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We appreciate the editing assistance of Dr. Angie Carter and the students in her English 2050 class at Utah Valley University.

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Contents

Letter from the Editors ix

Preparing Students to Emerge as Healthcare Leaders in Serving Deaf Communities 1
Sarah M. Hall, Ph.D.
Michael Ballard, Ph.D.
Faith Loosli, B.S.
Mindy Steadman, Ph.D.

Real Equality in America: Solving Racism in Healthcare 17
Anna Lesā

Body Image and Self-Esteem in a Sample of College Alumni: The Need for Compassionate Healthcare in Addressing Obesity 23
Christopher D. Anderson, Ph.D.
Ron J. Hammond, Ph.D.
Christine McCallister, B.S.
Duncan Humphries, B.S.

The Role of Leaders in Firefighter Mental Health 35
Amanda Jackson

Psychological Perceptions in College Student Athletes After Injury 41
Melinda Barber, M.S.
Merilee Larsen, Dr.P.H.
Heather Thiesset, Ph.D., M.P.H.

Healthcare Leaders Support Employees During the COVID-19 Pandemic 51
Natasha Brynn Byrd

Coaching and Leadership in Medicine..... 59
James Bryce Palmer

Culture as a Cornerstone: Leadership in Navajo Healthcare 75
Ethan Powers
Jair Gonzalez

Utah's Opioid Epidemic: A Public Health Crisis 85
J. J. Litster

The Power of Preceptors: Guiding Healthcare Students Toward Professional Excellence 95
Allison Ensign, D.N.P.

Non-Pharmacological Interventions For Anxiety in Hospitalized Patients 103
Garrett Parker

The Better Healthcare Strategy: A Literature Review of Internal and External Corporate Social Responsibility 117
Taylor Joseph Ward

Contributing Authors 125

Journal Description & Call for Papers 128

Letter from the Editors

Dear Esteemed Readers,

In this special issue, healthcare and leadership intersect, each contributing to the other, while emphasizing the enduring impact leaders can have on the lives of others in healthcare settings. We appreciate the distinctive insights the authors bring to the forefront of their respective topics. They have broadened our perspectives on leadership and have inspired us with their unique perspectives. Their scholarship contributes to the leadership discourse, thereby providing an engaging outlet for research, writing, editing, and publishing.

Our sincere appreciation goes to our dedicated staff, whose enthusiastic efforts have been instrumental in bringing this issue to publication. This endeavor would not have been possible without their unwavering commitment. Additionally, we express gratitude to our guest editors, students in the editing classes of Angie Carter and Deb Thornton, the JSL editorial board, and other anonymous faculty and student peer-reviewers for their invaluable input and double-blind peer review for each submission. Continued support from the Utah Valley University Department of Student Leadership and Success Studies is duly acknowledged.

Once again, thank you to all who have contributed to the success of this healthcare-focused issue of *The Journal of Student Leadership*.

Sincerely,

Dianne McAdams-Jones, Ed.D.
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Preparing Students to Emerge as Healthcare Leaders in Serving Deaf Communities

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Deaf and hard-of-hearing patients who use American Sign Language (ASL) as a first language experience unique barriers to accessing quality healthcare, resulting in disparities in health outcomes. We conducted five focus groups with Deaf participants regarding their experiences as patients to identify their specific perceived barriers to quality healthcare. Perceived barriers included miscommunication with hearing healthcare professionals, lack of access to full information during medical appointments, perceptions of provider bias, patient lack of confidence in the healthcare system, inadequate comprehension of Deaf culture and its norms among providers, and lack of access to direct care in the patients' first language (e.g., ASL). Although direct care was viewed by participants as the most favorable method of communication, experiences with direct care were rare among study participants, suggesting an opportunity to increase the number of healthcare providers fluent in ASL. This paper discusses how direct care from Deaf providers has the potential to overcome common barriers faced by Deaf patients. It further explores how universities and both Deaf and hearing students who are future healthcare professionals can emerge as leaders to increase health equity for Deaf communities. This includes examining systemic obstacles faced by Deaf university students who plan to enter medical professions and identifying potential points of intervention in healthcare education and leadership. We suggest a two-pronged approach targeting students in the healthcare field: improving educational opportunities and retention efforts to assist Deaf students to emerge as leaders in healthcare, and increasing awareness and education among hearing students regarding culturally competent care for Deaf patients.

The U.S. Department of Health and Human Services' *Culturally and Linguistically Appropriate Services* (CLAS) standards emphasize the importance of providing culturally competent care to individuals with limited English proficiency (LEP). Hall, Levin, and Anderson (2017) argue that language deprivation in Deaf communities appears to have sociocultural origins as decisions about language use (or lack thereof)

are often made for them as children. For instance, hearing parents may believe that sign language exposure interferes with spoken language development in Deaf children and opt for cochlear implants and spoken language only. This denies deaf children access to sign language during their critical language learning years, in turn resulting in cognitive delays and limited health literacy (Hall, 2017; Gur et al., 2020; Payami, 2021; Smith et al., 2015; Smith & Samar, 2016). As a result, many Deaf patients have decreased reading comprehension compared to hearing patients (McKee et al., 2015; Zazove et al., 2013; Rotoli et al., 2019). Deaf patients are at elevated risk of physical and mental health problems, highlighting the importance of clear communication between medical professionals and Deaf patients, as well as medical institutions building trust and rapport with Deaf communities (Barnett et al., 2011).

Culturally competent care includes informing LEP individuals of "the availability of language assistance services clearly and in their preferred language" and providing free language assistance to LEP individuals (Department of Health and Human Services, n.d.). Federal law requires health agencies receiving federal funding to provide reasonable accommodations to individuals with LEP at no charge to the patient (Jacobs et al., 2018). However, a large percentage of lawsuits related to the Americans with Disabilities Act relate to a deficiency in the accommodations necessary for deaf or hard-of-hearing patients to communicate effectively with their physicians (Iezzoni et al., 2023).

Deaf and hard-of-hearing patients who use American Sign Language (ASL) as a first language experience unique barriers to accessing quality healthcare. Accessibility to healthcare for Deaf patients is hindered by language barriers, biases, and other access issues (Hill et al., 2017; Hommes et al., 2018; Kritzinger et al., 2014; Meraz, 2019; Rotoli et al., 2019). Deaf patients are at elevated risk of physical health problems, intimate partner violence, and suicide attempts (Barnett et al., 2011). Treatment-seeking behavior for Deaf patients may be impacted by lack of trust from previous medical experiences, leading to delayed care and further health disparities (Barnett et al., 2011; Barnett & Franks, 2002; Richardson, 2014; Schniedewind et al., 2021). Effective modes of communication are imperative since Deaf patients have experienced misunderstandings

regarding diagnosis and treatment, medication safety, communication problems during medical procedures, delays in treatment and limited preventive care (Iezzoni et al., 2004; Sheppard, 2014).

Given the present hearing-centric nature of the medical and mental health professions, it is crucial to adopt a Deaf-centered approach in promoting Deaf equity. One approach is to create accessible systems that empower Deaf students to enter healthcare professions in which, as members of Deaf communities, they can play a crucial role in promoting Deaf equity. This study aims to identify obstacles to quality healthcare for Deaf patients and relate the results to how universities can best support students to emerge as leaders in healthcare fields to alleviate obstacles to quality healthcare.

We use *deaf* as an umbrella term to describe those who identify as Deaf, deaf, hard of hearing, hearing impaired, late deafened, and DeafDisabled. We use the term *hearing* to refer to individuals who do not identify as Deaf, deaf, hard of hearing, late deafened, or DeafDisabled. While the term *deaf* is often used by hearing people to denote an auditory medical condition, we use *Deaf* as an individual's identification within the Deaf community, Deaf culture, and use of American Sign Language (ASL).

Methods

We conducted five focus groups of culturally Deaf participants. Participants were recruited through various social media groups for Deaf persons in the state of Utah. Those who were interested in participating accessed the survey through an electronic link that took them to a consent form in both written English and ASL video. Those who consented continued to a screening survey (N=44). The study was approved through the institution's review board and protocol was followed. Participants provided contact information for participation in one of five focus groups. Those who were available participated in a 90-minute focus group session (N=32). Five focus groups were conducted with Deaf participants (N=27) and one focus group was conducted with ASL interpreters with experience interpreting in medical settings (N=5). Interpreters were included to determine obstacles to effective communication from the interpreter perspective. Each focus group contained one Deaf researcher, one hearing researcher, two qualified hearing interpreters, two Certified Deaf Interpreters (CDI), and five to six

focus group participants. Focus groups were conducted in both ASL and spoken English depending on participant preference. Sessions were video recorded, transcribed into written English, and verified by a third-party interpreting agency.

Transcriptions were de-identified and coded in NVivo (Dhakal, 2022; Vears & Gillam, 2022). A mix of deductive and inductive coding was used (Fereday and Cochrane, 2006). The deductive coding phase used pre-determined categories relating to communication type (writing back and forth, lipreading, using family/friends as proxy interpreters, Video Remote Interpreting or VRI, on-site interpreter, and direct care) based on prior research (James et al., 2022). Nodes were created for each communication type. The inductive coding phase identified specific barriers and benefits within each node first with open coding (Khandkar, 2009) and followed by line-by-line coding to identify specific sub-themes (Gibbs, 2012). The sub-themes were grouped using the open coding step or placed into a distinct separate category. Groupings were discussed, refined, and labeled.

Results

We found that patients often only received partial information about their medical status and were generally dissatisfied with common modes of communication with their medical providers such as writing back and forth, using family/friends as proxy interpreters, lipreading, and VRI. Deaf participants described miscommunication with hearing healthcare professionals, perceptions of provider bias and impatience, inadequate comprehension of Deaf culture and its norms among providers, lack of confidence in the healthcare system, and lack of access to direct care in the patients' first language (e.g., ASL). Deaf participants preferred on-site interpreters but frequently had trouble accessing an interpreter when requested. Concerns with on-site interpreters included confidentiality issues, interpreter intrusion on the Deaf patient's healthcare, and interpreter bias. The availability of a healthcare provider who was Deaf or proficient in ASL emerged as the preferred choice among Deaf participants:

> Being able to sign directly with the nurse and doctor would be nice. Regardless of if they can hear or are deaf, them [the provider] being able to sign would make it easier to develop that relationship with them. Not knowing sign

> language causes a disconnect, it's harder to understand what's going on. Where is the relationship with that? The friendliness, connection, and support just aren't there.

Deaf participants expressed a strong preference for direct care with a Deaf provider or a provider fluent in ASL over alternatives such as on-site interpreters, written communication, gesturing, using family/friends as proxy interpreters, lipreading, and Video Remote Interpreting (VRI). Interpreters expressed their frustration surrounding effective interpretation through VRI. Since the camera must face the Deaf patient in order for interpreters to interpret the ASL, interpreters stated that they could not see the medical provider's pointing or gesturing. Interpreters also had a difficult time determining who was speaking and who they were interpreting for when multiple people were in the room. Interpreters believed on-site interpreting was more effective than VRI. Deaf participants generally preferred on-site interpreting compared to other methods apart from direct care. Many Deaf participants had never experienced direct care due to a lack of available Deaf providers in the medical and mental health fields. While participants rarely received direct care in fluent ASL, when they did, they felt their quality of care improved dramatically. They also felt the providers viewed them with greater respect and humanity.

> With both of those situations [when direct care was experienced,] the best thing about them is that I feel like an equal, I don't feel like they're looking down on me. That is one thing that helps me with my health and my relationship with them.

Participants emphasized the benefit of sharing a common language with their healthcare provider during therapeutic and counseling sessions. Specifically, there appears to be a pronounced demand for circumventing the use of interpreters within such contexts. Patients also expressed increased communication depth and heightened awareness of patient body language among providers fluent in ASL.

> I have a therapist that signs. It's really nice to be able to go into deep topics through sign language. It's a big benefit. If they didn't sign, maybe it wouldn't be as efficient. That's a big plus in my experience…because a therapist that knows sign language can notice my body language

> and expression. With a hearing therapist they may miss some of those things that concern me.

Both Deaf participants and those in the interpreter focus group felt that hearing providers did not have a basic understanding of Deaf history or culture. Common concerns included language barriers, lack of training for providers, and provider lack of exposure to and understanding of Deaf people. One Deaf participant stated, "The doctor didn't understand that deaf people have different speech skills and hearing levels." A hard-of-hearing participant had the perception that disability issues are not taught in medical school and stated, "Medical schools need to do better at teaching students about effective communications and treating Deaf patients." Both Deaf participants and interpreters cited perceptions of provider biases.

> I have noticed when they figure out that I'm Deaf they don't want to speak directly to me…I feel like they don't think I am important, that I don't need to know everything, but I am important because I'm the one who requested to meet with the doctor or dentist so I should know what's going on.

Other Deaf participants felt that medical staff felt burdened or inconvenienced by requested interpreters: "[It's] simply that it's not convenient…'It seems like it would just be easier for them to write back and forth, so I'll just forget it.' Basically, they just don't want to." Many Deaf participants felt there was a lack of knowledge of how to best accommodate Deaf patients. For instance, several felt that staff responsible for scheduling their medical appointments at the front desk were not adequately trained to request interpreters. Still others mentioned the expense of on-site interpreters. Deaf participants felt that staff did not want to assist them due to cost, and instead asked the patient to write back and forth, use VRI, or have family or friends interpret, resulting in diminished quality of care and lack of full comprehension of the two-way exchange of medical information being shared between provider and patient.

Discussion

The findings suggest that many Deaf patients whose first language is ASL would benefit from communication with healthcare providers

who are fluent in ASL to prevent misunderstandings, ensure smooth communication, and have greater efficiency during medical appointments. Findings further suggest Deaf patients have increased trust and improved relationships with providers when patients are able to communicate directly with providers in their preferred language, without an interpreter as a middle person. This suggests a need to increase the availability of providers fluent in ASL, whether the providers are Deaf or hearing. Findings indicate the importance of cultural competency among providers, including the importance of providers possessing a knowledge of the unique health communication concerns of Deaf patients.

Efforts to strengthen rapport between the medical community and Deaf patients can begin by training students who will be future healthcare providers such as those in nursing school, medical school, and clinical counseling programs. Hill et al. (2022) discuss one such effort undertaken at Johns Hopkins University to develop a Deaf and ASL inclusive radiation oncology residency program that can serve as an academic model for other programs across medical specialties. Their successful integration of a Deaf resident points toward steps that can be taken by other institutions, such as engaging with graduate medical education stakeholders to promote the value of learners with disabilities for patients, future providers, and other students. Students who possess a nuanced understanding of Deaf culture and are fluent in ASL will be better prepared to effectively engage and build trust with Deaf patients. Though the literature cites some instances of healthcare leaders striving to provide more culturally competent care for Deaf patients (Panzer et al., 2020; Pertz et al., 2018), more efforts are clearly needed to bring healthcare providers fluent in ASL into healthcare settings tailored to meet the needs of Deaf individuals.

Deaf university students in various healthcare programs are uniquely situated to emerge as healthcare leaders who can alleviate barriers faced by Deaf patients. Institutions of higher education must press forward in developing educational content that meets accessibility and usability standards for learners of various capacities, including those who are Deaf. To date, research indicates that due to a lack of accessible technology, Deaf students often have difficulty accessing educational content

(Batanero-Ochaita et al, 2021). This must be remedied to ensure that the institutions and programs shaping our future healthcare leaders are equally open to students of all capacities.

Implications in Healthcare Leadership

Enhancing the quality of healthcare interactions for Deaf patients is dependent on university healthcare programs that are training tomorrow's healthcare leaders. National surveys have historically demonstrated a great need for faculty positions in Deaf education teacher preparation programs, leadership positions in instructional programs serving Deaf students, and addressing leadership personnel needs (LaSasso & Wilson, 2000). Hearing individuals often take the lead in advancing initiatives regarding Deaf persons; however, their decisions are tied to their own cultural proficiency and may not adequately reflect the needs of the Deaf community (O'Brien & Robinson, 2017). Andrews and Covell (2006) identified three challenges regarding education and leadership for Deaf students: understanding the challenging demographic composition of student and leadership populations, developing accessible curriculum based on research, and expanding the knowledge base of these issues through applied research. Each of these are explored further in our recommendations. We recommend a two-pronged approach to student leadership: (1) empowering Deaf students to emerge as leaders in healthcare for Deaf patients, and (2) training hearing students on Deaf issues and culture.

The first approach will require a conscious effort from universities in terms of understanding current student demographics, ensuring that curriculum is accessible, and supporting and retaining Deaf students throughout their educational journeys. If Deaf students are unable to enter or be retained in university healthcare programs, their potential for leadership in the field will be virtually non-existent. Despite the Americans with Disabilities Act (ADA) requiring programs that receive federal funds to provide reasonable accommodations (U.S. Department of Labor, 1990) and The Rehabilitation Act of 1973 prohibiting discrimination on the basis of disability in programs receiving federal financial assistance (U.S. Department of Labor, 1973), disparities in educational attainment indicate a need to achieve greater equity for Deaf students.

For instance, Deaf students are at increased risk of dropping out of high school, with only an estimated 50-55% earning high school diplomas (Foster & Walter, 2018). For Deaf students that attend universities, Marschark et al. (2001) report that only 30% graduate from four-year programs compared to about 70% of their hearing counterparts. Consequently, Deaf and hard-of-hearing students are heavily underrepresented in medical school programs. Health-related professions such as pre-med, nursing, and clinical psychology can make concentrated efforts to recruit Deaf students into their programs and create solutions to address systemic barriers to entry and retention. Once policies are in place to recruit Deaf students into healthcare professions, universities can better focus on retaining Deaf students and assisting them to emerge as leaders in the field.

Several studies have examined how universities can better retain Deaf students. Blended or online learning options for Deaf students have been shown to alleviate learning barriers, improve quality of comprehension, and increase interactions with the professor and other students (Long et al., 2007; Zavaraki & Schneider, 2019). Even so, barriers in online learning management systems, course content and materials, English transcript comprehension, and communications still exist for Deaf students (Coyner & McCann, 2004; McKeown & McKeown, 2019). Health programs can accommodate Deaf students by using Universal Design for Learning, utilizing ASL video, alternate text, closed captioning, and written transcriptions for lectures and videos (Brandt & Szarkowski, 2022; van Rooij & Zirkle, 2016). Additional suggestions include instructors using straightforward and plain language in their learning material, organizing readings with headings and subheadings, using imagery, providing resources such as hyperlinking medical jargon to their definitions, including a glossary, and providing resources to refresh on prerequisite knowledge (McKeown & McKeown, 2019). Institutional technical support for faculty to ensure accessibility is vital to success.

Medical school technical standards create a barrier to entry for Deaf individuals who may be disqualified from matriculating into or graduating from medical programs (Argenyi, 2016). Such standards vary from school to school, raising ethical concerns about equity and representation of Deaf students in medical school. Court decisions (e.g., *Alexander v. Choate* and

School Board of Nassau County v. Arline) have affirmed that Deaf students who are able to master the clinical requirements of a program with reasonable accommodation cannot be denied admission on the basis of being Deaf (Schwartz, 2009). Medical schools can reassess their technical standards to ensure greater inclusivity and diversity in the healthcare workforce and allow qualified Deaf students equal opportunity to participate in medical school without compromising safety or curriculum standards.

In addition to calling for concerted efforts to recruit, retain, and mentor Deaf students as future healthcare leaders, we recognize the need to enhance the cultural competence of hearing students in the healthcare field. Awareness and knowledge of barriers faced by Deaf students, policies affecting the quality of Deaf education, curriculum design, overcoming implicit biases, exposure to Deaf persons, language access, and understanding of Deaf culture and its norms are important factors to consider for hearing students who would like to emerge as leaders in diversity and inclusion efforts (O'Brien & Kuntze, 2014; Stamps, 2021). Deaf-hearing bi-cultural teams are important in promoting health equity for Deaf patients (Andrews & Covell, 2006). Culturally prepared providers may be positioned to offer better advocacy for Deaf patients.

A limitation of the study is that only perspectives of Deaf patients and those who provide interpreting services for them were explored. Further research should explore perceptions of hearing healthcare providers and administrators to better understand their reasoning for gaps in provision of culturally competent care. This would clarify the main obstacles from the provider perspective, such as budget, time constraints, lack of knowledge of Deaf culture, lack of experience with Deaf persons, lack of training, apathy, burnout, or other factors. Understanding hearing providers and administor's perspectives will inform targeted interventions.

Conclusion

Hearing providers often lack knowledge of the varied speech and hearing levels of Deaf patients, are unaware of challenges relating to various modes of communication and lack basic interpersonal communication skills related to Deaf culture (Hommes et al., 2018; James et al., 2022). Increasing the number of healthcare providers able to provide direct care to Deaf patients has the potential to increase quality of care

for Deaf individuals and reduce health disparities. Both Deaf and hearing students entering the healthcare field can play a vital role in this effort.

Universities can assist Deaf students to be future leaders in the provision of healthcare by involving them on Diversity, Equity, and Inclusion committees to identify obstacles to educational success for Deaf students and implement solutions to better recruit and retain Deaf students. Instructors and professors in this arena can play a key role by ensuring accessibility to learning materials and incorporating an exploration of needs of diverse groups of patients into curriculum for healthcare students. Hearing students in healthcare fields can emerge as leaders by taking the initiative to educate themselves on issues faced by Deaf patients. Hearing students who lack experience with Deaf culture can educate themselves about Deaf history and challenges in a myriad of ways: reading, watching documentaries, increasing their exposure to Deaf populations, taking ASL courses, participating in ASL school clubs and events, connecting with classmates who are Deaf, and conducting research on access issues, existing effective initiatives, and best practices in terms of policy.

Such actions have the potential to increase the number of healthcare professionals with the ability to provide direct care to Deaf patients, increase awareness among hearing students, position students as leaders in equity and inclusion, and reduce biases among hearing providers later in life as professionals. As they complete their education and embark on their own professional journeys, these students may also be able to educate the professionals around them who lack knowledge and experience in caring for Deaf patients. We assert that as the next generation of healthcare providers, both hearing and Deaf students have vital roles to play in improving the quality of healthcare for those in the Deaf community.

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Real Equality in America: Solving Racism in Healthcare

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Racism in the American healthcare system is a prominent issue that negatively affects people of color (POC). Racial disparities in the number of POC affected by metabolic diseases, the quality of healthcare for POC, and inaccessibility to health resources for POC are a few aspects of this issue. A deep history of racism and segregation in America exists; healthcare is just one aspect. American legislators and healthcare professionals need to create policies and legislation to make healthcare more affordable, create more accessible locations for care delivery, and make resources more culturally suitable for POC, which could subsequently help the overall issue of racism in America. These changes could improve the general health and well-being of communities of color. Promoting the general health and treatment of a large portion of the American demographic could contribute to an improved functioning society, consequently guiding America toward real equality.

Racism in the American healthcare system is an issue that negatively affects people of color (POC). Racial disparities in the number of POC affected by metabolic diseases, the quality of healthcare for POC, and inaccessibility to health resources for POC are a few aspects of this issue (Carratala & Maxwell, 2020; Riley, 2012). Inequalities across races can be observed within the American healthcare system, and it is an issue that affects everyone (Riley, 2012). The impact of this issue includes POC who are negatively affected, lawmakers who can influence change on a legislative level, healthcare professionals who give treatments to patients, and every American citizen who can advocate for change (Yearby, 2012). There is a deep history of racism and segregation in America; healthcare

is just one aspect (OASAM, n.d.). This issue has afflicted our country for years and is harming America's POC on systemic and interpersonal levels. American legislators and healthcare providers need to take action to combat this problem by making healthcare more accessible and creating better quality resources for POC. These changes would help balance health inequalities across races, create resources located in communities of color, and improve cultural suitability of healthcare resources for patients of color.

Making healthcare more accessible for POC could help equalize the health disparities across races. Some telling statistics examined by Sofia Carratala and Connor Maxwell (2020) demonstrate these disparities. The leading cause of death for African Americans and Hispanics is heart disease, cancer, and accidents. The incidence rate of tuberculosis is higher for Native Hawaiians and Pacific Islanders than for any other race. Asian Americans are 40 percent more likely to be diagnosed with diabetes and 80 percent more likely to develop end-stage renal disease than non-Hispanic whites. Statistics also show how minorities are not as medically insured as non-Hispanic Whites (Carratala & Maxwell, 2020). Additionally, "a noticeably higher percentage of COVID-19 cases are among Hispanic or Latino people compared with the percent of the total U.S. population" (CDC, n.d.). These statistics demonstrate how distinct the inconsistencies in physical health are across races. Those inconsistencies stem from minorities not having access to the healthcare resources necessary to prevent or treat the devolopment of their conditions. "A substantial research base now exists to show disparities in access to healthcare services for ethnic minority populations" (Riley, 2012, p. 23). Evidently, healthcare resources are not equally accessible for minority groups in comparison to Caucasians at this time. Some potential improvements to healthcare accessibility for POC communities include creating mobile health clinics, offering health resources at community events, and providing culturally sensitive health education in schools. Making preventive healthcare more accessible for POC would help stabilize these health disparities because it could allow them to receive quality healthcare regularly, thus improving the overall health of communities of color and decreasing the discrepancies in health issues across races.

POC may feel more comfortable and inclined to utilize resources with their healthcare professionals if these resources are more accessible. Making healthcare more attainable would mean making it more affordable, more accessible to living spaces, and more culturally relevant to suit the needs of patients of color. According to a survey with older minority adults of the treatment they receive from healthcare professionals, "perceived racism contributes to delayed/forgone care," and "poor doctor communication mediates the association of perceived racism with delayed/forgone care" (Rhee et al., 2019, p. 3). This shows that many POC have notions that they will not receive adequate care from healthcare professionals because of their race, and that healthcare professionals can do more to make POC feel more comfortable receiving care.

Additionally, many illegal immigrants do not feel comfortable accessing healthcare because of their documentation status and affordability (Joseph, 2017). This is a cultural barrier that can be mediated through programs that educate health professionals on how to work better with minorities, thus making healthcare more available to minorities and subsequently changing their perception of healthcare (Rhee, 2019). Racism in healthcare is present on an "interpersonal, institutional, and structural" level (Yearby, 2012, p. 12). By making healthcare more accessible for POC in location, affordability, and from providers who are culturally competent, the issue can improve on the systemic and interpersonal levels because POC may have a better perception and attitude about receiving healthcare.

Making healthcare more accessible to communities of color could improve the general issue of systemic racism in society. This accessibility could improve the overall physical health of POC, making them a stronger and higher functioning population in society. Training health professionals to become more culturally competent would promote quality interactions across different cultural groups. Exposure to cultures outside of one's own could motivate people to evaluate their own racial biases and adjust them. Educating an entire industry on how to better assist POC in the healthcare system could cause more people to realize their racial biases and address them, causing a ripple effect on the rest of society. Stout et al. (2021), a group of indigenous authors and healthcare professionals, wrote about their experiences with racism in healthcare in an article where they discussed

how "nurses and their allies feel forsaken by an unrequited longing for a world free of racism" (p. 14). People everywhere long for a society where racism is abolished. As a society, we need to take united action to put an end to racism, starting in healthcare. By making healthcare resources more accessible to POC, the health of POC would improve, and there would be more positive intercultural relations within healthcare facilities in communities of color. Increasing these interactions across cultures could demote negative racial biases and alternatively harbor sound intercultural exchange.

Although there are many benefits to providing more health resources to POC, some still feel that racism is not a significant issue, especially in the healthcare industry. A popular opposing view in America is that everyone has equal opportunity and access to everything. Some Americans may choose to believe that racism was abolished in America after the Civil Rights Act of 1964 which "prohibits discrimination on the basis of race, color, religion, sex or national origin" (OASAM, n.d.). This Civil Rights Act promised equality to all Americans regardless of their race. This act even showed promise of equal treatment in the aspect of healthcare because it "prohibits health care entities receiving government funding from using racial bias to determine who receives quality health care" (Yearby, 2012, p. 1288). In 2010, Congress and President Barack Obama also passed the Affordable Care Act (ACA) which strived to make healthcare more affordable to more people (HealthCare.gov, n.d.). With this information, it would appear some people choose to believe that racial health disparities are not a systemic issue and that they need to be solved on an individual level (Sakran et al., 2020). However, racism has been such a prominent part of American history that it still prevails today, even in healthcare. The issue is systemic and harmful. According to Ruqaijah Yearby in her article, "Breaking the Cycle of Unequal Treatment with Health Care Reform: Acknowledging and Addressing the Continuation of Racial Bias", the ACA failed to acknowledge that the cause of health disparities is racial bias and that it worsens the problem of health disparities because "it proposes individual and community based solutions that will not put an end to interpersonal, institutional, and structural racial bias, which cause racial disparities in health care" (Yearby, 2012, p. 1232). By not addressing that the root of the issue of health disparities is racism, the issue cannot be fixed because systemic solutions are not being implemented.

Racism is not always as obvious and overt as many in the public expect. In addition to Yearby's findings, three physicians of color (Sakran et al., 2020) found in their piece, "Racism in Healthcare Isn't Always Obvious," that there is clear evidence of systemic racism when we start to question something as common as heart health. They explained the discovery of "persistent sex and race-based disparities with respect to heart treatment, with Black patients statistically less likely to have a heart specialist assigned to them or an intervention performed to evaluate the blood supply to their hearts" (Sakran et al., 2020, p. 2). This reveals racial bias within the healthcare system and how small biases can culminate to large systemic issues that affect people's health. We can better understand the nature of this problem and how systemic issues need to be addressed with systemic solutions.

The issue of racism in healthcare is significant nationwide because racism has afflicted our country for too long. America was founded on the prospect of equality and justice (Washington Secretary of State [OSOS], n.d.). However, our current healthcare system suffers from racial inequality directly harming its own citizens. We can see this inequality in different aspects of our nation, but especially in our healthcare industry. As individuals and as a nation, we need to acknowledge that this issue is systemic and dangerous. We need to validate and listen the feelings of those who suffer from this issue and work together to create positive change in the system. It is not enough for us to talk about the issue, we all need to take actions. Everyone can help create change for this issue, but we especially need action from lawmakers and healthcare professionals. These prominent figures can create new policies and legislation for more quality healthcare resources for communities of color. We need to consider that this issue is affecting real people's health and well-being. Based on the aforementioned, the American healthcare system currently requires more attention and improvement. Legislators and healthcare professionals who influence training systems should address the issue of racism in healthcare by making resources more accessible, affordable, and culturally competent. This could help the overall issue of racism in America by increasing positive intercultural relations. The general health and well-being of communities of color could improve, subsequently strengthening the population of America. This small but powerful step could help America move towards truly standing as one nation "with liberty and justice for all" (OSOS, n.d.).

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Body Image and Self-Esteem in a Sample of College Alumni: The Need for Compassionate Healthcare in Addressing Obesity

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Obesity and weight stigma are prevalent in society. Patients who have experienced weight stigma often disengage from the healthcare system. Stigma internalization is also associated with negative psychological outcomes and eating disorders. The current study assessed body image and self-esteem ratings in a sample of 214 alumni of Utah Valley University. When results were analyzed based on BMI categories, One-Way ANOVAs found significant differences in participants' comfort with the shape and size of their bodies, comfort with their physical appearance, and overall self-esteem ($P < .001$). The results suggest weight stigma internalization is also prevalent at Utah Valley University. In light of these findings, recommendations for healthcare leaders and providers are discussed to address obesity with empathy and compassion.

Obesity in the U.S.

The prevalence of obesity was estimated at approximately 42% in U.S. adults in 2017-2018 (Hales et al., 2020). In 2013, The American Medical Association recognized obesity as a disease requiring a range of interventions (AMA, 2013). Although a disease classification had the potential to reduce weight stigma by identifying obesity as an accepted medical condition, significant weight stigma continues (Rubino et al., 2020). Additional cultural factors, such as the thin beauty ideal, make addressing the health risks of obesity more challenging for patients and healthcare providers. This paper will give an overview of challenges in the treatment of obesity and assess related challenges in a sample of college alumni.

Health Risks and the Measurement of Obesity

A common way to define obesity has been with the Body Mass Index (BMI), which is a ratio of one's height to weight. BMI categories are defined as follows: below 18.5 is considered underweight, 18.5 to less than 25 falls within the healthy weight range, 25 to less than 30 is classified as overweight, 30 to less than 35 is designated as class 1 obesity, 35 to less than 40 is categorized as class 2 obesity, and a BMI of 40 or higher is referred to as class 3 or "severe" obesity (CDC, n.d.) However, this basic measurement does not consider variations among different racial/ethnic groups, sexes, genders, muscle masses, or age groups. Further, a 2013 meta-analysis by Flegal et al. assessed nearly 2.9 million individuals and 270,000 deaths from 97 studies. The authors did not find significantly higher mortality rates in those in overweight or obese BMI categories. Grades 2 and 3 obesity were associated with significantly higher all-cause mortality, however. Min et al. (2021) found obesity to be associated with cardiovascular mortality when using the waist-to-hip measurement technique for classification. Due to these reasons, in June 2023, the American Medical Association adopted a policy that encourages educating physicians about the limitations of using BMI and the importance of utilizing alternative methods to measure obesity.

Obesity can lead to health consequences primarily due to changes in metabolic processes, resulting in conditions such as hypertension, elevated blood glucose, and dyslipidemia, among other metabolic diseases. Additionally, the mechanical stress caused by obesity can lead to issues like joint strain, reduced mobility, sleep apnea, gastrointestinal reflux, and tissue friction (Fitch & Bays, 2022).

Metabolically healthy obesity (MHO) is a concept rooted in clinical observations, suggesting that some individuals with obesity face a notably lower health risk compared to others. Although there is not a universally agreed-upon definition for MHO, it is often characterized by the presence of normal glucose and lipid metabolism levels, without hypertension (Bluher, 2020). While MHO may not be considered a safe condition, it can guide risk assessment and personalized treatment plans for those considering obesity treatment.

Weight Bias

Common weight biases include assumptions that people with larger body sizes are lazy, unmotivated, incompetent, and lack discipline (Lawrence et al., 2021). Healthcare professionals may express weight bias through incorrectly attributing a patient's health issues to their weight status. Weight bias among healthcare professionals has been demonstrated to influence their decisions regarding medical treatment (Rathbone et al., 2020). Furthermore, the practice of delaying medical treatments until weight loss is attained can result in obese patients being denied crucial procedures like total joint arthroplasty (Blankstein et al., 2023). Healthcare professionals may also treat larger patients in a disrespectful and patronizing manner. Such treatment can be an obstacle towards full participation in the healthcare system via return visits and open discussions with healthcare providers. Such healthcare avoidance can also increase the odds of physical health conditions (Prunty et al., 2023). A literature review found weight bias to be prevalent across the healthcare field including physicians, dieticians, psychologists, nurses, and physiotherapists (Lawrence et al., 2021).

Eating Disorders

The thin ideal of beauty has greatly contributed to the development of disordered eating (Marshall, Latner, & Masuda, 2020). Additionally, thinness is often falsely equated to health status (Treasure & Ambwani, 2021). The lifetime prevalence of anorexia nervosa in the United States has been estimated at 0.80%, 0.28% for bulimia nervosa, and 0.85% for binge-eating disorder (American Psychiatric Association, 2023). There are significantly elevated mortality rates from complications related to anorexia (Mehler & Andersen, 2022). Given the prevalence of eating disorders and the danger they pose, as well as weight stigma, debate exists in healthcare research about the ethics of promoting weight loss (Steinberg & Bohon, 2022). On the other hand, some argue that advocating for weight loss should persist in order to mitigate significant health risks. However, weight loss interventions should focus on making sustainable lifestyle changes, reducing weight stigma, and emphasizing health above weight. Rejecting diet culture and including mental health as an outcome should also be part of quality weight reduction strategies (Cardel et al., 2022 & Cardel et al., 2023). Indeed, programs such as Health at Every Size® and Intuitive Eating have shown benefits for both physical and

mental health (Dimitrov Ulian, et al., 2022; Babbott, et al., 2023). Further, Alimoradi et al. (2019) conducted a meta-analysis of studies that examined the psychological consequences of weight related stigma. Significant associations were found between psychological distress, consisting of depression and anxiety, and weight related stigma.

The current study explored the relationship between BMI and other psychosocial factors such as self-esteem, in a sample of former students at Utah Valley University.

Method

Participants

Following approval from the institutional review board at Utah Valley University (IRB approval #01833), an online survey was sent out to alumni from the Institutional Research Institute at Utah Valley University. After the initial email, two email reminders were sent out. From a pool of approximately 25,000 former students in the database, 10,000 alumni were selected at random. Of those 10,000 alumni, 214 sufficiently completed the questionnaire; participant demographics are summarized in Table 1.

Table 1. Sample Demographics

	N	% of Sample	Mean	SD
Total	214			
Age			31.08	9.93
Female Gender	131	61.2		
Race/Ethnicity (Select all that apply)*				
White	199	93.4		
Hispanic	11	5.1		
Native American	2	0.9		
Pacific Islander	2	0.9		
Other	6	3.7		
Prefer not to answer	2	0.9		

*Note that the figures for Race/Ethnicity do not add up to the sample size of 214 because some participants selected more than oe category.

Measures

The psychosocial questionnaire was partly developed by the researchers and included 30 items related to demographic information, relationship patterns, ADHD symptoms, health and weight status, and confidence.

Dimensions of *body image* were measured with the following items: *On a scale from 0-100 (0=not at all comfortable; 100=extremely comfortable), rate your comfort with body shape, comfort with body size, and comfort with overall appearance.*

Self-esteem was measured with the following item: *I rate my current self-esteem as: (1=lowest self-esteem rating 5=highest self-esteem rating).*

Body Mass Index (BMI) was calculated by using participants' self-reported data on their weight and their height. Participants' weight in kilograms was then divided by the square of their height in meters.

Procedure and Analysis

Upon completion of the survey distribution process, results were analyzed using Qualtrics and SPSS 22. Demographic information was gathered with a summary of descriptive statistics and frequencies. One-Way ANOVAs (analyses of variation) were created by grouping participants by BMI ranges of *healthy*, *overweight*, and *obese*. ANOVAs were conducted to assess mean differences between BMI categories regarding participants' comfort with their body's shape and size. Additional analyses examined group mean differences for comfort with overall physical appearance and self-esteem ratings.

Results

Significant differences were found between BMI groups and mean ratings for comfort with body shape, comfort with body size, comfort with appearance, and rating of self-esteem. The trend was for the obese group to report the lowest psychosocial rating, followed by the overweight group; healthy group reported the highest psychosocial ratings in each category under consideration (see Table 2 on next page).

Table 2. One-Way ANOVA Confidence by BMI Group

		N	Mean	SD	F	Sig.
Comfort with Body Shape	Healthy	85	76.41	21.48		
	Overweight	62	62.69	26.81		
	Obese	44	44.36	26.55		
	Total	191	64.58	27.43	25.06	*<.001*
Comfort with Body Size	Healthy	85	76.64	21.38		
	Overweight	60	59.35	24.03		
	Obese	43	39.53	26.47		
	Total	188	62.63	27.57	36.54	*<.001*
Comfort with Appearance	Healthy	85	78.35	16.07		
	Overweight	60	65.73	22.07		
	Obese	44	45.05	28.37		
	Total	189	66.59	24.98	35.24	*<.001*
Self-Esteem	Healthy	85	3.87	.94		
	Overweight	61	3.39	.95		
	Obese	45	3.13	1.14		
	Total	191	3.54	1.03	9.15	*<.001*

Note: Each comparison between groups was statistically significant as denoted by italicized <.001

Discussion

Previous research has identified multiple physical and mental health risks associated with obesity. The current study examined psychological factors consisting of comfort with body shape, size, physical appearance, and overall self-esteem. Significant differences were found between ratings in all these areas between different BMI groups.

These findings highlight the concerns expressed by Steinberg & Bohon (2022) and Cardel et al. (2022). Individuals have internalized the weight stigma towards their own bodies that is prevalent in society and the healthcare system. Anticipated weight stigma is a reason that individuals disengage with the healthcare system (Puhl et al., 2021). Consequently,

healthcare providers and leaders should work towards eliminating weight stigma and emphasizing compassion when interacting with patients with larger body sizes. Promoting positive body image could accomplish these tasks by helping patients conceptualize their own bodies with love, respect, and appreciation (Aime, et al. 2020). As Cardel et al. (2022) have suggested, healthcare providers can emphasize healthy living habits rather than weight. For example, promoting a diet rich in fruits and vegetables and regular, enjoyable physical activity may motivate patients to engage more with the healthcare system and improve their health. Programs that emphasize body appreciation and self-compassion have been linked to improvements in self-esteem, body image, and overall well-being (Linardon et al., 2021). Healthcare providers can help eliminate weight stigma by considering their own experiences and biases related to weight.

Although this study adds to this topic by comparing body image and self-esteem ratings across different BMI categories in a college-educated sample, there are also limitations to consider. For example, this study may have had a larger response rate if there were funds to incentivize participants. Nonetheless, the response rate is similar to studies that did not employ incentives. Since the participants were alumni of Utah Valley University, the results may not directly generalize to other populations. For example, the participants were somewhat younger than the general U.S. population, were mostly female, and the vast majority were White.

The recent statement by the American Medical Association, acknowledging the potential harm associated with BMI, marks a significant leadership stride toward adopting a more compassionate approach to addressing obesity. To promote a healthier paradigm, policymakers can encourage training programs for healthcare administrators and providers that increase awareness about weight bias in clinical decision-making, patient interactions, and the emotional well-being of patients affected by Western beauty ideals. Incorporating mental health services could provide essential emotional support for such individuals. Further research on the most effective ways to lose weight would give healthcare leaders a more consistent message on how to advise patients. At present, the range of opinions on the most effective methods can frustrate patients and providers.

Conclusions

Obesity and weight stigma are prevalent and can affect both physical and mental health. A traditional model of advising weight loss, without consideration of psychosocial factors, is inadequate. Healthcare leaders and providers should become aware of their own weight biases and adopt policies and practices that promote healthy living and self-appreciation as a standard part of weight management. A more compassionate healthcare system would also be more inviting to the many individuals who avoid engagement for fear of weight stigma. Leaders who establish a more welcoming system for individuals with obesity can create an environment conducive to both physical and mental well-being.

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The Role of Leaders in Firefighter Mental Health

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Members of the fire service have a high incidence of depression, post-traumatic stress disorder, and suicide. These unfortunate circumstances stem from repeated exposure to human suffering, which is a requirement of the job. However, the psychological trauma experienced by firefighters can be mitigated through effective, supportive leadership. Studies show that leaders who foster environments of communication and empathy have teams who report higher levels of psychological wellness than teams whose leaders exhibit a laissez-faire style, show favoritism, or are otherwise uncompassionate. Through increased awareness of the detrimental effects of stoicism culture, and proper training and testing for those in leadership roles, fire department leaders can actually improve the mental health of firefighters within their organizations. Although leaders play a significant role in creating an environment where fire department members lean on each other for support, watching out for each other and discarding the culture of stoicism is the responsibility of every member of the department. Taking this responsibility seriously is a necessity, because with the high incidence of firefighter suicides, lives are quite literally at stake.

Trauma-induced mental health challenges are common among firefighters. These conditions develop from regular exposure to the sick and injured, loss, and other tragedies most people will never witness. Many firefighters do not seek help for mental health problems due to the unspoken, and often subconscious, cultural belief within the field of public safety that a good first responder is one who can witness traumatic events without feeling the psychological effects.

Background and Problem

Untreated depression and post-traumatic stress disorder lead to deterioration of psychological wellness. The suicide rate among firefighters is alarmingly high. More firefighters "die by suicide than in the line of duty"

(Heyman et al., 2018, p. 7), which remains a verifiable statistic even though the Firefighter Behavioral Health Alliance, a national organization that researches first responder mental health, has found that 60% of firefighter suicides go unreported (p. 20). A greater effort must be made by fire service leaders to ensure firefighters feel supported when requiring and seeking psychological care. Simply making counseling programs available to personnel is not enough. Those rising to the role of a leader should be trained to recognize responders in crisis and must foster supportive environments that meet the psychological needs of their subordinates daily.

Thesis Statement

Being present during traumatic events is a professional requirement for firefighters. Because the nature of the job cannot be changed, fire department leaders must aim to buffer psychological trauma by increasing connectedness among crews and eliminating stoicism culture. Leaders must encourage department members to seek professional psychological care when needed and must create an environment that promotes consistent interpersonal support between calls for service.

Too many firefighters remain silent about their psychological struggles for fear of the consequences if they were to admit they were suffering. Dena Ali, a captain with the Raleigh, North Carolina Fire Department, describes this phenomenon, stating, "We're afraid to let other people know, because they might think that we shouldn't be here. There's a big fear that if you express any sort of psychological weakness, you're going to be reported and pulled off the truck" (Calams, 2020, para. 29). Fire service leaders are the first line of defense against this school of thought because, as the ones tasked with monitoring operations both in and out of the firehouse, they dictate what kind of culture is acceptable within their organization.

Literature Review

Findings from numerous studies lead to the same conclusion: suicide and suicidal ideation are a problem within the fire service. A study by the University of Oslo, Norway reported that 28% of operational ambulance personnel believe that life is not worth living, and 10.4% have seriously considered suicide (Sterud et al., 2008, p. 406). Most firefighters also perform emergency medical service (EMS) duties, and it is reported that those who share both firefighting and EMS duties are six times as likely

to attempt suicide than those who work only in a firefighting role (Stanley et. al, 2016, p. 39). Some of this data is found through coordinated studies, and some, as in the case of the Firefighter Behavioral Health alliance, is self-reported (Dill & Loew 2012, p. 19). Regardless of the methods in which data about firefighter suicide is collected and presented, one can see that the situation is dire.

In another study, Abbott et al. (2015) were able to quantify the prevalence of stoicism culture among first responders when researching attitudes on seeking psychological care: only 15% of participants reported having support from peers and management within their organization when it came to seeking professional care for their mental health. Stated another way, this means 85% of respondents reported having no support for utilizing formal psychological resources (Abbott et al., 2015). This is a problem that can be resolved beginning with effective, supportive leadership.

Damien (2019) measured the role commanding officers play in firefighter mental health by surveying firefighters in Florida regarding the leadership style of their commanding officers. These results were weighed against how the firefighters reported their own state of mental well-being. Through these qualitative surveys, a correlation between effective leadership and psychological wellness in the fire service was uncovered. This means that fire service leaders have the power to lessen damaging emotional crises within their agencies.

These findings can be explained by two theories: Weiss and Cropanzano's (1996) affective events theory, which explains that "work-related events cause an emotional response and alter behavior and attitudes" (p.106), and social bonding theory, which states that a lack of social connectedness has a detrimental effect on one's health and well-being (Seppala, 2012). To combine and apply these theories is to say that the nature of a firefighter's work and the tragedy they encounter on a regular basis will be harmful to their mental well-being, and feeling disconnected from those around them will only make these struggles more difficult to deal with. Firefighters who have regular contact with supportive colleagues throughout their workday will benefit from the mitigating effects connectedness has on their state of mind, regardless of the nature of their work. Mitchell (2011) supports Damien's findings and highlights the leader's role when he states that a first

responder who is mentally unhealthy may owe this in part to "inadequate training, unrealistic expectations from leadership, and arbitrary decisions or shows of favoritism" (p. 123). The leadership traits which most negatively affect firefighters have been identified. The key to reducing firefighter suicide and suicidal ideation is to teach leaders how to avoid these pitfalls and create an environment of support and trust.

Alternatives Analysis

Many fire departments, whether independently or through the human resources department of the municipality they serve, offer employee assistance programs to their workforce. These programs provide a hotline for department members to call to begin the counseling process, should the firefighter identify this as a personal need. Another formal assistance method is sponsorship of a critical incident stress debrief (CISD). Mitchell (n.d.) describes a CISD as, "a structured group story-telling process combined with practical information to normalize group member reactions to a critical incident and facilitate their recovery" (para. 3). Engaging in these conversations allows firefighters to discuss an event as a group in the presence of a trained mental health professional, giving them the opportunity to examine an event to which they responded. However, simply because employee assistance programs are available does not mean firefighters will utilize them, especially in a culture where they are made to feel as if nothing should bother them. If leaders permit stoicism culture to exist in their department, firefighters will forgo attending formal CISD sessions to keep up appearances in the workplace. Jeannette and Scoboria (2008) proposed the idea of one-on-one peer debriefings (p. 318) and found this method of intervention to be favored quite strongly by firefighters (p. 321). Developing strong leaders in the fire service who support the emotional well-being of their teammates is a worthy investment.

Recommendations

Stoicism is an outdated ideal that supports a culture of silence. While the guidance of professionals is important when experiencing a mental health crisis, day-to-day interactions build a more solid foundation of mental wellness among firefighters. Having this foundation encourages those who need professional care to seek it. The responsibility then falls to the leaders for fostering such environments of connectedness and support.

Leaders should be trained not only to recognize looming mental health crises within their ranks but must also be trained to act on these observations. Damien's (2019) subjects reported "leading by example, open communication, and honest, empathetic, and continued learning" (p. 150) as the leadership traits which best support psychological resilience. These traits must be cultivated in all fire service personnel, but most importantly, those in leadership roles.

Damien (2019) determined that firefighters who viewed their leaders' abilities in a positive light reported higher levels of psychological well-being, and those who had a poor opinion of their leaders' abilities reported lower levels of psychological well-being.

The first step in making effective use of this knowledge is to make it widely known. From the day they are hired, emergency services leaders should understand that they play a significant role in the mental well-being of their subordinates. Furthermore, fire departments should partner with counselors and psychologists to offer department leaders not only reactionary critical incident stress debriefings but continuous emotional intelligence training to support the well-being of their crews.

Conclusion

The studies and psychological theories cited substantiate that firefighters value peer support and affirm that strong leadership builds psychological resilience. Reducing instances of firefighter suicide and suicidal ideation is a team effort, but the team must be led to change the culture of the fire service from one where stoicism is idealized to one in which speaking out about mental health challenges is encouraged.

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Psychological Perceptions in College Student Athletes After Injury

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College student athletes play significant roles as leaders in both their local communities and sports communities. Student athletes are faced with numerous stressors that combine with an intrinsic higher risk of injury from engaging in contact sports, increases their susceptibility to depression, as well as a higher potential for pain medication addiction (Evans et al., 2012; Mellalieu et al., 2009; Nippert & Smith, 2008; Park et al., 2023). We conducted a single-institution, cross-sectional survey examining pain management and psychological perceptions of weakness and mental health in college athletes. Student athletes felt that pain made them weak. They also perceived that others viewed them as weak due to their pain. These student athletes also felt additional stressors due to peer pressure to push through their pain. Alarmingly, these types of stressors caused 92.3% of student athletes to have suicidal or self-harm ideation; therefore, there is a strong need for educational interventions for college athletes related to pain management, as well as support from the community so these athletes may continue to serve as leaders on and off the playing field.

College student athletes serve as leaders and influencers not only within their sport, but also within their surrounding community. College student athletes are under intense pressure to perform in their given sport and also perform at high levels academically in order to maintain eligibility to play their given sport. In addition to the rigors of academics, student athletes may also face the added pressure of maintaining scholarships to financially provide for their education and future (Lopes Dos Santos et al., 2020; Mitchell et al., 2014; Putukian, 2016).

In addition, other common stressors college athletes are faced with are injuries sustained during performance of college sports and their effects. Participating in athletic sports inherently increases the risk of significant injuries to an athlete of all ages (Hsu et al., 2017; Hughes et al., 2023; Martínez-Gómez et al., 2021). Injuries from playing college sports can have long-term and unintended consequences (Hughes et al., 2023; Martínez-Gómez et al., 2021). In fact, studies have shown that athletes in general have increased rates of injury that predispose them to adverse mental health conditions including depression and fear of reinjury (Chang et al., 2020; Hsu et al., 2017; Pfirrmann et al., 2016; Putukian, 2016; Wolanin et al., 2015). Life stressors and a history of injury can cause significant adverse effects to a student athletes' self-esteem, identity, and ultimate recovery (Park et al., 2023). Studies have also shown the devastating psychological effects of injury in athletes including devalued self-worth, feeling cheated, eating disorders, and even suicidal ideation (Park et al., 2023; Putukian, 2016).

Due to negative effects that stem from injuries, proactive pain management as well as physical and mental self-care, is imperative in getting college athletes back (and keeping them) on the field. Unfortunately, student athletes are often times left without effective pain management strategies. Injuries may put athletes at higher risk for long-term use and even abuse of common pain management medications, including opioid medication (Baker et al., 2021; Jacotte-Simancas et al., 2021; Martínez-Gómez et al., 2021).

Initial opioid exposure may result from medical prescriptions as a result of injury, chronic pain, or post-surgical procedures (Liu & Lin, 2019). Many individuals may even obtain prescription pain medication (opioids) from their family or friends (Volkow & McLellan, 2016). Exposure to opioids for extended periods of time increases the potential risk for misuse, abuse, and dependence; therefore it is essential to ensure that patients who need these types of medications are only exposed to them for the least amount of time possible and at the lowest effective dose in order to help reduce the risk of opioid abuse and/or dependence (Yaster et al., 2020). Efforts to encourage pain management without the use of opioids is a benefit not only patients, but also to society as a whole (Volkow & McLellan, 2016).

The purpose of this study was to understand how a student athlete's pain from injury affects their overall physical and mental wellbeing. Similar to related literature, it was hypothesized that student athletes would have higher rates of injury and a lack of effective pain management. It was also hypothesized that students' injuries and stressors would increase their risk for adverse mental health conditions, such as depression. Furthermore, there is a dearth of recent literature especially considering that these students are dealing with a post-pandemic era that brought about increased use of opioids, increased suicidal ideation, and worsening mental health (Son et al., 2020). Student athletes are examples and leaders to all within the athletic community and the student population in general. Therefore, student athletes' physical and mental wellbeing after injury should be of paramount importance.

Methods

A descriptive cross-sectional study was conducted at a single academic institution from January-May 2022. After institutional review board approval, students were emailed an anonymous Qualtrics questionnaire which included 44 multiple- choice questions and five-point Likert scale statements. This questionnaire was created by experts in the field and utilized validated survey questions from the Beck's Depression Inventory scale (Wang & Gorenstein, 2013). The questionnaire was also pilot tested in the intended population.

The questionnaire assessed attitudes and perceptions of pain management following injuries incurred as a student athlete. Non-responders were sent one follow up email reminder. Demographic and descriptive statistics were calculated on categorical variables using the chi-squared tests or Fisher's exact test, as appropriate. Data analysis was completed using Stata 17.1 software (College Station, TX).

Results

Forty-two participants were included in this study. The majority of students (72%) were female. Forty one percent were sophomores. Lower extremities were the most common anatomical location for injuries lasting longer than two weeks ($p=0.03$). All students (100%) reported a history of significant injuries needing pain management (Appendix A).

No differences were found by sex in reporting consistent verses intermittent pain (p=0.47). Many student athletes (55.3%) reported having pain for longer than three months. Five percent of athletes reported that they "have been in so much pain that they thought of taking their own lives." But when asked if they had "thoughts that you would be better off dead or of hurting yourself in some way," 92.3% of students affirmed that they had a history of suicidal or self-harm ideation with 17.95% of respondents reporting thoughts of suicide or self-harm nearly every day (Appendix B). The timeline between injury and suicidal or self-harm ideation was not established; however, a history of thought patterns were established from participant responses.

When asked about their perception of weakness in themselves after injury, 41.02% of students agreed that "having pain made them weak." A majority (56.4%) of students reported that "having pain makes [them] perceived by others as weak." Many students (64.1%) also felt "that others (coaches, teammates, friends, family) expect [them] to push through the pain." There were no significant differences in these psychological perceptions of weakness between males and females (self-perception of weakness p=0.33, perception from others p=0.46, push through pain p=0.75) (Appendix B).

Discussion

This study is unique in suggesting an inherent risk in potential for long-term mental health concerns including suicidal ideation, eating disorders, depression, and opioid misuse among college athletes with injuries. It has been noted that depression and suicidality were risk factors in the literature (Evans et al., 2012; Mitchell et al., 2014; Rihmer & Rihmer, 2019), and this study was consistent in that it also suggested instances of depression and suicidality because of pain in 5% of students. Furthermore, 92.3% of students affirmed that they had previously experienced suicidal or self-harm ideation. This suggests that while student athletes may not have attributed depression to their injury, their injury may have led to thoughts of suicide or self-harm or may have increased the risk in those already harboring these ideations. It is also extremely concerning that younger student athletes (sophomores) as well as females in this study were more likely to utilize opioids and had higher rates of depression resulting from injury. While there is a lack of longitudinal studies focused

on athletes and future opioid misuse and abuse, it is known that injuries, especially traumatic brain injuries, can lead to future opioid, alcohol, and cannabis misuse (Jacotte-Simancas et al., 2021; Baker et al., 2021).

In addition, student athletes exhibited signs of increased stress due to a more negative self-perception after an injury. Just over 41% of student athletes reported that they felt week after an injury, and 56.4% perceived that other individuals viewed them as weak. In addition, 64.1% of these student athletes felt pressure to push through pain. This data remains consistent with data described in similar literature.

Dr. Margot Putukian, Chief Medical Officer of Major League Soccer, Director of Athletic Medicine, and Head Team Physician at Princeton University described the following: "The psychological response to injury can trigger and/or unmask mental health issues including depression and suicidal ideation, anxiety, disordered eating, and substance use/abuse. There are barriers to mental health treatment in athletes. They often consider seeking help as a sign of weakness, feeling that they should be able to 'push through' psychological obstacles as they do physical ones. Athletes may not have developed healthy coping behaviors making response to injury especially challenging" (Chang et al., 2020; Hsu et al., 2017; Patel et al., 2010; Putukian, 2016).

These injury induced stressors caused feelings of weakness, both internally and externally, as well as increased pressure to push through the pain instead of proper healing. This has the potential to have devastating physical and psychological effects on student athletes (Lopes Dos Santos et al., 2020). Student athletes represent a unique population; they are strong pillars in their local and school communities and are often involved in various leadership roles and positions. Therefore, unhealthy pain management and unhealthy coping behaviors have the potential to impact others as student athletes are often a visible example to others within their distinct communities through their leadership and talents.

Limitations

This study is limited by a small sample size at one academic institution which limits the generalizability of the results. Furthermore, the study is based on self-reported data, which could potentially lead to bias by students

giving socially desirable responses, however, this bias was mitigated by the survey designed to be anonymous and confidential.

Leadership in Athletes

While student athletes are leaders in their communities it is also true that their communities need to be responsible for ensuring that they have proper access, knowledge, and education regarding their mental health as well as pain management from injuries sustained during the performance of their sport. Furthermore, student athletes can also serve as leaders to those in their respective communities (e.g. coaches, fellow athletes, trainers, other students, spectators, etc.) through their examples of obtaining necessary assistance for pain management and/or coping strategies for mental health concerns. When athletes lead through the example of proper self-care of both their physical and mental health, they contribute to a culture of healthy life practices, positive relationships, and become positive examples to others. They will then not only stand as pillars of elite athleticism but also as healthy individuals.

Conclusion

This study suggests that there may be room for educational interventions to ensure that injuries sustained during a student's athletic career do not become a life-long catalyst for chronic pain, addiction or medication misuse, and other long-term mental health conditions. Furthermore, it suggests that as athletic leaders on and off the field, student athletes have the opportunity to lead the charge in ensuring peer support of teammates and other students to prevent opioid addiction and suicide.

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Appendix A

Population Demographics

		Males (n=11)	Females (n=28)	Chi2 pvalue
Year in School	Freshman	2 (18%)	2 (50%)	p=0.07
	Sophomore	5 (45%)	11 (39%)	
	Junior	4 (36%)	3 (11 %)	
	Senior	0 (0%)	10 (36%)	
	Graduate school	0 (0%)	2 (7%)	
What sport do you play on your university's extramural team?	Basketball	0 (0%)	2 (7%)	p=0.03
	Baseball	2 (18%)	0 (0%)	
	Cross Country	1 (9%)	1 (3.5%)	
	Golf	0 (0%)	1 (3.5%)	
	Soccer	1 (9%)	15 (54%)	
	Softball	0 (0%)	2 (7%)	
	Track and field	6 (55%)	6 (21%)	
	Volleyball	0 (0%)	1 (3.5%)	
	Multiple sports	1 (9%)	0 (0%)	
How many times have you sustained serious injuries (where your pain lasted longer than 2 weeks) that affects your abilities to perform your sport?	None	2 (18%)	3 (11%)	p=0.14
	One	2 (18%)	16 (59%)	
	Two	5 (45%)	5 (19%)	
	Three	2 (18%)	3 (11%)	

Appendix B

Psychological Perceptions After Injury, by Sex

		Males	Females	Pvalues
Q: Thoughts that you would be better off dead or of hurting yourself in some way	Not at all	1	2	0.71
	Several days	2	2	
	More than half the days	6	13	
	Nearly every day	2	5	
Q: Have you ever been in so much pain that you thought of taking your own life?	Never	10	25	0.19
	Sometimes	0	2	
	Often	1	0	
Q: I feel that I am weak if I have pain.	Strongly disagree	2	1	0.33
	Somewhat disagree	1	7	
	Somewhat agree	4	10	
	Strongly agree	1	2	
Q: I feel that having pain makes me perceived by others as weak.	Strongly disagree	0	1	0.46
	Somewhat disagree	3	2	
	Somewhat agree	5	11	
	Strongly agree	2	4	
Q: I feel that others (coaches, teammates, friends, family) expect me to push through the pain.	Strongly disagree	3	4	0.75
	Somewhat disagree	1	2	
	Somewhat agree	2	2	
	Strongly agree	5	13	

*Significance determined at $p < 0.05$

Healthcare Leaders Support Employees During the COVID-19 Pandemic

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Healthcare providers (HCPs) and healthcare workers (HCWs) risked their lives and mental health throughout the COVID-19 pandemic. The global health disaster demonstrated the importance of healthcare facilities ensuring the safety of their employees, patients, and community. Efforts made by healthcare leaders to help HCWs cope with the stresses include in-person support groups, engagement with nutritional and exercise efforts, and sleep. This paper will reference quantitative and qualitative studies conducted throughout the pandemic to provide suggestions for implementing leadership in healthcare facilities, including improvements in job satisfaction and mental health behaviors among HCWs.

At the beginning of the COVID-19 pandemic, leaders understood that the unfolding pandemic would be stressful and wanted to ensure that healthcare workers (HCWs) were supported. After the first case was announced, the top priorities for leaders in healthcare facilities were to keep hospitals open, keep employees and patients safe, and provide communication and resources for support. The unknown nature of the virus and the environmental conditions caused HCWs to experience long-term mental health consequences.

The COVID-19 pandemic caused different types of stress among HCWs. These stresses include mental and behavioral health problems, separation from family and support systems, a higher risk of contracting the virus and possibly dying, and long working hours with limited resources to keep them safe (Wu et al., 2021). Some of these led nurses to leave the healthcare industry. Studies published since the start of the global pandemic investigated job satisfaction, communication skills, and compassion fatigue

(Goktas et al., 2022; Gonzalez et al., 2020; Gaiser et al., 2023). Nurses and doctors became burnt out and overworked throughout the pandemic due to long shifts, shortages, and lack of knowledge to treat a new virus. HCWs were encouraged to participate in the wellness tips mentioned in this paper and found that the methods were effective in handling the pandemic's new stress.

This work reviews quantitative and qualitative studies conducted throughout the pandemic to discuss the various methods to improve job satisfaction and mental health behaviors among healthcare workers. The topics include mental health and well-being, supporting employees through the dark days of the pandemic, and future research.

Employee Support

In the early stages of the COVID-19 pandemic, healthcare leaders began discussing the well-being of patients, families, and employees (Gonzalez, 2020). According to Wu et al. (2021), "The pandemic introduced a unique set of threats to the emotional well-being of healthcare workers. Most prominent was a universal sense of fear and anxiety for one's health, and that of family members" (p. 712). At the start of the pandemic, the responses of healthcare providers ranged in fear and uncertainty, fear of getting sick, and mental health stress (Torales et al., 2020). The recommendations included quarantine guidelines, safety precautions for healthcare workers to practice while caring for patients, and methods not to contract the virus (Wu et al., 2021). HCWs faced such a loss of control in knowing how to treat COVID-19 patients; it was difficult to know how to handle these challenges.

Due to the risks that HCWs faced, employee mental health became a concern, and studies indicate that they had higher mental health concerns compared to the general U.S. population (Marshall et al., 2022; Gonzalez et al., 2020; Gaiser et al., 2021; Wu et al., 2021; Young et al., 2021). Young et al. (2021) found that HCWs were prone to suicide ideation, major and mild depression, anxiety, and post-traumatic stress disorder (PTSD). These mental health concerns impacted HCWs' daily lives with no knowledge of the resources available to them. With this factor in mind, healthcare facilities needed a strategic approach to address the concerns.

Some healthcare facilities took the initiative to approach employee mental health before the first case of the virus was announced (Wu et al., 2021; Marshall et al., 2022; Gonzalez et al., 2020; Gaiser et al., 2023). One of the programs was a 'buddy system' to monitor employee well-being by having a supervisor check in on their team members individually (Gaiser et al., 2023). Some efforts included in-person support groups (with social distancing precautions), engagement with nutritional and exercise, and sleep efforts (Wu et al. 2021). Considering these challenges, healthcare leaders can proactively support their employees during future crises. By taking these steps, healthcare leaders can ensure the safety and well-being of their employees and provide high-quality care to those who need it most.

Mental Health and Well-Being

The common theme in this work was the stresses HCWs experienced due to changes that happened at the start of the COVID-19 pandemic, including loss of control—e.g., patients dying, safety risks for HCWs and patients—long shifts, and an on-going shortage of nurses from before the pandemic. According to Ahmad et al., (2023), leaders in healthcare organizations must be aware of external and internal elements that impact performance, and leadership has more control over the culture within the company (Ahmad et al., 2023). Ahmad et al. acknowledged that HCWs could no longer keep their work and home lives separate, which sometimes affected performance. Healthcare leaders understood the elements out of their control to empower employees to continue caring for patients, create accountability, and attend to other concerns.

Dark Day Support

Some employee benefits include an employee assistance program to aid with different stresses. Wu et al. (2021) mentioned a proactive approach to ensure employees have the necessary resources during stressful events. In 2011, Johns Hopkins Hospital (JHH) created an employee support program called RISE, "with the original mission of providing confidential, timely peer support to employees that encounter stressful, patient-related events" (Wu et al., 2021, p. 711). JHH noticed that HCWs do not call for help when experiencing distress, and employees would only call when a supervisor recommended calling the program for support (Wu et al., 2021). In comparison, RISE made rounds to each department at the start and end

of each shift to prevent HCWs from experiencing distress throughout the pandemic. Wu et al. acknowledged that, "this method of support reduced the need for a unit director or worker to call and request support" (Wu et al., 2021, p. 713). Acknowledging the RISE program, employees seemed more willing to take initiative in their mental health in a safe and confidential environment.

A system mentioned earlier is the 'buddy relationship system' between managers and employees. Gaiser et al. (2023) recommend that healthcare leaders "implement and encourage supportive 'buddy' relationships, managerial debriefs, environmental well-being supports, and rapid access to brief mental health interventions for HCWs" (p. 53S). If managers checked in on their employees and followed through without obligation, employees would likely talk more. Gaiser et al. (2023) mentioned, "Trauma in populations overwhelmed by large-scale emergencies can trigger an increase in mental health problems among HCWs, who face high levels of exposure to disaster and low levels of access to care" (p. 51S), which also relates to the stats provided earlier. With this in mind, studies shared that "in-person, real-time support has been one of the most effective means for engaging hospital workers" (Gonzalez et al., 2020, p. S169; Wu et al., 2021; Gaiser et al., 2023). HCWS must have an internal support system because this way, their peers will understand what they are feeling about their experiences.

At some healthcare facilities, psychiatric nurses made rounds in the hospital to provide "in-person support, including meditations, empathic listening, encouragement, and support resource flyers" (Gonzalez et al., 2020, p. S169). In addition to psychiatric help, occupational therapists and chaplains were available to provide physical and spiritual support to HCWs (Gonzalez et al., 2020). One of the wellness tips Gonzalez et al. (2020) included was REST: relaxation, eating, sleep, and talk. Healthcare industry leaders wanted to ensure that medical personnel cared for themselves to prevent burnout. The acronym stated earlier was an effort to encourage employees to be prepared for the unknown (Gonzalez et al., 2020). By implementing the wellness tips, the organization encouraged employees to find something to do outside of work to have a break, such as going on hikes or other recreational activities (if allowed in their local communities).

Protection of mental health became a highlight throughout the pandemic, especially in the United States (Gonzalez et al., 2020, p. S169; Wu et al., 2021; Gaiser et al., 2023). Some organizations created programs to address the importance of maintaining basic needs to shelter their mental health in high-stress situations like the pandemic, protests, and other events (Wu et al., 2021; Gaiser et al., 2023; Gonzalez et al., 2020). These basic needs include relaxation, nutrition, physical activity, sleep, and social interaction. They encouraged employees to talk amongst themselves for support and to keep tabs on how everyone was doing throughout the shift; if they got stressed, they were encouraged to take some time to do some breathing exercises, which helped them to proactively do what was needed to help their patients (Wu et al., 2021; Gaiser et al., 2023; Gonzalez et al., 2020). A support system has been mentioned throughout this work, demonstrating the essential elements of empowerment with one another, and encouragement not to give up.

Leaders sent recommendations to HCWs to keep in touch with those they cared about on their day off, meditate to help process and prepare for whatever they may face when it is time to head back to work, and take a pause to recharge—such as saying a prayer, thinking of things they are grateful for, and exercising (Gonzalez et al., 2020). Therefore, the 'buddy' relationship, on-staff psychiatric nurse support, and RISE programs are effective methods for healthcare leaders to consider supporting their employees with their well-being (Gaiser et al., 2023; Wu et al., 2021; Gonzalez et al., 2020). By implementing a system that employees can see acted upon daily, the ripple effect reaches others who need the benefits of the programs.

Conclusion

During the COVID-19 pandemic, healthcare leaders faced the challenge of supporting their employees' physical and mental well-being amidst the strenuous conditions in healthcare facilities. These challenges included long working hours, increased risk of contracting the virus, and mental health problems. Nurses had a lack of knowledge to treat COVID-19 patients, increased anxiety, and loss of control. Healthcare leadership has a crucial role in supporting their employees during this time.

The suggestions shared in this work include in-person support groups, wellness programs, and onsite mental health resources. Quantitative and qualitative studies conducted throughout the pandemic emphasize improving healthcare workers' job satisfaction and mental health behaviors. By implementing the methods discussed in this paper, healthcare facilities can create a safe and supportive environment for their healthcare workers, enabling them to continue providing excellent care during these challenging times.

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Coaching and Leadership in Medicine

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Coaching, a thought-provoking partnership, is a leadership style that can be characterized by openness, unconditional positive regard, a non-judgmental attitude, a growth mindset, and authenticity. The coaching approach uniquely focuses on assisting a client in identifying and pursuing their individual beliefs, values, strengths, and goals through powerful questions and empathetic listening. The use of coaching skills in the field of medicine is a current frontier of research. Thus far, coaching has been identified as a potential approach to relieving physician burnout, improving chronic disease management, and enhancing the patient-physician relationship. The implementation of coaching skills into the healthcare system may equip physicians with the skills needed to revolutionize the quality of care delivered in the United States healthcare system.

As a unique approach to leadership development, coaching is a thought-provoking partnership that has not been well characterized empirically. Yet, thousands of individuals have shared their testimonials of the power of coaching. Coaching can occur in formal one-on-one sessions involving a client and a coach or can be more broadly referred to as a stylistic approach to leadership (Jones, 2021). The use of coaching principles has been described as "eye-opening," "introspective," "inspiring," and "life-changing" (Sorensen Center, 2022). Although coaching can be considered a relatively young profession, it has demonstrated rapid growth over the past decade (Bluckert, 2004). Having been conceived in the business world, it is rapidly expanding into other fields such as higher education and medicine. The purpose of this paper is to define coaching, introduce coaching methodologies, and describe how coaching can impact the healthcare industry.

What Is Coaching?

Because defining coaching can be difficult due to its unique and arguably revolutionary qualities, a variety of definitions have emerged to describe the coach-client relationship. A helpful initial approach to characterizing this thought-provoking partnership is to establish how coaching compares to more well-known and related fields. For example, the Sorensen Center for Moral and Ethical Leadership at Brigham Young University (BYU) is the first institution to train and employ undergraduate students as peer leadership coaches. They define coaching as "a partnership between coach and client that focuses on personal goal setting, self-development, potential outcomes, and actionable steps for creating a more positive future. Coaching is not mentoring, counseling, therapy, training or teaching" (Sorensen Center, 2022). The BYU definition of coaching is helpful when relationships individuals may be familiar with are used to provide context for defining the parameters of coaching.

For example, mentoring is a relationship established between an experienced individual and a less experienced mentee who desires a similar status as obtained by the mentor. The mentoring relationship is founded on the help or advice provided by the mentor (Mentoring, n.d.). Although both coaching and mentoring are designed to help individuals achieve untapped potential, coaching does not necessarily include giving advice. Instead, the coaching approach assumes that the client can discover their own answers if they are asked the right questions (Crowe Associates).

Another comparison can be drawn between coaching and therapy, more specifically psychotherapy. Psychotherapy requires medical training to provide healthcare to those with mental illnesses or emotional difficulties (Parekh & Givon, 2019). While coaching can be paired with psychotherapy, coaching does not involve the treatment of illness or trauma. Rather, coaching is forward-looking and focused on goal setting in relation to personal development.

Finally, teaching is done in individual or group settings with the purpose of "imparting knowledge or skill" (Teaching, n.d.) from a knowledgeable teacher to education-seeking students. In comparison, coaches do not lecture or tutor; rather, they ask questions that promote reflection and creativity for the client to discover answers for themselves (Crowe Associates, n.d.).

While mentoring, therapy, and teaching are each essential in their respective domains, coaching stands alone as a forward-thinking, creative, client-centered, tailored approach to assisting individuals in reaching their full potential as leaders. The International Coaching Federation (ICF) has created a definition that encapsulates this vision. Founded in 1995, the ICF is currently the most widely accepted organization that provides both training and certification for professional coaches. The ICF defines coaching as "partnering with clients in a thought-provoking and creative process that inspires them to maximize their personal and professional potential. The process of coaching often unlocks previously untapped sources of imagination, productivity, and leadership" (ICF, 2023). Coaching, by nature, assumes that all individuals have goals they hope to achieve or challenges that need to be overcome. Clients, with the help of a coach, determine a personal path that will result in more personal or professional fulfillment. The role of the coach is to use listening skills and ask questions to promote the development of the client.

Principles of Coaching

Although there are a variety of applications of coaching, including in personal relationships, work meetings, or coaching sessions, there are common principles that characterize the coaching approach to leadership. For the purposes of this paper, we will refer to the five principles identified by Dr. Rebecca Jones in her book "Coaching with Leadership in Mind" (2021). Her five central principles of coaching were identified as openness, unconditional positive regard, non-judgmental attitude, growth mindset, and authenticity.

Openness

The term *openness* is well-known to be associated with the Big Five personality traits which have been used in organizational behavior studies to investigate the relationship between personality and job fit (Zillig et al., 2002; Barrick & Mount, 1991). The Big Five defines openness as an individual's motivation to engage in learning experiences as well as their natural ability to learn. In this manner, openness is closely associated with cognitive processing and not behavioral processing (Zillig et al., 2002). Openness includes "being imaginative, cultured, curious, original, broad-minded, intelligent, and artistically sensitive" (Barrick & Mount, 1991, pg. 5). Coaches need to develop this kind of openness as defined in the Big Five

to be genuinely curious about their clients and have a general desire to learn more about them. It is understood that unless a coach asks, they do not understand the client (Jones, 2021). This curiosity fuels the coaching experience through open-ended, powerful questions that facilitate the client in being introspective and creative.

As openness is classified as a cognitive process rather than behavioral or emotional, coaching can similarly be described as cognitive processing-based interaction or an imaginative, creative, and broad-minded approach to problem-solving. One goal of a coaching session is to explore clients' existing viewpoints on a problem before reflecting on their unique values and belief systems to discover new frames of reference. Although coaching sessions often result in behavioral changes for the client, this coaching relationship is focused on the cognitive aspects of a client's problems, goals, or challenges. It is essential that behavioral changes are predicated on cognitive changes, or frameshifts, to be sustainable for the client (Jones, 2021).

Openness is not only required for the coach but is also needed for clients. Clients must choose to be open to exploring their thoughts and engage in the creative process of problem-solving. It should be noted that although openness is evaluated as a natural trait according to the Big Five, openness as a personality trait can be developed over time (Jackson et al., 2012). Any individual can, therefore, potentially benefit from the coaching experience as they develop their openness to the coaching experience.

Unconditional Positive Regard

Because coaching approaches challenges and goals that are personal to the client, when a coach maintains an underlying unconditional positive regard, they cultivate an atmosphere of trust that is required to explore the challenging, uncomfortable, or difficult thoughts a client brings to a session. This positive regard is a warmth and care for the client that is not associated with personal gratification (Rogers, 2020). In other words, a coach cares for a client independent of the client's thoughts or behaviors. This type of care is rooted in the client's unconditional value innate in their being that is full of potential (Jones, 2021). A coach works under the assumption that the client is creative, resourceful, and whole as challenges and goals are discussed (Elsey, 2017).

It is in a setting of positive regard that a client is permitted to have and interpret their own feelings and experiences. As a leadership approach, coaching is powerful in promoting universal acceptance where all can feel heard and validated. In a coaching session, these safe spaces create opportunities for a coach to challenge assumptions or assist in shifting clients' views that promote the behavioral changes associated with the coaching experience.

Non-Judgmental Attitude

An unconditional positive regard is closely related to non-judgmental attitudes. Coaches naturally view what the client is sharing through a lens founded on personal perspectives and lived experience. Maintaining a non-judgmental attitude sharply contrasts with the natural human tendency to judge other thoughts, ideas, or emotions. When humans make judgments, they are often rapid and use decisional shortcuts that are based on heuristic strategies or cognitive biases (Blumenthal-Barby & Krieger, 2015). Although one may have accurate beliefs about their own circumstances, these may be inaccurate in others' related circumstances. Even if the belief is correct, the coach may know little about the situation (Fischhoff & Broomell, 2020).

Due to the nature of judgements, advice-giving is limited in coaching because of its tainted or restricted view regarding the client's situation. Instead, the use of questions sparks reflection and exploration to access the client's individual skills and insights that are just not yet fully realized (Gazelle et al., 2015). Like unconditional positive regard, a non-judgmental attitude promotes a safe environment built on trust between coach and client.

Growth Mindset

The purpose of coaching is to recognize, identify, and bring out the potential of the client. To do this, it is important for both the coach and client to have what Carol Dweck refers to as a *growth mindset* (Dweck, 2009). Like openness, the growth mindset views talents and abilities as something that can be developed through effort and practice rather than being fixed or immutable (Richardson et al., 2021). These talents and abilities will be unique to each client and should set the tone of the goals established by the client. Using a growth mindset, the client brings

their challenges and goals to the coaching session with an openness to try new approaches or find new frames of reference. According to growth mindset, the full potential of the client is unknown if the client determines to approach their goals with dedication and effort (Jones, 2021). Therefore, a coach acts to support the client in setting the client's own goals but never limits the vision of the client. When both coach and client possess an openness to new ideas and a growth mindset, coaching sessions help clients unlock their unrealized potential.

Authenticity

Authenticity, as the final principle of coaching, plays a crucial role in creating a unique and genuine relationship between coach and client as each seeks to be true to who they are. Brenè Brown said it this way: "Authenticity is a collection of choices that we have to make every day. It's about the choice to show up and be real. The choice to be honest. The choice to let our true selves be seen" (Brown, 2010). In a coaching relationship, the client must be authentic or true to themselves. All the clients' feelings, thoughts, strengths, passions, and weaknesses are brought to the session. Through verbal and nonverbal cues, the coach can learn what comes naturally for the client and what goals are aligned with their client's values, beliefs, and characteristics. Because each client is unique, the outcome of each coaching session varies with each client, effectively tailoring the experience to each individual. A coach must be open to the directions that the client chooses to take in the session, effectively honoring the client's agency. Although the coach may not necessarily agree with the decisions of the client, they can often focus on validating the feelings of the client as their thoughts and experiences are real and impactful. Even though the coach supports the client's unique and authentic self in every circumstance, the coach should also be true to themselves by responding in ways that are genuine for the coach (Jones, 2021). It is through authenticity that each coach will have their own style of coaching because of their own unique personality and coaching preferences.

Coaching as Leadership

When individuals are equipped with the coaching principles of openness, unconditional positive regard, non-judgmental attitude, growth mindset, and authenticity, they become better leaders. They are more

prepared to foster genuine relationships of trust, cultivate non-judgmental spaces, and help others feel heard and valued. Those who develop their coaching skills are better equipped to work with others to confront challenges, make positive changes, and achieve untapped potential.

Leadership and Coaching in the Medical Field

Coaching, as a unique approach to leadership, may play a role in improving the U.S. healthcare system. One of the greatest contemporary challenges in U.S. healthcare is improving the quality of care delivered to patients (Shi & Singh, 2022). Quality care can refer to both the efficacy of treatment and the overall patient experience during diagnosis, treatment, and follow up. Current and future healthcare leadership will need to grapple with the difficult task of navigating a complex healthcare system to approach the challenges associated with delivering high-quality care that patients deserve (Warren & Carnall, 2011). Coaching is a leadership tool that can assist healthcare professionals to effectively transition into an improved, twenty-first century, quality care (Henochowicz & Hetherington, 2006).

Current State of Medical Leadership

Medicine in the United States has rapidly developed from its more primitive origins that prevailed even into the 1800s where physicians traveled via horse and buggy to the home of the patient or where clergy men of the church provided care in a style that anteceded hospitals. Rapid development of medical practice over the past two centuries in the U.S. has resulted in an industrialized and corporatized healthcare system that delivers healthcare differently than any other country. Currently, the U.S. healthcare system is in an era of healthcare reform focused on decreasing costs, expanding access, and improving quality.

Today, well-regulated, evidence-based medicine is provided in technologically advanced hospitals and outpatient centers by well-educated and well-respected physicians (Shi & Singh, 2022). Physicians attend at least four years of rigorous medical education before advancing into intense three to five years of additional training in a residency program which centered in a field of competency. Traditionally, physician career development is centered on advancing academic knowledge and mastering technical skills. These medical training programs produce well-educated,

competent, and effective physicians. Currently, leadership development or softer, less technical skills are limited in their implementation (Warren & Carnall, 2011). As medical education programs are competitive and demanding to even matriculate into, they are inadvertently creating a medical culture that places value in perfectionism. Additionally, the long, intensive, and poorly compensated training programs previously described inadvertently place value in delayed gratification. Finally, high professional expectations lead to physicians not sharing or addressing their personal needs, leading to a denial of personal vulnerability (Gazelle et al., 2015; Miller & McGowen, 2000; Wallace et al., 2009). These program characteristics are considered necessary for physician competency and have great value. An additional focus on leadership development can have significant impacts on quality care delivery.

One piece of improving the quality of care can be found in the patient-physician relationship. The trust required for this relationship requires both the competencies developed in medical training and character that can be found in good leadership. This call for leadership development in medicine connects healthcare back to its primitive roots (Valentino & Pavlica, 2016). The Hippocratic Oath that has been taken by physicians for centuries emphasizes the potential impact of leadership in medicine: "Warmth, sympathy, and understanding may outweigh the surgeon's knife or the chemist's drug…I will remember that I do not treat a fever, chart, a cancerous growth, but a sick human being" (Lasagna, n.d.). Physicians who develop strong values and belief systems, as implied by the Hippocratic Oath, will be equipped with the leadership tools necessary to navigate the healthcare system complexities to improve healthcare quality (Henochowicz & Hetherington, 2006). Coaching may be the mechanism by which physicians can develop their values and belief systems and more fully realize their role as leaders in the healthcare system.

Leadership Coaching in Medicine

Using a coaching mindset in medicine may be the key for developing and seasoned physicians alike to navigate a healthcare system that is unintentionally placing value in perfectionism, delayed gratification, and denial of personal vulnerability. Although having high expectations for medical students and physicians is important to their development and

the development of their field, coaching cultivates an atmosphere focused on meeting these expectations in personalized ways that emphasize the strengths of the student. While long training programs provide the time required to master skills, using coaching allows for challenges to be viewed as opportunities rather than looming requirements. Finally, although professionalism guides physician conduct, coaching provides a space where medical students and physicians can be authentic and vulnerable to address their personal needs and wellness. Coaching is a vehicle that can connect physicians to their individual values and belief systems, assist in their problem-solving, and lead to a change in quality of care. Fortunately, leadership skills, like other skills, can be learned and developed over time (Tuso, 2003; Henochowicz & Hetherington, 2006). As physicians develop their personal leadership skills through receiving coaching or implementing coaching principles themselves, they will improve the crucial relationships found in their work, including relationships with administration, patients, and other healthcare providers.

Examples of the Value of Coaching in Medical Practice

One example of the benefits of leadership skills can be found in the physician-patient relationship. The purpose of this relationship is for the physician to understand the needs and health concerns of the patient with the goal of preventing, diagnosing, and treating illness. Listening to a patient is not only critical for gathering data in preparation for diagnosis but fosters trust and can even act as an emotionally healing and therapeutic agent for the patient (Jagosh et al., 2011). Despite the significance of listening in this relationship, a recent study found that "physicians interrupted patients after a median of 11 seconds" when discussing a patient's agenda (Singh Ospina et al., 2019). This lack of listening is concerning because it reflects a lack of prioritization for the patient's needs while overemphasizing the physician's expert authority.

In contrast, implementation of coaching skills could encourage physicians to be curious about the patient's unique experience to promote the development of a stronger relationship founded on an emotional connection between physician and patient that can lead to higher quality listening (Linney, 2001; Henochowicz & Hetherington, 2006). When a physician is open, nonjudgmental, and authentic and maintains a positive regard for the patient, it creates the atmosphere required to nurture trust

in the patient-physician relationship that is prerequisite to change for the patient. Although the physician has a deep understanding of the science of healing, the patient must trust the provider before implementing their knowledge. Physicians who apply coaching skills have the potential to have a positive influence in their relationships with patients, or in other words, can be a better healthcare leader.

Another example of the use of coaching in the medical field can be found in the management and treatment of chronic diseases. As medicine has continued to rapidly advance in recent decades, the average life expectancy has dramatically increased in the United States due to effective treatment and prevention of acute illnesses and fatal diseases. An increasing life expectancy is a positive factor used in the analysis of the general health of a population; however, as treatments and preventions have advanced, there has been a stark rise in chronic diseases. Finding solutions to managing chronic diseases through primary care is a rising trend in the U.S. as managing them is often difficult for both physicians and patients. The use of coaching principles in the management of chronic diseases may prove to be effective.

In fact, a randomized clinical trial conducted by Wolever et al. (2010) implemented the use of coaching principles in the treatment of patients diagnosed with Type 2 Diabetes (T2D), a common chronic disease. In comparison to the control group who only received traditional diabetes education, the trial participants received additional coaching interventions that focused on patients discovering their purpose and values regarding T2D management. Those patients who received coaching for their T2D management reported an increased self-reported adherence to treatment, an increase in exercise frequency, and improved perceived health status (Wolever et al., 2010). Although additional studies evaluating the implementation of coaching in treatment are limited, the use of coaching skills by physicians has potential additive benefits in treatment of patients diagnosed with chronic diseases by helping patients understand their personal values, empowering patients to make the best decisions for themselves, and increasing patients' feelings of accountability to interventions.

The implementation of coaching practices may not only be beneficial for patients, but it has also been found to be beneficial for physician wellbeing.

It is a harsh reality that our hard-working and dedicated physicians are not invincible (Miller & McGowen, 2000). In fact, research over the last decade done by the American Medical Association, Mayo Clinic, and Stanford has shown a consistent rise of physician burnout that exceeds prevalence rates of the general U.S. workforce. These institutions have estimated burnout rates to range from 37.9% up to 62.8% during the COVID-19 pandemic in 2021 (American Medical Association, 2022; Shanafelt et al., 2012). Gazelle et al. (2015) defines burnout as "…a low sense of personal accomplishment, emotional exhaustion, cynicism and depersonalization." Despite this bleak reality, coaching has shown potential in alleviating burnout.

Dyrbye et al. (2019) recently published results from a pilot randomized control study using coaching as an intervention method to improve well-being and decrease distress in physicians. Their study included an intervention group that consisted of 41 physicians who received three-and-a-half hours of coaching in six sessions over five months. Sessions were reported to have been focused on assessing needs, identifying values, and setting goals. After five months, the physicians who received coaching experienced significant reductions in emotional exhaustion in addition to decreased overall burnout rates (Dyrbye et al., 2019). Although additional studies should be elicited, these findings suggest that coaching has the potential to positively impact the lives of physicians.

Through coaching, physicians may enhance their self-awareness, tap into their strengths, challenge defeating thoughts, discover new perspectives, and find added meaning to their personal and professional lives. Coaching can help physicians feel a greater sense of accomplishment, outline a clearer purpose, and increase professional engagement (Gazelle et al., 2015).

Conclusion

Coaching, a thought-provoking partnership, is a unique approach to leadership that is characterized by openness, unconditional positive regard, non-judgmental attitude, growth mindset, and authenticity. Currently, healthcare culture has placed value in perfectionism, delayed gratification, and denial of personal vulnerabilities that has challenged its ability to provide quality care and develop positive leadership practices. Coaching has the potential to revolutionize the way in which healthcare

is delivered by tapping into personal values and strengths for both patients and providers. The use of coaching principles may be a powerful addition to improving healthcare effectiveness, quality care for patients, and physician development. In accordance with coaching principles, challenging current belief systems and practices is a great first step in moving to improved leadership in our healthcare system.

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Culture as a Cornerstone: Leadership in Navajo Healthcare

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The role of healthcare leaders among Navajo patients is important for developing culturally appropriate education to raise awareness of common diseases that affect the Navajo population. Diseases such as cardiovascular diseases, diabetes, and genetic diseases are major health problems for the Navajo people, who have the highest prevalence in the nation for certain chronic morbidities. Comprehensive methods were used to select relevant articles for this review and highlight the importance of culturally relevant prevention programs for Navajo healthcare and public health. Genetic counseling and testing as critical roles in the prevention and management of common diseases among the Navajo population are discussed. We cover limited healthcare access, which is a prominent issue for the Navajo people, with inadequate infrastructure, poverty, and geographic remoteness all contributing to the problem. Strong leadership in healthcare is essential for implementing change for the Navajo people and driving innovation.

The Navajo Nation is the largest Native American tribe in the United States, with a population of over 350,000 individuals spread across the Four Corners region of the Southwestern United States. Despite the size of the Navajo population, research on their health conditions and healthcare needs has been limited. Unfortunately, the Navajo population is also disproportionately affected by certain genetic diseases compared to the US general population (Claw et al., 2021). These health disparities are exacerbated by a lack of access to quality healthcare, a shortage of healthcare providers, and cultural and linguistic barriers that can hinder effective communication between healthcare providers and Navajo patients (Franz et al., 2020). In this review, we examine the current state of Navajo healthcare and discuss how healthcare leaders can help raise awareness of the healthcare needs of this underserved population.

The Navajo people have been historically underserved regarding medical information and treatment. We investigated chronic diseases and access to healthcare amongst the Navajo population and used sources from 1995 to 2022 with a focus on studies conducted within the past five years. The selected studies met the criteria of investigating chronic diseases in the Navajo population and access to healthcare in their communities. Findings on three of these chronic conditions are presented herewith: cardiovascular disease, diabetes, and genetic diseases. We highlight the importance of culturally relevant prevention and education programs in improving health outcomes in the Navajo population. The unique genetic profile of Navajo people and the importance of genetic screening for specific conditions are also emphasized.

The Social Determinants of Health plays a significant role in the health disparities faced by Navajo people, particularly in the context of cardiovascular diseases, diabetes, and genetic diseases. Healthcare leaders can address these determinants by developing culturally appropriate education and outreach programs that target socioeconomic status, access to quality healthcare, education, and cultural relevance. Such programs hold the potential to reduce health disparities, improve health outcomes, and promote overall well-being within the Navajo community.

Material and Methods

Location of Studies

Google Scholar and PubMed were used to search for relevant sources. The majority of the sources used were studies conducted within the previous five years.

Selection of Studies and Data Extraction

Two authors (E.H.P and J.A.G) independently searched for and selected sources for use. Studies were selected if they investigated chronic diseases in the Navajo population or if they investigated access to healthcare amongst the Navajo population. Studies were excluded if they did not meet the preceding criteria. Studies were examined for pertinent information regarding statistically significant hazards and odds ratios, response biases, and 95% confidence intervals were taken into consideration.

Results

Cardiovascular disease

Cardiovascular diseases are a prominent health problem for Navajo people, as they are for many Native American communities. A study conducted by the U.S. Department of Health found that American and Alaskan Natives are 50% more likely to be diagnosed with coronary heart disease and are 10% more likely to have high blood pressure compared to their white counterparts (Office of Minority Health). Another study analyzed the Navajo people of Tuba City, Arizona, and assessed the likelihood of cardiovascular disease onset in individuals already diagnosed with type-2 diabetes mellitus (Hoy et al., 1995). The data show increases in the odds ratio of heart disease in all age groups 20–39, 40–59, and >60 when compared to the general public. Some groups experienced a significant increase in the heart disease odds ratio, specifically, women 40–59 years of age presented with a 19.2 increase accentuated odds ratio. In the years 1976–79 and 1984–86, the increase of myocardial infarction increased by 243% in men and 496% in women (Hoy et al., 1995).

Only a small amount of research investigating predispositions and environmental factors contributing to cardiovascular disease in the Navajo population exists. One such study (Godfrey et al. 2022) found that Native Americans, including Navajo adults, had a high prevalence of metabolic syndrome, which is a cluster of conditions that increase the risk of cardiovascular diseases. Many studies have correlated exposure to mining materials with the development of chronic diseases. More specifically, chemical metal exposure has been associated with "lung cancer, neurodevelopmental disorders, and cardiovascular diseases" (Cortés et al., 2021, p. 2). Several studies have associated uranium and other harmful metals in many of the mines located on the Navajo Nation, with the increased onset of chronic diseases including diabetes, kidney disease, and cardiovascular diseases (Sanchez et al., 2020). The Navajo Nation has been exploited for mining uranium for 40 years (Jones et al., 2020). Bringing awareness about the potential environmental factors that affect the health of the Navajo Nation population has been understated especially with regard to chronic disease development (Panikkar & Brugge, 2007). Native Americans are typically at risk for participating in behaviors

known to increase the probability of developing cardiovascular diseases, such as being 50% more likely to smoke, 27.2% more likely to be obese, and 13.7% more likely to drink alcohol during pregnancy (Dejong et al., 2019).

Diabetes

The prevalence of diabetes among the Navajo people is alarmingly high, making it a serious health concern in the country. According to researchers, Native Americans and Alaskan Natives are nearly twice as likely to have diabetes as non-Hispanic, white Americans (Bullock et al., 2020). It is crucial for community members to be cognizant of the risks and take steps toward the prevention and management of this condition.

Prevention efforts have been focused on enhancing diabetes knowledge, promoting healthy lifestyle choices, and providing culturally relevant education. A study by AuYoung et al. (2019) revealed the effectiveness of a community-based intervention program centered on lifestyle modifications, such as healthy eating and physical activity, in reducing the incidence of diabetes among Native Americans. Wilson et al. (2022) found that a culturally tailored diabetes education program that incorporated traditional Navajo practices was effective in improving diabetes knowledge and self-care behaviors among Navajo adults with gestational and type 2 diabetes. The program also incorporated traditional Native American practices, such as storytelling and community events, to promote cultural relevance and engagement.

In addition to diabetes prevention efforts, the use of telemedicine has been explored as a means of improving access to diabetes care and education among people living in remote areas. Researchers found that telemedicine consultations with diabetes specialists led to improved glycemic control and increased diabetes knowledge among patients in remote areas within the United States. These studies underscore the importance of culturally relevant diabetes prevention and education programs in improving diabetes outcomes among patients living in rural areas, such as Navajo populations (McLendon, 2017). By incorporating traditional practices to address the unique challenges faced by this population, these programs have the potential to continue to reduce the burden of diabetes and improve the health of Navajo communities.

Genetic Diseases

Due to their geographic isolation and cultural practices, Navajo people have a unique genetic profile contributing to a higher prevalence of certain genetic disorders. One such disorder is Navajo Neurohepatopathy (NNH), which is an autosomal recessive disorder characterized by neurological symptoms and liver disease. Researchers have identified a pathogenic mutation in the MPV17 gene that is related to NNH in Navajo children, highlighting the importance of genetic screening for this condition in this population (Baumann et al. 2019). Genetic counseling and testing can play a critical role in the prevention and management of genetic diseases in Navajo people; however, cultural and linguistic barriers can limit access to these services. Claw et al. (2021) found that Navajo patients and healthcare providers had little knowledge and understanding of genetic research, highlighting the need for culturally appropriate education and resources to improve access to these services. Addressing cultural and linguistic barriers is paramount to improving access to genetic counseling and testing. Accommodation for these barriers would allow these services to play a crucial role in the prevention and management of genetic diseases among Navajo people.

Limited Access and Improving Access

It is common for Native American communities, including the Navajo, to have limited access to healthcare due to a shortage of providers (Franz et al., 2020). The Indian Health Service is the primary source of healthcare for many Native American communities and works to provide access to healthcare for these communities. However, challenges such as a lack of providers, long distances to facilities, and lack of transportation can make it difficult for the Navajo people to receive the healthcare they need.

A lack of transportation and resources has impacted the availability of medical facilities and services in some areas, forcing many Navajos to travel long distances for medical care due to poor roadway infrastructure. According to Estradé et al. (2023), poor infrastructure in internet access, electricity, and telephone signal also make it difficult for the Navajos to contact or reach access to healthcare sources. These factors have a severe impact on the health of Navajo people, particularly in the management of chronic diseases such as diabetes, as previously discussed,

and hypertension. Godfrey et al. (2022) found that lack of access to healthcare was the biggest barrier to receiving appropriate diabetes care among Navajo adults, leading to poor management of diabetes and higher rates of diabetes-related complications. In response to these challenges, some healthcare organizations have implemented innovative solutions to improve access to healthcare services. Studies by Kruse et al. (2016) reviewed and evaluated the effectiveness of using telemedicine technology to provide diabetes care to remote patients. They found that telemedicine services were well-received by patients and improved diabetes outcomes, highlighting the potential of medical providers who use telemedicine to address healthcare access in remote areas. Telehealth technology significantly expands healthcare access for the Navajo people, particularly those living in remote or underserved areas. By connecting patients and healthcare providers through telecommunication, individuals can receive medical care without the need for arduous journeys to distant healthcare facilities. Telehealth facilitates connections with specialists who may not be physically located within the Navajo Nation, ensuring patients have access to specialized care without the need for extensive travel (Begay et al. 2021). As effective as innovative solutions such as telemedicine have been, there is still work to be done in addressing the systemic barriers to healthcare access in Navajo populations.

Discussion

These results point to disparity in the levels to which Native Americans suffer from chronic diseases. The increased odds ratios for cardiovascular disease in the Navajo population demonstrates a lack of medical attention given to the Navajo community in that preventative measures are not utilized, and patients are at risk of remaining untreated without proper medicine or regular appointments with healthcare professionals. Though both cardiovascular diseases and diabetes mellitus type 2 are chronic diseases, there are preventive strategies that can help reduce the incidence of these diseases. The prevalence of diabetes onset in the Navajo people further indicates an additional medical disparity experienced by the Navajo people. The occurrence of genetic diseases such as NNH indicates that the Navajo people suffer from chronic diseases not experienced by the general public. As such, there needs to be an emphasis on

understanding the unique circumstances that give rise to these genetic diseases, on methods to treat these diseases, and on bringing awareness to the Navajo community.

Leadership in Healthcare

Our findings of the need for preventative care suggest that the above chronic conditions are avoidable in some way. We recommend that healthcare leaders proactively combat limited healthcare access in the Navajo Nation by incorporating telemedicine into primary care. Awareness and availability of telemedicine in the Navajo Nation, along with other remote communities, will need to be emphasized by healthcare leaders. An important aspect of leadership in healthcare is the ability to adapt to change in order to help those being served. The healthcare industry is constantly evolving, with new technologies, treatments, and regulations being introduced on a regular basis. Effective leaders in healthcare must be able to navigate these changes and adapt their operations to meet the changing needs of the industry, individuals, and populations. This includes raising awareness about resources like telemedicine. Additionally, healthcare leaders can identify areas for improvement and develop strategies to address them, such as raising awareness about cardiovascular disease, diabetes, and common genetic diseases.

The lack of resources and access to medical information are key starting points for initiating a change. Effective leaders in the healthcare industry are able to create a vision for their organizations and inspire others to work towards achieving that vision. A salient role of healthcare leaders is to develop culturally appropriate education and outreach programs that can effectively reach the Navajo population. Healthcare leaders should work closely with Navajo community members to ensure that these programs are culturally sensitive and respectful of Navajo traditions. Another important role of healthcare leaders is to advocate for the Navajo people through promoting policies that improve access to healthcare. This can include working with government officials and policymakers to increase funding for healthcare programs that serve Navajo communities, as well as advocating for policies that address improving the social determinants of health.

Conclusion

In conclusion, the Navajo people in the United States face significant challenges with regard to their healthcare needs. The lack of access to healthcare, shortage of healthcare providers, and cultural and linguistic barriers all hinder the quality of healthcare for Navajo patients and underscore the urgency for action. This underserved population is disproportionately affected by chronic diseases, including cardiovascular diseases, diabetes, and genetic diseases. The health and well-being of a significant population are at stake. Culture-specific prevention and education programs can be effective ways of improving health outcomes among the Navajo population. Genetic counseling and testing play a critical role in the prevention and management of common diseases among this population and should serve as important points of focus. Inadequate infrastructure, poverty, geographic remoteness, and limited healthcare access are common issues for the Navajo people. Strong leadership in healthcare is essential for initiating change and implementing innovative solutions to address the healthcare needs of the Navajo population. The healthcare challenges faced by the Navajo people demand our immediate attention. By addressing these issues, we can effect change, improve healthcare outcomes, and ensure a better future for the Navajo community.

Limitations and Future Recommendations

Many studies included were survey-based and thus, are subject to response bias amongst the participants. Additionally, the body of research on Native Americans, and even more so for the Navajo people, is small in size. To further research on Navajo healthcare and address the limitations mentioned, future research should incorporate diverse methodologies. Mixed-methods approaches that combine surveys with qualitative interviews, focus groups, or observational research can provide a more comprehensive understanding of Navajo healthcare needs and experiences. We encourage future researchers to collaborate closely with the Navajo community to ensure their active involvement in all aspects of the research process. Engaging community members and healthcare providers in the research design, data collection, and interpretation of findings can help address the lack of available research for the Navajo population's unique health needs to improve their future health.

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Utah's Opioid Epidemic: A Public Health Crisis

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Opioid overdose death in the United States is a growing public health concern. Utah continues to have one of the highest drug overdose fatality rates in the country. It can be difficult for any one organization or branch of healthcare to combat this complex crisis. In this article, recent state and national data are used to express the severity of Utah's opioid epidemic and explore the methods by which various organizations and systems including medical providers, pharmacists, psychologists and counselors, and larger industry stakeholders can help mitigate the risk of opioid-induced morbidity and mortality. The research and arguments presented herein can be used to educate and empower patients, providers, pharmacists, and concerned citizens to seek new strategies to lower the risk of overdose deaths in their communities across Utah.

Opioids are natural, semi-synthetic, or synthetic chemicals that interact with opioid receptors in the body and brain to reduce perception of pain (American Psychiatric Association [APA], 2022). Some uses of prescription opioids may include the treatment of acute pain during recovery from a serious injury or surgery and chronic pain seen in cancer or end-of-life care. Common prescription opioids used by medical professionals include oxycodone, hydrocodone, codeine, morphine, fentanyl, methadone, tramadol, and others (APA, 2022). While the benefits of opioids in treating pain can be considered a medical miracle, it can also have serious risks and side effects including drowsiness, headache, itching, nausea, vomiting, and constipation (Gregorian et al., 2010). At high doses, opioids can slow breathing, which can lead to death (APA, 2022). Opioid addiction may occur when individuals become mentally or physically dependent on opioids and continue to use them beyond the duration of treatment, whether through legal or illegal means.

Among the public health challenges that are affecting Utahns today, the opioid epidemic is perhaps the most severe and widespread issue. To illustrate this point, Utah Governor Spencer Cox and Attorney General Sean Reyes recently announced a historic $26 billion dollar agreement that will help bring desperately needed relief to people across the country who are struggling with opioid addiction, with over $309 million dollars directed toward Utah's opioid crisis. During the announcement Governor Cox stated that "the impacts of the opioid epidemic have been and continue to be devastating to thousands of Utahns and their families" (Cox, 2021, para. 3).

Drug overdoses are now the leading cause of unintentional death in the United States. In 2018, more than 67,000 Americans died of a drug overdose (Centers for Disease Control and Prevention [CDC], 2021). Of those deaths, nearly 70% involved a prescription or illicit opioid (CDC, 2021). While individuals who are taking prescribed opioids properly may build up a tolerance when the pain has subsided, many people may find it difficult to stop altogether. Those who find it challenging to quit may continue to take opioids for longer than their clinician intended or may even develop an opioid use disorder. Many people are not aware that sharing prescription medications is a felony; over 50% percent of people who have misused prescription opioids reported getting them from friends or relatives (National Safety Council, 2023). Strong leaders like Governor Cox and Attorney General Sean Reyes could change the course of the opioid epidemic in Utah.

Opioids in Utah and Vulnerable Populations

In 2017, 456 Utahns died of prescription opioid overdose (National Institute on Drug Abuse [NIDA], 2019). During the same year, Utah medical providers wrote 63.8 opioid prescriptions for every 100 people, which is significantly higher than the national average of 58.7 prescriptions per 100 people (NIDA, 2019). Opioid use in pregnant women has also posed a problem in Utah. A 2019 study found that drug-induced death is the leading cause of pregnancy-associated death in Utah with over 75% of deaths due to the use of prescription opioids (Smid, 2019). While death by overdose are the more likely complication, growing evidence suggests that opioids may be associated with birth defects including congenital heart defects, neural tube defects, small gestational age, and clubfoot (Yazdy

et al., 2015). Opioid use disorder among women delivering in hospitals has increased 400% from 1999–2014 in the United States (Haight et al., 2018). From 2007 to 2016, opioid-related death during pregnancy increased over 200%, and in 2016, drug overdose deaths made up approximately 10% of all pregnancy-associated mortality (Gemmill et al., 2019).

By addressing the root causes and upstream factors, as well as continuing to create innovative and proven treatments for opioid overdose and opioid use disorders, Utah's capacity to prevent the plague of opioid-induced morbidity and mortality may increase. The following information and research underscores the gravity of the opioid crisis in Utah; it delves into the strategies through which different entities and systems, such as medical professionals, pharmacists, psychologists, counselors, and major industry players, may collectively reduce the dangers associated with opioid misuse and mortality.

Who Can Help?

Epidemiologists at the Utah Department of Health began studying opioid misuse in 2004. Between the years 2002 and 2007, they found that opioid and non-opioid prescriptions were increasing steadily each year (Porucznik, 2011). However, the prudent treatment of opioid misuse was not widely available until 2015, when naloxone was approved by the United States Food and Drug Administration (FDA) as a prescription-only treatment for opioid overdose. Naloxone reverses the effects of overdose by attaching to opioid receptors and blocking the effects of other opioids. Prompt and proper use of naloxone can rapidly restore regular respiration to a person if their breathing has slowed or stopped due to opioid overdose. Countries across the European Union and Canada have approved naloxone for public use in the form of injections and nasal sprays, which has helped lessen the burden of emergency care on healthcare providers and emergency medical services (Strang et al., 2019). It was not until March 2023 that the FDA made naloxone available to the public without prescription (FDA, 2023). This was a monumental step forward in the treatment and prevention of opioid overdose death.

Pharmacists can play a unique role in counseling patients about the risks and hazards of opioid use due to their proximity to patients receiving prescription medications. Pharmacies across the country are increasingly

becoming places where naloxone is readily available for emergency use. This way, patients who overdose immediately after receiving their prescriptions are more likely to receive rapid, life-saving treatment. Prescription drug monitoring systems in clinics and pharmacies can also track how often opioids are being dispensed and incentivize providers and pharmacists to continually check their prescriptive practices.

Primary care providers are another major entity where continuing education could play a role in decreasing opioid deaths in Utah. In a study analyzing beliefs and attitudes about prescribing opioids for chronic pain management, 56 providers were surveyed to determine their level of knowledge and feelings about opioid prescribing. In general, the providers demonstrated adequate opioid knowledge (Jamison et al., 2014). In the same study, most providers showed some degree of concern about prescription misuse by their patients (89 percent) and felt that managing patients with chronic pain was a stressful part of their job (84 percent). Most providers were worried about precipitating addiction in their patients (82 percent), and less than half felt that they were adequately trained in prescribing opioids (46 percent). Continued education and training for providers concerning opioid prescription can help reduce risk of overdose death and help providers feel more confident in properly educating their patients. Medical providers may also choose to utilize a co-prescription of naloxone with long-term opioids after assessing risks for misuse or even consider prescribing naloxone to one of the patient's trusted family members for emergency use. One study published in 2016 found that "opioid-related ED visits after the receipt of a naloxone prescription corresponds to a 47% reduction in opioid-related ED visits per month six months after receipt of the prescription…and a 63% reduction after one year" (Coffin et al., 2016).

Psychologists and counselors also can help in Utah's opioid epidemic. With proper training, psychologists are well positioned to make a positive impact on this crisis. If clinicians suspect an opioid addiction, they might seek ways to refer patients to opioid addiction recovery psychologists that can provide resources for cognitive and behavioral change to complement medical interventions. One study performed in 2019 highlighted the power of positive psychology and cognitive behavioral therapy in helping patients with opioid addiction (Garland et al., 2019). Patients with opioid-treated chronic pain were randomly assigned into treatment groups receiving

eight weeks of positive psychology-focused therapy. Throughout the study, patients' moods, pain levels, and metrics focused on quality of life and happiness were measured. After the study, and in a three-month follow-up, patients reported decreased pain, increased pain tolerance, and significantly lower levels of opioid addiction compared to the control group (Garland et al., 2019). Psychologists and counselors in Utah can be instrumental in tackling the opioid epidemic by offering specialized addiction recovery support and utilizing positive psychology and cognitive behavioral therapy to enhance patients' well-being.

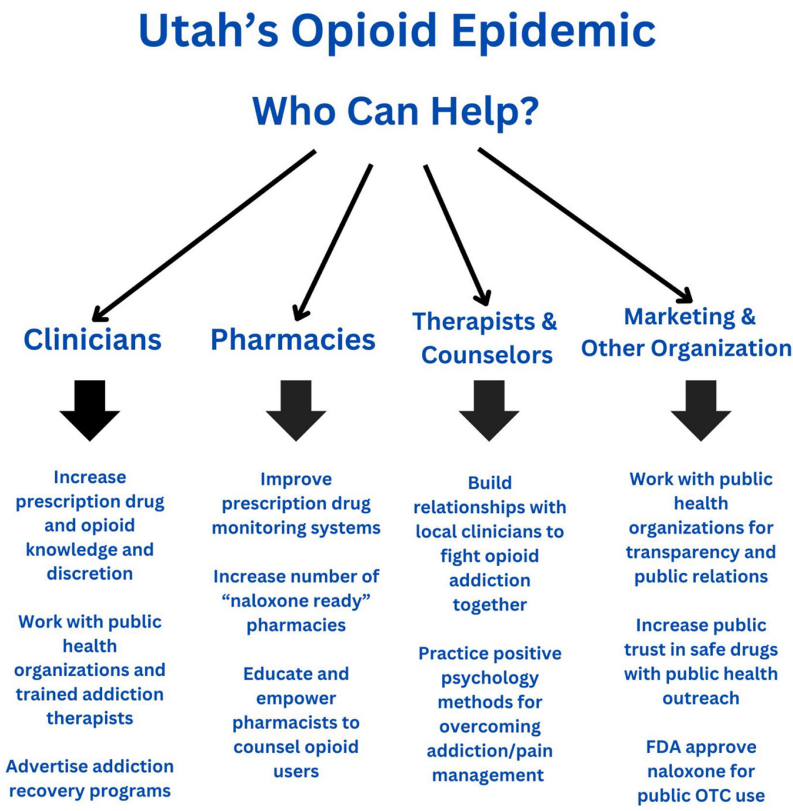
Pharmaceutical marketing companies can also help fight the opioid epidemic. With these companies making up a multi-billion-dollar industry, there have been hundreds of lawsuits and claims that companies are marketing their prescription drugs without adequately describing the potential adverse effects. Though litigation is warranted and accepted during early stages of drug development, it has continued to plague the industry, mostly focused on their advertising strategies (Uppal and Anderson, 2021). By partnering with public health agencies and organizations, pharmaceutical marketing companies and Utah citizens can mutually benefit. By working together, public health organizations could ensure that all the risks and hazards of prescription drugs, including opioids, are being disclosed to the public in a safe and convincing way. This could lead to pharmaceutical marketing companies saving money from legal fees. Perhaps pharmaceutical companies would also benefit from greater optics by establishing an increased standard of transparency and safety. It is imperative that the risks and side effects of opioids, as well as other potentially addictive medications, be clearly known by the public. Utah has been particularly progressive with the use of highway billboards over the last several years, which has helped to increase awareness of the risks and side effects of opioids and provided resources for patients and family members to get needed assistance. Pharmaceutical companies could consider similar campaigns to increase awareness and public confidence in their drugs.

Conclusion

The opioid epidemic in Utah is an issue that continues to affect many individuals and families across the state. It is essential to recognize that the responsibility for combating this crisis cannot be solely shouldered

by patients, nor can it be placed solely on the shoulders of healthcare providers. Instead, it necessitates a concerted effort from a multitude of stakeholders spanning the spectrum of healthcare. Medical providers, pharmacies, psychologists, and counselors all play pivotal roles in mitigating opioid misuse, as they are on the front lines of patient care and education. However, the issue runs deeper, implicating larger stakeholders including regulatory bodies like the FDA and pharmaceutical companies. These entities must also be part of the solution, implementing stricter guidelines for prescription medications and more transparent practices in the pharmaceutical industry.

To truly reverse the opioid epidemic and create a healthier, safer Utah, it is crucial to underscore the vital role of state and organizational leadership. State governments must lead the charge by enacting and enforcing robust policies, directing resources toward prevention and treatment programs, and fostering collaboration among all stakeholders. Equally, organizational leadership within the healthcare sector and beyond must champion responsible and transparent prescription drug practices, patient education, and support for those affected. Only through this comprehensive approach can a society be fostered where individuals and families are no longer held captive by the devastating grip of opioid addiction and plagued by opioid-induced mortality.


Utah's Opioid Epidemic
Who Can Help?
Clinicians
Pharmacies
Therapists & Counselors
Marketing & Other Organizations
Increase prescription drug and opioid knowledge and discretion
Work with public health organizations and trained addiction therapists
Advertise addiction recovery programs
Improve prescription drug monitoring systems
Increase number of "naloxone ready" pharmacies
Educate and empower pharmacists to counsel opioid users
Build relationships with local clinicians to fight opioid addiction together
Practice positive psychology methods for overcoming addiction/pain management
Work with public health organizations for transparency and public relations
Increase public trust in safe drugs with public health outreach
FDA approve naloxone for public OTC use

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The Power of Preceptors: Guiding Healthcare Students Toward Professional Excellence

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Preceptors in healthcare education are indispensable, as they are pivotal in shaping healthcare students' skills, knowledge, and attitudes. This article explores the power of preceptors in guiding and mentoring healthcare students, discussing their impact on student learning, professional development, and, ultimately, patient care outcomes. By examining the qualities of effective preceptors, the benefits of preceptorship programs, and the challenges faced in the preceptor role, this article emphasizes the importance of preceptors in fostering the next generation of healthcare professionals. Furthermore, it provides recommendations for enhancing preceptorship experiences and maximizing their potential in shaping the future of healthcare education.

Healthcare education plays a vital role in shaping competent and compassionate healthcare professionals. While academic coursework provides theoretical knowledge, the practical experience gained through clinical rotations truly molds students into future skilled practitioners. At the heart of this experiential learning process are preceptors, experienced healthcare professionals who mentor students. The power of preceptors in teaching healthcare students cannot be overstated. Their expertise, guidance, and mentorship significantly contribute to developing clinical skills, professional identity, and ethical values among students. Preceptor roles are multifaceted, and it is vital to explore how their influence positively impacts the future of healthcare. This article aims to better understand the power of preceptors by examining the qualities of effective preceptors, their role in the students' professional development, the benefits of formal preceptorship programs, and the challenges and opportunities in the preceptor role.

The Qualities of Effective Preceptors as Role Models and Influencers

Clinical expertise, communication skills, mentorship abilities, and role modeling in guiding and inspiring healthcare students are a few of the essential qualities and characteristics of effective preceptors (Blevins, 2016). Furthermore, Blevins states that creating a supportive learning environment is a crucial skill for preceptors and is achieved by encouraging questions and providing approachable feedback. Preceptors' professionalism, ethical conduct, and commitment to patient-centered care shape students' values and attitudes. Moreover, qualified preceptors play an essential role in developing students' identities. Qualities of effective preceptors are often developed through professional development courses or simply through years of experience in the preceptor role (Blevins, 2016). This type of development does not always come naturally and may require time and investment on the part of institutions and the preceptor.

Unfortunately, the supply of qualified preceptors is declining with the retirement of experienced workers, demand for new workers, and schools putting out higher numbers of recent graduates. This often results in facilities struggling to find sufficient faculty and clinical preceptors to fill roles, meaning preceptors are often selected based on availability rather than experience, training, or competence (Warren et al., 2023). Thus, institutions must recognize the qualities of effective preceptors and contribute to their development through adequate training and experience opportunities.

Without well-defined standards, healthcare types and facilities' qualifications and requirements vary dramatically. The most required capability for preceptors in undergraduate nursing programs is years of RN experience, which ranges from one year to three years minimum. Other programs require a BSN and demonstrated interest. Interest in precepting is often in the form of volunteering or accepting a requested position. Still, other states require preceptors to be academically prepared at or above the program of the preceptee (Warren et al., 2023).

Research supports preceptor preparation courses to standardize and prepare preceptors for their roles (Warren et al., 2023). According

to Warren et. al, preceptor courses prepare preceptors with conceptual frameworks for developing content for training and educating new nurses. Though, not all preceptor preparation courses are standardized and are sometimes offered by healthcare facilities, and other times are provided by academic institutions. Booster education is also supported in the literature with reinforcement courses offering content such as improving preceptors' understanding of their role, techniques for being a role model, and suggestions for ensuring preceptee success in their clinical programs (Warren et al., 2023). Such standardization is a key step in ensuring preceptors have the necessary qualities to prepare students for healthcare careers.

Clinical Skill Development

Preceptors possess a wealth of knowledge and clinical expertise, which they impart to healthcare students. Through their guidance, students are exposed to real-life patient cases, clinical decision-making processes, and technical skills that cannot be adequately taught in a classroom setting. Preceptors provide a safe and supervised environment where students can practice and refine their clinical skills. By observing and working closely with preceptors, students gain hands-on experience, enhancing their competence and confidence (Wu et al., 2018). Thus, observation of the preceptor engaging in clinical skills, combined with a safe environment for practicing hands-on skills, provides a meaningful environment for students' growth and development.

Professional Identity Formation

Beyond technical skills, preceptors are pivotal in shaping students' professional identities. Through preceptors' professionalism and dedication to patient care, they serve as role models, inspiring students to adopt similar values and behaviors. Preceptors instill in students the importance of empathy, compassion, and patient-centered care. Students learn to navigate complex healthcare dynamics and develop effective communication skills by witnessing the interactions between preceptors and patients (Wu et al., 2018). Therefore, the professional demeanor and ethical decision-making demonstrated by preceptors set a standard for students to follow, fostering the development of a professional identity that aligns with the core values of healthcare.

Contextual Learning and Critical Thinking

Preceptors bridge theory and practice, facilitating contextual learning for healthcare students. They help students connect theoretical knowledge to real-life patient scenarios, enabling a deeper understanding of the complexities of healthcare. By engaging students in active problem-solving, preceptors promote critical thinking skills, encouraging students to analyze, evaluate, and make informed decisions. It is the combination of faculty, preceptor, and student roles that leads to academic competency (Lofgren et al., 2021). Through discussions, case presentations, and bedside teaching, preceptors challenge students to think beyond the textbook and consider the holistic aspects of patient care, including social, cultural, and ethical dimensions.

Preceptors contribute to student learning and professional development. The role of preceptors promotes critical thinking, clinical reasoning, and evidence-based practice among students. It also explores how preceptors facilitate the transition from student to healthcare professional. Many factors exist that contribute to the preceptor/preceptee experience. According to Lofgren et al. (2021), these factors include academic program processes and policies, preceptor experience, incentives, healthcare facility policies, and accreditation agencies.

Combining these factors creates a framework for effective preceptorship in developing critical thinking and clinical problem-solving. According to Weitzel et al. (2012), the basis of the preceptor's role is direct instruction, followed by modeling, coaching, and ultimately facilitating learning. That model further asserts that effective precepting begins with ensuring the student has foundation skills and builds upon those to create opportunities to apply the skills and knowledge to promote practical application and integration into clinical decision-making opportunities. This model for teaching clinical problem solving shows a systematic method preceptors can apply for developing critical thinking, ensuring the student is equipped with basic clinical skills, followed by practical application of those skills, and providing opportunities for integration. When integrated in this fashion, Weitzel et al. assert that the process culminates in the development of essential critical thinking skills.

Preceptor-Student Relationship: Building Trust and Collaboration

The dynamics of the preceptor-student relationship include the importance of establishing trust, open communication, and collaboration between preceptors and students. Strategies must be considered for fostering a positive learning environment and nurturing a mentoring relationship. The preceptor-preceptee relationship is complex, and there are both negative and positive factors that affect that relationship (Quek & Shorey, 2018). Negative factors include random allocation of pairs, variable educational backgrounds, and intergenerational differences. Factors that have a positive effect include friendliness of both parties, empathy, psychological compatibility, and similar personality types (Quek & Shorey, 2018). Developing the positive components of a preceptor-student relationship is essential to ensuring the experience effectively prepares the preceptee for their new role.

Preceptors often assume the role of mentors, guiding and supporting students throughout their healthcare education journey. As trusted advisors, they offer insight into career paths, specialty options, and professional development opportunities. Preceptors encourage students to set goals, pursue lifelong learning, and engage in reflective practice. Through mentorship, preceptors inspire students to navigate healthcare challenges with resilience and a growth mindset. They help students identify their strengths and areas of interest, guiding them toward a fulfilling and meaningful career.

Enhancing Interprofessional Collaboration

Positive healthcare outcomes are increasingly dependent on successful interprofessional teamwork and collaboration. Preceptors play a vital role in modeling and preparing students for competent teamwork. By fostering an environment that values interdisciplinary cooperation, preceptors expose students to the importance of teamwork and effective communication across healthcare disciplines (Šanc & Prosen, 2022). Through interprofessional experiences, students gain an appreciation for the unique contributions of different healthcare professionals, learn to respect diverse perspectives, and develop the skills necessary for seamless collaboration in future practice settings (Šanc & Prosen, 2022). Šanc and Prosen (2022) state that formal training can shape future healthcare professionals in developing

interprofessional collaboration skills. Therefore, preceptors can have a positive impact on healthcare students' ability to navigate interprofessional relationships toward better patient outcomes successfully.

On the other hand, various power structures between healthcare professions can hinder patient outcomes. Integrating disciplines in preceptorship may be one solution for breaking such barriers. For example, physicians precepting nurse practitioners have been shown to improve patient care delivery and change power relations (Andrews et al., 2021). Thus, creating opportunities for interprofessional collaboration during preceptorships benefits the students and patient outcomes.

Preceptorship Programs: Benefits and Structure

Structured preceptorship programs have positively impacted student learning, clinical competence, confidence, and professional socialization. Precepting provides an individualized learning opportunity for less experienced healthcare workers. This tailored relationship offers one-on-one guidance with bonding between preceptor and preceptee, which has been shown to improve job satisfaction, patient satisfaction, job retention, and patient outcomes (Quek & Shorey, 2018).

Furthermore, preceptor training has positively impacted clinical competence and teaching quality during a preceptorship (Good, 2021). Such programs fill gaps in the preceptor's and preceptee's education and training. Preceptors who have gone through preceptorship training programs are found to be superior to those without training in terms of competence, effectiveness, and abilities as an educator (Good, 2021). Thus, organizations would benefit from incorporating preceptor programs aimed at preparing preceptors to guide students in the development of practical skills and clinical competence.

Challenges and Opportunities in the Preceptor Role

Some of the most significant challenges preceptors face include time constraints, workload, and balancing clinical responsibilities with on-the-job teaching. Eighty-three percent of preceptors report mild to moderate stress with this role (Quek & Shorey, 2018). The pressure primarily comes from managing more responsibilities in addition to the usual work responsibilities of their positions. Extra administrative work,

reflections, and checklists were reported as burdensome (Quek & Shorey, 2018). Quek and Shorey (2018) also discovered potential solutions and opportunities for professional development for preceptors, such as training programs, recognition, and support from healthcare institutions.

Even the most experienced healthcare workers may not be trained or have the necessary skills to be an effective preceptor. Optimizing preceptorship experiences entails ongoing training for preceptors, feedback mechanisms, and recognition programs (Wu et al., 2018). Collaboration between educational institutions and healthcare organizations can also help strengthen the preceptorship process. Moreover, teaching tools can be effective in standardizing the precepting experience. One example is the 5-Minute Preceptor (5MP) strategy. The 5MP strategy includes five steps: take a stand, probe for supporting evidence, teach general rules, reinforce the positives, and correct misinterpretations and errors (Bagioni et al., 2020). Each of these five steps includes probing questions for the preceptor to ask the student, which provides the preceptor with an opportunity to seek information, encourage critical thinking, and integrate knowledge in clinical cases. Structured resources such as these offer tools for preceptors and help facilitate a systematic standard for precepting students and improving patient outcomes.

Conclusion

The research shows that preceptors are instrumental in guiding healthcare students toward becoming competent, compassionate, and ethically grounded professionals. Their expertise, mentorship, and guidance contribute significantly to the development of clinical skills, professional identity formation, critical thinking abilities, and interprofessional collaboration among students. Recognizing the power of preceptors in guiding healthcare students is crucial for the ongoing improvement of healthcare education. Institutions should prioritize preceptors' recruitment, training, and support, ensuring they have the necessary resources and recognition to fulfill their roles effectively. Additionally, fostering a culture that values the preceptorship role and encourages collaboration between academic institutions and healthcare facilities has the potential to enhance the impact of preceptors on student learning. By harnessing the power of preceptors, the future healthcare workforce might be better prepared to meet the complex challenges of the ever-evolving healthcare landscape.

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Non-Pharmacological Interventions for Anxiety in Hospitalized Patients

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Hospitalized patients suffer from high rates of anxiety which can decrease their quality of life. Pharmacological interventions can effectively reduce anxiety, but they can cause severe side effects. Non-pharmacological interventions could help reduce patient anxiety while avoiding these side effects. Nurses should act as leaders by identifying effective non-pharmacological interventions for anxiety and providing patient education about these interventions. This literature review identified effective non-pharmacological interventions for anxiety and compared them to pharmacological interventions. Music-based interventions, progressive muscle relaxation, and guided imagery were found to significantly reduce anxiety when compared with placebos or standardized care. However, few studies have directly compared pharmacological and non-pharmacological anxiety interventions. It is, therefore, unclear whether non-pharmacological anxiety interventions are as effective as pharmacological anxiety interventions. Additional research should be performed to determine whether non-pharmacological interventions can serve as effective and safer alternatives for anxiety reduction than pharmacological interventions.

Anxiety is a psychological and physiological arousal in response to perceived threats, thereby serving as an adaptive protective mechanism (Penninx et al., 2021). However, some individuals experience excessive or prolonged anxiety that impairs their functioning and reduces their quality of life, resulting in anxiety disorders. Anxiety disorders are the most common form of mental illness with a worldwide prevalence of around 7.3% (Thibaut, 2017) and include generalized anxiety disorder, post-traumatic stress disorder, and panic disorder (Penninx et al., 2021).

Anxiety disorders are the ninth leading cause of health-related disability and are correlated with worse health outcomes in a variety of diseases,

such as cardiovascular disease (Penninx et al., 2021). Furthermore, the prevalence of anxiety is increased in patients suffering from many diseases. For example, studies have shown that 18-20% of cancer survivors (Yi & Syrjala, 2017), 26% of out-of-hospital cardiac arrest survivors (Yaow et al., 2022), and 20% of stroke survivors (Knapp et al., 2017) suffer from clinically significant levels of anxiety. Hospitalized patients often suffer from these diseases or other related health problems and are, therefore, at a high risk of suffering from severe anxiety and experiencing worse outcomes because of this anxiety.

Currently, a variety of pharmacological treatments, such as selective serotonin reuptake inhibitors (SSRIs), serotonin and norepinephrine reuptake inhibitors (SNRIs), and benzodiazepines are used to treat anxiety in hospitalized patients (Penninx et al., 2017). However, SSRIs and SNRIs can cause life-threatening serotonin syndrome (Scotton et al., 2019). Additionally, benzodiazepines can cause a variety of negative long-term effects such as dependence, cognitive decline, and an increased risk for falls (Crowe & Stranks, 2018; Del Giorno et al., 2018; Soyka et al., 2023). Benzodiazepines are also overprescribed, with prescriptions having risen 67% between 1996 and 2013 (Del Giorno et al., 2018; Limandri, 2018). Thus, there is a need to identify non-pharmacological interventions that effectively treat anxiety in hospitalized patients. Additionally, non-pharmacological intervention strategies need to be developed for nurses and nursing leaders to implement these interventions, reducing the use of pharmacological interventions, thereby minimizing unnecessary side effects and adverse events.

Research Problem

The problem facing nurses and patients is that patients need anxiety-focused treatments. Yet anti-anxiety medications such as benzodiazepines and SSRIs are potentially overprescribed to patients suffering from anxiety in hospitals which can result in harmful side effects and adverse events. While non-pharmacological anxiety interventions can avoid these harmful effects, they are underutilized in hospital settings (Sabeti et al., 2021). This research addresses the following question: Do non-pharmacological interventions reduce anxiety in hospitalized patients as effectively or more effectively than pharmacological interventions?

Literature Review

To answer the research question, a literature review was performed using the Pubmed, CINAHL, and Cochrane databases. Papers published between 2006 and 2022 were included. The following search terms were used: "non-pharmacological anxiety interventions," "pharmacological anxiety interventions," "anxiety," "hospitalized patients," "SSRIs," "SNRIs," "benzodiazepines," "music therapy," "music medicine," "aromatherapy," "essential oils," "safety," "relaxation techniques," "progressive muscle relaxation," and "guided imagery."

The Efficacy of Common Non-Pharmacological Interventions

Music Therapy and Music Medicine

Some of the most well-studied non-pharmacological interventions for anxiety are music-based interventions (Bradt et al., 2013). Music-based interventions for anxiety typically fall into two categories: music therapy and music medicine. Music medicine is performed by healthcare professionals, such as nurses, and it involves offering patients the opportunity to listen to pre-recorded music (Bradt et al., 2013; Stegemann et al., 2019). In contrast, music therapy involves professionally trained and certified music therapists who engage in therapeutic relationships with patients, and tailor music listening to the patient's needs. Music therapy has been shown to have a more significant improvement in outcomes than music medicine (Bradt et al., 2013, p.6). This likely occurs because music therapists, unlike other healthcare professionals, receive specialized training for music-based interventions and can tailor the music to suit individualized patient needs. However, certified music therapists often only work part-time and are not available in all clinical facilities (Kern & Tague, 2017).

Many studies, including multiple meta-analyses, systematic reviews, and randomized controlled trials, have shown that both music therapy and music medicine significantly reduce anxiety when compared to control groups that did not receive music-based therapy (Abdul Hamid et al., 2022; Bashiri et al., 2018; Bradt et al., 2013; da Silva Santa et al.; 2021; Pavlov et al., 2017; Stegemann et al., 2019; Umbrello et al., 2019). These studies demonstrated a reduction of anxiety in a variety of patients, including patients in intensive care units, mechanically ventilated patients,

pediatric oncology patients, pregnant and laboring patients, parents of neonatal intensive care patients, patients with comorbid psychological disorders such as schizophrenia, and patients in pre-operative, operative, and post-operative settings. This demonstrates that music-based interventions can be used in virtually any hospital setting, and there is strong evidence to support the use of music as a non-pharmacological intervention for anxiety.

Although many studies have shown the effectiveness of music-based interventions for anxiety reduction, few studies have directly compared music therapy and music medicine with pharmacological anxiety interventions. The studies that have been performed to compare music-based interventions with pharmacological interventions have found that music-based interventions reduce anxiety as, or more, effectively than pharmacological interventions (Bringman et al., 2009). Additionally, music-based interventions reduced the need for and use of pharmacological agents such as midazolam for anxiety control in multiple pre-operative studies (Bringman et al., 2009; Ebrahimi & Tan, 2018; Harikumar et al., 2006). These studies demonstrate that the use of non-pharmacological interventions could potentially reduce the use of pharmacological interventions for anxiety, allowing for adequate anxiety control while avoiding the side effects from anxiolytic medications. However, there is a need to perform more studies directly comparing music-based interventions to pharmacological interventions for anxiety to confirm these findings.

Aromatherapy

Aromatherapy refers to a broad variety of complementary and alternative medicinal non-pharmacological interventions involving essential oils (Farrar & Farrar, 2020; Wang et al., 2022). These essential oils are derived from natural products such as plants via distillation, mechanical pressing, or other means (Farrar & Farrar, 2020). Aromatherapy has a wide range of applications, due to the utilization of over forty different plant extracts, with lavender, rose, and citrus species being the most commonly used plant products (Wang et al. 2022). Additionally, these essential oils have several different implementation methods, including topical application, inhalation, and oral ingestion (Farrar & Farrar, 2020). Essential oils are commonly used for anxiety reduction (Wang et al., 2022), so an analysis of the available research on the efficacy of aromatherapy for anxiety is needed.

Unfortunately, nearly all studies of aromatherapy for anxiety reduction compare aromatherapy treatment to either controls who do not receive aromatherapy or who receive placebo oil, rather than comparing to pharmacological anti-anxiety interventions. Only one meta-analysis directly comparing aromatherapy to pharmacological treatments was identified. This study compared the effectiveness of 80 mg/day or 160 mg/day of Silexan, an orally administered lavender essential oil, to 0.5 mg/day of the benzodiazepine lorazepam and 20 mg/day of the SSRI paroxetine (Yap et al., 2019). Findings showed that 160 mg/day of Silexan decreased anxiety more effectively than 20 mg/day of paroxetine and 0.5 mg/day of lorazepam. Some limitations of this study include the low dosage of lorazepam (0.5 mg/day is the lowest recommended dose) and the short timeframe with several of the studies occurring over only 6 weeks (SSRI medications such as paroxetine take several weeks to exert an effect) (Boschloo et al., 2023; Yap et al., 2019). Thus, additional studies directly comparing aromatherapy interventions for anxiety to anxiolytic pharmacological interventions should be performed.

An additional concern regarding the use of aromatherapy for anxiety intervention is that studies comparing aromatherapy use to either placebo oils or no aromatherapy treatment for anxiety have mixed and contradictory results. Several of these studies found that aromatherapy significantly reduced anxiety in patients (Deng et al., 2022; Domínguez-Solís et al., 2021; Lee et al., 2021; Liu et al., 2022; Tabatabaeichehr & Mortazavi, 2020), but aromatherapy produced no significant reduction in anxiety in other studies (Fardin et al., 2020, Wang et al., 2022). The variation in effectiveness across studies could be due to the use of different types of essential oils and administration methods. Additionally, several meta-analyses of studies for aromatherapy as an anxiety intervention found a high risk of bias in many of the studies that reported a significant reduction in anxiety levels from aromatherapy (Fardin et al., 2020; Lee et al., 2021). Thus, there is a need to perform additional high-quality, randomized controlled studies with a low risk for bias, that directly compare aromatherapy to pharmacological interventions for anxiety.

Relaxation Techniques

Relaxation techniques are a broad variety of mind-body non-pharmacological interventions that reduce anxiety by stimulating the

parasympathetic nervous system and/or reducing stimulation of the sympathetic nervous system (Smith et al., 2018). Some examples of relaxation techniques are progressive muscle relaxation and guided imagery (Klainin-Yobas et al., 2015; Smith et al., 2018). Relaxation techniques typically involve simple methods that would enable their implementation by bedside nurses, and they typically produce no side effects, although they can cause a paradoxical increase of anxiety in rare cases (Smith et al., 2018). Thus, relaxation techniques should be compared to pharmacological interventions for anxiety to assess their effectiveness.

Progressive Muscle Relaxation. Progressive muscle relaxation involves a sequential tensing and subsequent relaxation of muscles throughout the body to induce an overall state of relaxation in sessions that often last at least ten minutes (Sinha et al., 2021 Smith et al., 2018). Several meta-analyses and randomized controlled trials have demonstrated that progressive muscle relaxation significantly reduces anxiety in patients (Hasanpour-Dehkordi et al., 2019; Kılıç et al., 2023; Klainin-Yobas et al., 2015; Liu et al., 2020; Sabherwal et al., 2021; Tan et al., 2022). However, these studies involved a comparison of progressive muscle relaxation plus standard care with standard care alone, rather than a direct comparison of pharmacological interventions with progressive muscle relaxation alone. Studies directly comparing progressive muscle relaxation to pharmacological anti-anxiety interventions should be performed.

Guided Imagery. Guided imagery is performed by teaching a patient to redirect their thoughts and focus to more pleasant experiences to help reduce the levels of unpleasant sensations, such as anxiety or pain (Smith et al., 2018; Wang et al., 2022). Several systematic reviews and randomized controlled trials have provided evidence that guided imagery significantly reduces patient anxiety in various clinical settings, such as labor and delivery, operative, hemodialysis, medical-surgical, and ICU settings (Afshar et al., 2018; Aghakhani et al., 2022; Hadjibalassi et al., 2018; Marc et al., 2011; Vagnoli et al., 2019; Wang et al., 2022). Only one identified randomized controlled trial found a non-significant decrease in anxiety from guided imagery (Álvarez-García & Yaban, 2020). However, as with other relaxation techniques, no studies directly comparing pharmacological anti-anxiety interventions to guided imagery were found, indicating a need to perform such studies.

Limitations

Few studies were identified that directly compared pharmacological to non-pharmacological treatments for anxiety. Because of this, a definitive conclusion that non-pharmacological interventions are as effective for anxiety as pharmacological interventions in hospitalized patients cannot be reached. Therefore, non-pharmacological interventions cannot be recommended to be used in the place of standardized pharmacological interventions with the evidence identified in this literature review. For example, studies to identify the effectiveness of aromatherapy for anxiety reduction vary significantly in their methods with the use of different essential oils and administration routes. This high degree of variation coupled with the presence of few studies for each specific essential oil limits the ability to identify the overall effectiveness of aromatherapy for anxiety reduction. Thus, additional research to determine the effectiveness of aromatherapy for anxiety should be performed.

Applications to Nursing Leadership

One important role of nurses in society is to guide and liaise between medical providers and patients. In this role, nurses can and should serve as leaders for their patients and communities, even if they do not work in formal leadership roles such as management (Booher et al., 2021). One way to perform this function is for nurses to serve as educators for patients. Bedside nurses can incorporate this function to help reduce anxiety in hospitalized patients by educating patients about resources and methods to reduce anxiety. This education could include instructions about effective non-pharmacological interventions for anxiety reduction, especially for patients with concerns about the side-effects of pharmacological interventions such as pregnant women (Domínguez-Solís et al., 2021) or for those who are at risk from taking medications such as benzodiazepines because they can cause dependence with long-term use. It would be beneficial for nurses to stay up to date with research on non-pharmacological interventions for anxiety and share this information with the community and their patients.

Formal nursing leaders, such as nursing unit managers, can also aid in the implementation of non-pharmacological anxiety interventions for hospitalized patients by educating their staff about effective

interventions. They can also participate in research to identify effective non-pharmacological interventions for their patient population and help develop facility policies that assist nurses in implementing these interventions. As part of this process, leaders should review the available literature and evidence-based practice guidelines to assess the effectiveness of various non-pharmacological interventions for anxiety. As shown in this literature review, music-based interventions appear to have relatively strong support for use in anxiety reduction with these interventions potentially being as effective as benzodiazepines (Bringman et al., 2009; Ebrahimi & Tan, 2018). Thus, nursing leaders could consider implementing music medicine to help reduce anxiety in their facilities.

Conclusion

Anxiety is a debilitating mental health condition that is highly prevalent among hospitalized patients. Nurses can act as leaders by identifying and implementing effective anxiety reduction interventions. Although pharmacological anxiety interventions are effective, they carry the risk of significant side effects. Alternatively, non-pharmacological interventions could also be effective while avoiding these side effects. This literature review found that several non-pharmacological interventions effectively reduce patient anxiety in hospitalized patients when compared to placebos or controls. Specifically, music therapy, music medicine, progressive muscle relaxation, and guided imagery can significantly reduce anxiety levels in patients. However, few studies directly comparing pharmacological and non-pharmacological anxiety interventions have been performed. Thus, it is unclear whether non-pharmacological anxiety interventions are as effective as pharmacological anxiety interventions for hospitalized patients, so it cannot be recommended that non-pharmacological anxiety interventions be used in place of pharmacological interventions at this time. Additional research should be performed to determine whether non-pharmacological interventions are as effective as pharmacological interventions for anxiety reduction.

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The Better Healthcare Strategy: A Literature Review of Internal and External Corporate Social Responsibility

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Reviewing literature on corporate social responsibility (CSR) can help healthcare professionals strategically improve and sustain a competitive advantage in business through industry applications of CSR initiatives. The reviewed implications for internal and external corporate social responsibility include increased motivation and productivity, improved market reputation and social insurance, and reduced turnover rates and industry exit. The promising benefits of developing CSR initiatives are recognized and recommended to healthcare leaders in an attempt to provide what may be the better healthcare strategy.

When companies rise above economic pressures to prioritize making an impact in their community and value the men and women in their employ through holistic means, the benefits of corporate social responsibility (CSR) are manifest. CSR represents an organization's active attempt to improve their communities, promote ethical and sustainable business practices, and enhance the general wellbeing of employees. Internally, an organization accomplishes this through measures such as training on work-life balance, resources to address mental health, and opportunities for employee engagement. Externally, this type of responsibility can be carried out through practices like supporting local charities or reducing environmental impact. The gains brought about by a stronger emphasis on corporate responsibility in a healthcare setting has proven CSR to be a matter that must be carefully and strategically considered. The International Organization for Standardization's advisory group defined CSR as "a balanced approach to address economic,

social, and environmental issues in a way that aims to benefit people, communities, and society" (Carpion & Avramchuk, 2017, p. 27). This balanced involvement in environmental, social, and governance matters can be readily seen from businesses in a wide variety of markets. These companies are acting upon the yield they see in community outreach and a greater focus on employee well-being. At their core, healthcare clinics and organizations are companies that are "subject to business drivers for profit and survival as well as societal drivers for public welfare and care" (Carpion & Avramchuk, 2017, p. 28). Too many healthcare issues exist that have the potential to be managed by internal and external CSR solutions. These issues may include nurse burnout, increased turnover rates, workplace dissatisfaction, and tragically, an increasingly critical attitude towards the industry that once brought them meaning and fulfillment (Carpion & Avramchuk, 2017, p. 24).

The continued frustrations in managing expectations between economic and social pressures in healthcare seem to consistently leave many dissatisfied. From administrators and insurance specialists to providers and patients, the delicate nature of the industry, as lives are both lost and preserved, must be nurtured with mutual reciprocity and an understanding of value systems and ethical standards between individuals and organizations. The strenuous environment where human life is preserved can be pacified when accompanied by integrity, respect, and kindness towards both those in their organizations and in the community (Carpion & Avramchuk, 2017, p. 26). Of course, the obvious time commitments to patients and profitability while operating a hospital or clinic cannot be overlooked when implementing expanded CSR efforts to reduce disrespectful attitudes and negativity. Thus, employing strategic applications of CSR and practical endeavors to incorporate genuine human decency and care outside of work in a sensible manner is essential. Additionally, the conclusions of research performed on the implementation of pro bono work in CSR resulted in the resounding affirmation that health care pro bono and charity services fill a void (Goupil & Kinsinger, 2020, p. 21). Pro bono in healthcare is seen as providing services without charge to those who are otherwise unable to afford such treatments. It is clear that "vital to the consideration of volunteering one's services are both the legal and economic implications of pro bono work in the healthcare

field" (Goupil & Kinsinger, 2020, p. 24). Benefits of expanded CSR efforts in the healthcare industry include increased employee and stakeholder confidence and reputational and social insurance, an employee governance tool that cultivates a motivating and encouraging atmosphere, an improvement in satisfaction and productivity, and reduced rates of employee turnover (Carnahan et al., 2017, p. 1953). Light should be shed on the better healthcare strategy that finds meaningfulness and contentment in the workplace through corporate social responsibility—to improve hospital and healthcare clinic success.

A Governance Tool for Motivation and Encouragement

Though human capital is highly touted as a critical strategic resource, it also includes the drawback that employee motivation and encouragement are difficult to measure and observe. This managerial difficulty of actively tracking effort and productivity leads to adverse behavior which economic theory defines as the occurrence of the more informed party (the employee as the 'agent' to the business) acting contrary to the wishes of the party with lesser knowledge (the management as the 'principal' to the employee) out of self-interest. As the agent acts on behalf of the principal, we essentially see the danger that "if the interests of the agent and the principal are misaligned, the agent may have an incentive to act in a way that is detrimental to the principal" (Flammer & Luo, 2016, p. 66). When employee productivity and interest go unmonitored, we see that projects with larger personal benefits to the employees are completed more often than those with weaker incentives. We also see that disloyalty to the company ensues in the workplace and loyalty to self heavily governs the amount of human capital held by firms (Flammer & Luo, 2016, p. 164). This issue has become increasingly prevalent in hospital organizations that are seeing results of burnout among nurses and employees are working longer hours for lesser pay. There must be a healthy balance between both self-interest and a commitment to the organization among employees. The negative consequences surrounding the prevailing disparity between self-interest and company success must be addressed as misplaced employee motivation and enthusiasm continue to decrease productivity (Flammer & Luo, 2016, p. 164). This issue can most certainly be addressed by an increase in internal CSR initiatives

because of the potential that they have to unite and align employees with a higher, more fulfilling purpose.

As noted in the article by Carpion & Avramchuk (2017),"public health strategies and opportunities for advancing healthy behaviors within the workplace setting are receiving greater acceptance and priority" (p. 28). Though employers are presumably invested in the well-being of employees in the workplace for matters of productivity and profitability, it is in corporate functions that the matter of CSR must become a priority rather than a means to survive in the market. Internal CSR initiatives assuredly increase profitability, but it is also shown to reduce costs and address situations of employee subjective well-being (SWB). Carpion & Avramchuk concordantly explain that "a health system's costs are directly impacted by the underlying health and well-being of the population that it serves, and healthcare organizations might find it prudent—as much as socially responsible—to implement individual programs and wider policies toward CSR" (Carpion & Avramchuk, 2017, p. 28). Focusing on stress-reducing initiatives, positive and encouraging experiences in the workplace, and the general subjective health of employees will provide a return on investments that cannot be overlooked. As costs from an accounting standpoint are regarded as the sacrifices made to achieve some benefit, the benefits of SWB in the workplace have massive implications on cost-reduction in ways that when intentionally attended to can be easily accomplished. These aforementioned investments in employee wellbeing, as addressed by Carpion & Avramchuk, "demonstrated how positive events and reflections at work might decrease the negative effects of stress and concluded that 'positive daily experiences at work, such as socializing, positive feedback, and goal accomplishment, relate directly to reduced stress and improved health'" (p. 28). A more intentional effort by healthcare leaders to maximize human capital within their organizations through concise, pointed CSR initiatives and a prioritization of their interests for self and company objectives will yield benefits that cannot otherwise be imitated either morally or economically. As highly valued members of society, healthcare professionals provide "services to the public according to the benefits and responsibilities inherent under the social contract" (Goupil & Kinsinger, 2020, p. 21). Healthcare leaders can demonstrate valuing their employees by applying these methods and

may simultaneously discover means to secure greater motivation and encouragement in the workplace.

Market Reputation and Social Insurance

The complex ramifications of social insurance, which is defined as a company's reputation among key stakeholders and the market, must be heavily protected and safeguarded. Generated by its image, credibility, or public perception, one's social insurance can be heavily dictated by both positive interactions as well as negative situations. We see detrimental consequences in the following examples including an investigation on allegations surrounding nepotism and funds used for personal use endeavors by management of an Ohioan hospital (Wildow, 2023). We see an orthopedic surgeon and private doctor with suspended licenses for an unnecessary surgery on a patient's perfectly healthy leg and negligence that led to the death of another patient (Ians, 2023). We see a doctor charged with sexual misconduct (Phelan, 2023). These are all examples of healthcare misconduct reported over the course of a week. The following statement could not prove truer: "Hospitals are more vulnerable than other organizations to public relations challenges because of the nature of treating patients on a daily basis" (Flanagan, 2016, para. 12). Made abundantly clear in the media, the resulting reputational detriment hospitals are forced to resolve due to such challenges is extremely evident. While exploring the pattern of employee turnover rates and industry exit, as explained in the following section, the hypothesis that higher levels of a firm's CSR activity would mitigate turnover and exit, subsequently brought about a connection with insurance-like benefits with respect to influential contributors. The noted consistency led to the argument that "firm investments in CSR create a sense of goodwill among a firm's stakeholders that has insurance-like benefits when bad things happen" (Carnahan et al., 2017, p. 1954). Thus, 'social insurance,' as generated by robust CSR efforts, returns market confidence and trust during the inevitable pitfalls of accusations and allegations inherent to the healthcare industry.

The growing expectation from the market is for organizations to adopt and implement more CSR pursuits, and though these demands are not specific or particular in nature, these actions are becoming increasingly strategic. We see that "strategic CSR draws from the charitable and philanthropic underpinnings of CSR to selectively allocate and leverage the

companies' own resources for socially responsible development and ultimately strengthen their competitive advantages" (Carpion & Avramchuk, p. 27). The strategy lies in the reputation a healthcare organization displays to the market, gaining a competitive reputation that establishes the confidence and trust of stakeholders and the general public. The clear need to appeal to the market's CSR expectations is growing. Aligning effective use of resources proves strategic and a natural determinant for an organization's economic success and survival (Carpion & Avramchuk, 2017, p. 27). Initiatives for corporate social responsibility may appear costly, time-consuming, uncomfortable, or even unprofitable. However, investing in the people who pay an administrator's salary, supporting them in the market, and keeping their healthcare facility operational will undoubtedly pay greater dividends than perceived.

Decreased Turnover Rates and Industry Exit of Employees

Stemming from the current issues surrounding healthcare worker burnout, the potential for decreased turnover rates and industry exit of employees illustrates the implications of what more diligent CSR efforts may have on any healthcare organization. The industry as a whole finds itself hurting from the loss of committed and motivated workers who are leaving this field of work. The nature of improving the quality of life through business proves it to be an inherently fulfilling career. Sadly, the rates of shortages in the ranks of nurses and other sectors are continually increasing. A solution to this can be found in corporate social initiatives. In finding a positive association between retention and employee participation in such initiatives, researchers duly noted that their results came from a conservative context in which profit-driven business consultancy employees were observed (Bode et al., 2015, p. 1703). It was further stated that "consultants in this firm willingly took pay cuts to participate in corporate social initiatives, and their post participation likelihood of staying at the firm was greater than that of nonparticipants" (Bode et al., 2015, p. 1717). Stemming from research done on lawyers from the NYC area during the attacks on 9/11, mortality-related shocks on professionals in the industry stripped away at their sense of purpose and resulted in leaving their organizations, potentially beginning their own firms, or even exiting their field of work entirely. As CSR constructs a reputational

foundation for goodwill and community concern, a corporate emphasis on "pro bono may also build a reservoir of meaningfulness among employees that buffers the firm against turnover when crises occur in employees' lives" (Carnahan, et al., 2017, p. 1954). Their recognition of exemplars of charitable efforts in healthcare is as follows: "We conclude that the implementation and delivery of health care pro bono or charity services can fill a health care gap and can be applied successfully in the health professions" (Goupil & Kinsinger, 2020, p. 21). This application to the healthcare industry may give a resounding response to the meaning being lost among professionals and fill the void created by the conflict of healthcare in being both influenced by matters of profit and society.

Conclusion

In reviewing the literature surrounding the advantages of placing a greater emphasis on CSR, both internally with the people in an organization and externally with the people in the community, the analysis offers a myriad of ways in which healthcare leadership can change the trajectory and future overall success of their organizations and the industry. Great potential exists for increased motivation and productivity among employees. Improved market reputation and social insurance will certainly be more securely and positively established. Finally, a reduction in turnover rates and industry exit will ensue as organizations begin to care more for their employees. The review of this material offers that deeper consideration and subsequent implementation of CSR initiatives is worthy of further contemplation and may be the better healthcare strategy.

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