excellently as possible in achieving their ends."[84]

Why Virtues as a Foundation for Professionalism?

There are many times during a physician's day that he must make judgement calls for the good of the patient, which forces the patient to trust the physician. The physician must honor patient preferences, which provides "a framework within which the ethics of character and virtue must always play a prominent role."[85] While principles and rules "concern the action in question," virtue ethics "governs the interior life of the agent(s) who perform(s) the action."[86] Rules "unless interiorized, will be broken as expedient. On the other hand, without objective morality, any actions...could be justified on the basis of 'good intentions.'"[87] There needs to be a balance between rules and objective morality of the individual.

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[83] Pellegrino, Edmund D., and David C. Thomasma. *The Virtues in Medical Practice*. New York u.a.: Oxford Univ. Press, 1993, 146.

[84] Pellegrino (1993), 166.

[85] Pellegrino (1996), 13.

[86] Pellegrino (1996), 14-15.

[87] Pellegrino (1996), 15.

In an age of health care reform, there are many practices that present moral dilemmas to health care providers. These practices "compromise, endanger, or conflict with the best interest of patients."[88] There is a connection between "practice dissatisfaction, work life stress, burnout, and fatigue with behaviors that are known to adversely affect staff relationships and performance efficiency that can seriously compromise patient safety and quality of care, increase the occurrence of adverse events and/or medical errors, and increase the likelihood of litigation."[89] Cutting corners to reduce health care costs, receiving perverse incentives to prescribe certain medication, misleading marketing and advertising, ordering unnecessary tests, and hiding medical errors are just a few examples of ethically marginal practices.[90] Furthermore, this list of "morally marginal practices is spawned by the current commercialization and monetization of health care as an industry that legitimates the financial motivations of health professionals, administrators, and owners of health care facilities."[91]

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[88] Pellegrino (1996), 79.

[89] Rosenstein, Alan H., and Michelle Mudge-Riley. "The Impact of Stress and Burnout on Physician Satisfaction and Behaviors." *Physician Executive; Tampa* 36, no. 6 (December 2010): 16–18, 20, 22–23. https://search.proquest.com/docview/763161550/abstract/840DD3DED33C4203PQ/1, 18.

[90] Pellegrino (1996), 79.

[91] Pellegrino (1996), 79.

Virtues in Medicine

There are various virtues that are needed in the daily practice of medicine within the context of the physician-patient relationship. This section draws upon Pellegrino and Thomasma's two works, *The Christian Virtues in Medical Practice* and *The Virtues in Medical Practice*, to illustrate certain virtues that are necessary for health care professionals. These integral virtues to the practice of medicine are charity, justice, fortitude, trust, compassion, temperance, and prudence.

The practice of medicine involves people—thus charity is the most important virtue to be practiced by health care professionals. Charity does not solely involve philanthropic acts or a benevolent attitude. To be charitable means one has a deep love for Mankind and the Good. For example, St. Augustine held that "charity is…the 'root of all good.'"[92] The physician-patient relationship needs to be ordered by this call to love and to serve one another. It takes humility and trust between both physicians and patients to create this partnership.[93]

Justice is "rendering what is due to others" and "has its deepest roots in love."[94] Within the physician-patient relationship, justice is a moral obligation to demonstrate love and compassion.[95] The virtue of justice "denotes excellence in determining what is

[92] Pellegrino (1993), 94.

[93] Pellegrino (1996), 80-81.

[94] Pellegrino (1993), 92, 94.

[95] Pellegrino (1993), 95.

due to whom."[96] Justice is applied in the clinical setting when physicians provide proper services according to the needs of each patient, only order necessary tests, protect patients' confidentiality, and respond appropriately to the demands of various health care organizations.[97] For teachers and their students, the Hippocratic Oath charges physicians to respect their teachers, pass on their knowledge to the next generation, and act according to the best interests of their patients. By demonstrating the virtue of justice, physicians, especially young physicians, must learn to respect and obey their teachers. Teachers, in turn, need to instill these virtues in their students, respect their students, and encourage excellence in them.[98]

To be a good physician, one must also be courageous, or in other words, exemplify fortitude. Fortitude is moral courage, not just physical courage.[99] Fortitude is exemplified when one masters his emotions, endures, and responds in a certain way.[100] To exemplify fortitude is when physicians do "...the right thing when it is required and expected of them, given their role in life."[101] Physicians "take part in the difficult medical decisions confronting physicians and patients, wherein the wrong choice could result in disability or death or perhaps a claim of malpractice."[102] In response, students

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[96] Karches, 512.

[97] Karches, 512.

[98] Karches, 512.

[99] Pellegrino (1993), 109.

[100] Pellegrino (1993), 110-111.

[101] Pellegrino (1993), 111.

[102] Karches, 512-513.

lacking fortitude might try to distance themselves from such circumstances. However, "the best physicians...cultivate authentic relationships with patients. They admit when they make mistakes or are unsure what to do. Such perseverance in the face of danger takes courage."[103] This may be demonstrated when physicians stand up against perverse incentives, uphold ethical practices, do not succumb to peer pressure, or report medical errors. In corporate medicine, it is easy to shift the responsibility of actions to someone else. However, fortitude is a virtue that enables physicians to stand up for their patients and put aside self-interest.

To honor the physician-patient relationship, there needs to be "fidelity to trust." This fidelity to trust means the physicians protect patients during their vulnerable time. Patients depend on physicians, so it is a physician's job to practice beneficence and non-maleficence. Unfortunately, fidelity to trust is currently eroding in today's health care practice. Patients think doctors care more about making money than in their treatment for patients.[104] Trust is needed on both sides of the physician-patient relationship. Patients should trust their physicians with their autonomy, but there is a delicate balance since physicians should not become paternalistic.[105] Fidelity to trust is a necessary component to create a partnership between physicians and patients.

Additionally, physicians need to practice the moral virtue of compassion. It is not a principle to be memorized, but stems from the character of the physician. Compassion

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[103] Karches, 513.

[104] Pellegrino (1993), 71-72.

[105] Pellegrino (1993), 75.

means that "...the good physician co-suffers with the patient."[106] Compassion is important in the physician-patient healing relationship. Being a compassionate physician does not undermine the need for physicians to be competent; rather they also need to be able to "...comprehend, assess, and weigh the uniqueness of this patient's predicament of illness."[107] Compassion fosters fellowship. Yet in any relationship there needs to be healthy boundaries. Compassion enables the physician to see the person, rather than the disease.

Temperance is moderation and self-control.[108] In medicine, there is a lack of temperance when physicians "play God" and are paternalistic through the use of technology.[109] Because of technology, it is easier to take control of life and use extraordinary measures to keep someone alive. The practice of temperance combats this by lessening the prolonged sufferings of patients and their families. In other words, the physician who practices temperance, as well as prudence, knows when enough medicine is enough. He knows when he cannot cure, but must instead be present and attentive to his patient and the family.[110] Medical temperance is the "constant disposition of physicians toward responsible use of power for the good of their patients, avoiding, on the one hand, underuse of technology and other interventions, with its consequent

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[106] Pellegrino (1993), 79.

[107] Pellegrino (1993), 80.

[108] Pellegrino (1993), 117.

[109] Pellegrino (1993), 120.

[110] Pellegrino (1993), 121.

abandonment of patients, and on the other, overuse of interventions and technology."[111] It is a balance of interventions.[112]

Practical wisdom, prudence, is a capstone virtue between intellectual and moral virtues. Prudence enables physicians to take a situation and discern the right course of action for the good of the patient in that circumstance.[113] The practice of medicine requires both skill and judgement—physicians need prudence to do this and put the two in the right relationship with one another. Prudence takes the other virtues and uses them to do the right act in any situation, which is learned through a liberal arts education.

The physician who practices these virtues does so through habit. Since it is impossible to quantitatively qualify if someone has learned the virtues, it is important to create a culture of community where physicians can hold one another accountable to excellence. These virtues are not specifically tied to any religion, but are more concrete than principles. If virtues are made the basis of professionalism, individuals working in community can change the culture of medicine.

Teach Virtue as Foundation for Professionalism

To reinvigorate calling and engage physicians, there is also the need to create space to foster such traits in community. Burnout is a negative behavioral response to a

[111] Pellegrino (1993), 122.

[112] Pellegrino (1993), 122.

[113] Pellegrino (1993), 84.

larger problem. There is "ample evidence that contemporary medical training often alters students' and residents' values for the worse. And yet, if trainees can develop vices, there is proof that they can change, and there should be no theoretical obstacle to the acquisition of virtues, provided a learning environment in which the virtues flourish."[114] Virtues such as "curiosity, humility, and patience" are formulated in doctors who practice virtue ethics. Nussbaum states that "virtue ethics explains why a person *is* a physician rather than simply being employed as a physician."[115] Establishing a stronger foundation for physician professionalism grounded in virtues within the context of humanities classes might help reinvigorate the traits that are necessary to the calling and role of physicians.

Teaching Virtue

There are different ways to teach virtue to medical students and physicians. Since virtues are instilled through habit, they cannot solely be fostered in the classroom. Virtue needs to be practiced during daily life and as part of a community that is also devoted to virtue. As one author writes, "students will not learn the virtues unless faculty and staff exemplify them, and academic medical centers must foster a culture in which the virtues

[114] Karches, Kyle E, and Daniel P Sulmasy. "Justice, Courage, and Truthfulness:" *Family Medicine* 48, no. 7 (August 2016): 511–16, 514.

[115] Nussbaum, 155, Italics Original.

are rewarded and their corresponding vices punished."[116] One way to accomplish this is in "an apprenticeship model" where faculty are paired with small groups of students.[117]

Some medical schools have implemented classes on virtues as a foundation of physician professionalism. One medical school, The University of Queensland-Ochsner Clinical School in New Orleans, Louisiana, implemented a virtue ethics class for their fourth year medical students. In their own internal study, the researchers found that "49% of medical students experience some signs of burnout by their fourth year," as well as a dramatic decrease in empathy during the clinical years.[118] The researchers found that there is an informal curriculum in medicine on how to treat one another, and with this many students experience mistreatment by peers, residents, attendings.

The University of Queensland-Ochsner developed a class on virtues for fourth year medical students called "Medicine in Society" in order to combat this informal curriculum. The class was broken down into five, three hour sessions and was taught in a clinical context. The students were assigned case scenarios, guest lecturers, and more in order to apply virtue ethics to their daily lives and medical practice. The students evaluated six virtues: courage, wisdom, temperance, humility, transcendence, and justice. As of July 2015, 30 students completed and evaluated the course—100% of whom

[116] Karches, 513.

[117] Karches, 513.

[118] Seoane, 50.

reported "understanding the importance of virtues in the practice of medicine."[119] The goal was to teach "virtues as a foundation for professional formation."[120]

The virtues of courage, wisdom, temperance, humanity, transcendence, and justice compliment what is professionally expected of physicians. For instance, when learning about the virtue of courage, the class associated it with "bravery, perseverance, honesty, and zest."[121] Then, the guest lecturer provided two personal examples to students: one when the virtue of courage was practiced, and the other when it was not. Consequences of not following the virtues are stressed, and students are then given hypothetical case scenarios of being an intern and needing to practice the specific virtue of the class period. Classes such as this are needed in most medical schools, since many students are impacted by negative traits of the hidden curriculum within medicine.

Cultivate Character in the Classroom

Virtue should go beyond just duty-based ethics and go to the character of the physician. There should be "more attention to character formation and professionalization...since virtue is best taught by practice in the presence of teachers who themselves are models of virtuous behavior."[122] It is by cultivating the character of individuals early in their education that will make a difference for the future culture of

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[119] Seoane, 50.

[120] Seoane, 51.

[121] Seoane, 51.

[122] Pellegrino (1993), 77.

health care organizations. Virtues such as attention, wonder, perseverance, and humility can be fostered in any academic study. However, in the science curriculum, as mentioned by Dr. Barron earlier, students learn how to memorize knowledge and apply skills. While there are still opportunities to habituate virtues in science classes, the humanities provide rich opportunities for students to practice the virtues and form their characters. Humanities classes provide context for applying skills learned in science classes within the practice of medicine through the physician-patient relationship. It is through humanities classes that students can reflect, but also through humanities classes that students' characters are formed by opening them up to reading and reflection. Since character is cultivated in community, the humanities classes can begin to challenge students to apply what they learn to their daily life and other classes, which cultivates their character. Professors have the unique ability to model virtue and excellence to students, building in them a solid foundation for professionalism that is grounded in virtue.

Simone Weil, in "Reflections on the Right Use of School Studies with a View to the Love of God," discusses the relationship between academic studies and attentiveness. She claims that academic studies teach students how to be attentive, which helps one be attentive to God in prayer. School studies foster lower levels of attention, but it is through the practice of being attentive to all studies—even those one does not like—that one is able to cultivate attention. Weil clarifies that attention is not just "muscular effort."[123] Rather, attention "consists of suspending our thought, leaving it detached,

[123] Weil, "Reflections on the Right Use of School Studies with a View to the Love of God." In *Waiting on God (Routledge Revivals)*, 0 ed., 32–36. Routledge, 2009. https://doi.org/10.4324/9780203092477-7, 3.

empty and ready to be penetrated by the object."[124] This form of attention, then, can be learned in any subject or classroom and is vital, not only in prayer, but to being attentive to any person, patient, or peer.

When cultivating character and virtue in the classroom, especially in the field of medical humanities, it is not about having students just read a book, reflect on it, and discuss it with their peers. It also is not solely about achieving success through good grades, goals, graduate school, and making money. These do not cause an inner change in character, nor do they foster attention in the students. As Jason Whitt states, "Virtues learned through habits of study and classroom activity accompany as proximate goods the recognized good of disciplinary competencies."[125]

This type of cultivation of character is seen through the medical humanities class "Disability and Society" at Baylor University. In this course, the "formation of attention as a virtue that is oriented by love of persons with disabilities" is the "core content of the course."[126] Whitt accomplishes this by encouraging students to "encounter" those with disabilities by being present with them.[127] Students are put in contact with people with disabilities, and live out the virtues learned in the classroom by being friends and

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[124] Weil, 4.

[125] Whitt, Jason D. "Teaching Attentiveness in the Classroom and Learning to Attend to Persons with Disabilities." *International Journal of Christianity & Education* 19, no. 3 (November 2015): 215–28. https://doi.org/10.1177/2056997115588869, 215-216.

[126] Whitt (2015), 224.

[127] Whitt (2015), 224.

attentive to those with disabilities.[128] In the classroom, students learn the virtue of charity by completing readings multiple times. Rather than just reading for the sake of completing the assignment, students are tasked with re-reading certain sections within the books. In this way, the virtues of charity and attention are fostered through the practice of re-reading and continuing to learn from the text while engaging with it in class. Students learn to treat their peers with respect, listening to one another as they discuss the readings.

Virtue is taught by example and in community; ethics are taught as a discipline. There is no guarantee that behavior modeled or ethics learned as a discipline will make someone virtuous. However, cultivating virtue in the classroom still demands students to reflect on their own values.[129] It is difficult, maybe even impossible, to measure virtue and see if it is being learned. Some suggest that medical school admissions should find ways to evaluate the character of potential students, choosing candidates with both character and knowledge.[130] The drawback of this, however, is that it incentivizes students to not absorb virtue in their character, but practice excellence to sustain the appearance of character. The end goal of teaching virtue is "a change in human character, a strengthening of virtuous intention and practices, and a deepening of the disposition to do the morally right thing even when no one is watching."[131] The nature of

[128] Whitt (2015), 227.

[129] Pellegrino (1993), 179.

[130] Pellegrino (1993), 180-181.

[131] Pellegrino (1993), 179.

the role of physician, and teachers of physicians, demands virtue—to take responsibility for the "covenant of trust implicit in the healing relationship."[132] Virtuous physicians are sustained in community, so it is mandatory, by the nature of the role of physician, to reinforce virtuous behavior in the community of the hospital, which should be taught in undergraduate and medical school education.

While attentiveness and other virtues can be fostered in any school discipline, the humanities provide rich opportunities for students to learn virtue through different practices built into the courses. In the humanities, students are able to reflect on virtues as the basis for professionalism. As Osler once said, "Carefully studied, from such books come subtle influences which give stability to character and help to give a man a sane outlook on the complex problems of life."[133]

Training

It all comes down to how students are trained to see patients and medicine. If they are trained as merely technicians then there is a threat of disillusionment and later, burnout, as discussed earlier in this chapter. If students are trained to reflect and to heal patients as people through relationships, then there is a balance between the science and humanities. Thus, students who are exposed to humanities understand the

[132] Pellegrino (1993), 180.

[133] Osler (2008), 10.

complementary relationship between humanities and science that together make up the art of medicine.

Students attend medical school to learn how to be physicians.[134] Medical education needs to teach them not just the science of medicine but also the art of being a physician. Unfortunately,

> ...Medical school training is sometimes a breeding ground for aggressiveness, pride, poor communication with patients, and other character traits that directly contravene the virtues we have examined thus far. The standard criticisms of medical school training are built on this experience. Too often, previously altruistic students are subject to systematic pressure that undermines altruism and rewards selfishness and competition. Under the pressure to conform in order to succeed and not to imperil a career, even a virtuous student will need extra courage to resist.[135]

In order to combat such behavior, patients' interests need to be kept at the forefront of all health care professionals' concerns. Forming character connects to physician professionalism since professionalism is undermined by burnout and the hidden curriculum. Virtues such as compassion, justice, charity, and fortitude are needed so that students are able to resist such pressures to conform to the hidden curriculum present in medical practice. By promoting virtue formation as the basis for professionalism, students might be more inclined to act against negative pressures of the health care system since their professionalism is more firmly established. If such virtue is upheld and modeled by professors, the character of students may be formed which encourages them to act together in community against negative behavior. Virtues are taught by

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[134] Pellegrino (1993), 176.

[135] Pellegrino (1993), 177.

example in community—the academic community should foster virtues and encourage excellence in character in their students.[136]

The space for humanities within the context of medicine has direct relevance to clinical work. Physicians are able to heal patients as whole persons, rather than fix parts. In order to cultivate this in health care, students need an "…earlier foundation for deep engagement with the human side of health upon which further medical training is built."[137]

The daily "practice of medicine includes empathy, healing, alleviating suffering, and caring for those who suffer."[138] Humanities enhance "patient-centered skills, such as empathy and observation."[139] Furthermore, "Observing drama fosters empathy...drawing enhances the reading of faces, and observing art improves the art of clinical observation. Reading good literature prompts better detection of emotions, and reflective writing improves students' well-being."[140]

Another study, "Providing context for a medical school basic science curriculum: the importance of the humanities" by Thompson studied medical students at the University of Oklahoma College of Medicine in 2010. The school required all first and

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[136] Pellegrino (1993), 179.

[137] Barron, 482.

[138] Thompson, Britta M., Jerry B. Vannatta, Laura E. Scobey, Mark Fergeson, Humanities Research Group, and Sheila M. Crow. "Providing Context for a Medical School Basic Science Curriculum: The Importance of the Humanities." *Medical Teacher* 38, no. 1 (January 2016): 82–87. https://doi.org/10.3109/0142159X.2015.1018878, 82.

[139] Thompson, 82.

[140] Mangione (2019), 233.

second year medical students to take two, sixteen hour humanities program courses. At the end of the courses, the researchers asked the students "How have your views of being a doctor changed, if any, as a result of this course?" as part of the evaluation. 137 of 197 students responded, for a 70% response rate.[141] Themes recorded in the student responses included that students learned that there was a "bigger purpose of medicine," students learned about the role of medicine in human flourishing, they learned how to care for "patients with diseases, not diseases of patients, and they put the person back in medicine for holistic treatment.[142] Medical education today needs space for students to reflect, listen, and empathize.[143] By having this education, students learn from humanities "patient-centered attitudes and skills, perhaps inoculating students against the hidden curriculum especially prominent in the clinical curriculum."[144]

Link between Humanities and Burnout

As mentioned in previous chapters, there are multiple factors that contribute to burnout. The key component however is that the U.S. health care system dehumanizes both physicians and patients. Medical humanities programs provide the balance between humanities and the science of medicine. These programs also have the ability to foster virtues as the basis of professionalism through cultivating students' characters in the

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[141] Thompson, 84.

[142] Thompson, 84.

[143] Thompson, 85.

[144] Thompson, 85.

classroom. Physicians who are burned out report a low sense of engagement, exhibit negative professional behaviors, and low work-life satisfaction. Medical humanities courses provide the space to learn self-care practices such as reflection and meaning in work. More specifically, these classes have the unique ability to foster character in the classroom that will engage and enlighten the career of the future physician and reduce her risk of burnout.

There is a growing body of literature supporting the relationship between humanities and the reduction of physician burnout. This is exemplified through the study, "Medical Students' Exposure to the Humanities Correlates with Positive Personal Qualities and Reduced Burnout: A Multi-Institutional U.S. Survey" by Mangione, et al. The researchers wanted to evaluate the possible correlation between students' exposure to humanities and higher positive traits (such as empathy), and lower burnout rates (such as emotional exhaustion, depersonalization, and personal accomplishment). The study looked at five U.S. medical schools and utilized an online survey, for a 23.8% response rate. The results of the study "[confirm] the association between exposure to the humanities and both a higher level of students' positive qualities and a lower level of adverse traits."[145] For example, students exposed to humanities exhibit "...wisdom, empathy, tolerance for ambiguity, skilled observation, and emotional resilience…[and] openness."[146] There were several limitations to this study, such as recall and report bias,

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[145] Mangione, Salvatore, Chayan Chakraborti, Giuseppe Staltari, Rebecca Harrison, Allan R. Tunkel, Kevin T. Liou, Elizabeth Cerceo, et al. "Medical Students' Exposure to the Humanities Correlates with Positive Personal Qualities and Reduced Burnout: A Multi-Institutional U.S. Survey." *Journal of General Internal Medicine* 33, no. 5 (May 2018): 628–34. https://doi.org/10.1007/s11606-017-4275-8, 628.

[146] Mangione (2018), 629-630.

low response rate, and the conclusions are only correlations not causations.[147] Nevertheless, this study suggests that there is a connection between exposure to the humanities and well-rounded physicians exhibiting beneficial personal qualities. The researchers also state that "...one could argue that some of the qualities we measured (tolerance for ambiguity, empathy, emotional appraisal of self and others, resilience) are, together with wisdom, fundamental components of *professionalism.*"[148] Thus, "Exposure to the humanities is associated with both important personal qualities and prevention of burnout."[149]

Liberal Arts Education within Medicine

As discussed earlier in this chapter, incorporating humanities into the medical curriculum should not solely be a space for students to reflect about their own emotions through reading and writing. While this is an important element of it, in order to be well-formed as a person and understand the *telos* of medicine, students need exposure to classes that make up a liberal arts education. In this way, these classes cultivate the character of students and foster such virtues necessary for future medical practice in their students. It is through becoming friends with great authors that students learn to read charitably, engage with the texts which fosters attention, and apply the lessons in these

[147] Mangione (2018), 631.

[148] Mangione (2018), 633, Italics Original.

[149] Mangione (2018), 633.

works to their own lives and profession. Osler charged others to "read for half an hour" before going to sleep from a "bedside library" which are "a list of ten books which you may make close friends."[150] Osler stated that "The scientific student should go to the sources and in some way be taught the connection of Democritus with Dalton, of Archimedes with Kelvin, of Aristarchus with Newton, of Galen with John Hunter, and of Plato and Aristotle with them all."[151] It is through becoming friends with these authors that the intellect and character of students are formed.

By implementing more of a liberal arts education within humanities students might be able to reconcile the *telos* of the past with present medical practice. The current medical education reflects the *telos* of today's medical practice: cure patients efficiently and effectively. But, as seen with the rising rates of burnout, this *telos* is no longer sustainable since it creates tension between the *telos* of the past (heal patients) and the *telos* of the present (technical skill to cure). Classes that cultivate critical thinking and character formation through virtues, in addition to classes that teach science, help future physicians to practice the art of medicine. Osler stated that, "Science will take a totally different position in this country when the knowledge of its advances is the possession of all educated men."[152] Physicians' education should be well-rounded to challenge them to think critically about their lives and their practice, not just teach them the practical skills to be technicians.

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[150] "Sir William Osler's Beloved Books." Health Arts and Humanities. Accessed March 11, 2020. http://health-humanities.com/sir-william-oslers-beloved-books/.

[151] Osler (1919), 27-28.

[152] Osler (1919), 28.

Combat Burnout

The practice of medicine currently dehumanizes both patients and physicians. The high rates of burnout are only a symptom of this dehumanization. Individual organizations and physicians have a responsibility to combat burnout as they can, but habits are hard to break and it is necessary to start thinking about these questions early in the formation of future health care professionals. As an undergraduate student and future health care professional, there is a need for all pre-health students to receive exposure to humanities. It is through the humanities that character is cultivated, which enlightens other subjects and forms the character of the student. Students have time in their undergraduate education to reflect on these difficult questions, learn about physician professionalism, the nature of the role of physician, the overarching goal of medicine, medicine as an art, the healing relationship between physicians and their patients, personhood and dignity, and meaning in their own future work. In this space, the purpose of work and engagement may be restored in later years and the high rates of physician burnout might be reduced by rethinking the way in which future health care professionals are educated.

CONCLUSION

Conclusion and Potential Further Research

This thesis claims that there is something wrong in our health care system since the rate of physician burnout continues to increase. As discussed in chapter two, rates of physician burnout are near and almost exceeding 50%. The organization and operation of the current health care system contributes to dehumanizing both patients and doctors. This dehumanization is reflected by current medical education as young medical students are trained to fix a part of a person efficiently and cost effectively. Current policy reforms, electronic health care records, loss of physician autonomy, increase in clerical duties, and the increase of business volume pressures only add to the problem of burnout.

As seen in chapter one, the way in which health care is currently organized stems from the loss of medicine's original *telos*. The original *telos* of medicine, as seen through the hospitals of Saints Basil and Gregory, were to heal the sick and care for one's neighbor out of charity. Today, through corporatization and reforms of health care, the current *telos* of health care is to treat high volumes of patients efficiently. This, in turn, transforms physicians into technicians who fix parts of people. There is tension between medicine as an art and as a practical skill.

Chapter three explained that physicians are what they are trained to be. Our current medical education, which heavily emphasizes the science of medicine, trains future physicians to see patients as parts, not people. Yet, as seen through the escalating

rates of physician burnout, there is a gap between the practice of medicine and its ideal as a calling to heal. In order to reduce burnout and get to the root of the problem of it, which is dehumanization, there is a need to shift the focus of training.

This thesis suggests that in order to achieve this goal, medical education beginning in undergraduate pre-medical programs needs to provide a balance between humanities and science. These humanities classes, however, should not solely be a place to reflect on one's own emotions. Rather, these classes need to incorporate more of a liberal arts focus to challenge students to wrestle with hard questions, engaging students with readings that foster their intellectual and moral character. Virtues, which are fostered through practices within community, need to be the strong foundation for physician professionalism. When these classes achieve this, these future physician leaders will be equipped to practice medicine as an art despite the societal demands to view them as technicians.

As an undergraduate student myself, I am only able to write about what seems to be the root of the problem of physician burnout according to practicing physicians, administrators, and health care professionals. However, as an undergraduate student, I see practices that could already be implemented and changed within undergraduate pre-medical education to foster virtue and meaning in work. As a senior in college about to begin graduate training in health care administration, this thesis will enlighten the rest of my career as I strive to explore and implement necessary practices within health care to foster community, engagement, and virtue. I hope that throughout graduate school and my career, I will approach the organization of health care in a way that understands and reflects the original *telos* of medicine. In this way, organizations can be transformed by

groups of individuals working in community, acting against hidden curriculums and pressures.

There are different strategies that seek to reduce burnout. As analyzed in chapter two, hospitals are currently seeking to prevent burnout by assessing the problem in their own organization, increasing communication between all levels of staff, and fostering community at work. The Mayo Clinic does this by designating a meeting area with drinks and food for doctors and administrators. While I agree with these strategies, I also wonder if further research should be explored about how to incorporate fellows and residents into this engagement process. I think that in order to change the culture of medicine, we need to also reach those who are still in their formal medical education. In order to reach young physicians as well as aspiring physicians, meetings and places of community within the hospital itself should be open places that foster communication between all levels of medical practice. While this thesis assumes that physicians themselves are virtuous, or at least strive to practice ethically in their careers, there still remains the need for a stronger foundation for professionalism. With virtue ethics as the foundation of professionalism, as well as spaces to communicate, physicians acting in community may foster habits that continue to cultivate their characters. Thus, these discussions and meetings are an embodied practice that provide space for physicians to work in community, speaking against the hidden curriculum while building up professionalism grounded in virtue. By creating spaces for administrators, practicing physicians, residents, and perhaps even inviting medical students and undergrads, I wonder how this might improve the culture by opening up the lines of communication and engagement by fostering community at all levels.

EHRs are a tool that are often used in a way that interferes with the physician-patient relationship. One practice to foster community and good habits might be to remove technology that comes between physicians and their patients. Doctors find most work satisfaction in their partnership with patients. Further research might be needed in order to explore the cost-benefits of hiring scribes to reduce physicians' clerical work. Physician burnout already costs the system. I wonder if improving the EHRs by hiring scribes to chart and so reduce clerical burdens for physicians, might be more cost effective in the long run while improving work-life satisfaction for doctors.

Strategies that focus on physician resilience and grit are grasping at the language of character, virtue ethics, and professionalism. While medical education is already tightly structured, I wonder how incorporating humanities classes that foster virtue as the basis for professionalism could be included in any stage of medical school or undergraduate curriculum. Further research is needed to see how students who graduate from programs that balanced humanities with science are succeeding in balancing the pressures of the practice of medicine and burnout.

As seen throughout this thesis, physician burnout is not just a problem for individual physicians to resolve. Since health care is operated as a business, physicians are technicians who are only useful due to their output of fixing parts of patients. Yet, personal altruism is not an unlimited resource as seen through the escalating rates of physician burnout. Current medical practice is not sustainable for individuals within the system.

Real change begins with individuals who form community and act together to create positive changes in their organization. Virtue ethics as the foundation of

professionalism establishes a strong standard and shared responsibility within individuals to act against perverse incentives and pressures within the system. I believe that incorporating a liberal arts education within medical education will foster virtues within physicians, equip them to understand the overarching *telos* of medicine, as well as their individual purpose as doctors. In this way, physicians may be able to work together against the pressures of the hidden curriculum by having virtues as their foundation for professionalism. By attaining more concrete values within professionalism, doctors working in community can enact real change in their organization. As a future health care professional, it is my hope that in my own career I will strive to find such practices that foster relationship with patients and peers, cultivate virtue through these habits, and transform the culture of organizations as individuals working in community.

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