FOUR Medicine & the Arts

GRANOUR WILL

VOL.1 MARCH 2023



Volume 1, Issue 1

March 2023

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Published by Tourniquet www.TNQT.org

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The *Tourniquet* team extends a special thanks to Taylor Davis-Van Atta, Head of Research Services at the University of Houston Libraries, for giving the journal an online home.

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CURRENT EVENTS

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Equity in the Trenches

Jacob Harper and David Clark The University of Texas Medical Branch–John Sealy School of Medicine

For nearly forty years, the students of The University of Texas Medical Branch have been serving the low-income, uninsured population of Galveston through a student-led clinic called St. Vincent's House. Recently, a small team of these students began the uphill battle of helping uninsured patients suffering from the Hepatitis C Virus (HCV) to receive free treatment that would normally cost these patients nearly \$100,000. These student volunteers and the people they help face innumerable challenges along this journey to healing. Income restrictions, transportation needs, and chronic alcohol and drug use are just some of the many hurdles that emerge through every step of this process. Despite these challenges, the patient-student healer relationships have overcome the obstacles, and several patients have completed the rigorous process and achieved virus-free status at the conclusion of the treatment regimen.

These victories are nothing short of miraculous. There is life-altering treatment available for this condition. A number in a bank account serves as a gatekeeper to healing. Without programs like this one, these patients—real people with real lives and families—would be unable to access this second chance at life.

For the students, every treatment-denial letter stings. Every missed appointment is heartbreaking. The steep learning curve of navigating this bureaucratic landscape and the hours spent at volunteer clinic are well worth it when a patient bursts into tears because they feel hope; they feel loved and cared for, they finally have a teammate on their road to recovery.

In the eternal battle to eradicate disease and promote health and healing, there is a historical ebb and flow. Prevalence of one disease can fall in concert with a separate ailment

appearing and rising in the same population. Such is the case for HCV. While many infections have been greatly reduced or even eliminated in the US over the past several decades, HCV is on a steady climb. From 2013 to 2020, cases of acute HCV infection more than doubled (Centers for Disease Control and Prevention [CDC], 2022). Texas is not exempt from this trend, seeing a near doubling of confirmed cases over the past decade (Texas Department of State health Services [DSHS], 2021). Incidence statistics are likely under-reported because so many infections occur in the unhoused and incarcerated populations (Hofmeister et al., 2019).

The rate of acute infections becoming chronic infections is incredibly high, with some studies suggesting it may be up to 85% (World Health Organization [WHO], 2022). Chronic HCV can be fatal when it leads to cirrhosis and cancer. Mortality rates show that the disease disproportionately affects ethnic and racial minority groups, especially the Black and Native American populations (CDC, 2021).

Treatment for HCV can cost nearly \$100,000, an untouchable number for many patients in high-risk, often uninsured populations (Henry, 2018). This all too often leaves afflicted patients without an option, barricaded by a number in their bank account and condemned by a system that frequently abandons the most vulnerable.

Luckily, there are people committed to addressing this disparity. Students at the John Sealy School of Medicine at UTMB launched a Community Hepatitis C Program three years ago. Since then, the program has steadily grown, treating more and more patients each year. The program is simple, and the results are life changing.

The program identifies at-risk patients at a free, student-run clinic in Galveston, Texas. These patients are screened for HCV and other frequent comorbidities for free. If a positive result returns, the patient is placed into a protocol developed by student volunteers under the

direction of in-house physicians. Questionnaires are administered, physical exams are performed, and paperwork is submitted. The manufacturers of select HCV medications offer Patient Assistance Programs (PAP) that allow these students to provide life-altering medication for free to the patients who qualify.

There are still holes in the system, and people frequently fall through the cracks. Many patients come from vulnerable populations – low income, unhoused, high incidence of drug use, etc. These patients face additional barriers such as access to telephones to communicate with the clinic, transportation, and the social support required to successfully obtain and complete a rather rigorous daily treatment regimen. If patients have insurance, their PAP is likely to be denied, leaving them with copays of thousands of dollars that these patients simply do not have.

Fortunately, many patients are approved for this program; more are being treated each year. While red tape, technicalities, and logistical limitations prevent some individuals from getting the treatment they need, we rejoice in knowing that none of these patients would have access to the medications without the efforts of so many committed healthcare volunteers.

For those who dare to tread in the waters of addressing inequity, it is a daunting task. You find yourself staring down the barrel of systems and industries built to maintain the status quo. There are simply too many issues, gaps, and failings for one person, organization, or program to tackle. Although we cannot pretend to solve all issues of equity, we can fight in the trenches for our patients. We reach out to vulnerable demographics and lift where we stand. It does not take a Herculean effort. These seemingly small efforts and initiatives change lives, and when viewed in their totality, they are changing the world.

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Decomposing Medical Mistrust

Sriya Kakarla and Ananya Srivastava Rice University

Introduction

Medical mistrust has been broadly defined as "the lack of trust in or suspicion of medical organizations" (Andrade et al., 2020). Recent media attention has been centered around medical mistrust and continues to explore the issue as it relates to vaccine hesitancy. Though the issue of medical mistrust has recently entered the public eye concerning vaccine hesitancy and the vaccine rollout, the issue is more expansive and has been slowly developing for centuries due to chronic racial inequalities and social injustices (Ojikutu et al., 2022). Shifting the mistrust from just vaccines to the medical hierarchy as a whole shows that the issue extends into the effectiveness of medical visits, pharmaceuticals, and ultimately, the outcomes of care. A 2015 poll shows that medical mistrust, including attitudes about the aforementioned components, decreased from 73 percent in 1966 to 34 percent in 2012 (Taber at al., 2012). This drastic erosion of public trust despite the healthcare industry's increasing capacity and success shows that the problem is more deeply rooted and requires looking at the healthcare industry through the lens of history. Understanding the presence of mistrust requires investigating critical events in American history. Minority populations, especially African Americans, have faced a more complicated past with the medical field from years before the Civil War. Slaves were often used for unethical medical experiments performed without proper consent or medical ethics practices. For example, J. Marion Sims, reputed as the father of modern gynecology, conducted many of his experiments on enslaved Black women without anesthesia or proper care (Wall et al., 2006). Such use of African Americans as test subjects continued with the infamous Tuskegee experiments, where

African American men were misinformed on the purpose of a syphilis study and never given adequate treatment when it eventually became available (Wall et al., 2006). While changes have been made to prevent future occurrences of such egregious events, these past events continue to shape the perspectives of minority populations on the healthcare system. Such mistrust has severe consequences for healthcare interactions. Specifically, the patient-physician relationship is delicate because it involves deeply personal and sensitive information. A lack of trust compromises this relationship and leaves physicians without crucial information to support the decisions that are best for their patients. In fact, mistrust in the healthcare system could render visits to a doctor useless because mistrust has been linked with low treatment adherence. Furthermore, patient satisfaction with a physician has even been linked to overall treatment outcomes, illustrating that even if some level of treatment adherence is present, the treatment still may not be successful due to the pervasive mistrust (Martin et al., 2013).

Thus, medical mistrust is a vital issue which plays a pivotal role in the success of healthcare. It is essential to delve into the contemporary reasoning underlying medical mistrust to better understand how physicians can address the nuanced factors that play into medical mistrust and ensure improved outcomes. This review will focus on exploring studies that investigate the critical causes of medical mistrust, which include lack of proper communication between providers and patients, perceived racism, and belief in conspiracy theories.

Causes of Medical Mistrust

Lack of Proper Communication

Communication is the bedrock of patient-physician interactions and sets the tone for information discussed during appointments and treatment outcomes. Medical professionals often share access to private information and must discuss sensitive health information with their

patients. Hence, their communication – both verbal and non-verbal – must be well thought-out and meticulous. Nervous patients often look to their provider for signs of how they should behave and feel during appointments, so the presence of certain cues or lack thereof profoundly impacts how patients feel about the care they are receiving. This phenomenon can be seen in a study conducted with White and African American patients who have hypertension. This study intended to assess the importance of interpersonal communication on patient trust within racial groups. The study took place in community health centers providing primary care to low-income or minority populations. Prior to the study, 75% of the patients had established relationships with their physician. Overall, the authors tested the effects of informational behaviors, affective behaviors, and process measures on patients' trust for their physician. Different aspects of patient interaction were derived and coded for using the Roter Interaction Analysis System. Informational behaviors, such as providing biomedical information or patient education, were measured based on the frequency of occurrence. Meanwhile, affective behaviors, rapport building, and emotional statements were measured by adding together scores from 1-6 for interest, friendliness, assertiveness, empathy, responsiveness, and hurried nature (Martin et al., 2013). Finally, process measures – which included the ratio between psychosocial exchange and biomedical exchange – were rated where a value above one showed a greater patient focus than physician interest. Patient trust was then measured using the Trust in Physicians scale, where patients rate their level of agreement with five statements. When analyzed, these measures provided significant insight into physician-patient interactions. Two-thirds of the patients demonstrated a high degree of trust in their physicians, with the affect score having the strongest correlation with the degree of trust. However, Black patients reported significantly lower trust. This was potentially explained by physicians using fewer partnership-building statements in

visits with Black patients and having shorter visits with a higher speech rate (Martin et al., 2013). Overall, these results clearly demonstrate that taking the extra time to build rapport with patients is crucial to establishing trust. Activities such as soliciting patient opinions during visits, showing interest, and appearing less hurried were attributed to higher trust in physicians, which provides a potential direction of improvement in the healthcare field. The disparity in trust and interaction between White and Black patients is demonstrative of the microaggressions that drive medical mistrust in healthcare, and it also illustrates the impacts of various forms of communication.

Another similar study illustrates the importance of communication through a different channel. Molina et al. (2015) tests the effect of navigators on patient satisfaction and the overall link between medical mistrust and self-efficacy. This study used a random sample of Black women who were accessing mammography services and separated them into two groups: one with a healthcare navigator and the other that received standard care. Navigators, who acted as mediators of patient-provider interactions, met with their assigned patients at least twice. This study intended to measure socioeconomic factors, general medical mistrust using the Health Care System Distrust Scale, healthcare self-efficacy using a Communication and Attitudinal Selfefficacy scale, and patient satisfaction using a comprehensive questionnaire. After combining the results, they were not as expected .While those with navigators received better communication about their treatment process, recipients with high healthcare mistrust reported lower care satisfaction with navigators. Instead, patients who interacted directly with their providers reported more satisfaction and self-efficacy, direct indicators of trust (Molina et al., 2014).

These results suggest that a direct provider-patient relationship is indispensable, regardless of outside services that are available to supplement communication. Additionally, it

proved the importance of such communication between providers and patients by promoting selfefficacy so individuals believed they could improve their healthcare outcomes. Taken together, these two studies show the direct relationship between communication and patient care, and emphasize the importance of establishing direct and effective communication between patients and providers.

Belief in Conspiracy Theories

Conspiracy theories have been prevalent throughout history, especially during periods of crises and changes, due to the false feeling of control they provide (Lolic et al., 2021). The field of healthcare is especially prone to conspiracy theories because of the complexities inherent in understanding medical treatments along with the "infodemic," which has led to people being overwhelmed with the vast amount of information available on the Internet and not understanding which sources to trust (Grimes et al., 2021). Additionally, conspiracy theories tend to predominate in situations where fear or human suffering is involved, as they offer an alternative solution by providing the opportunity to find meaning for an otherwise random coincidence (Molina et al., 2014). Overall, these beliefs in conspiracy theories have been a significant cause of medical mistrust and have even been termed a public health crisis (Ojikutu et al., 2022). For example, this impact of conspiracy theories on medical mistrust is shown in a study which sought to find the connection between HIV conspiracy beliefs and medical mistrust as well as treatment non-adherence. The study took a longitudinal sample of 214 African American men with HIV, aiming to assess their degree of agreement with HIV conspiracy beliefs and medication adherence by using a medication event monitoring system (MEMS) that reports medication-taking patterns. Exploratory Factor Analysis extracted two main factors from the questionnaires: genocidal conspiracies and treatment conspiracies. Additionally, background

information was collected to determine socio-demographic factors and healthcare barriers. The majority of the participants were unemployed and low-income, of which two-thirds believed in at least one HIV conspiracy theory, and 44 percent believed that HIV was man-made. Data compilation from the MEMS system showed that 68 percent of the participants took only the prescribed doses of their antiviral, and 22 percent had optimal adherence to the treatment plan (inclusive of lifestyle changes). Bivariate tests demonstrated that strong conspiracy beliefs were associated with decreased treatment adherence and lower trust in the treatment plan. However, among the conspiracy theories, only conspiracies relating to treatments were associated with non-adherence. These results demonstrate that belief in conspiracy theories is a fundamental cause of medical mistrust and has severe consequences in treatment adherence. Without proper treatment adherence, conditions such as HIV cannot be managed, which curtails the ability to work and quality of life (Taber et al., 2014).

Meanwhile, Westergaard et al., (2014) illustrated a different side of the same issue. They conducted a cross-sectional study among African American, Mexican American, and White participants selected randomly in select Chicago grocery stores that attempted to identify how conspiracy theories affect medical mistrust and participation in clinical trials. The participants were given a 235-item survey that sought to identify socioeconomic status, healthcare access and utilization, perceived discrimination, and general attitudes about medicine. These answers referred to the broad question, "How willing would you be to join a study of a vaccine to prevent HIV infection if the study began tomorrow?" The combined results showed that African Americans and Mexican Americans were more likely to agree with HIV conspiracy theories; however, these beliefs were not correlated with their willingness to participate in clinical trials. In fact, Mexican Americans and African American participants showed a greater likelihood to

participate in clinical trials, contradicting other studies which stated that racial and ethnic minorities were often underrepresented in clinical trials (Westergaard et al., 2013). It was hypothesized that this contradiction was a result of incentives provided by the study rather than a measure of medical mistrust. This hypothesis was furthered by the fact that the correlation between medical mistrust and conspiracy beliefs was upheld; participants of all three populations who exhibited strong or medium belief in conspiracy theories were more likely to have strong medical mistrust. This shows that the connection of clinical trial participation cannot be considered as a byproduct of medical trust/mistrust and must be examined separately. However, the ultimate connection between conspiracy beliefs and the presence of medical mistrust is underlined once again through this study. Both of these studies emphasize that conspiracy theories are affecting treatment and patient outcomes, and thus must be immediately addressed. While the second study took a slightly different turn towards clinical trials, they both addressed conspiracy theories at their core as they related to healthcare. Though few studies point to the approach of directly addressing conspiracy theories to improve trust between patients and providers, the results of the previously mentioned studies provide potential support for this conclusion and suggest that future research in this area is warranted (van Prooijen et al., 2017).

Perceived Discrimination

Though many of the studies investigating medical mistrust focus on minority populations, the effects of perceived discrimination are often missed (Lopéz-Cevallos et al., 2014). A cross sectional study from 2014 sought to find the correlation between medical mistrust and perceived discrimination amongst rural Latinos (Bazargan et al., 2021). The study used the behavioral model for vulnerable populations to measure satisfaction with health care, medical mistrust, and perceived discrimination. These measures were obtained using questionnaires that asked for

degree of agreement with certain statements and computed results using multivariable models. The results showed that perceived discrimination is strongly associated with negative satisfaction in healthcare and the trust in their physicians. The participants in this study had higher rates of healthcare usage than previous studies suggested. Participants showed higher agreements with statements like "My physician has my best interest in mind" and "My physician will recommend the best treatment option for me" (Wall et al., 2006). s with medical discrimination, are less likely to trust recommendations given by their physician and express less satisfaction with their care, whereas patients with positive experiences are likely to comply with treatment plans.

Similar trends can be seen in another study that examined the relationship between discrimination and medical mistrust in a broader population in California. This study, unlike the previous one, included participants from multiple age groups and ethnic backgrounds in order to study this correlation. A random sample of Californian households were given a survey that measured demographic information, self-rated health status, the presence of a primary care physician relationship, and perceived discrimination (Jaiswal et al., 2019). As shown in the previous study, a strong link between medical mistrust and discrimination was found, with Black and Hispanic students reporting the greatest occurrences of discrimination and mistrust. Specifically, ethnic and language discrimination appeared to drive mistrust in the Latino population while more broad discrimination underlay mistrust in African American participants (Ojikutu et al., 2022).

These studies approached the impact of discrimination in healthcare in distinct ways; the first study looked specifically into a small subset of participants who were mostly students, while the second study was more comprehensive and representative of the U.S. population. Despite the

difference in their approaches and samples, both studies pointed to the same thing - implicit bias in healthcare has an important influence on crucial healthcare decisions and interactions.

Conclusion

The studies reviewed point to the fact that medical mistrust can be created through multiple channels including faulty communication, conspiracy theories, and perceived discrimination. Virtually all of the studies discussed highlight the importance of trust for patient satisfaction and treatment adherence. Thus, when developing a comprehensive curriculum for medical school and training for residency, it is important to teach medical students and physicians how to build and foster trusting relationships with their patients (Westergaard et al., 2013). However, a key limitation of many of these studies entails their small sample sizes. Furthermore, the people who are sampled may not be representative of the entire population of people who do not trust the medical system, as many of the individuals who have severe reservations with the healthcare system tend to also mirror the same sentiment around other institutions and feel uncomfortable participating in studies. Additionally, all six studies talk about individuals who have sought out healthcare to a certain degree; however, this excludes the population that does not, who may be the most severely distrustful of the healthcare system. These limitations must be addressed in future studies to create more impactful change.

Overall, these studies illustrate that a multitude of factors impact medical mistrust. Though the issue of medical mistrust is nuanced, it is essential that communication between providers and patients is improved, conspiracy theories are disproved, and providers become culturally conscious and avoid being perceived as discriminatory towards their patients, as it is only when these factors are properly addressed that the trust in the healthcare system improves and treatments are successful.

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"They Ain't Alright": A Historical Perspective on the Demonization of Black Children and Its Impact on Black Youth and Adolescent Health Today

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"They Ain't Alright": A Historical Perspective on the Demonization of Black Children and Its Impact on Black Child and Adolescent Health Today

At birth, Black lives are readily shaped by stereotypes, biases, and racial doctrine. An old saying goes, "before they knew whether you were going to be male or female, they knew you were going to be Black." While a significant portion of racism and discrimination may be experienced in adulthood, Black children and adolescents do not go unscathed. In fact, the depiction of Black children as abnormal, deviant, and "super-predators" has a historical timeline connected to clinical medicine and its response to drug addiction, violence, and racialized crime. In this essay, I will explain the formation of the "crack baby" image, analyze its influence in the demonization of Black children and adolescents, and discuss the socio-medical consequences of racialized ideas on present day adolescent health for Black youth. What initially was thought to be a healthy concern for prenatal cocaine usage has had a devastating impact on the societal and medical views of Black children concerning development.

The "crack baby" can be defined as an infant born to a mother addicted to crack cocaine during the "crack epidemic" of the 1980's. During this time, the explosion of concern of the long-term sequelae of prenatal cocaine exposures led researchers to publish their findings, often stating that the "crack baby" would have long-term physical, mental, and social disabilities while consuming governmental resources. Not only were the scientific studies limited, but their predictions were wrong. A study by Singer et al. showed reliable scientific evidence illustrating

the adverse effects of prenatal tobacco and alcohol usage on the development of children, but there was a lack of sufficient evidence proving the effects of prenatal cocaine exposure on the development of babies (Becker, 2001). In fact, few studies possessed the accurate methodology and external validity to correctly draw conclusions, let alone make predictions pertaining to the development of prenatally cocaine-exposed infants. Even when peer-reviewed studies were conducted, the data was often misinterpreted. Some studies would go as far as to draw illsupported conclusions such as, "[crack kids] are permanently damaged cognitively, but also morally, and emotionally troubled," which further stigmatized and portrayed crack babies as remedial, uncivilized, and emotionally inept, consistent with the historical, stereotypical representation of Black people (Becker, 2001).

The urgency to create false narratives – cocaine being the key culprit for potential child developmental delay in "crack babies" – maintains racial myths concerning blackness and its deviance from societal norms, further criminalizes Black adolescents, and absolves proven, structural inequities as the true culprits they are. In *The Prenatal Cocaine Exposure*, the researcher extrapolates outside of the pertinent medical findings (e.g., neonatal respiratory function decline) to say that infants exposed "may never function normally in society." This perpetuates pseudoscientific ideas about what it means to function in society as a Black child with cocaine exposure, while failing to acknowledge relevant sociodemographic factors (e.g., poverty, lack of healthcare access, community violence, racial profiling) that influence behavior and development (Mayes, 1992; Zuckerman, 2002).

As time progressed, we saw the emergence of a new image outside of the crack baby in the 1990's: the child super-predator. Super-predators were defined "as dangerously violent youth" that were responsible for the increased incidence of violent crimes, seen particularly in

the South and West Coast. This label almost exclusively referred to Black children. In "The Coming of the Super-Predators," DiLulio writes, "[They] made no mistake...the trouble will be the greatest in Black inner-city neighborhoods," which was said to explain the "nearly [doubling] of violent crime" (1995). This failed to account for Black targeting-targeting due to societal bias and discrimination, not because of an innate characteristic or pathology within the Black community. DuLulio goes even further to describe young, Black men as "beefy big guys" in attempts to strip Black boys of their youth (1995). Here, we must recognize that language is a central component of the adultification and overcriminalization of Black adolescents. The War on Drugs propaganda, or what some would say "The War on Thugs," was key in fueling our race-based incarceration problem beginning just at the tail of the 1970's. During this time, Black incarceration was growing at record-breaking numbers congruent with a nationwide mass incarceration agenda. Young Black males were incarcerated four times more than Whites for drug and violent charges (Delaney, n.d.). This is consistent with today's trends as well. According to The Sentencing Project, "despite long-term declines in youth incarceration, the disparity at which black and white youth are held in juvenile facilities has grown" (Rovner, 2021). Currently, Black youth are at least 3.4 times more likely to be detained or incarcerated than their White peers despite Black children making up only 14% of the child population compared to their White counterparts at 61% (Delaney, n.d.; Rovner, 2021).

What does this mean for Black child and adolescent health today? In addition to ostracization and discrimination, Black children have consistently been neglected as society has failed to acknowledge their physical and mental health needs more-so now than ever. During a time where virtually no individual has gone unharmed from the wrath of the COVID-19 pandemic, Black youth has borne the brunt of it. In a society where systemic racism has operated

as a pre-existing condition, inequality has disproportionately impacted minority families, especially children. Studies have shown that Black youth have experienced higher rates of familial death, are more likely to attend schools and live in communities that have fewer economic resources and are experiencing elevated levels of stress compared to their White counterparts (Gaylord-Harden, 2020). Medically, Black children have had significantly lower rates in COVID-19 testing and vaccinations since the start of the pandemic (Artiga, 2021). Psychologically, Black children's experiences during the pandemic have also been compounded by trauma (e.g., police brutality, domestic violence). Coupled with a rather large disruption in daily routines that reduce contact with familial and peer support, Black children are likely at a higher risk for psychological distress during such a turbulent time ("Racial and Ethnic, 2018).

The historical picture of how Black children have been demonized helps us understand why it has been rather easy to neglect our Black youth. From a historical perspective, we failed to see them as human. Literature and mass media has painted Black children to be villains, savages, and a nuisance to society. This essay is a call for immediate attention and intervention on the behalf Black children and adolescents because *they ain't alright*.

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STUDENT LED RESEARCH

A collection of research submitted by healthcare students. Each research submission has been edited by local experts.

Rare Variant of a Supernumerary Pectoralis Minor: A Case Report

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Key Words: Pectoralis minor, pectoralis quartus, shoulder, musculoskeletal, anatomy, dissection The author has no funding/grants to disclose for the completion of this work.

Summary

In the superficial chest wall, deep to the pectoralis major, one can find a thin, triangularly shaped muscle known as the pectoralis minor. It forms the anterior wall of the axilla and is frequently credited as a potential source for shoulder pathology. In the late 1800's, anatomists had concluded that variants in pectoralis minor origin and insertion existed in up to 28% of the general population.¹ A modern-day systematic review of 25 studies resulted in an aberrant insertion of the pectoralis minor muscle in 19.27% of individuals (95% CI 15-24%).² During a dissection in an Anatomy Distinction Program led by Dr. Thomas Gest at the Tilman J. Fertitta Family College of Medicine, the author uncovered a particularly unusual variation that was noted within the body of an elderly female. Her right shoulder contained two different pectoralis minor muscles—one with the traditionally documented variation, and one with its own particular origin and insertion. The implications of such a variation are relevant to modern day treatment of orthopedic shoulder injuries as well as surgeries in the local region.

Case Presentation

Traditionally, the pectoralis minor muscle originates from the anterior surfaces of the 3rd, 4th, and 5th ribs near their costochondral junctions and inserts at the coracoid process of the scapula.³ This origin and insertion allow for the muscle to stabilize the shoulder as well as depress, internally rotate, and anteriorly rotate the scapula. With the scapula stabilized, it can

also assist with elevating the ribs, functioning as an accessory respiratory muscle. More importantly, the pectoralis minor also functions as a bridge covering the brachial plexus, subclavian artery, and subclavian vein. It receives its innervation from the medial pectoral nerve (C8, T1) and may also receive partial innervation from a branch of the lateral pectoral nerve called the ansa pectoralis.^{3,4} Functionally, a shortened pectoralis minor muscle has been regarded as the source of poor "rounded" shoulder posture, leading to limited shoulder mobility as well as potential thoracic outlet syndrome.⁵ Studies regarding the variation in the anatomical position of the pectoralis minor traditionally mention unique sites of insertion. One famous 1897 study performed by Le Double documents what he would call a type I, type II, or type III variation of insertion, with insertion to the glenohumeral joint capsule being the most frequently documented unique site of insertion.

- Type I: A superficial portion of the pectoralis minor tendon continues past the coracoid process to attach to a more proximal location.
- Type II: Most fibers of the pectoralis minor tendon attach to the coracoid process and only a few continue over it.
- Type III: Entire the ligament passes over the coracoid to attach to a more proximal location and can be separated from the coracoid process by a bursa.

Le Double also documented various instances where the pectoralis minor muscle originated from as superiorly as the first rib to as inferiorly as the sixth rib.¹ With an appreciation of embryology, it is possible to speculate at which period of development endogenous or exogenous factors may have contributed to each variation. Certain anatomists have speculated that there may be accessory pectoral muscles present as vestigial structures, evidence of human evolution from apes, which traditionally have four to seven rib attachments for the pectoralis minor muscle. Such accessory structures have been given names, and if we are to follow this theorem, this case study may present an example of a pectoralis quartus, "which runs from the lower ribs to various structures of the distal shoulder."¹

2. Pectoralis quartus, unilateral, confined to the right side, arises over the fifth right costo-chondral junction, the mesal fibres being directly continuous, as already stated, with the lateral margin of the origin of the sternalis, and not attached to the deeper parts, while the remainder of the muscle arises by short tendinous fibres from the fifth costal cartilage near its junction with the rib. The quartus, forming a flat band 18.5 cm. long, with an average width of 1 cm., continues laterad along the border of the pectoralis major, but entirely distinct from the same, across the axilla, to be inserted, together with the axillary arch, on the deep surface of the pectoralis major tendon.

Fig. (1) An excerpt from "The Derivation and Significance of certain Supernumerary Muscles of the Pectoral Region," authored by Dr. George Sumner Huntington, MD, professor and anatomist at Columbia University College of Physicians and Surgeons in the late 1800's.⁶

Materials and Methods

The cadaver in question was obtained ethically via human body donation for the purpose of medical education. During the summer between the first and second year of medical school, students at Tilman J. Fertitta College of Medicine can apply to an Anatomy Distinction Program that involves six weeks of immersive dissection and practical examination. With deep reverence for the cadaver donated, an elderly female, the author performed routine medical dissection and noted all unique anatomical variations. All tissue was properly preserved and disposed of with respect to the donor's body as well as the families of the individual.

Results

In the subject of study, the supernumerary pectoralis minor muscle originates from ribs six and seven and insert directly into the conjoint tendon—the tendon where the short head of biceps brachii and coracobrachialis muscles merge to connect to the fascia covering the apex of the coracoid process.^{2,3} This is lateral to where the pectoralis minor attaches to the superior and most medial aspect of the coracoid process (so named as it is derived from the Greek term for "raven" as its shape is hooked and resembles a large beak).⁷ The left pectoralis minor exhibits

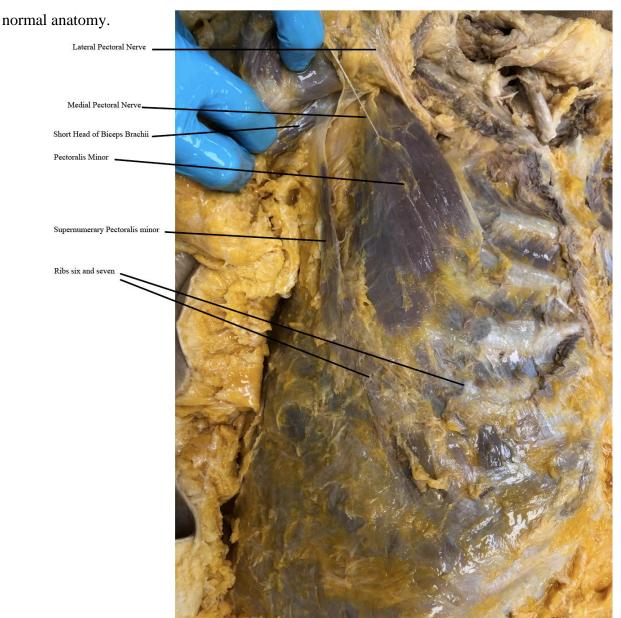


Fig. (2) Photograph of right anterior chest, displaying pectoralis muscle originating from ribs 6-7 and inserting onto conjoint tendon.

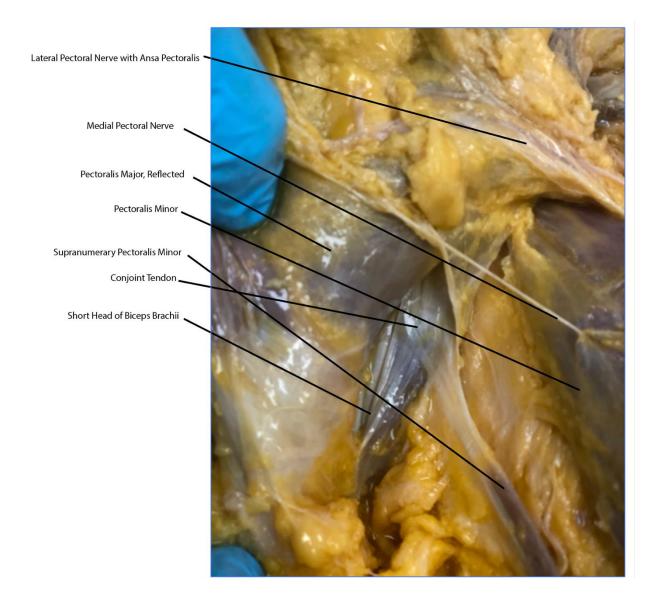


Fig. (3) Visual of insertion onto conjoint tendon.

Discussion

The study of the superficial musculature of the anterior chest wall can provide much insight regarding the pathology of the shoulder joint. Clinicians frequently struggle with the treatment of shoulder pathology as it is considered four separate true joints in one, making it the most mobile joint of the body. The high incidence rate of variations in the pectoral musculature

can provide some insight regarding why certain individuals may be more prone to shoulder injury and instability than others. For example, for unknown reasons, the incidence rate of aberrant pectoralis minor muscles is significantly greater in females and prefers a left lateralityfindings supported by four separate research studies.³ This unique case allows for the speculation of underrepresented and underreported anatomical variations within the general human population, emphasizing the importance for tailored therapeutic and surgical treatment or intervention of the area. In multiple ways, this is of surgical relevance as the pectoralis minor muscle is frequently utilized as a donor site for several reconstructive surgeries, including mandibular reconstruction.⁸ The pectoralis minor muscle is also used as a landmark for several structures, including lymph nodes. It is utilized to classify between zones I, II, and III axillary lymph nodes during a lymph node resection or mastectomy.⁹ Although there is no clarity regarding the innervation of the supernumerary pectoralis minor muscle, it provides a unique force vector onto the conjoint tendon. A dual innervation to the conjoint tendon (e.g., musculocutaneous nerve to the coracobrachialis muscle, and separate innervation to the supernumerary pectoralis minor muscle) would provide suspicion for impaired glenohumeral rhythm with mobility. Without knowing the medical history of the body donor, there can be no conclusions drawn regarding her right shoulder mobility in comparison to her left, and shoulder pathology regarding unique variations of the pectoralis musculature should remain a topic of interest to the orthopedic community.

Acknowledgements

The author was greatly supported by the wisdom, knowledge, and encouragement of Dr. Thomas Gest, Ph.D., president of the American Association of Clinical Anatomists. It was Dr. Gest's mentorship and deep reverence for the study of clinical anatomy that allowed this case

study to come to fruition.

"The author[s] sincerely thank[s] those who donated their bodies to science so that anatomical research and teaching could be performed. Results from such research can potentially increase scientific knowledge and can improve patient care. Therefore, these donors and their families deserve our highest respect."¹⁰

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CULTURE AND ART IN MEDICINE

Authors' full creative energy in the format of narrative medicine, opinion pieces, or poetry.

Resilience

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Sedimentation begins with the gravitational pull of the still water overlying the surface and thus bringing with it pieces of broken rock. The large pieces of rock weather down into smaller pieces, and as this continues the small rock deposits begin to form layers. Once the water comes out of the layers, they are compacted together. Much like the process of sedimentation is the process of overcoming difficulties we face. In medicine, we are faced with diagnoses that can shake the foundation on which we stand. It begins with tears and the confusion of who we once were, a feeling of brokenness. However, over time, by healing, the layers become part of our story of overcoming and growing through the adversity we face. What once felt broken creates a stronger person of overcoming mental or physical illness, survivors.

The Price We Pay

Cynthia Okafor The University of Texas Medical Branch–John Sealy School of Medicine

Oh what a noble cause It is to practice medicine But, at what cost?

Oh the joy it brings To relieve patient's pain But, at what cost?

Oh the power of teamwork To achieve utmost patient satisfaction But, at what cost?

Oh the rewarding gift of perseverance In the face of challenges But, at what cost?

Surely, medicine is a noble cause---A cause that perpetually gives and keeps on giving But, at what cost?

Levántense: Get Up

Cynthia Okafor The University of Texas Medical Branch–John Sealy School of Medicine

Get up and walk Walk away from negative thoughts Part ways with unhealthy habits Say goodbye to toxic relationships

Get up and walk Walk away from crippling doubts and fears Dressed up as valid excuses And never look back

Get up and walk Walk into positive thoughts And new habits that will Catapult you to greater heights

Get up and walk Walk towards those that love you Those that appreciate you And embrace your uniqueness

Get up and walk The time is now The time has come Levántense.

Yesterday, Today, and Tomorrow

Christopher Doan The University of Texas Medical Branch–John Sealy School of Medicine



Last fall, my younger friend and cousin died abruptly. He had a promising future and aspirations to become a physician's assistant. I have no doubt that he would have served his patients well. He was cherished in our community, and it was not until he had passed that we realized the true impact he made.

At his funeral, I looked around at a crowd of what must have been a thousand people. An epiphany came over me at that moment, pointing me towards the here and the now - the unfathomable present.

This photograph is inspired by my cousin's work in photography and a tribute that I have done in his memory. The left side of the photo highlights the joy and fullness of life, the happiness of a past life. The right side symbolizes the seeming emptiness of death, the closing of a once bright future. I chose to make the transition between color and black and white very abrupt, symbolizing my cousin's own harsh and sudden ending to his story. The flowers, both in the foreground and in the model's hands, also symbolize this transition. The seated person is blinded, pointing to how blind we are to our own present reality.

There is hope on the right side of the photo, though. While my cousin is gone, he leaves behind a legacy of kindness. This is represented by the stethoscope, a universal symbol of healing, and the graduation cap, a promise for excellence.

Lord let me die with a hammer in my hand

-confessions of a medical humanist

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All day, wherever I go, I am clutching a hammer. My main mistake is refusing to wait for the winter-proof coat of tenure. Late for the faculty meeting, I hammer-punch elevator buttonsmy lone empirical contribution to academic medicine. Colleagues around the conference table gawk like I'm a killer. But I'm not. I'm just a man with a hammer: old and rugged wooden handle, metal head sharp and curved like it wants to be a rooster. Typing with it now isn't easy—pecking each individual key. Most days I wish I were John Henry, who could make the cold steel ring. I would have miles of tracks to lay down, a long tunnel to wrest from the mountain one momentous stone at a time.

Standing deep inside, I'd be safe from the erasing blizzard. Diego Rivera would paint me a mural. But Rivera is very dead. So I use my hammer to gesture in lecture, to dismantle the students' sensible questions. In the hospital cafeteria, with my claw end, I lift the weightless ramen noodles. And later, playing ping-pong with Winston, the awkward hammer is again my downfall. If your only tool is a hammer, somebody somewhere once said, you're destined to see everything as a nail. But I haven't noticed a nail in years not since the summer I was a Christian and pitched in to build six houses. This was in the hills of ransacked Appalachia, where you're never far from the plucky sadness of banjo, guitar, and hammer dulcimer. Coal trains crossing the Cumberland River. Our twelve-person crew did it all: foundation, roof, walls. And at each day's end, overcome by fatigue, sleep was a dreamless oblivion.

But I don't think I could sleep tonight, not with this hammer hunched under my pillow. So I'll stay awake and keep on typing, tapping make something to take me to the end of the line.

Smoking Among Healthcare Professionals and Their Influence on Texas Smokers

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Healthcare providers are supposed to be one of the top advocates for smoking cessation, right? Well, the number of physicians still using cigarettes is quite startling, with a prevalence of 21% of physicians that are current smokers worldwide (Besson et al., 2021). From 2010 to 2011, 8.34% of all healthcare professionals reported being current smokers (Sarna et al., 2014). There is no current data on cigarette smoking among healthcare workers within Texas, but with as much as 13.2% of the state population being smokers in 2020, it is a worthwhile topic to discuss (America's Health Ranking [AHR], 2020). Healthcare professionals acquire extensive knowledge about the negative health outcomes of smoking throughout their training. So, why are these numbers shockingly high? How can this affect the manner by which cessation programs are presented to patients?

Healthcare workers have one of the most stressful careers; in addition to indirectly determining the health outcomes of their patients, working long hours, frequent patient charting and note completion, and high overall occupational stress, they are also responsible for their own mental and physical wellbeing (Ramos et al., 2018). This is where smoking prevalence can be understood, as it provides the means for de-stressing and comfort. Other factors that influence physicians to smoke are working night shifts, disruption of the circadian rhythm via shift work, long durations of stress that lead to depressive symptoms, and the acceptance of smoking in the culture or regional area (Besson et al., 2021; Giorgio et al., 2015; Pipe et al., 2009). The reasons for smoking are multifactorial, making it difficult for interventions to be designed. But, before

delving into program planning, physician-smoker and patient interaction outcomes should be assessed.

Are current-smoking healthcare workers just as inclined to address smoking concerns or smoking cessation programs to their patients compared to non-smoking physicians? One study conducted across 16 countries assessed the use of tobacco among general and family practitioners and how they would address smoking cessation programs to their patients. Compared to non-smoking physicians, smoking physicians were less likely to discuss smoking cessation programs with their patients, less likely to believe that smoking posed a significant threat to patient health, and less likely to continue consultation activities to directly assist smokers to quit (Pipe et al., 2009). These physician smokers were more likely to perceive further barriers to helping their patients quit smoking. This included patient willpower, a stressful environment, increased workload, low success rate, and enjoyment of smoking (Pipe et al., 2009). If we looked into a country where the smoking prevalence is high that is also made up of the healthcare workforce, we can focus on Italy (Besson et al., 2021; Giorgi et al., 2015). A hospital in central Italy, a country with high smoking prevalence amongst its healthcare workforce, found that 47% of physicians and 43% of nurses were current smokers. Some of the major findings were that, of the smokers, only 47.4% believed that the behaviors of health workers are seen as role models by patients, and only 54.1% believed that smoking is the most important preventable cause of death in industrialized countries (Giorgi et al., 2015). These numbers are quite shocking, as one would believe that healthcare professionals would be highly conscious of how their words and actions can greatly influence patient behavior and its role as a risk factor for countless diseases. A healthcare professional's perception, education, and experience with cigarettes can alter and influence the path and progression of a current-smoking

patient's health or disease. These are important factors to consider as new tobacco products are growing in popularity among young adults.

We should also examine the emergence of e-cigarette usage among young adults, including healthcare professional students (Besson et al., 2021). As much as 5.2% of adults in Texas were current e-cigarette users in 2020, including college and health professional students (AHR, 2020; Sarna et al., 2014). Health professional students' usage and perspective of ecigarettes will pave the way for how smoking cessation programs will play out in future clinical settings. One study in 2018 from the University of Minnesota Medical School looked into medical students' knowledge, perspective, and usage of e-cigarettes. Some of the key findings from the study showed that 14.7% of the participants have already tried an e-cigarette, 84.7% stated they have not received any education about e-cigarettes, and those who were current e-cigarette users believed that e-cigarettes had a lower risk of causing lung cancer and were more likely to recommend e-cigarettes to patients for smoking cessation (Hinderaker et al., 2018). A study conducted at the New York University School of Medicine found that 14.8% of students reported currently using cigarettes or an alternative tobacco product (ATP), a small percentage of students were able to correctly report the potential harm of ATPs compared to cigarettes, and a majority of respondents reported receiving significantly less education about ATPs compared to cigarettes (Zhou et al., 2015). According to the National Youth Tobacco Survey for 2022, 14.1% of high school students, and 3.3% of middle school students reported current e-cigarette use (U.S. Food and Drug Administration, 2022). These studies raise concerns about health outcomes that may be presented in the near future, as the health effects of such products will become more pronounced. The usage and lack of education on e-cigarettes in healthcare professional schools

could lead to unique repercussions when educating and providing smoking cessation programs to future patients who do not represent the traditional cigarette user.

Although the amount of current-smoking healthcare professionals is lower in the US compared to other countries, the observations mentioned are still important to consider if we want to deliver the best care to our population (Sarna et al., 2014; Besson et al., 2021). Tobacco products have been shown to be frequently and strongly correlated to harming nearly every organ in the body; it is linked to heart disease, kidney disease, liver disease, lung disease, stroke, cancer, and much more (Carter et al., 2015). In Texas, a state where 13.2% of the population smokes, it would be valuable to provide this patient population with healthcare professionals who are knowledgeable about the negative consequences of varying tobacco products, willing and consistent in discussing smoking habits and cessation programs, and cognizant of their position and influence towards patients. The first step to tackling the problems presented is to acknowledge the high prevalence of smoking among healthcare professionals—focusing on the lack of current information allows us to create opportunities to better learn about smoking among all Texans, including healthcare professionals.

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IMPACT

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His beady eyes pierced my soul. At that moment, I swear I saw a glimpse of his, too. "Dr. Ward ... what do you think?" He knew I was a student but insisted on calling me "doctor." It was a sign of not only respect, but trust.

His hospital course streamed through the riverbanks of my mind.

The last week of my inpatient internal medicine rotation had arrived, and I had grown fond of a patient. He presented ten days prior due to a fall. He was an elderly, weak man, so frail that I initially hesitated to do my physical exam, fearing I might be too rough and hurt him.

Due to his initial confusion, obtaining a history was challenging. As he stabilized over the next few days, I spoke with him. Together, we traveled to the past in a time machine. I knew his nicknames, previous life experiences, and deepest fears. Eventually, the residents informed me there was nothing more to learn from his case, and my patient list changed. In the following days, I arrived even earlier than before to make time for my new patients and my old friend.

And now, he gazed. His eyes—his eyes pierced my soul. "Dr. Ward?" he repeated. He sought out my opinion about his next step of care, and I was honored. I had already researched rehabilitation facilities in anticipation of his next moves and was able to provide my genuine, honest, and informed perspective. "I think that's a great idea...." I began and explained my reasoning. He nodded, looked at the other providers and family members in the room, and agreed. I realized that he was *waiting* on me. He *wanted* me involved in his care.

On the last day of my rotation, I said my final goodbye. A solemn song played on a phonograph in my mind.

But, like falling leaves marks the end of one season and the beginning of another, I knew it was time for a change.

I hope I never forget his voice. I wish to see his beady eyes forever and ever.

Seasons change. Leaves fall, and flowers bloom. New becomes old and old; new.

But IMPACT is eternal.

Thank God for Good Residents

Anthony Carona, Ph.L. University of Houston–Tilman J. Fertitta Family College of Medicine

I don't think I'll ever forget my first week of clerkship – the time in every would-bedoctor's medical school career where he transitions from a hunchbacked memorizer of textbooks into a hospital wallflower with actual, if elementary, patient care responsibilities. After a year and a half of lecture-based learning (and the associated mountains of memorized facts) to say I was excited would be an understatement. I signed up for medical school to care for patients, and in clerkship I'd finally be able to.

It didn't take long, however, for excitement to turn to dread as my alarm blared at 4:00 a.m. on the Monday of my first day. With most the world and half my brain still asleep, I could hardly remember brushing my teeth, donning my hospital-issued soap green scrubs (2X's too large), or even starting my car by the time I got to the hospital. I remember the feeling of a widening pit beneath my stomach when I saw the harshly illuminated sign directing me to the correct department. Perhaps it was fear overtaking me on day one as I realized I didn't know a thing about obstetrics and gynecology – my home away from home for the next several weeks.

I was greeted without ceremony by a weary-eyed resident who, in a motion that did nothing to relieve my anxieties, indicated that I'd be following her around for the week. She escorted me to a windowless room where all the other residents and attendings had gathered to "give report." It was shift-change, and it proceeded according to a ceremonial that was as foreign to me as any ancient rite. I was lost as residents read out their patient lists complete with lab values and countless unfamiliar abbreviations. I took my seat at the end of the horseshoe-shaped table; I soon after learned that even the seats had been hierarchically arranged.

A few minutes in I began to feel the heaviness of my eyebrows increase. The room was unsettlingly warm. Terrified at the thought of being caught dozing, I tried a number of tricks, including biting my own tongue, to stay awake. It was futile - until BAM! My bobbing head had just been sent back reeling by my own vigilant neck. Suddenly I was wide awake with heart pounding and panicked that someone had seen me fall asleep. I scanned the faces in the room surreptitiously and, as an initial clue of their humanity, was relieved to see that half the residents (and some attendings too!) had their eyes softly shut.

Over the next several weeks it would be my privilege to glimpse even more signs of the humanity of these doctors. Where my own insecurities in this new environment had made them seem aloof and unapproachable, they tore down these barriers with patience and kindness. They showed me how I could be helpful, and I was truly made to feel like one of the team. Like me, the residents were still learners, and like me they still had moments of self-questioning and uncertainty.

The standard medical student task on labor and delivery is to deliver the placenta. It's not particularly glamorous nor challenging work; left to their own devices, most placentae will deliver themselves. Nevertheless, after any successful delivery of a baby, it fell to me to apply gentle traction to the umbilical cord via a pair of forceps and ensure that the slimy, pancake shaped organ exited the birth canal in one piece. This procedure carried on well throughout my rotation, until one day it didn't.

Things began normally – as had happened many times before, my team was summoned to the delivery room. After the residents had successfully delivered the baby, who now rested on her exhausted mother's chest, the clamped umbilical cord was handed to me. I pulled back slightly on the forceps until the cord was taught – behind me I could hear the attending physician

advise me with a whisper, "gently... gently." To this day I still don't know if it was overconfidence or just bad luck, but in the blink of an eye I heard a damp snap and watched the gelatinous cord sever and recede back into the patient without even a glimpse of it left behind. Instantaneously, I felt the same pit widening beneath my stomach as on the first day. My gloved hands began to tremble. I was quickly scuttled away by the residents, one of whom prepared to manually extract the lost placenta while the other gently explained to the patient what was about to occur. "I'm sorry, I'm sorry," I muttered to the attending as I watched the bloody and uncomfortable task that ensued. Within a couple of minutes, the placenta had been secured and successfully extracted. The residents, scrubs bloodied by the urgent procedure, cautiously examined the organ to make sure no pieces were missing. Ultimately, my ego was the only one harmed.

I was filled with dread on the walk back to the work room. I kept my head down, fully expecting to receive a tongue-lashing from the entire team. When that didn't happen, I apologized again for my mistake, this time profusely. Rather than a scourging, I received unexpected clemency. "No need to apologize," the attending said, and continued on to list the variant anatomies that can contribute to an umbilical cord avulsion. "Yeah, it's happened to all of us," one resident assured me. Encouraged, but still shaken, I left to change my scrubs.

I remain grateful for my experience in Obstetrics and Gynecology. Apart from this episode, I was edified daily by hearing the residents share their joys and sorrows, hopes and frustrations as they labored to provide the best for their patients. It's too rare that doctors – residents or attendings – willingly share their mistakes with others. Now I realize how crucial it is. Without that self-avowal, we're left with unrealistic expectations and constant feelings of inadequacy, but with openness and honesty, we create a much more accommodating system, especially for our peers still in training.

An Honor I Never Wanted... and Didn't Deserve

David Jacobson University of Houston–Tilman J. Fertitta Family College of Medicine

"It is an honor to be present at the time of death." I was 18, sitting in my EMT class getting my first glimpse into medicine. I had never seen someone pass before; it seemed like anything but an honor. Death was something I feared, something that I was getting into medicine to fight. I knew death was an unbeatable foe but there would be honor in fighting death. Sitting nearby while Death wins, there is no honor there, it would mean we lost that fight.

A few weeks later, I started my first clinical rotation. My first ever call while working on the ambulance was a call for an unresponsive person. This was it; I was going to the big show. My heart raced, I was excited to have a chance to make a difference, but terrified of what I may see. When I got there, the family was crying, pleading with us to "do something." I got to work and started CPR. I felt his ribs break under the weight of my arms as I started compressions. My professors had warned me that this was a normal occurrence so luckily, I was not caught off guard. What caught me off guard was the feeling of bones breaking in my hands, the *crunch* that rang in my ears for the rest of the day. Nothing could have prepared me for that. A few minutes after doing everything we could, we called medical control, and they pronounced the patient dead. This was the first person who had died in my presence, and I was anything but honored. I was dejected, unsettled by the harsh reality of CPR and uncomfortable being surrounded by grieving family members with no way to comfort them. This wasn't an honor. This was torture. We stayed with the family for a few minutes trying to get them to focus long enough to get information for our report. I felt like an outsider, intruding on what should have been a very private time for the family to comfort each other.

More recently, my wife and I experienced a devastating loss. We adopted a child, Travis, who passed in the NICU before we ever got to bring him home. It was only then that I understood what my instructor meant by "it's an honor to be present at the time of death." It is not an honor that we should feel grateful for, but it is a huge responsibility that is extended to us. There were two types of healthcare providers that we interacted with in Travis' last hours. There were some that drew near to us and were allowed into our lives. Without knowing them, we allowed them to share in our sorrow. They saw parts of us that were, and continue to be, hidden from the rest of the world. There is a raw honesty in experiencing sorrow and based only on their position as healthcare providers, we let them in and shared our most vulnerable emotions with them.

Contrasted to the healthcare providers who were there to offer comfort during our despair, there were others who were visibly uncomfortable with our emotions. Instead of talking to us, they stood distant from us. They would come in to check on us but not interact with us; they would just watch us for a few minutes and leave. I cannot express how intrusive this was. We had no choice but to invite them into our most exposed moments only to have them reject us by standing out of reach, physically and emotionally.

This illustrates the honor that is bestowed upon healthcare providers. That by nature of our profession alone, people allow us to be there for them during their most vulnerable times, something reserved for family and closest friends. However, I want to share that this honor is accompanied by mighty responsibility. I write this to illustrate the opportunity that is given to us in people's last moments and encourage everyone to embrace the discomfort of death. Draw near to your patients and see the opportunity for what it is, a great honor.

Listening Dispels Distrust

Rosemary Agwuncha University of Houston–Tilman J. Fertitta Family College of Medicine

There is something deeply sacred about the trust a patient places in their provider. Some moments will forever be etched into my memory. While obtaining this young Black man's history, he told me about his struggles with depression that led to excessive alcohol intake throughout college and grad school. This was only exacerbated during the pandemic. He avoided eye contact as he sheepishly admitted with a tinge of shame and regret that he knew it wasn't good for his health, but he had become so accustomed to drinking 10-14 shots of hard liquor every night to make it through, that he couldn't imagine coping any other way. I asked if he had ever followed up with someone to navigate his concerns with his mental health, and he mentioned that he was supposed to, but never did.

I was taken aback at how much he trusted me, even after I made a grave med student mistake a few moments earlier. While reviewing his medical history with him, I asked how things were going with his kidney disease. Then, there was silence. Finally, the patient looked at me in confusion for a few moments and asked, "What kidney disease?" Only for me to look at the chart's adjacent column and realize that my preceptor had just added that diagnosis today based on the patient's most recent labs.

I quickly tried to backtrack and said I was not sure about that diagnosis, that I had possibly made a mistake, and the doctor could confirm shortly if that was meant to be in his chart. I then skipped over what appeared to be a new diagnosis of diabetes that was right underneath and went on to obtaining the rest of the medical history and completing the physical exam.

I reported the information I had collected to my preceptor, and sure enough because the clinic had been moving so quickly that day, she wasn't able to tell me earlier that she planned to confirm these two new diagnoses today with this young man.

We walked into the room together, and shortly after the formalities, she went ahead to the main item of business for the visit: "I wanted to go over your most recent labs with you."

He said, "Yeah, she said something about kidney disease? How did that get in my chart? Was that a mistake?"

She replied, "Well according to your GFR and creatinine levels, you actually have what we would call stage 3 kidney disease, and your blood sugar levels are now in the official range for diabetes as well."

He looked devastated and distraught. She continued on to share how each of the remaining lab values were normal. I interjected afterwards, "I know that was a lot to take in. How are you feeling? What questions do you have?" He said he was trying to take it all in and needed a few moments to think, but he would tell us once he had questions. So, my preceptor proceeded with the physical exam. After that, she gave him some education about lifestyle modifications and told him when to return for a follow up appointment, then bid him farewell and left the room.

Without even asking permission, I stayed and pulled up a seat and asked him once again, "I know that was a lot to take in. What questions do you have?" I was a little nervous because I knew I probably should help the workflow by moving on to go see the next patient, but I felt like leaving this patient in this overwhelming state of shock and confusion would be a disservice.

He thanked me for really taking the time to listen and speak with him because usually he feels rushed, and he admitted that he didn't always feel his doctor was listening to him. I told

him that I was sorry to hear he felt that way, and that I would be glad to take the time to answer whatever questions he might have, even though in the back of my mind I felt inadequate to answer the intricate details of all the pathophysiology and treatment for CKD.

I told him as much as I knew, and with the internet's help, we looked up more information and looked at different graphics that helped him understand the diagnosis more in depth; what lifestyle modifications would be important to make, following up with psychiatry, and what treatment options he would have to consider if those modifications fell short of managing the disease. Then, we talked a little bit about his support system, his perceived barriers to making these lifestyle changes, possibly channeling energy and time into cooking for his friends so they could be social without going to bars, and discussed considering Alcoholics Anonymous.

At the end of our conversation, he expressed gratitude, and that on many occasions he felt unheard by his doctors. I thanked him for trusting me to have this conversation with him and told him I would excuse myself to go see the next patient. He was shocked that I was supposed to be seeing other people but decided to spend so much extra time talking to him, so he thanked me again. I shared that it was truly a pleasure to do so, offered some encouragement, and wished him the best of luck before excusing myself from the room.

I know that the amount of extra time I took won't be realistic to do when I become an attending physician, but it allowed me to take a step back and treasure the unique opportunities I have as a medical student; to really contribute something meaningful to the team and to the patient's care. I was nervous to find my preceptor afterwards because I figured she would've wanted me to see more patients. Instead, she genuinely thanked me for taking the time to talk

with that patient because she knew he needed extra time, but that she had other patients waiting on her.

It was special to reassure this young Black man, who was previously feeling some level of distrust, that his healthcare team truly had a vested interest in supporting him to improve his overall wellbeing and quality of life. For me, the moment provided positive reinforcement to continue striving to become an empathetic physician who listens well, even when the busyness and stress of the job tempts you to do otherwise.

All patients, especially minority patients, desperately need to feel heard, otherwise they end up losing trust and motivation to engage with the healthcare system, diminishing the efficacy of our efforts and the efforts of any other future healthcare providers they may encounter. I will strive to always remember that listening dispels distrust and is central to building relationships with patients.

LOOKING INSIDE MEDICINE WITH HEALTHCARE PROFESSIONALS

Interviews with faculty, healthcare providers, or other inspirational professionals.

Psychiatrist's New Clothes

Caroline Quynh-Huong Nguyen The University of Texas Medical Branch–John Sealy School of Medicine

Interview Video

[CAROLINE]: Good afternoon, my name is Caroline Nguyen, a second-year medical student. I have the pleasure of interviewing Dr. Chandler Self today—if you want to go ahead and introduce yourself and tell us a bit more about what you do!

[Dr. Self]: Hi, I'm Chandler Self: I'm a psychiatrist at UTMB and also the Assistant Dean of Academic Support and Career Counseling, a job that I started in July of 2022. I am so excited, and thank you so much Caroline, for having me here today.

[C]: How did you get to where you are today...can you walk us through your entire journey? I'm sure it was very stressful given that you have so much on your plate currently.

[Dr. S]: It's been a wild ride I would say, becoming a psychiatrist today. Starting from the beginning, I grew up in Rockwall, Texas, which is a small town on the east side of Dallas. I went to public school all the way through. From there, [my sister-in-law] threw the javelin for the Texas A&M track team, and I was running cross country in high school. I desperately wanted to run cross country in college, so I walked right up to the Texas A&M coach at an invitational meet when I was a senior in high school [and I said], "Coach Hartman, I'm not the fastest runner at my high school, but I will work harder than *anyone* else if you let me walk onto the team. He invited me to walk onto the team, and I ran cross country and track and field for all four years... I worked, I followed the training regimen, I followed the program that my coach had for me, and ended up earning a scholarship as a student athlete at Texas by my junior year and traveled all around the country (back when Texas A&M was in the Big 12) and really had a great experience. Those values that I learned running cross country and track and field in terms of determinationmaking it to every single practice on time, doing all the work, eating right, learning how to persevere through pain, learning how to tolerate that feeling of [discomfort] of like, "Okay, this, this is painful to be running at this pace, this hurts, but I can do it, I can handle it." I think that was a valuable lesson for me moving on to medical school here at UTMB, and so when the study load became so intense here, as it does in medical school, I learned how to push through the pain when it didn't feel good to study, when I wanted to get up, when I wanted to go do something else, when I wanted to relax, when I wanted to go to the beach, and it was like, "I don't understand the spinal cord yet. I need to sit here and study longer." Learning to tolerate that pain was something that I learned in running. From there, I really wanted to do my residency in New York City. That was where I wanted to learn psychiatry. I wanted to move to New York... I had been living in Texas my whole life. I wanted to move to New York City, and so I applied to all of the Manhattan programs, a few Brooklyn programs, and a couple Bronx programs. I interviewed, and I was accepted at Mount Sinai Beth Israel in the East Village and learned so much living in New York City. They say, "What doesn't kill you just makes you a New Yorker." Living up there was very, very difficult... snowing and walking and carrying your groceries

home and riding your bike around town and waiting on the subway platform. It was just such an interesting experience, and I really valued the lifestyle grit that I had learned. At [that] point in my life, [I'd] learned running grit, I had learned study grit, and now I was truly learning lifestyle grit—how to get by on a resident's budget, living in a very expensive city, and having to survive in that way. One of my favorite parts about living in New York City is that I also experienced the other side of what we're talking about today with grit and glamour: I learned the value of the arts. Everybody in New York City was so creative... people were playing music, people were into Broadway shows, people were into dance, people were into painting, making pottery. I mean, people were just interested in so many aspects of the arts, and of course I think an area of art that I really valued living in New York City was fashion. I really was inspired by everybody around me who could put together these *fabulous* outfits, and it wasn't so much that they were expensive or elaborate, but they just represented who they were. I loved seeing people wear clothing that didn't conform to any social norms. Oftentimes, what they wore was culturally influenced from their family backgrounds. It was artistically influenced by designers that they enjoyed. It was an expression of who they were, and I really valued that part that I learned in New York City. Anyway, long story short, after living in New York City—I lived there for seven years—I decided that I was ready to come back home to Texas, and that's where I started my job here as a psychiatrist at UTMB. I took some of that love for fashion back with me to Texas and also kept with me that lifestyle grit that I learned in New York City, that studying grit that I learned here in Galveston, and that ability to push through pain that I learned from living at in College Station at Texas A&M.

[C]: Thank you for sharing! How would you say that you carry your sense of fashion with you today, as a psychiatrist?

[**Dr. S**]: [It's one of the things] that helps me prevent burnout. [I think in medicine we talk a lot] about, "How can we prevent burnout?" Well, maybe we need to go do yoga. We need to eat vegetables. We need to make sure we exercise. We need to make sure we get to bed early. But, what about the fun stuff that helps you get through burnout? Yes, you can do things at home like cook nutritious meals and have fun with that, and everybody has their different ways of making life fun, but as you and I have talked about before, one of the things that helps me go, "Cool, I'm excited about today" is having a great pair of cute shoes to wear. It really is something that I see all throughout the day. It's something that other people often notice. The patients love it; it brightens their day. They go, "Wow Dr. Self, that's a wild pair of shoes you got on." Or they don't, but either way, it's something that I look at all day, and it makes me happy to have a colorful pair of shoes to wear. It's not every day. In fact, on Monday I remember I was like, "I just got to get to work." Sometimes, that meant a pair of Keds sneakers, a button down, and pants, and I was good to go. It's not every day, but I will say that it is something that helps me to prevent burnout, and burnout is always such a serious topic that we talk about—and it is serious, but there's some lighthearted, fun, superficial, non-evidence-based ways that we can all get through the day. For me, wearing a cute pair of shoes is something that is lighthearted and helps me.

[C]: I'm not sure if they can see it, but you're wearing a cute pair of shoes today! Me too, I love my [current pair of] heels. I was doing a Family Medicine preceptorship this summer, and I noticed that my patients really appreciated not only my disposition—the smile on my face, being

excited to come to work—but also the outfits I would put on; the shoes I wore, as well, so I totally understand what you were talking about with your patients!

[**Dr. S**]: Our appearance is individual and unique, and it's okay to have a little bit of fun with it in medicine. I think sometimes we're in fields, and we're in times in our lives where we are studying so hard, and we are working so hard, and we have so many patients that need us that it's impossible to even think about what you're wearing. That is just the last thing on your mind. You are pulling a 30-hour shift, the pager is going off nonstop, and the last thing that you can think about is what shoes you're wearing. That is a very real issue, but I think what's important is...okay, so for me it's shoes, but for anybody else I think it's what brings you joy. It might be making sure that you have a really good sandwich to look forward to at lunch or that you find some time in the day to spend five minutes out in the sun, and just feeling the sun hit on your face. I think everybody has our little superficial, small things that we need to do to be able to get through the day, and shoes are not for everybody, but they're certainly something that make me happy. I'm glad that you had a similar experience as well, where you realize that people do notice in the clinic! They pay attention, and I think that's nice.

[C]: Dr. Self, to kind of close off this interview, could you give your opinion on the definition of grit, in the wider context of the field of medicine?

[**Dr. S**]: I think grit is what I talked about a second ago—that capacity to endure. When I think of grit, I think of clenching your teeth in an effort to push through, and it's not easy. You and I have talked before about the emotional toll that psychiatry can take, and it does take a strong constitution... to witness human suffering so intimately. No matter what field of medicine you go into, that is our charge. We are here to heal, to provide comfort, and to bear witness to a fellow human's suffering, and I think that is what grit means to me in medicine. What little happiness we can bring in that arena—whether through a bright color or a smile or a comforting word or a touch on a hand—I think these are all ways that various different physicians throughout time have found ways to heal besides just prescribing medications. I remember a physician who didn't have anything left to give to a patient because the illness was terminal. He said, "I don't have anything left to provide, but I do know how to play 'Amazing Grace' on my guitar." For that physician to be able to provide that beautiful music in that moment is, I think, all part of what having grit in medicine is about.

[C]: For sure. Well, thank you so much Dr. Self. I really love your insight and perspective on what glamour and grit mean to you in the context of medicine. I love how you found a way to cope with the stressors of your everyday work [and the] field in general. Thank you so much for your time. Thank you for sharing!

[Dr. S]: Yes, of course! Thank you so much for having me! I've enjoyed it, and I hope everyone can find their way of experiencing those little colorful joys in our days.

Grit and Glamor

Madelina Nguyen The University of Texas Medical Branch–John Sealy School of Medicine

Note from the author:

One thing that I would like to include with my student-faculty interview is the amazing glamour that accompanies the career of the faculty I interviewed. It was very briefly touched upon, but Dr. Rogers has received a countless number of awards and honors throughout her career, which serve as a testimony to her commitment to the noble ideals of medicine as a pediatrician and educator. Dr. Rogers serves as a key contact for legislative issues involving health care reform with the American Academy of Pediatrics. She has served on the Board of Directors for the Galveston County Health District and has received numerous awards for her significant contributions to education, including the induction into the UTMB Academy of Master Teachers in 2007, the Pediatric Educator Award for Excellence in Medical Student Education, recognition from the UT Board of Regents as a Distinguished Teaching Professor, Teacher of the Year Award of Excellence from the residents of Family Medicine, and the Department of Pediatrics Golden Rattle Award for the Excellence in Clinical Teaching (twice!). Dr. Rogers was also one of the inaugural recipients of the John P McGovern Academy of Oslerian Medicine Excellence in Clinical Teaching Award. Listed among the Best Doctors in America since 2005, Rogers has also been featured in the Texas Monthly Magazine as a super doctor. In 2020, she became an *Emeritus William Osler scholar and was listed in the Waiting Room Magazine as a top* pediatrician in Texas. These are only a few of the many honors bestowed on Dr. Rogers, but it took her a lot of resilience and grit to get to where she is today. On a fundamental level, she serves as a caring pediatrician and a strong mentor and teacher to others.

[Madelina]: Hi everyone, my name is Madelina Nguyen. I'm a second-year medical student at the University of Texas Medical Branch in Galveston, TX, and today I'm joined with Dr. Patricia Rogers, a professor of Pediatrics at UTMB in Galveston... she serves as a mentor and faculty for many residents in the department of Pediatrics. She completed her medical degree from the University of Tennessee College of Medicine at Memphis in 1981 after graduating from Vanderbilt University, and she completed her residency training at UTMB in Pediatrics as the chief resident. She also spent 13 years in private practice at Plano, TX, and then in 1998 she returned to UTMB as faculty and has led various committees at UTMB since then. Throughout her career, she's received many honors and awards. The most recent accomplishment was in 2021 when she was included in the new edition of Women in Medicine and is listed among thousands of other influential doctors. So, thank you for being here with us today. Would you like to tell us a little bit about yourself?

[Dr. R]: Thank you! I wanted to start with way back when, when I was three. People would ask my parents, "What does she want to be when she grows up?" That's a weird question to ask a 3-year-old, but I was pretty precocious. So, I would say "a baby doctor" instead of pediatrician. It was the same thing: baby doctor. And they would pat me on the head and say, "Oh that's sweet, but you can only be a nurse." So, my parents would say "If she wants to be a nurse, she

can be a nurse. If she wants to be a doctor, she can be a doctor." I had very supportive parents, and that's when it all started. The person who really influenced that was my pediatrician Dr. Bisson. I worshipped him, he was great. And you can see the influence he had because I'm a pediatrician now. That sort of guided my life as far as Pediatrics being my calling. I would do things like, when I was at Vanderbilt, I did some volunteer work at the hospital with children, and in the summer, I worked with children. Then lo and behold, I was accepted into medical school. I did my undergrad training at Vanderbilt, where I majored in mathematics and minored in chemistry. The thing about mathematics was if I didn't get into medical school, I could teach at college... mathematics. Anyway, then after medical school, I did my residency at UTMB in Pediatrics and stayed on as chief resident with Dr. Daeschner. He said I should stay on as an academician, but I wanted to try my wings at private practice and that's how I ended up in Dallas/Plano. I was there for 13 years. I ultimately was in a very lucrative private practice with a total of four pediatricians, and I was enjoying Pediatrics. Things started to get sort of monotonous, kind of old-little ears and runny noses and ADHD. I mean, there was a gamut of what we saw in Pediatrics. Dr. Thompson here in family medicine and Dr. Richardson wanted me to come back to UTMB to be the medical director of the health department. That was something I had never done before, so I did it! That was a change and later I'll talk about not being afraid to make a change. The interesting thing about that—the health district had never been JCAHO approved, and they told me, "Surprise! You get to get us JCAHO approved," which was a major undertaking, but we did it.

[M]: Yeah, that's a big task.

[Dr. R]: We did it. Anyway, fast forward, I was back in Pediatrics in my element, and the reason for the change was I wanted to teach. I teach residents, I teach medical students, I wanted to see patients. I see my patients, and I'm on a lot of committees, unfortunately. I need to wind down. I've managed to get several awards and honors so that's where I am. You have a little document that sort of list different awards and different things, but that's who Pat Rogers is!

[M]: Awesome, thank you for sharing that with us. You've had a very robust career. I'd say a lot of moving parts.

[Dr. R]: A lot of moving parts, yes.

[M]: So, what would you say your hardest obstacle was in getting to this point in your career?

[**Dr. R**]: I didn't experience much as far as racism at Vanderbilt. The good thing about Vanderbilt; it was obviously an international school, and you could pick and choose your friends, and I had my group of friends from different nationalities. It was great. They were my buddies. In medical school, there were some racists, and the big obstacle was Dr. Peter Jones. I remember him very well. He was from South Africa. He didn't feel that African Americans should be doctors—He pretty much told me that, and then his statement was, "If they go to medical school, they should only go to Meharry," which was a medical school that was predominantly African American in Nashville. So that was an obstacle. You know, there are obstacles with being a woman, but that didn't stand out as much as Peter Jones.

[M]: I'm sorry you had to go through that. I feel like now it's a lot better from what I've heard. So, the next question I have for you is more on the patient care side of things. As a pediatrician who works with kids, how do you cope with the emotions that you feel about human suffering that you experience through some of your patients?

[**Dr. R**]: I think the biggest way I cope with human suffering is with empathy and compassion. Yes, we see some of the bad sides of Pediatrics. For example: kids who've had trauma in their life, kids who've been abused. The big thing is having resources and knowing what resources to tap into. For example, we have an abuse team with Patricia Beach as the head, and we can use that resource for kids who have had a traumatic life. We have a social worker, Pam Massey, who does an excellent job at helping parents and helping kids; particularly kids who don't have food and kids who are in a terrible home situation and other things. We do referrals for counseling, particularly with adolescents who have anxiety or post-traumatic stress. So those are the things. That's the way I handle the human suffering part—is having resources that I can use. In general, human suffering—the big thing about Pediatrics is kids do bounce back. An example is that they can be sick as a dog, and they can make adults pretty sick as a dog. Adults kind of linger for several days but the kids do bounce back. They're out playing after they've been really ill.

[M]: Well, it seems like you have a good team of support. I feel like you need that and can't just handle it all by yourself.

[Dr. R]: Yeah, I try not to handle it all by myself.

[M]: That leads me to my next question: Do you have any habits or practices that you have done in your career that help ground you in your ideals as a physician?

[Dr. R]: I think the biggest thing that has grounded me is God and prayer. My favorite verse is Philippians 4:13 "I can do all things through Christ who strengthens me," and that's it. My humanity through Him has helped, so that's the biggest thing through my career that has grounded me.

[M]: How do you practice that in your daily life?

[Dr. R]: As far as God and prayer, remembering that God created everything, and I don't think He wants kids to suffer, so I'm busy doing my job to make sure the kids are well and doing preventative medicine as well, but mainly taking care of kids.

[M]: You have done a great job so far. I've heard a lot from other physicians as well about how great of a pediatrician you are.

[Dr. R]: Thank you.

[M]: So, my next question is: as one of the most recognized and highly decorated physicians at UTMB and in the state of Texas, what does grit mean to you?

[**Dr. R**]: Grit! I'm not sure I understood that question.

[M]: Well, I did hear a little bit about how you gave us advice at the Pediatric Student Association (PSA) meeting on being resilient as we're going through medical school and through your career, so, my question was what did that mean to you—resilience and grit?

[**Dr. R**]: I think there are two things: one is having "stick-to-it-ness" and sticking to and having tenacity has been the thing as far as my grit is concerned. The other thing I tell students and residents is that it's okay to change. Do not be afraid of change. I think I mentioned that at the PSA. My example of change was obviously changing from seeing patients day in and day out to going to be medical director at the health department. That was a change. People get locked into their career, and they may not be happy. They may be happier doing something else. It's okay to change, and don't be afraid of that. Change actually demonstrates courage, so you have to be courageous, and through my convictions, I've used courage. I've used courage to take chances as well.

[M]: That is awesome. Thank you so much for telling us a little bit about your story and some advice for us. I think a lot of people that are going to listen to this will be medical students. Do you have any further advice for us as we proceed through our medical career?

[Dr. R]: Once again, stick-to-it-ness. There will be times when it seems impossible, but it's not impossible. You got here, and you are meant to be here. So, you want to stick to it. The other thing I like to tell students is to have a folder—mine is called Positive Pats—where you put cards from patients or if you made an A on a test, you put that test in your folder so that when times get hard, you can look back and see the positive things that have happened in your journey. As far as being a medical student, being a resident, being a teacher, being a physician: Positive Pats.

[M]: I think that's a great idea. So that you can look back, on basically like your whole career, your life, and see and all of the positive things.

[Dr. R]: Only positive things are going to go in that folder, and you know, parents give you notes and give you cards, and those things should go in that folder too so you can remember the good times. When things get rough, you can remember the good times.

[M]: When did you start that?

[**Dr. R**]: I started that right after my residency. Yes, right after my residency. Sometimes I have to clean out the folder.

[M]: I was thinking how big is that box?

[Dr. R]: It is pretty big.

[M]: Well, thank you so much for being here with us today. I am sure that this is going to help a lot of people with the pieces of advice that you gave us and sharing your story with us. So, thank you!

[**Dr. R**]: Thank you for the interview.

An Interview with Danny Corbitt, M.D.

Madelyn Schmidt The University of Texas Medical Branch–John Sealy School of Medicine

[Madelyn]: Joining me today is Dr. Danny Corbitt, an amazing gross anatomy professor. Thank you Dr. Corbitt for speaking with me today. Would you tell me a little bit about yourself?

[**Dr. Corbitt**]: I was born when the dinosaurs roamed the earth back in 1954. I went to school in the piney woods of Crockett, Texas. I graduated from high school in '72 and went to Texas A&M University from '72 to '75. I was accepted at UTMB Galveston in 1975. I studied there from 1975 to 1979. Then my residency program was in Fort Worth at John Peter Smith Hospital where I did a three-year internship for family practice and then switched to orthopedic surgery. This probably made me the longest tenured resident that John Peter Smith has ever had. I completed my orthopedic residency in 1985. I married Sally after my internship year in 1980. She stuck with me through all my residency years, and our first child was born in '84. I completed my residency in 1985 and moved to the Lewisville-Flower Mound Area. I have practiced for 32 years in orthopedic surgery, and I am now retired and teach part time at UTMB Galveston as you mentioned in the anatomy program, which has always been my dream. To teach anatomy to first year students is quite a wonderful experience for me. It's rewarding to see young people be able to "get it," to see the light bulb go off.

[M]: I'm glad we can bring you some joy in all our struggles! Along your journey, you experienced and persevered through a life-altering cancer diagnosis. Could you share what the diagnosis was, and how that changed your perspective and treatment of patients?

[**Dr. C**]: I was diagnosed with adenocarcinoma which is non-small cell lung cancer in 2005. I ended up having a right upper lobectomy to remove the cancer and then chemotherapy. Survival rates have improved dramatically over the past few years for non-small cell adenocarcinoma, but it carried a very heavy mortality rate when I was diagnosed with stage 2B in 2005. Luckily it had not involved the pleura of the chest wall; it had remained in the lungs so that by doing the lobectomy I was cured. I didn't know at the time, but as years have passed it's obvious that I could not have been here, had it involved the chest wall and metastasized. Going through the diagnosis, the surgery, the chemotherapy, and recovery of that, really did change my practice. It changed my ability to deal with my patients because I understood what they were going through when I would see patients in my office with metastatic pathological fractures from cancer. It gave me a whole new empathy and sympathy for those patients. It changed everything for me. It was quite a traumatic experience.

[M]: I can only imagine. I'm sure your patients are grateful for that deeper connection that you were able to attain with them from it.

[Dr. C]: Yes, it brought them some comfort in the fact that I was sitting there in front of them, and I was a survivor. It gave them hope, and I think that's a lot of what we do as physicians is to

give our patients hope. It helped give me a deeper understanding and it's what led to my retirement. I came to the conclusion, and I told my wife as soon as I could retire, I wanted to, and I wanted to start teaching. At that time, I didn't know how much time I had. It gave me a whole different perspective on life. I enjoy each day more from the standpoint of not knowing how many more I have left. It kind of changes everything.

[M]: Your oncologist had this mantra that encouraged you during that time. Would you share what it was, and how that impacted your fight?

[Dr. C]: She was actually my second oncologist. I had gone to a local colleague friend, and he was terrified to treat my cancer. And it became obvious in our meeting that he really didn't want to be there and so my wife and I talked about it, and we decided to go outside our local community and go to a different oncologist, Dr. Margie Sunderland. Oh, my heavens she was an angel. When we talked about the diagnosis and the prognosis, she was quite honest with me. She told me, "Dan, what do you want to do? Do you want to continue living? Or die?" And it had such an impact on me. I know a lot of times in medicine we back away, and we don't want to face what the facts are, but that had such an impact on both me and my wife. We don't know how many days we have and whether it's in a situation like mine where I was looking at a bleak prognosis of a cancer that has a history of six months to a year before it metastasizes and causes our death. Or whether I would be cured and have an unlimited lifestyle. We didn't know. Because of the unpredictability when she said that to me, I was taken aback that she would even say that. But she said it with a full compassionate heart. Her point was we can either look at life and we can choose to live in joy, or we can choose to live in the pits of depression. Why would you want to do that? How do you want to live with the days you have left? Do you want to live them in joy and happiness and live life to its fullest, or do you want to drudge around feeling sorry for yourself and have everybody around you depressed? It was a wonderful way to look at life, and I know it's blunt. But that was her point; you can choose either way you want to. That was one of the most wonderful things that she could have done for me, and I've thanked her many times since then for saying that.

[M]: It brings to light for physicians our job is not only to bring healing, but we're supposed to be a friend and be somebody near to our patients.

[Dr. C]: Absolutely we are. We are their only advocates sometimes, and we have to remember that.

[M]: Could you share some of the most difficult parts of being a physician?

[Dr. C]: I think the hardest part of being a physician is what Dr. Sunderland did with me. When you know what the natural course of pathologic processes are, and you deal with that with your patient. We invest part of our lives and our hearts into our patients and become their friend, become their advocate, become their best buddy. We suffer along with them. The hardest part of being a physician is bringing bad news to patients. It's the most difficult thing we do as a physician, but we have to, and we bring it with love, empathy, and sympathy. We have to be honest. We want to provide hope, but we can't provide false hope. The major thing about being a physician is honesty. Always be honest with your patients. Medical technology is growing

exponentially, and it's wonderful. I have seen miraculous things happen in my lifetime, and I can only imagine what you guys will see in your careers. But it's still a personal thing. It is why medicine is an art based on science and not the other way around. I think it's very important that we have that connection with our patients.

[M]: As a successful physician and teacher, what has motivated you through those hard moments?

[**Dr. C**]: Probably the greatest motivation was my dad. My dad didn't finish high school. He owned an auto parts store in East Texas. He provided for his family and worked day and night. People would have car trouble in town, and they'd call him up in the middle of the night, and he'd get up, go to the store, and get parts they needed so they could get fixed up and on the road. I've seen him do that time and time again. And the thing he told me growing up was, "leave the world better than you found it." As physicians, in any occupation that we are in, we can be kind, we can be generous, and we can leave things better than they began. And that has to be the driving force behind what we do. It's hard to remember sometimes, but we have to realize we're servants. We chose a profession of servitude. And it's hard. Sometimes our egos get in the way, but we must understand that we're here to serve society. We've been given a gift of being educated much higher than many other professions, so that we can understand and treat those folks. We have to remember that we're here to serve.

[M]: That's a great point and a very humbling reminder that's important for our entire career.

[Dr. C]: It comes back many times. There will be times that you will have accolades. You will be successful, achieve things, and be honored for it. But keep remembering to get up in the middle of the night when you need to and go take care of that patient. That's your reason for being here, and for me that was the driving force.

[M]: What advice would you give to rising medical professionals?

[Dr. C]: I think the biggest thing about being in medicine is perseverance. The practice of medicine is a marathon, not a sprint. We have to keep plugging every day. We're never going to know everything. There are going to be times when you're going to be exhausted. Take a deep breath and keep moving. There are times when I thought I wanted to quit. You'll just want to give it up, and then you have to remember why you were placed here. Why were you chosen? Why were you picked to have this education, to have this position in society? Persevere. There's always tomorrow where the sun is going to rise, and we get to start all over again.

A Conversation About Academic Medicine and Going the Extra Mile

Brian P. Crowley, M.Ed. and Jonathan Giordano, D.O., M.S., M.Ed. McGovern Medical School at UTHealth Houston



Note from the author:

Dr. Giordano and I both hold Master's Degrees in Education. As someone interested in academic medicine, I wanted to learn more about what that career might look like, since, as students, we only see the finished product of that work. I also wanted to talk about the shifts that emergency medicine has undergone since the pandemic. What changes did COVID-19 make that have become permanent? Is the specialty in a better or worse position since the pandemic? These are some of the questions I attempt to explore with Dr. Giordano.

[Brian]: I have Dr. Giordano with me. He is an emergency medicine physician associated with McGovern. I don't want to butcher titles, so tell us a little bit about yourself.

[**Dr. Giordano]:** In terms of my roles at McGovern Medical School, I wear quite a few hats within the education sphere. Within our emergency medicine department, I serve as the director of undergraduate medical education where I oversee all of our clerkships and undergraduate clinical offerings. I also serve as the faculty mentor for our Emergency Medicine interest group and co-direct our Medical Education fellowship. Within the medical school I have two main roles: the first one as the assistant director of the Doctoring course, which covers the first eighteen months of the medical school curriculum. I also co-direct the acute care track in the fourth year—so, a lot of different hats, but all within the education sphere.

[B]: What is the career progression? I have to assume that when you got to UT you didn't just pick those all up at once. How did that develop?

[Dr. G]: As time has gone on, more has been put on my plate, and I've asked for more as well. My career in education starts back in medical school. My medical school offered a program called the Academic Medicine Scholars program. We took courses about education theory, research methods, and then we also taught in different venues, and we got mentored guidance for lectures we gave the first- and second-year students. The benefit was they actually paid for the final half of my medical school. Throughout residency, I was involved with sort-of-different educational endeavors, where I tried to create curricula and really develop programs for our residents and our medical students who were rotating with us. My chief year gave me an even more in-depth look at how to help mold and create curricula over time and to deliver educational content. From there, I came down here to Houston, and my roles have expanded over time, but it has come with a lot of work. I just can't see my career not being in academics – it's everything I've always wanted to do in medicine. I get to deliver quality care to patients and take care of folks, while also educating the next generation or next group of physicians coming up behind me; and it's something I really, really love. Our students and our residents that I work with are so brilliant and so inquisitive and so talented that they ask really good questions, and they want to know important details and the most current evidence. If I'm not keeping up to date with that, I can't serve in my role, so it really pushes me as well.

[B]: It seems like there are so many upsides to teaching: you have to sharpen your own skills, you get to teach this group of highly motivated people. In your case, it even paid for half your education. What are some of the low points or most difficult aspects of being a physician educator?

[**Dr. G]:** Building curricula is interesting. How you approach it is interesting. I went back and did some extra schooling after medical school and got my Master's of Education at [University of Houston]. Really learning the nuts and bolts of how to do that was excellent for me, but kind of eye-opening. There's work involved there—and time. At least, personally, I try to put a lot of effort into that, and thought, into what I'm doing to create lectures or small group sessions or simulations or procedure labs—whatever I'm building—that are exciting, engaging, but most importantly valuable and at the correct level for my individual learners. Because your time is

valuable as a student, and we want to make sure you're getting the most out of these lessons, so I put a lot of time in on the back end to try and make them valuable.

[B]: Is all of that on the clock, per se, or does that leak into the personal time?

[**Dr. G**]: It depends on what you're doing. Early on, a lot of your time is your time – it's personal time – and once you create these niches, I feel like the institutional support typically comes. The total amount of time that you put into it is never fully supported. You're always doing a little bit more work than what time you're given or allotted is, but for me, it's worth it because it's what makes me happy. To be passionate about something and to enjoy something every day of your career, to me... I'm not sure that money or that little bit of time would make that big of a difference.

[B]: Am I correct that thinking early on in your career they want you to produce clinically, generate revenue, and then as your educational work gets recognized, people within the system are more willing to compensate you for that time?

[**Dr. G]:** I think it depends on where you work and what your specific role is. The ultimate goal is to be a really, really great clinician. So, I think that should always be our priority, to just take excellent care of patients. In terms of making that move into academia, it depends on where you work. Some places are more open to supporting you up front, others are more of a "prove that you need the time and then we will provide you the time." And I think that's all sort of just professional growth and conversations with your leadership in terms of job expectations. It is challenging for folks as they start out in academia, and I think it's up to those individuals to have those conversations to see about how they can best be productive on both sides.

[B]: You're not just an academician or a teacher, you're also a clinician and a physician. There was this huge surge of support for healthcare workers when COVID [COVID-19] hit, and I feel like over the past two years you've seen that level of support decline as the level burnout increases. As someone who's working in primary care, in emergency centers in one of the biggest cities in the US, what's your experience been?

[**Dr. G**]: Over the last few years, there have definitely been challenges, clinically. Not just for me, but I think nationally. For me, in the ED, one of the big challenges that has really reared its head over the past few years has been ED boarding: where patients who need to be admitted are admitted... however, there's no bed available upstairs for them to go to because the hospital is full. As we increase boarding in the ED, we eliminate locations where we can actually care for people who come to the ED because these admitted people are taking up beds in the ED instead of getting a bed upstairs.

[B]: Instead of getting a room upstairs, their room is one of the emergency bays?

[Dr. G]: And they wait there for hours and hours and days, sometimes, until they get a bed available upstairs. So, that has caused challenges for us. We don't have as many care settings or areas where we can deliver care to patients, so we travel out to the waiting room and see patients in the waiting room, and it's really challenging to do that.

[B]: Are you limited in what you can do? Can you do a full physical exam out there?

[**Dr. G**]: We try to be as complete and thorough as possible. We'll bring folks into small rooms on the side and do our full histories, full exams, but once we see them, they sometimes have to go back into the waiting room to wait for results or to have testing done. It's just not ideal. We've seen wait times go up. The "Left Without Being Seen" numbers throughout the country have gone up over the course of the last few years. So, the delivery of healthcare has been challenging. Some systems have been creative in trying to work around some of these challenges, and I think that's what we need more of in healthcare, throughout the country. We need creativity and investment into how we can actually work around some of these challenges.

[B]: How does that affect you on a personal level in terms of fitting with how you pictured yourself practicing before the pandemic?

[Dr. G]: I think emergency physicians, in general, are trained to roll with the punches, be a little bit creative, and to work with limited resources because, oftentimes, that's what we're doing. So, I think our specialty has done a great job of doing all of those things. With that said, some days are more difficult than others, and it would be nice to have the space, staff, and see patients in private rooms. It's just not the reality of the situation right now. We do the best we can with what we have, and I think that speaks to the resilience of physicians dealing with these challenges.

[B]: I feel like that has to be encouraging, right? What other positives have you seen come out of these situations?

[Dr. G]: I feel folks have really banded together. When the ER is blowing up and it's really busy and there are patients everywhere, I feel like people come together. You see the best in people and the best in your colleagues. You really understand why they're so excellent, and it's really nice to see.

[B]: It's almost morbidly beautiful in some ways, because if everything is routine, you're going through the motions. When something shakes up your world like a snow globe, you really get to see what people are made of and what we can do. And you might never have experienced those relationships or those ties.

[Dr. G]: During the pandemic one of the most interesting things was we had a lot of travel nurses. These are nurses who are contracted and are coming in from everywhere, and these are folks you're just meeting. They're folks you don't really know, right? They come in and they have these great attitudes and you're all working together to try to just do the best that you can together. Those bonding moments are really wonderful. They really bring out the best in everyone. So, in the darkness there was some light, if that makes any sense.

[B]: Any closing thoughts you might want to give readers, about being an academician or an emergency physician—thoughts on what you would say to yourself if you were back in medical school?

[Dr. G]: I think that I have the best job in the world. I love what I do. Being able to work in emergency medicine, to me, is just... every day is so fascinating. I chose emergency medicine because I appreciated the undifferentiated patient. I wanted to be able to see a patient, think through what I thought was going on with them or what was wrong with them, and then come up with the diagnostics and the interventions that I thought were needed. I love the clinical aspect of my job. I think that there's a large component of service to what I do. In emergency medicine, we see folks from all walks of life—insured, uninsured, we don't say no to anyone. That, to me, is a special characteristic that I value. I'm able to take care of this, sort of broad, swath of individuals and hopefully make an impact on their lives and their health. And I think there's something special about that. That clinical aspect, coupled with my ability to work with supermotivated, super-engaged learners... to me it's the perfect job, and so I love what I do every day. I think that if you are entering academic medicine for those reasons, you're going to have an incredible career.



