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Addressing Physician Burnout and Moral Injury to Improve Physician Retention in the United States: Perceptions of Physicians

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EMPA 396 – Graduate Research Project in Public Management

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Abstract

There has been an alarming increase in the levels of moral injury and burn out among physicians. This, compounded with a significant estimated shortage of physicians within the next decade, is now a public health crisis. A recent study conducted by Medscape of over 12,000 physicians reviewed the different etiologies to burnout and access to treatment, but it was limited in exploring the effectiveness of the treatments available. Other studies have suggested a possible correlation with burnout and physician retention, but many of the studies only inquired about thoughts of leaving practice, instead of assessing the physicians that have actually left. This study was designed to assess the current availability and effectiveness of burnout treatments and to investigate a possible correlation of moral injury and burnout on physician retention. Over 500 physicians were surveyed, and quantitative and qualitative data were gathered. The results highlight the importance of offering more screening and effective treatment modalities to physicians to reduce the frequency of burnout and moral injury. If our country is going to retain its physician work force to take care of its citizens, addressing physician burnout and moral injury is essential.

Chapter 1: Introduction

Background of the Problem

A resounding theme at nearly every medical school white coating ceremony is the reciting of the Hippocratic Oath by the graduates. Although it is delivered in a variety of ways and there are now many different versions, there is one recurrent underlying theme, “First, do no harm” (Gill, 2019). The Hippocratic Oath has been around since 421 BCE. It was written by Hippocrates, a renowned Greek physician (The Editors of Encyclopedia Britannica, 2019). Although "first do no harm" is not actually in the Hippocratic oath verbatim, it is believed to be within the heart of the text itself.

The medical field has dramatically changed since the Hippocratic Oath was written, and more recently, the New Public Administration (NPA) has influenced the transformation. The New Public Administration arose out of the need for a relationship driven process between organizations and their customers. It was believed to have generated a more efficient, value based, personalized model for service and product delivery (Denhardt &Denhardt, 2015).

The impact of these changes within the health care industry has led to a paradoxical situation. There has been a shift to increase evaluation and performance metrics, which has resulted in substantial administrative burdens for physicians. Prior to the NPA shift, the health systems placed value on the autonomy, personal experiences, and ingenuity of the physician in regards to patient care. Now, achieving the best performance scores and meeting the metrics of the system has become a priority to the health care administrators and insurance companies across the country. The increased documentation needs with the Electronic Medical Record (EMR) systems to adequately achieve those scores and improve quality performance measurements may have improved value and transparency within the health care system (O’Reilly, 2019). But, the extra responsibilities of charting and trying to keep up with the metrics

are continuing to weigh on the physicians. The charting has become duplicative and many of the areas required are not clinically relevant (O'Reilly, 2019).

Now, the same physicians that were once in complete charge of the patient's medical care have multiple entities to answer too. Physicians are now battling to serve their patients and stand by what they promised during their first white coat ceremony: "first, do no harm." With the push of the performance measurements on top of the extra non-clinical administrative burdens, many physicians believe the system is interfering with the ability to deliver safe, quality care. As a result, the rates of moral injury and burnout among physicians have been increasing at an alarming rate (Patel et al, 2018).

In addition to burnout and moral injury, many physicians suffer from mental health disorders, like post-traumatic stress disorder, depression or anxiety. Often times, their mental health challenges are a direct result from the clinical experiences they are involved in or have witnessed circumferentially (Dyrbye et al., 2017). Many physicians report living with fear of making a mistake. Others report insomnia from worrying over missed diagnoses or possible medical errors (Dyrbye et al., 2017). Patient deaths may haunt them for their rest of their lives.

All humans make mistakes; doctors are no exception to this rule. When doctors do make a mistake, their entire lives can be disrupted. Many are shamed in the local news and/or taken to court. They are at risk of not just a substantial fee from a lost malpractice suit, but potentially losing everything they own: their practice, their license, their family home, and marriages (Dyrbye et al., 2017).

The medical system may be contributing to the burnout, moral injury, and mental health disorders among physicians with lack of support and continued emotional stress. Medical boards continue to hold physicians to mental health standards. If physicians seek mental health care,

they risk losing their medical license or other disciplinary actions. Often times, physicians will either delay care or use falsified personal information to avoid such repercussions (Berg, 2018). Although physician burnout is not recognized as a serious health condition by the Family and Medical Leave Act, many believe it should be to allow the physicians to get the care they need (Marshall, 2021).

As a result of inadequate mental health care, many physicians choose to end their life by suicide. Physician suicide has become a public health crisis in of itself, but it is often not spoken about. The first recorded physician suicide dates back to 1858, and today at least one physician dies by suicide every day. They have the highest rate of suicide compared to any other profession (Anderson, 2018), and that includes our military members. One million people across the country lose their physician to suicide each year, which has a huge impact on the health care system and our physician shortages (Letter to the editor, 2019). One out of ten physicians, and up to one out of five physicians in some specialties, reported thoughts of suicide (Kane, 2021).

Figure 1.1

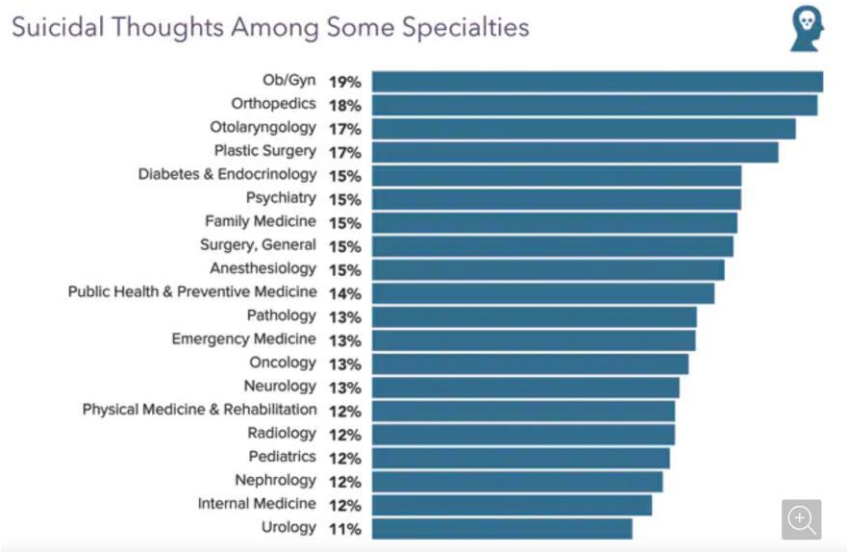


Figure 1.1. Physician Suicidal Thoughts by Specialty. Reprinted from 'Death by 1000 Cuts': Medscape National Physician Burnout & Suicide Report 2021. In Medscape, 2021. Retrieved June 10, 2021, from https://www.medscape.com/slideshow/2021-lifestyle-burnout-6013456?faf=1#20

The COVID-19 pandemic has only complicated the picture. Burnout among physicians prior to COVID-19 was estimated at a 50% prevalence within the profession. Since COVID-19, it is now over 70% (Amanullah & Shankar, 2020). The worsening burnout is multifactorial, but a few of the top reported stressors includes the lack of proper equipment and a fear of contracting or spreading the virus to family (Bradley & Chahar, 2020). To complicate matters, physician retention has also plummeted since the pandemic (Landi, 2021). Whether or not there was correlation between the two is still left to be discovered.

Considering the work effort required to get into medical school, the rigorous training environments, and the life and death challenges, physicians are some of the most resilient people you will ever meet. With that said, the rate of moral injury and burnout throughout the profession is one of the highest of any profession. There is substantial evidence that suggests over half of physicians report negative feelings about their jobs. One third would not choose their career again (Spears, 2017). It is likely moral injury and burnout are among the reasons behind why physicians leave the field.

Regardless of the cause, many physicians are leaving their clinical practices (Peterson-Kaiser Family Foundation, 2020), which is perhaps an even larger public health concern. The US already has fewer practicing physicians per 1000 people when compared to most other similar countries (Peterson-Kaiser Family Foundation, 2020).

Figure 1.2

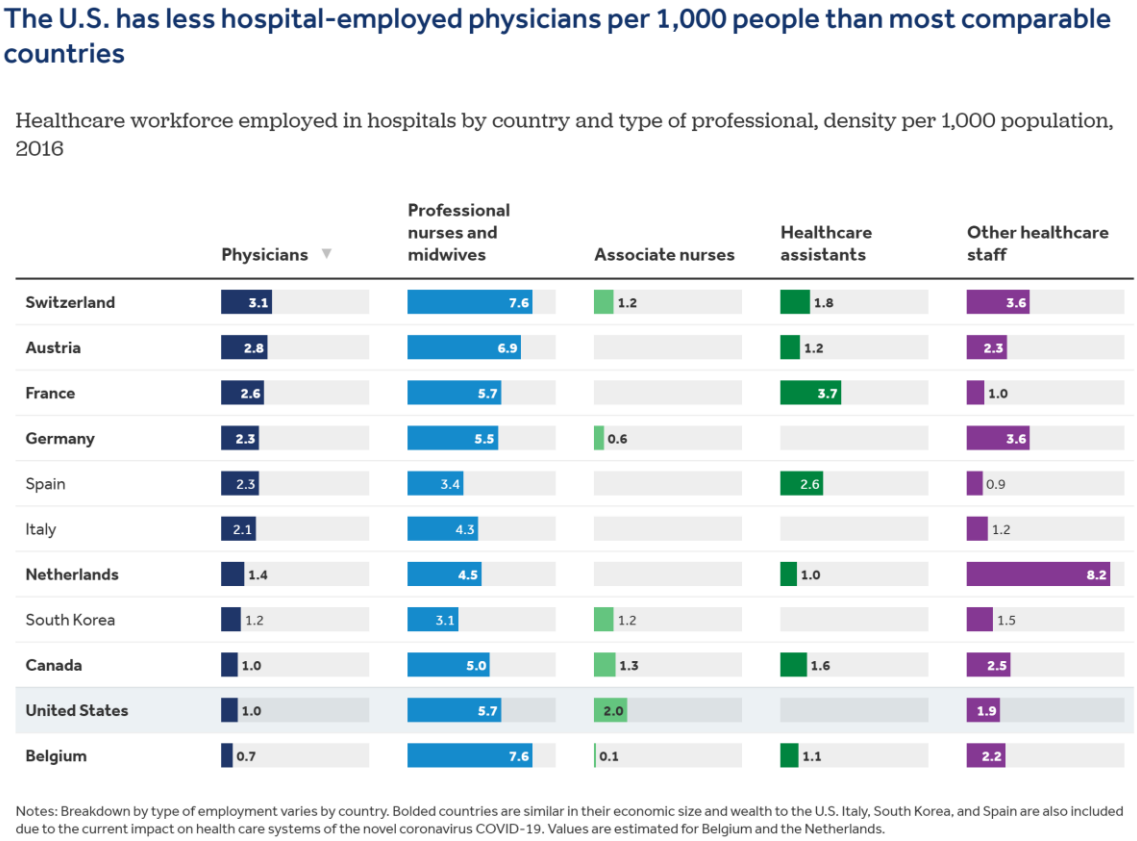


Figure 1.1. Comparison of healthcare worker employees in the hospitals. Reprinted from How prepared is the US to respond to COVID-19 relative to other countries? In Peterson-Kaiser Family Foundation, 2020. Retrieved June 8, 2021, from https://www.healthsystemtracker.org/chart-collection/how-prepared-is-the-us-to-respond-to-covid-19-relative-to-other-countries/#item-start

Sadly, there is an even larger estimated shortage of physicians anticipated in the future. The Association of American Medical College (AAMC) is estimating a shortage of up to nearly 122,000 physicians by 2032 in the United States. This estimated shortage is multifactorial, but is likely due to an increasing patient population and physicians taking 15 years to fully train and replace (AAMC, 2019).

Statement of the Problem

With increasing rates of burnout among physicians due to the pandemic, we may be facing even larger physician shortages in the future. In order to combat the shortages, understanding the various factors that may be contributing to our physicians choosing to leave their medical practices is important. Through recognizing physician burnout and moral injury and offering support with effective treatments, the physician retention rates may ultimately improve. If the physician retention rates improve, our anticipated shortages may be more manageable.

Purpose of the Study

To avoid continued injury to our physicians and worsening retention rates, it is crucial to understand the processes that are contributing to physician burnout. There have been multiple studies completed already regarding the different etiologies, including those that have developed since the COVID-19 pandemic. There have also been studies reviewing the current treatments available for physicians in their workplace. There have been little studies regarding the effectiveness of these treatments, however.

It is also important to recognize the remaining dichotomy of roles for the physician as an agent serving multiple entities, or principles. Although the agency theory has been applied to the health care industry before in attempts to better understand the doctor-patient relationships, it has not yet been applied to the comprehensive health care system itself to understand the impact on the physician. If applied to physicians, it may better explain the underlying moral injuries that physicians suffer with that contribute to their burnout. Understanding the agency theory and other areas that have led to the moral injury within the physician is needed to start to impact change within the system.

If moral injury and burnout are left untreated, physicians may continue to leave medical practices. As a result, the physician shortage will continue to increase. This country cannot afford any more physician losses given the critical shortages we currently face. The purpose of my research will be to review the unique paradoxical dilemma contributing to the moral injury of a physician, the different etiologies of burnout, current treatments being offered, the effectiveness of those treatments. Due to the additional concerns surrounding the physician shortages, I investigated the correlation of moral injury and burnout on physician retention specifically.

Significance of the Study

Understanding the unique circumstances physicians face is important. The constant push from the health care system to meet certain measurement requirements has created an internal rift within the physician. In addition to the new metric and performance requirements, physicians are trying to meet all the needs of the different entities they serve. These entities include the administrators, the patients, the insurance companies, their families, and their own personal needs. There is an exceptional challenge in balancing the different priorities of these entities.

Understanding the concept of the agency theory and how it might be playing a role in physician moral injury is imperative. The goals of the majority of physicians are to provide quality patient care. When a physician witnesses activities in the medical field that contradict their practice values or are misaligned with their patient care goals it can create internal unrest. Although the concept of moral injury is more complex than this, this internal unrest is one of the components. Administrators and public health officials should be introduced to this paradoxical situation physicians face in order to alleviate the problems with the health care systems design leading to it.

Although the term moral injury is relatively new when applied to physicians, the term burnout has been around for decades. The impact of burnout on the health care system has been extensively studied. After heart disease and cancer, death by medical error is next as a leading cause of death in America (Motluk, 2018). A burnout physician is twice as likely to make a medical error, and over half of our country's physicians are reporting clinical burnout. The BMJ Journals reported after literature review there is moderate evidence that safety related quality care for patients is associated with physician burnout (Dewa, n.d.).

This is an incredibly alarming trend that needs to be addressed. Physician burnout does not just impact physicians, it effects the communities around them. Although there have been many studies that have identified the different etiologies and treatments of burnout, there have been very few studies on the effectiveness of those treatments. This is an important area to research if burnout is going to be addressed successfully. If burnout is left unaddressed, the repercussions on the health care system and physicians are significant. The increased errors and emotional detachment associated with burnout, is not an ideal situation for patients or physicians (Moukaddam, 2020).

Research Hypotheses

There have been studies suggesting a correlation between burnout and physician retention, but a more definitive impact assessment of the impact moral injury and burnout on retention directly is needed. The general question for this research study is to determine if there is a correlation between moral injury and burnout with physician retention. In order to reduce physician shortages in the future if a correlation is found, this study will help highlight the importance of focused efforts to correctly treat moral injury and burnout for physicians.

Additional questions are included in this research study. In order to understand what factors influence physician retention, it is important to understand the different causes, including

the new stressors since the COVID-19 pandemic. The different etiologies of moral injury should also be reviewed. It is also important to understand the variety of treatments currently available for physician moral injury and burnout, accessibility to those treatments, and barriers to care.

Theory of Change and Assumptions

The theory of change for this research study is: If physicians with burnout were recognized, if the process of moral injury was appreciated as a contributor to burnout, if physicians were offered effective treatments for moral injury and burnout, then physician retention rates would improve. As such, the three following assumptions are made:

Assumption 1 (A1): If physicians with burnout were recognized, then physician retention rates would improve.

Assumption 2 (A2): If the process of moral injury was appreciated as a contributor to burnout, then physician retention rates would improve.

Assumption 3 (A3): If physicians were offered effective treatments for moral injury and burnout, then physician retention rates would improve.

Limitations

As with every study, there are limitations to this research study. Because of the complexity of the health care system, it is difficult to include every potential contributor to moral injury and burnout. There are a lot of different physician specialties, and the challenges they face within their field of medicine may vary greatly from one another. Additionally, physicians are able to practice clinical medicine in a variety of settings. These include hospitals, clinics, surgery suites, and telehealth. The different clinical scenarios may also have a role as to what factors influence the moral injury and burnout. The current treatments available may also vary on the

health care system and/or location of their practice. Although, I have attempted to capture the most common etiologies and treatments for burnout, it is not a comprehensive list of options.

There are also limitations with the design of the study. This particular study will rely on physician self-reporting in the survey. There is still a questionable stigma surrounding burnout, mental health disorders, and potential repercussions if there's an admission of diagnosis. There may be a few physicians that have symptoms, but do not report it. Many of the survey questions concern private or sensitive topics. This may lead to social desirability bias as well. In order to reduce the social desirability bias and challenges with physician self- reporting, the survey will be completed anonymously. Lastly, a few of the survey questions involve present and past events. This may lead to recall bias with the events.

Definition of Terms

Within this study, there are a lot of terms used that are important to define further. The term physicians will represent allopathic and osteopathic medical doctors, residents, and medical students.

The differences between burnout and moral injury are important to understand. The term burnout is not considered an actual medical condition. According to the World Health Organization, burnout is defined as "a syndrome conceptualized as resulting from chronic workplace stress that has not been successfully managed. The three characteristics include: feelings of energy depletion or exhaustion; increased mental distance from one's job, or feelings of negativism or cynicism related to one's job; and reduced professional efficacy." In this study, the feeling of burnout is subject to the interpretation of the reporting physician.

Moral injury on the other hand, represents a mental, emotional, or spiritual distress that develops when someone witnesses, fails to prevent, or is involved in acts that "transgress deeply

held moral beliefs and expectations (Dean, 2019).” For this study, moral injury is represented by the distress that develops when the physician experiences a misalignment of their goals for patient care with the administration, insurances, patients, or their own personal goals.

The Agency Theory is typically applied in the business world. Per Investopedia, an agency represents a relationship between two different parties (Kopp, 2020). One party is considered the agent, who has been hired to perform a specific service. The other party is the principal, that has hired the agent to perform a specific duty (Kopp, 2020). Generally speaking, the principal allows the agent to be in control of the decision-making processes. The agency theory assumes there are differences in priorities and interests between the agent and the principal, which can create problems (Kopp, 2020). In this research study, the agent represented the physician, and the different principals are the administrative body, the system, the patients, and the physician’s self-interests. This is the theory that was used to exemplify the underlying distress within the physician after witnessing a misalignment of goals for patient care with the various principals.

For the purpose of this study, the burnout identification processes will include surveys, informal conversations, and more formal approaches. The most common surveys used for identify burnout include the Maslach Burnout Inventory, Oldenburg Burnout Inventory, Single Item Burnout Measure, Copenhagen Burnout Inventory, Stanford Professional Fulfillment Index, Viable and Reliable Survey Instruments to Measure Depression and Suicide Risk, and the Well Being Index. The Maslach Burnout Inventory-Human Services Survey (MBI-HSS) is a widely used tool to measure burnout and has been validated in the physician population (Maslach & Jackson, n.d.). In this study, I investigated the use of these studies within the physician organizations.

For the purpose of this study, the treatment options were assessed through two pathways: individual, self-care options and organizational strategies. The self-care strategies ranged from improving resiliency, exercise, and improving work-life balance. Organizational strategies included continued education training, conferences, offering scribes to assist with charting, increasing support staff, and easing the prior authorization processes. Accessibility and the self-reported effectiveness of the various treatment options were also evaluated.

The fear surrounding burnout treatments is defined as the perceived implications of potential career repercussions. The different areas of perceived career repercussions included practice management or with medical licensing.

For the purpose of this study, physician retention is defined as physicians who were practicing clinical medicine at a specific location, but have reduced their hours there, left the clinical practice location, or left clinical medicine completely. All of these actions represent a change in a patient's access to care with the physician.

Expected Impact of the Research

Physician moral injury and burnout is a public health crisis. Understanding the relationship between moral injury, burnout, and physician retention highlights the importance of developing effective strategies on how to treat it. Physicians should be screened regularly for symptoms of burnout and treated appropriately without repercussions if identified. Physicians should be protected from situations that promote moral injury. In order to curb the anticipated physician shortages in the future, this should be a priority for our public health care system.

Chapter 2: Review of Literature

Introduction

Over the years, there have been many studies regarding the incidence of burnout and the different etiologies underlying it. Moral injury is a relatively new concept applied to the field, but is worthy of discussion. The COVID-19 pandemic accelerated physician burnout and created a need for updated studies related to burnout etiologies and incidence among physicians. This has been extensively studied already.

The COVID-19 pandemic has also generated a need for further investigation into physician retention. Although there are a few studies that suggest physician burnout leads to decreased retention, many of the studies asked physicians if they thought of, or plan to leave the field in the next 5 years. There have been very limited definitive investigations on the correlation between physician moral injury and burnout on actual clinical retention.

Etiologies to Burnout

The American Medical Association (AMA) reported a trend in increased administrative burdens due to added federal, state, and local government laws and regulations on the system. The new measurement requirements implemented within the health care industry, ultimately fall on physicians to comply with (Berg, 2020). Often times, new laws and regulations are implemented without understanding the translated impact onto the practicing physician. This places a higher administrative load onto the physician and may interfere with patient access to care (Berg, 2020).

The EMR is a big contributor to physician burn out. The system is multifaceted and can record the planning and evaluation of a patient's treatment plan. It is the tool the physician uses to refill medications, review labs and imaging, and even submit billing requests. When charting occurs during the medical visit, the physician is often focused on the EMR system, which in

turns makes the patient encounters less personable. As the documentation requirements have increased for physicians, much of the work is duplicative and arduous (Berg, 2020).

As private insurances expand their own payment and practice policies, the associated administrative burdens and financial pressures for physicians have increased (Berg, 2020). The insurances play an active challenge for physicians to combat on behalf of the patients. Many insurances have specific formulary prescription lists they require physicians to adhere and prescribe from, but most physicians do not have direct access to the formulary information (Berg, 2020). Additionally, private insurance companies have hired third party review companies to review all the imaging studies requested. If the clinic fails to send in the notes, the order is denied. This constant battle with the insurance companies on behalf of the patients is very difficult for physicians to withstand, especially without efficient ancillary staff support to help (Berg, 2020).

Physician performances are often measured by multiple factors, with the two most common being: our productivity and our patient satisfactions scores. Often times, productivity is based off a unit called a relative value unit (RVU). That unit is assigned after the patient visit and is dependent on the length of time of the visit, the procedures performed during the appointment, the medical complexity of the patient, immunizations given, among other factors. It is an assigned billable value that the physician uses to later collect payment of those services delivered (Cynar, n.d.).

From a business and administrative perspective, this sounds reasonable. The units are straightforward, reproducible and can be applied across subspecialties. However, many practicing physicians believe the RVU based system does not adequately capture the value of service rendered at each patient encounter. For example, a patient coming in for an immunization

holds similar RVU credit when compared to a 30-minute visit with a patient newly diagnosed with cancer, despite spending time discussing labs, imaging results, submitting referrals, and comforting the patient.

The oversimplification of the system has led the administrators to incentivize shorter appointment times and increased appointment volumes to, in turn, produce more RVUs. The United States has a significant disease burden, compared to similar countries throughout the world (Peterson-Kaiser Family Foundation, 2020). Delivering high quality care to a rapidly, increasing more complex medical society is difficult to simplify into a quantity of units. Increased productivity doesn't always equate to better quality of care rendered or better clinical outcomes (Cynar, n.d.).

Figure 2.1

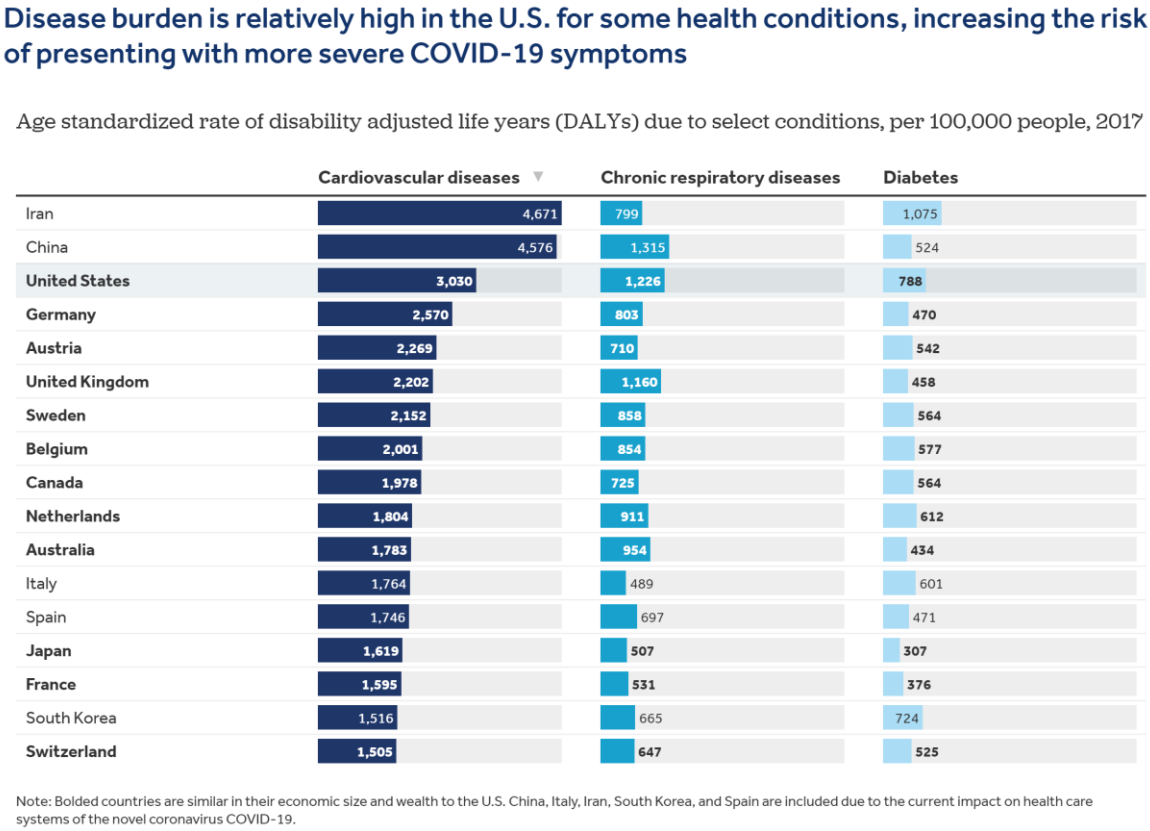


Figure 1.1. Comparison of healthcare worker employees in the hospitals. Reprinted from How prepared is the US to respond to COVID-19 relative to other countries? In Peterson-Kaiser Family Foundation, 2020. Retrieved June 8, 2021, from https://www.healthsystemtracker.org/chart-collection/how-prepared-is-the-us-to-respond-to-covid-19-relative-to-other-countries/#item-start

Outside of the RVU productivity measurements, patient satisfaction scores have been introduced as a new tool for administration to measure physicians by. Initially, it was proposed as a new model for bonus incentives for physicians. Recently, it is being used as a requirement for physicians to obtain certain scores in order to receive reimbursements for their services rendered (Scalpel, 2018). Patients having the ability to rate physician visits, with the scores ultimately impacting payment for that visit, has naturally led to less evidence-based medical practices, including over-prescribing of unnecessary antibiotics and pain medications (Scalpel, 2018).

The COVID-19 pandemic has certainly caused additional stress on the health care system. As a result, the burnout rates among physicians increased (Kane, 2021). Surprisingly though, this was not substantially due to the stress of treating patients. In a recent survey conducted by Medscape, two-thirds of physicians reported burnout due to excessive bureaucratic demands. One third blamed the long hours as a source of burnout. Less than 10% reported worsening burnout due to the stress of COVID-19 alone (Kane, 2021).

Figure 2.2

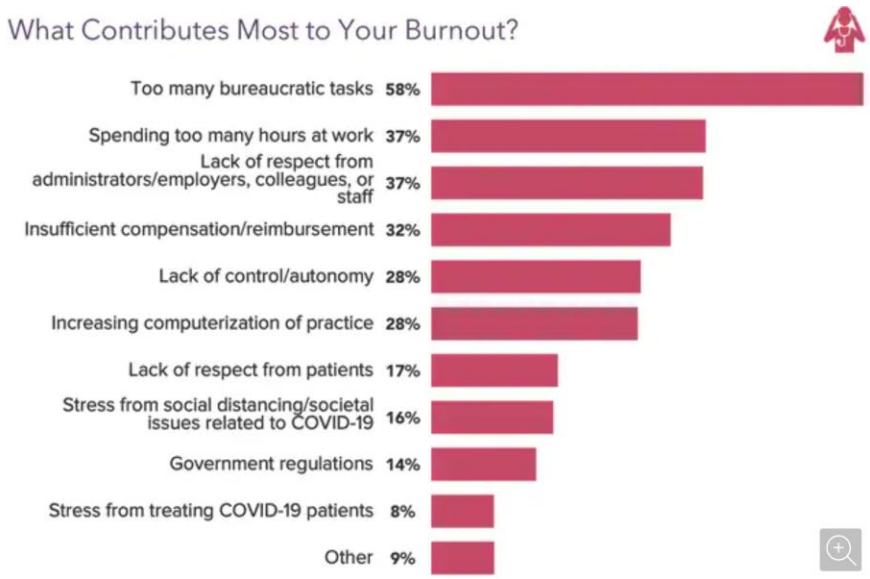


Figure 2.1. Contributors to Physician Burnout. Reprinted from 'Death by 1000 Cuts': Medscape National Physician Burnout & Suicide Report 2021. In Medscape, 2021. Retrieved June 10, 2021, from https://www.medscape.com/slideshow/2021-lifestyle-burnout-6013456?faf=1#5

Understanding the Agency Theory and Moral Injury in Medicine

According to the agency theory (Denhardt & Denhardt, 2015, p. 19), a physician holds the position of agent for multiple principals. These principals include both the patient, the administrators, the system, and the physician's own self-interest. It is near impossible to meet each principal's needs, given the individual objectives are misaligned. Attempting to act as an agent to varying principals with different objectives can increase the moral injury and ethical burn out of the physicians.

Over the last twenty years, the health care system has been reformed dramatically. The administrative employees have increased substantially. The United States has a higher number of total hospital employees compared to many similar countries, but nearly half of that number is

actually non clinical staff who are not involved directly with patient care (Peterson-Kaiser Family Foundation, 2020). This is a significant statistic when you consider that the physicians have to follow the directives from the non-clinical administrators regardless of what motivations are underlying that request. If the administrators focus on financial or performance metrics, the physicians are obligated to meet the measurement standards in addition to providing appropriate clinical care.

Figure 2.2

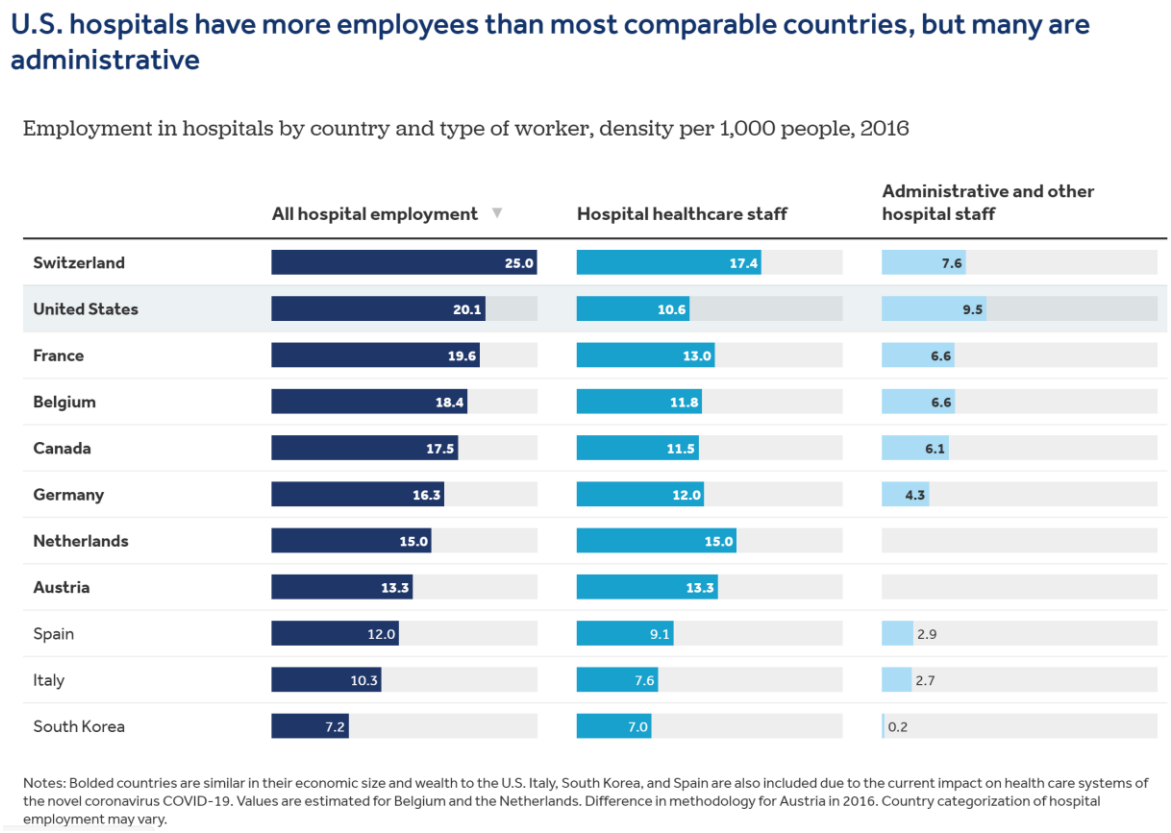


Figure 2.2. Comparison of healthcare employees. Reprinted from How prepared is the US to respond to COVID-19 relative to other countries? In Peterson-Kaiser Family Foundation, 2020. Retrieved June 8, 2021, from https://www.healthsystemtracker.org/chart-collection/how-prepared-is-the-us-to-respond-to-covid-19-relative-to-other-countries/#item-start

From the start of a physician's training, they strive to deliver safe, evidence-based care to their patient's without causing harm. The patients in turn expect to be on the receiving side of high-quality care. They bring their deepest and most personal problems to their doctor, and share their most private vulnerabilities (Gardiner, 2003). The patients rely on the opportunity to make well-informed decisions and play an active role in communication with their physicians. It takes additional time in the clinical setting to appreciate their vulnerabilities, provide proper education, and to make sure the communication between the physician and the patient is adequate in regards to the plan of care. Time is often undervalued by the administrators, and the reimbursements for the time spent are not adequate based off current RVU models (Berg, 2020).

As the complexity of the patients increase, the need for physicians to have increased appointment times with their patients increases as well. The disease burden in the US is substantially higher compared to other countries for cardiovascular disease, diabetes, and chronic kidney disease (Peterson-Kaiser Family Foundation, 2020). Managing complex patients with multiple co-morbidities requires more time and attention by the physician. Medication drug interactions need to be constantly re-evaluated and taken into account. The medications also need to be specifically dose adjusted based off the health status of their kidneys and/or liver. On top of all that, patients often see multiple subspecialists, and all of their different treatment plans need to be taken into account for the best patient management. Trying to find a balance with the complexity and time spent can cause undue internal stress upon the physician.

Despite the patient and physician feeling like more time is deserved together, the decision to allow longer appointment times is often determined by the administration and non-clinical staff members. The stakeholders have different interests and goals for the organization that complicate the efforts to improve the delivery of health care within the current system (Berg,

2020). The more patients on the clinic or surgical schedule for the day, the better the revenue for the organization, but often at the cost of the physician's values and expectations to deliver quality patient care. Due to certain productivity metrics and cost control motivations, the stakeholders and the physicians are not well aligned to the same goal. This impacts the physicians' sense of control over their practice and their feelings of autonomy (Berg, 2020).

In addition to all the administrative duties and burdens, physicians act as a principal to themselves. They have to balance their own personal needs and lives outside medicine. Family time, friendships, and personal free time is often scarified due to call schedules, administrative duties, and patient needs. After hour clinic administrative work has doubled, with multiple studies stating that for every hour a physician spends with patients it requires an additional 2 hours of data input into the medical record system (Green, 2016). Many physicians bring this extra charting work home and have coined the term "pajama" time. Unfortunately, the pajama time duties distract the physician from family and friends, and limit the ability for the physicians to part take in activities or hobbies they would prefer to be doing on their down time (Green, 2016).

Physicians also have an enormous amount of educational debt to pay when they are finished with school. This debt leaves a personal financial incentive to earn a higher income to pay the debt down sooner. The conflicting financial motivations can push the physician to pursue a more productive clinic with increases in the number of patients being seen during the day, often times at the cost of delivering the best quality care to the patients (Berg, 2020). Many physicians struggle with their multiple obligations to find a balance between seeing an adequate number of patients during the day and spending an acceptable amount of time with each of them.

All of these experiences that interfere with the physician's ability to provide quality care to a patient can all create a sensation of internal unrest within the physician. The process of moral injury is a relatively new term applied to physicians, but the concept has been around a lot longer. It represents a mental, emotional, or spiritual distress that develops when someone witnesses, fails to prevent, or is involved in acts that "transgress deeply held moral beliefs and expectations (Dean, 2019)."

Treatments Available for Moral Injury and Burnout

There are many organizational strategies that have been deployed to combat physician burnout. At the medical school and resident level, there have been various wellness curricula created to increase awareness of burnout. There were adjustments to the grading policies, including pass/fail options. There have been efforts initiated to improve the clinical training environments through improved schedules, more collaborate learning, and adequate supervision (Jackson Physician Search, 2020).

To address burnout through a more personal approach, many organizations are creating wellness programs. There are also tools the individual physician could use, such as reviewing Continued Medical Education (CME) training or attending formal wellness conferences. Some of the prior successful strategies include exercise, mindfulness activities, yoga, and finding activities to enjoy outside of medicine (Jackson Physician Search, 2020).

There has also been a significant push to remove any barriers for physicians to receive care for burnout, as well as other mental health disorders. The health care system should encourage physicians seeking treatments. Physicians should not be penalized for seeking treatments, and addressing the concerns for work place retaliation or licensing repercussions is important. According to a comparative analysis of the medical licensing mental health disclosure

statements, only 23/50 states did not require disclosure or required minimal disclosure regarding current personal impairment (Wilbe and Palermini, 2019). The other 27 states required disclosure of any mental health counseling, diagnosis, or treatment received in the past 5 years, with many asking beyond 5 years (Wilbe and Palermini, 2019). The Joint Commission has released a statement supporting reduced mental health disclosures on medical licensing boards (The Joint Commission, 2020). A recent study conducted by Medscape showed 20% of physicians had not sought treatment for burnout or mental health disorders due to fear of disclosure (Kane, 2021).

During the COVID-19 pandemic, many organizations are trying to lessen the impact of the additional stressors for physicians. The American Medical Association (AMA) released initiatives to assess the level of physician stress, identify the etiologies leading toward the stress, improve work load distributions, and provide support through conferencing tools and mental health support hotlines (AMA, 2020).

Etiologies to Physician Retention and Shortages

According to the Peterson-Kaiser Family Foundation research, the U.S. has fewer practicing physicians per 1000 people when compared to most other similar countries (Peterson-Kaiser Family Foundation, 2020). Americans have been impacted by this scarcity. In 2019, the Association of American Medical Colleges (AAMC) conducted research regarding the patient perception of physician accessibility. At the time, 35% of the voters reported difficulty finding a physician within the last 3 years. When compared to the research from 2015, this percentage had increased 10 points (Boyle, 2020).

The physician shortage is multifactorial. The patient population has been increasing, and it has proven difficult to train physicians to care for the country. Since 2002, there has been a 52% increase in the spots available in medical school (Finnegan, 2019). After graduating from

medical school, the new doctors have to complete a medical residency. Unfortunately, the number of residency positions available has not increased proportionately to the spots available in medical school. The AAMC reported only a 1% increase in residency positions available each year since 2002 (Finnegan, 2019). This has resulted in thousands of new graduates left unable to finish the necessary training to become practicing physicians. In 2021 alone, there were 10,500 more registered applicants for residency than positions actually available (The Match, 2021).

In addition to insufficient training opportunities for physicians, physician retention has been notoriously poor. It has been estimated that one third of the current practicing physicians will be over 65 in the next 10 years. When the aging physicians retire, it will have a huge impact on the number of physicians to provide care (AAMC, 2019). The aging population will affect physician supply, and ultimately, patient access to care. When these physicians decide to retire could have the greatest impact on the estimated shortages.

Other practicing physicians are reducing their clinical ours, changing jobs, or leaving the career altogether. A study in 2012 found that over half of physicians left their first job after 5 years (Jackson & Coker, 2012). A recent study completed by Medscape found that nearly 30% of physicians reduced their schedule due to burnout (Kane, 2021). Another 40% changed their work setting or adjusted their work flow, which could impact patient care volumes (Kane, 2021).

There is also a significant disconnect between the physicians and administrators in regards to retention programs. In a recent survey, 83% of physicians reported there was no established retention program at their organization. Only 30% of administrators reported a lack of a program (Landi, 2021).

The COVID-19 pandemic has only exacerbated the problem. In a survey with physician administrators, there was a 30% decrease in physician retention (Landi, 2021). Although the

administrators surveyed believed the majority of the drop was related to early retirement, many of the physicians surveyed reported the reason for leaving as moving to a new place of employment, retirement, and burnout. Another study indicated that 8% of doctors reported closing their offices in the early months of COVID-19, which was estimated to be close to 16,000 practices (Abelson, 2020).

Correlation Literature Between Burnout with Moral Injury with Physician Retention

There have been quite a few studies regarding physicians planning to leave the medical field due to burnout. One article reviewed the results of the 2012 Medical Practice and Attitude Report. The most commons physicians left or were considering leaving the medical field were economic factors and healthcare reform. Burnout was actually the third reason (Look for Zebras, 2020). According to the article, physicians were not asked if they had actually left the clinical field. The questions predominantly encompassed thoughts of leaving practice (Look for Zebras, 2020). Only physicians who actually leave clinical medicine impact patient access. This particular article highlighted the need for further investigation in this area.

Figure 2.3

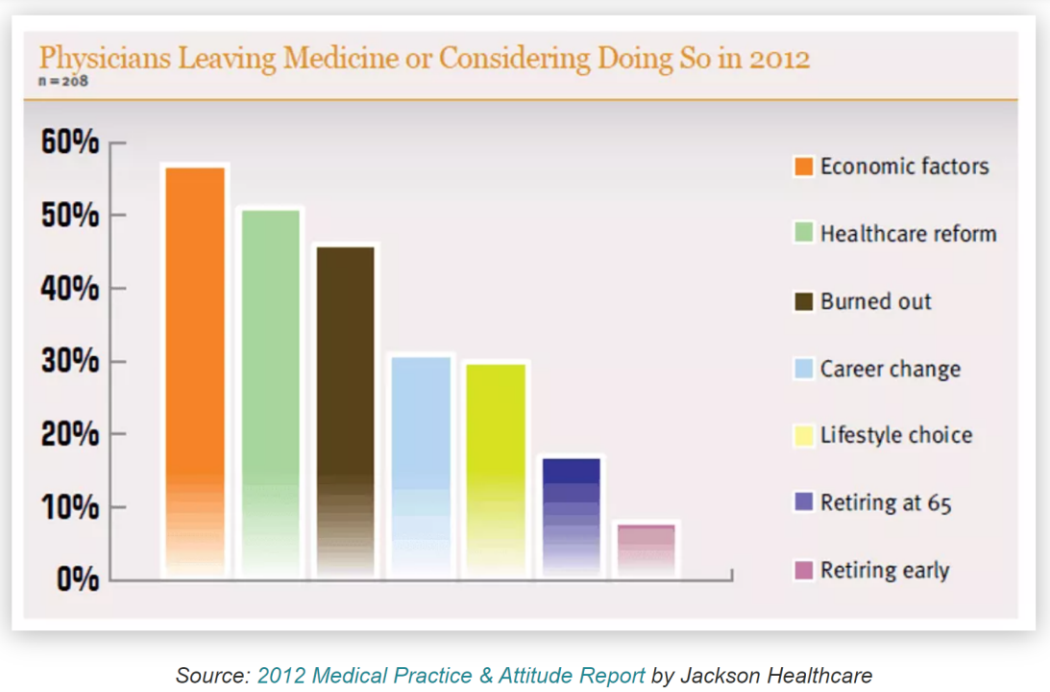


Figure 2.3. Physicians Leaving Medicine or Considering Doing So in 2012. Reprinted from Are doctors quitting medicine in droves due to burnout? I'm not convinced. In Look for Zebras, 2020. Retrieved June 8, 2021, from https://lookforzebras.com/are-doctors-quitting-medicine-in-droves-due-to-burnout-im-not-convinced/

Conclusion

With the anticipated upcoming physician shortages, physician retention remains a public health concern. With burnout and moral injury as contributors to retention, it is important to address them early in the process. Improved detection and encouraged referrals to treatment is critical. Physician burnout and moral injury have multiple etiologies and thus require a multifaceted approach. These include offering a variety of treatments at an organizational and personal level. In order to adequately support treatments, state licensing boards should modify and standardize mental health disclosures. Current impairment and the physician's ability to provide sound care is reasonable, but more aggressive questioning may be unintentionally discouraging physicians from receiving treatments.

Chapter 3: Research Methods

Research Design

The research method selected for use in this research study was a systematic investigation conducted via a survey. As the primary research method, it was a questionnaire released to physicians across the country. The intent is to capture authentic replies regarding the current opinions of physicians within the healthcare system.

Introduction

This research study was a mixed method study and included a quantitative and qualitative assessment of physician burnout and moral injury, screening usage, treatment opportunities available, and the effectiveness of those treatments. There was also be a correlation-comparative analysis between burnout, moral injury, and the relationship with retention.

Research question and sub questions

There have been studies suggesting a correlation between burnout and physician retention, but a more definitive impact assessment of the impact moral injury and burnout on retention directly is needed. The general question for this research study is to determine if there is a correlation between moral injury and burnout with physician retention. In order to reduce physician shortages in the future if a correlation is found, this study will help highlight the importance of focused efforts to correctly treat moral injury and burnout for physicians.

Additional questions will be included in this research study. In order to understand what factors, influence physician retention, it is important to understand the different causes before and during the COVID-19 pandemic. The different etiologies of moral injury and burnout before and during the COVID-19 pandemic should also be reviewed. It is also important to understand the variety of treatments currently available for physician moral injury and burnout, accessibility to those treatments, and barriers to care.

Theory of Change and Assumptions

The theory of change for this research study is: If physicians with burnout were recognized, if the process of moral injury is appreciated as a contributor to burnout, if physicians were offered effective treatments for moral injury and burnout, then physician retention rates would improve. As such, the three following assumptions are made:

Assumption 1 (A1): If physicians with burnout were recognized, then physician retention rates would improve.

Assumption 2 (A2): If the process of moral injury is appreciated and recognized as a concern, then physician retention rates would improve.

Assumption 3 (A3): If physicians were offered effective treatments for moral injury and burnout, then physician retention rates would improve.

Operational definitions

In order to clearly communicate the study process, there are important operational definitions to clarify:

- For the purpose of this study, the physicians assessed included allopathic and osteopathic medical doctors, residents, and medical students.
- According to the World Health Organization, burnout is defined as "a syndrome conceptualized as resulting from chronic workplace stress that has not been successfully managed. The three characteristics include: feelings of energy depletion or exhaustion; increased mental distance from one's job, or feelings of negativism or cynicism related to one's job; and reduced professional efficacy." This was represented by the subjective feelings of burnout by the physician respondents.
- Moral injury represents a mental, emotional, or spiritual distress that develops when someone witnesses, fails to prevent, or is involved in acts that "transgress deeply held

moral beliefs and expectations (Dean, 2019).” In this study, moral injury was represented by witnessing a misalignment of patient care goals between the physician and various entities (administration, insurances, patients, and self-interests).

- For the purpose of this study, burnout identification processes will include surveys, personal conversations, or formal evaluations.
- For the purpose of this study, the treatment options assessed will be through two pathways: individual, self-care options and organizational strategies. The self-care strategies range from improving resiliency, exercise, and improving work-life balance. Organizational strategies will include continued education training, conferences, offering scribes to assist with charting, increasing support staff, and easing the prior authorization processes.
- For the purposes of this study, the Agency Theory included an agent, which is represented by the physician, and multiple principals. These principals will include the patient, administrative system, the administrative body, and the physician’s self-interest.
- For the purpose of this study, physician retention was evaluated. There was a general retention assessment. This was used to identify physicians who were practicing medicine at a specific location, but are no longer employed there or employed at the same location, but has reduced their hours. The areas that impact this retention assessed in the study included burnout or moral injury. The clinical physician who reduced their clinical hours, left their employment location, or left clinical medicine altogether all impact patient access to care and may or may not impact the physician shortages in the future.

Population sampling strategy

Physicians all across the United States were asked to participate in the survey. The factors that influence burnout and moral injury are complex and may vary between different specialties, as well as different locations throughout the country. A broad survey for physicians allows a more complete assessment of physician burnout and moral injury prevalence, the various etiologies, treatment accessibility, and effectiveness of those treatments. While assessing physician retention, this study encompassed the different types of clinical practice, including the hospital, clinic, or telehealth/remote setting.

Procedure

The survey was collected using the social media site called Facebook. There were 5 physician communities selected to post the survey too. These communities require licensing confirmation prior to allowing entry. Only three gave permission to officially post on their site. The survey was accessible for one week. The initial goal was to obtain at least 100 respondents.

Data Processing and Analysis

After the study was completed, the data was reviewed using a qualitative and quantitative analysis. The replies were analyzed and summarized in the following chapter. Patterns within the quantitative data was represented via a bar graph. The qualitative analysis of the data focused on looking for additional factors involved that were not included in the survey. The qualitative data was collected through open ended questions in the survey. If there was a significant correlation between burnout with retention, it would support the original hypothesis.

Internal and External Validity

Although physicians face unique challenges within their field, the results of this study may be useful to other healthcare workers. There are similar challenges across the fields with administrative burdens, insurance barriers, as well as burnout and moral injury. The results may

also be applicable to those outside of the medical field. The U.S. military and our police forces also struggle with burnout and moral injury and may benefit from an understanding of possible correlation with retention. Understanding the different etiologies to burnout and moral injury, what treatments are effective, and how it might impact retention is helpful across many industries.

Limitations

In general, surveys only provide estimates for the true population, not exact measurements. There will be a lot of different types of specialties within the field of medicine surveyed from all over the country. However, some specialty types and locations may inadvertently be left out. Additionally, evidence has shown the COVID-19 pandemic has impacted burnout and retention. This poses a challenge with data analysis to tease out the root cause for overall retention concerns among physicians.

Conclusion or summary

In order to combat the future physician shortages, a definitive assessment of the impact moral injury and burnout on retention directly is needed. Additional assessments of the effectiveness of current treatments for burnout and moral injury are crucial if interventional changes are going to be implemented. The general question for this research study is to determine if there is a correlation between moral injury and burnout with physician retention. In order to determine correlation, a qualitative and quantitative survey will be conducted and offered to physicians across the U.S.

Chapter 4: Results and Findings

Introduction

This chapter presents the results and analysis of the qualitative and quantitative online survey conducted with physicians across the United States. Each question in the survey was multiple choice; a few of the questions offered an additional opportunity for the physicians to provide alternative responses to the questions. The quantitative and qualitative data was been analyzed and compared to the stated research assumptions.

Demographical Data

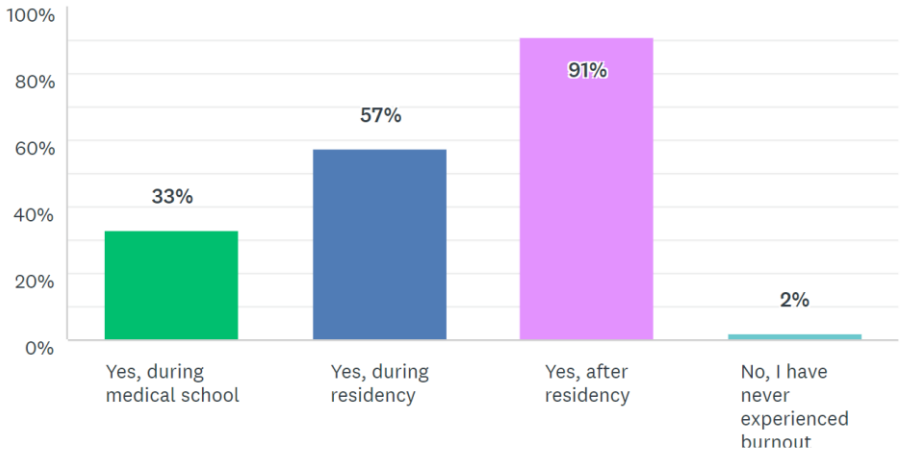
A total of 520 anonymous responses were collected. Of the 520 respondents, 86% were female, 13.8% were male, and .2% identified as other. The majority, 74%, of the respondents were employed full time. Around 17% of the physicians were employed part time and 9% reported not being currently employed.

Data Collection and Analysis

Assumption 1 (A1): If physicians with burnout were recognized, then physician retention rates would improve.

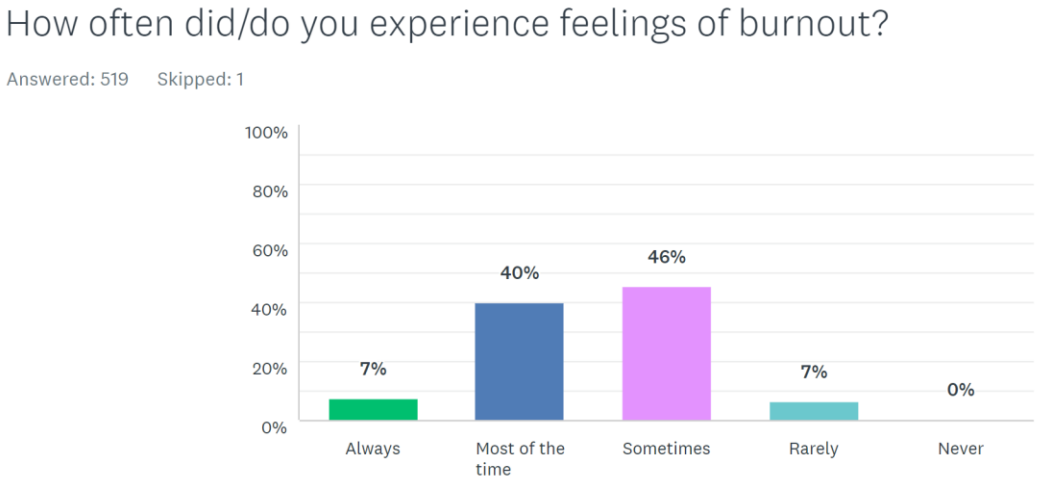
According to the survey results, many physicians start to experience burnout as early as medical school. The incidence of burnout symptoms among physicians increases over time. Of the respondents, 33% (n=171) reported feelings of burnout in medical school, 57% (n=298) reported feelings during residency training, and 91% (n=471) reported feelings of burnout after residency. Less than 2% (n=10) of the respondents reported never having symptoms of burnout.

Figure 4.1



When the feelings of burnout occur for the physician, the frequency of symptoms may vary. Of the 519 respondents to this question, 7% (n=38) reported the symptoms were always present, 40% (n=207) reported the symptoms were present most of the time, 45.6% (n=237) reported sometimes, 7% (n=35) reported rarely, and 0.4% (2) reported never having feelings of burnout.

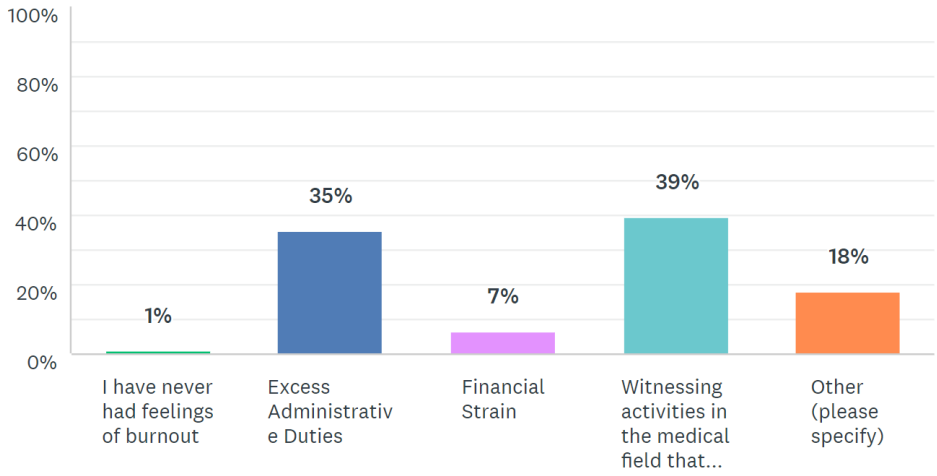
Figure 4.2



The various contributors to feelings of burnout for physicians were also evaluated. The largest reported contributor was witnessing activities in the medical field that contradict the physician's values or are misaligned with their goals to provide quality patient care at 39.5%

(n=205). Although other moral injury components were assessed in the Medscape study earlier this year, these components were not evaluated in this study (Kane, 2021). The next largest contributor to burnout was the excessive number of administrative duties at 35% (n=183). This was significantly less compared to the evaluation of excessive bureaucratic tasks as a source of burnout in the Medscape survey. Up to 58% of those respondents of that survey reported excessive tasks as a contributor (Kane, 2021). However, this study only allowed the respondent to select one answer. Considering the additional moral injury question in this survey wasn't present in the Medscape evaluation, it could explain the discrepancy in results. Another less significant, but important contributor, included financial strain in 6.5% (n=34) of the respondents. Only 1% (n=4) of the respondents reported never having feelings at all.

Figure 4.3



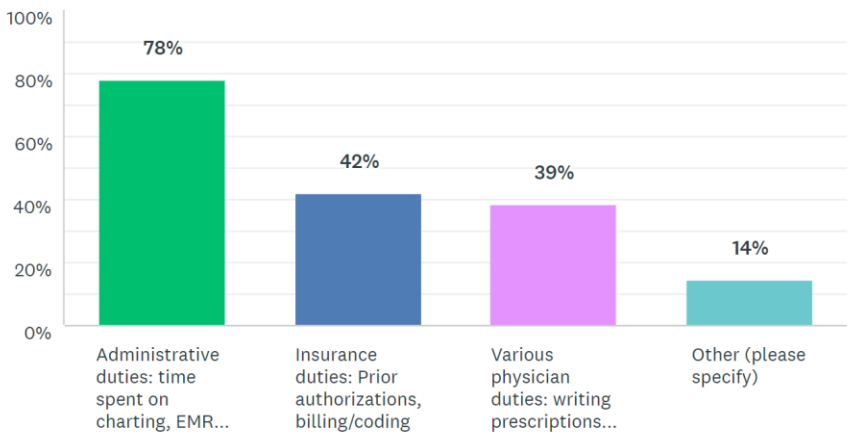
The misalignment of goals for patient care with the administration, insurances, and/or self-goals is an area not previously identified in the literature review as an etiology to burnout, but it is worthy of recognition. Of the physicians that responded, three out of four confirmed it had contributed to feelings of burnout all of the time (30%, n=153) or most of the time (43%,

n=222). The other respondents reported it caused feelings of burnout sometimes, 23% (n=118) and 4% (n=20) reported rarely. Only 1% of the physicians reported it was never a contributor.

As anticipated from the literature review, when physicians were given an opportunity to add additional details, many physicians reported COVID as a major contributor to their burnout. Some reported the level of excess deaths in the intensive care unit causes their burnout. Others reported it was the lack of personal protection equipment. Many attributed their feelings of burnout to the continued fear of contracting the disease and/or passing it on to loved ones. A few physicians reported feeling burnout due to the new push by organizations to replace physicians with paraprofessionals to save money and potentially compromising patient care. This is an actively developing area in the medical field and not well studied yet.

In the more recent literature reviews, administrative duties have been one of the major contributors to physician burnout. To further clarify which administrative duties are less favorable for physicians, the respondents were asked to select their least favorable job-related activities. The least favorite activity reported, 78% (n=404), included administrative duties, such as working with the EMR system, spending time on charting, sending patient messages through the EMR system. Insurance related activities were reported next at 42% (n=218). These include processing prior authorization from the insurance companies for the ordered imaging studies or prescribed medications. It also included billing and/or coding related duties. Other physician duties, such as writing prescriptions, filling out patient forms, taking after hour call, and/or working holidays were next at 39% (n=200).

Figure 4.4



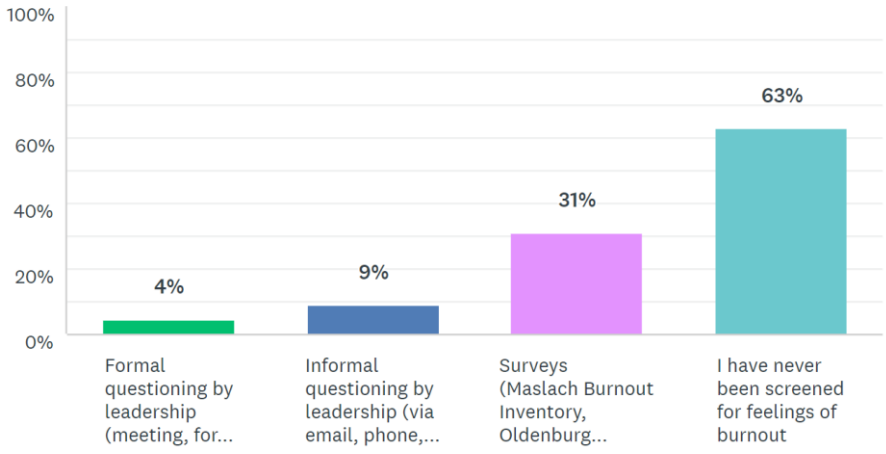
The physicians were given an opportunity to provide additional feedback on other less favorable job activities. Close to 14% (n=75) of the respondents provided additional responses. Inadequate staffing and lack of resources were reported issues for many physicians. The concern for a metric focused administration was also mentioned. One physician described the metric dilemma further and said, "we are being told we are not productive enough, not working fast enough, and not doing enough." The metric and performance measures were also identified as a possible etiology to burnout in the literature review (Cynar, n.d.). Other physicians reported frustration with working under disconnected leadership where policies were being made regarding clinical care without physician input. Other physicians are overwhelmed with non-clinical duties, including scheduling patients, making telephone calls, sending faxes. These activities take away from their ability to spend time in patient care.

Considering the incidence of burnout among physicians and the various etiologies to it, it is important to review whether or not they are screened for symptoms. The physicians were asked if they have ever been screened for burnout by their place of employment. Out of the respondents, 35% (n=181), reported at some point in their career some type of screening had

been done. Close to 65% (n=325) of the physicians had never been screened by an employer. The remaining 2% (n=12) were independently employed.

According to the physicians surveyed, the types of screening methods used to identify symptoms of burnout were variable. Only 4% (n=23) reported screening through formal questioning by leadership. This occurred through formal meetings or conversations. Close to 9% (n=46) were screened through informal questioning. This would have occurred through emails, phone calls, or causal conversations. Up to 31% (n=161) of physicians reported being screened through surveys, including the Maslach Burnout Inventory, Oldenburg Burnout Inventory, and the Well-Being survey, etc. The majority of the respondents had never been screened for feelings of burnout, 63% (n=326).

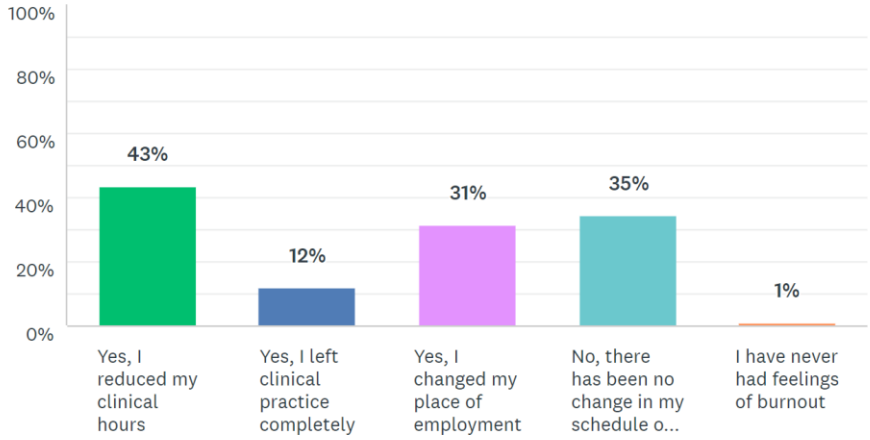
Figure 4.5



It is also important to understand the impact that physician burnout has on clinical retention specifically. To evaluate the potential impact of physician retention on direct patient care, the physicians were asked if they have reduced or left clinical practice due to burnout. Up to 43% (n=225) of physicians reported reducing their clinical hours due to their feelings of burnout. Other physicians reported leaving their place of employment due to clinical burnout,

31% (n=162). Quite a few reported leaving clinical practice completely, 12% (n=62). Close to 35% (n=180) of physicians reported not adjusting their schedule or changing their place of employment due to burnout. The 2012 Medical Practice and Attitude Report previously found that 45-50% of physicians were considering leaving clinical medicine due to burnout. Although the number of physicians considering leaving the field today was not assessed in this study, the study did identify those physicians who definitively adjusted their clinical practice hours, left their place of employment, or left clinical medicine altogether with the incidence being 86%. All of these adjustments can impact patient access of care by a physician.

Figure 4.6



The survey results regarding the frequency and various etiologies to burnout align well with what has already been established in the literature reviews. The misalignment of goals between the physicians and other agents (insurances, administrators, and patients) is important to recognize as a newly identified contributor to burnout, considering it was reported as the highest cause. Another more recent developing contributor identified in the qualitative analysis not yet seen in the literature is the replacement of physicians by paraprofessionals. The laws that allow nurse practitioners and physicians assistants to practice independently have only recently

developed, but there have been multiple reports of physicians losing their jobs being replaced in the Emergency Rooms and clinics across the country. Considering it is a newer phenomenon, it has not been well studied.

Physician retention in a clinical practice does seem to be significantly impacted by burnout with 74% of respondents reporting a reduction of their clinical schedule, change in place of their employment, or leaving clinical medicine all together. The 12% of physicians that left clinical practice completely directly impacts the anticipated physician shortages.

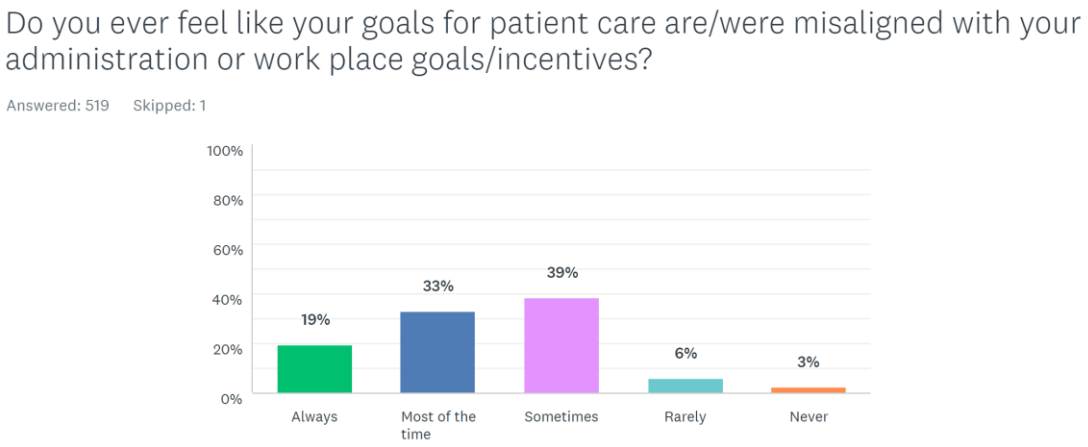
Considering the correlation between physician burnout and retention, recognizing physicians with burnout symptoms is important. Up to 63% of physicians reported never being screened for burnout. If physicians are not properly screened, there is lost opportunity for early treatment. Burnout symptoms being as early as medical school and the frequency of symptoms for the physician may vary. For these reasons, screening that begins in medical school and at regular intervals to identify those physicians with burnout is a reasonable option to mitigate physician loss. After review of the data, it is reasonable to state the survey results support the original assumption.

Assumption 2 (A2): If the process of moral injury is appreciated and recognized as a concern, then physician retention rates would improve.

The process of moral injury in complex, but for the purposes of this study the intention was to evaluate the moral dilemma for the physician who is witnessing medical practices that contradict his or her goals for quality patient care. As stated previously, the largest reported contributor to burnout was witnessing activities in the medical field that contradict the physician's values or are misaligned with their goals to provide quality patient care in 39.5% of the respondents.

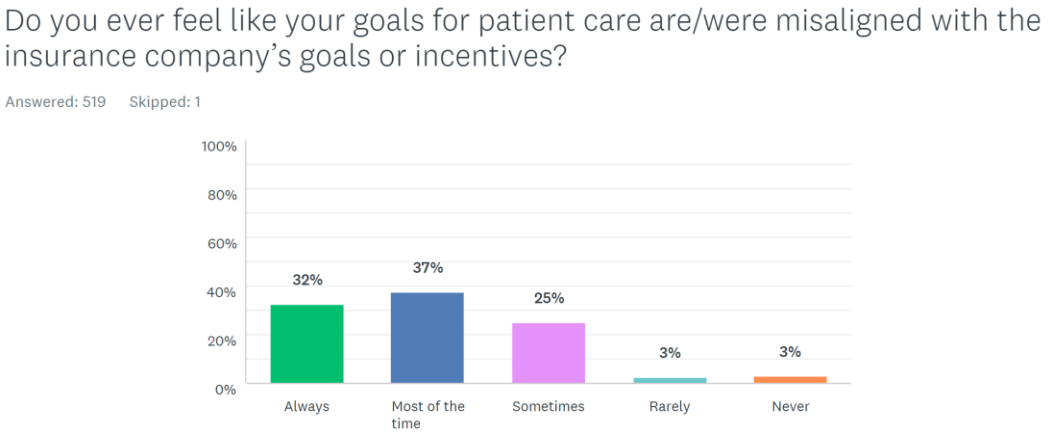
To further clarify the topic, the frequency of the misalignment for physician with the individual entities were assessed. Up to 19% (n=101) of physicians reported always feeling like their goals for patient care are/were misaligned with the administration or work place goals. Up to 33% (n=172) reported feeling misaligned most of the time and 38% (n=200) reported sometimes. Only 6% (n=32) reported rarely feeling misaligned with the administration and 3% (n=14) reported never.

Figure 4.7



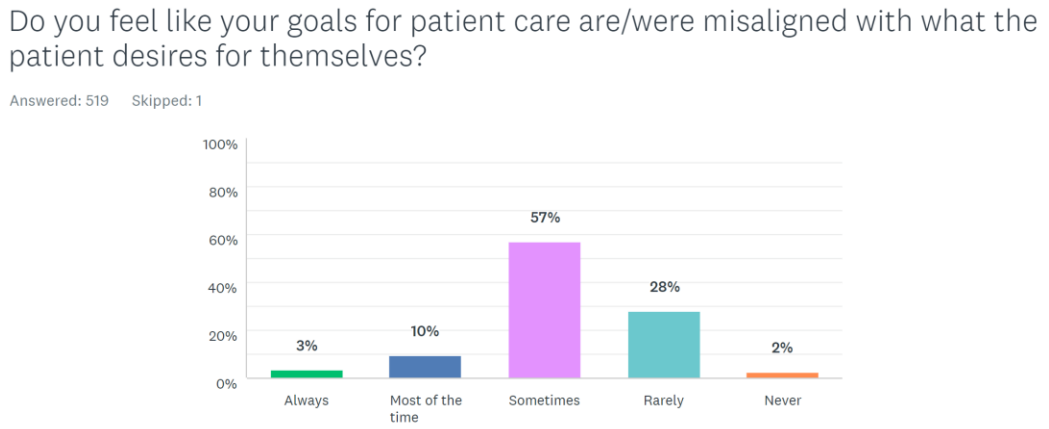
The frequency of misalignment of goals for patient care with the physicians and the insurance companies were even more significant. Close to 32% (n=158) of the respondents reported feeling always misaligned, 37% (n=194) reported feeling misaligned most of the time, and 25% (n=129) of the respondents reported sometimes. The remaining responded reported rarely (3%, n=13) and never (3%, n=15).

Figure 4.8



It is also important to recognize the potential misalignment of goals between the physicians and the patient themselves. This was certainly not a common occurrence among the respondents. Only 3% (n=17) of physicians reported feeling their goals for patient care were misaligned with the patients all of the time and 10% (n=50) most of the time. Up to 57% (n=295) reported feeling somewhat misaligned and 2% (n=12) never.

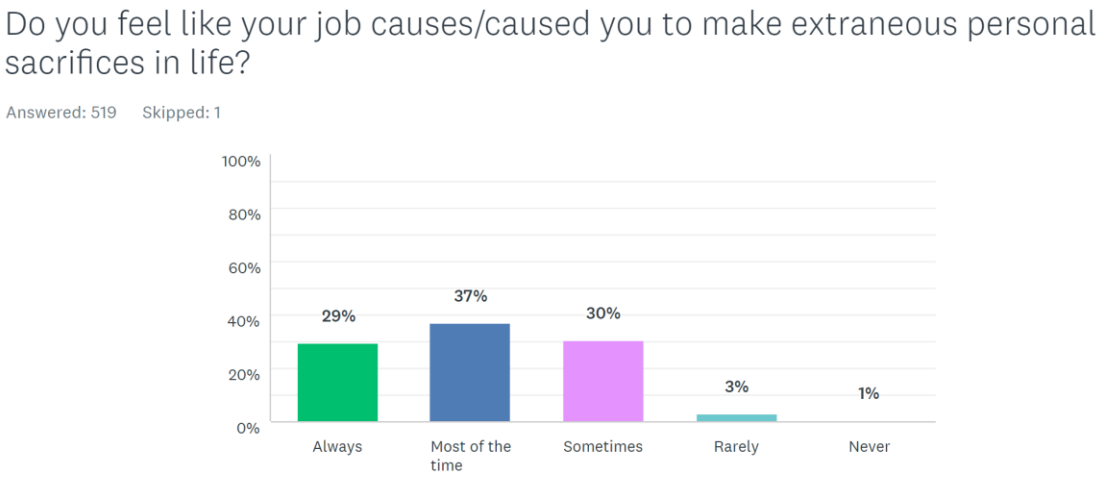
Figure 4.9



It is also important to recognize the potential impact the medical field has on the physician at a more personal level. A well-known contributor to burnout is a poor work-life balance (Medscape, 2021). In the recent Medscape study, close to 50% of physicians identified it as a significant workplace concern (Medscape, 2021). This additional pull for the physician to find a balance between their personal life and time to provide quality of care for the patient is

also a component of moral injury. Many of the respondents reported having felt their job caused them to make extraneous personal sacrifices. Over 29% (n=152) reported the feeling occurred always, 37% (n=191) most of the time, and 30% (n=157) sometimes. Only 3% (n=16) reported rarely having felt like they were asked to make a personal sacrifice, with the remaining 0.5% (n=3) reported never.

Figure 4.10

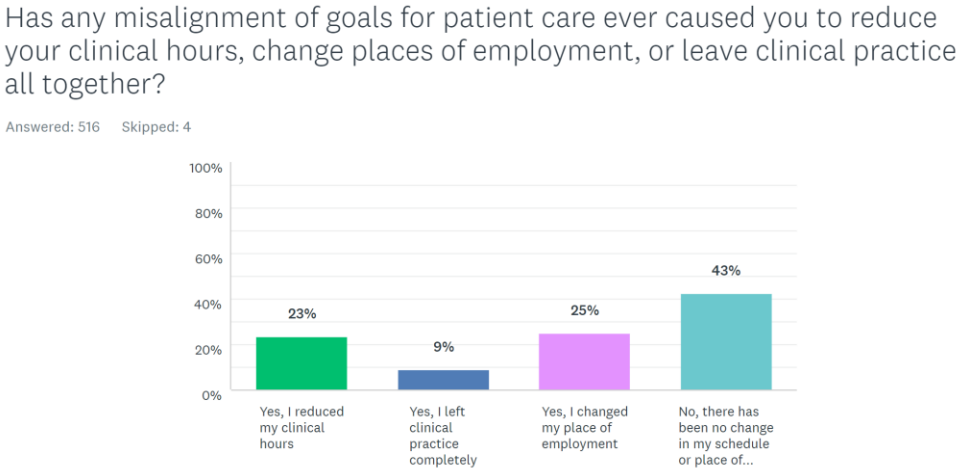


Investigating the potential relationship of moral injury with burnout is important if burnout or retention will be adequately addressed. The majority of the respondents reported the feelings of misalignment led to feelings of burnout either always (30%, n=153) or most of the time (222, 43%). The rest of the respondents reported only sometimes (23%, n=118), rarely (4%, n=20), and never (1%, n=4). The responses support a relationship between moral injury and burnout.

Increased burnout appears to be correlated with physician clinical retention and moral injury appears to contribute to burnout, but it is important to investigate a relationship with moral injury and retention directly. Only 3% (n=120) of the respondents reported a reduction in their clinical hours and 9% (n=47) reported leaving clinical practice completely due to the misalignment of patient care goals with administration, insurances, and patients. Up to 25%

(n=129) of the physicians reported leaving their place of employment due to the misalignment, but this is still less than those physicians that leave due to burnout. Many of the physicians (42%, n=220) reported no changed in their schedule or place of employment due to the misalignment of goals.

Figure 4.11



Of the physician respondents, 18% (n=93) reported having other major contributors to their burnout outside of those surveyed. Many of the additional responses were substantiated in the literature review and would fall in the category of leading to other causes of moral injury for the physician. Many physicians admitted feeling like they have lost their autonomy with the insurance companies or administration now dictating how they practice medicine. Other physicians feel the metrics and patient satisfaction scores have become more important to the administrators than actual healthcare outcomes. Many physicians feel they have to see too many patients in a small amount of time and with fewer resources. There were others that reported significant emotional toll, whether it is from the toll of sharing the burdens patients carry or working in "constant fear of making a mistake or negatively impacting someone's well-being."

The survey supports the assumption that the moral injury is important to recognize. The misalignment of patient care goals is a significant contributor to burnout, and physician burnout

does impact physician clinical retention. The correlation between moral injury and physician retention directly is not as significant as the correlation between burnout and retention, but more than half of the respondents did adjust their clinic schedule, location, or left practice completely. A morally injured physician noticing a misalignment of patient goals with their administration, the insurances, or patients themselves is more likely to change their place of employment in response or do nothing at all. Changing their place of employment may have some impact on patient access to care, especially if the patient cannot follow the physician to the new location. The impact on patient accessibility may not be as significant as if they reduced their clinical hours or left medicine all together. With a change in the place of employment, there is no direct impact on physician shortages.

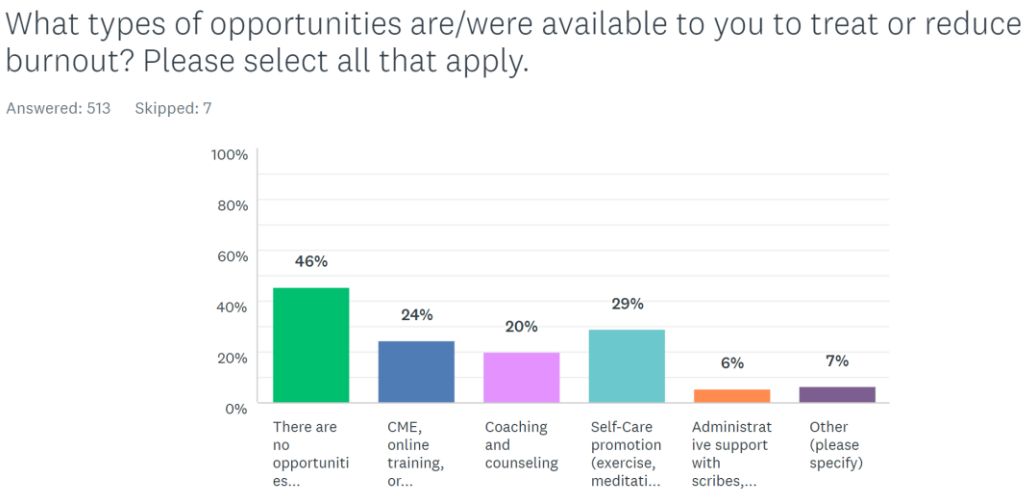
Assumption 3 (A3): If physicians were offered effective treatments for moral injury and burnout, then physician retention rates would improve.

Throughout the country, there have been many organizational strategies created to combat physician burnout (Jackson Physician Search, 2020). There are organizations that have created wellness programs, and others that rely on CME training or wellness conferences and retreats. Despite some of the strategies to help with burnout, many physicians report not being aware of their organization having opportunities to treat or reduce burnout. Of the physician respondents, 58% (n=301) reported there were no opportunities for treatment available and 15% (n=76) reported being unaware of any. Only 28% (n=143) of the physicians confirmed there were some type of opportunity available to them for burnout treatments.

The available options to the physicians for burnout treatment were investigated further. Self-care promotion with exercise, mediation, or reduction in scheduled hours were among the most commonly available option at 29% (n=148). CME, online training, and/or conventions and

retreats were the next most common at 24% (n=125). The other options for treatment included coaching and counseling (20%, n=102), administrative support with scribes, messages to patients, prior authorization, or financial incentives (6%, n=29), and financial incentives (7%, n=34).

Figure 4.12

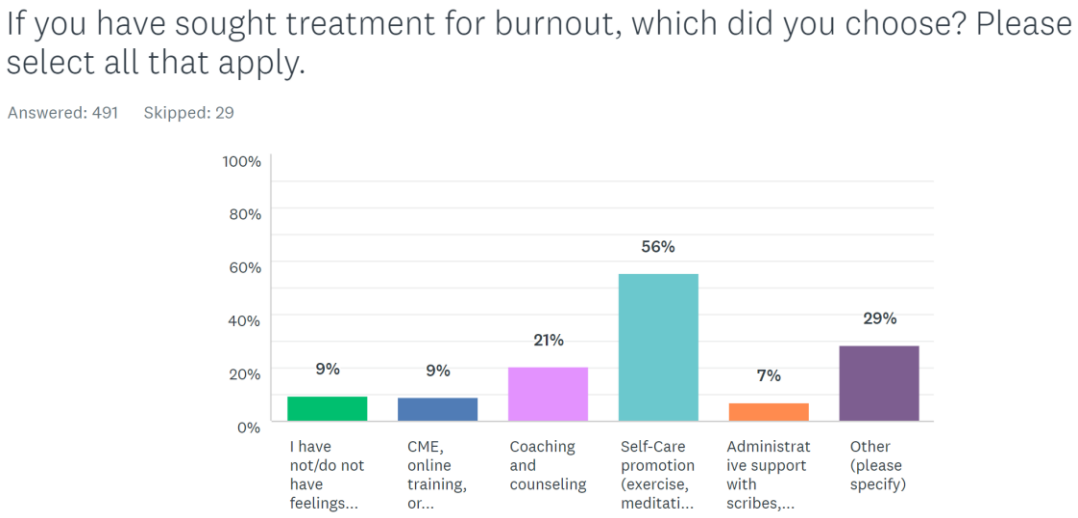


The physicians were given an opportunity to provide additional feedback on other options that are currently available to them for treatment of burnout and 7% (n=34) responded. Many of the physicians stated their organization offered a happy hour and/or cookouts, but none of the physicians reported being able to attend as the events occurred during patient care hours. There were also organizational mindfulness and relaxation seminars, but these also occurred during patient hours. One physician stated they had access to counseling, but there was no time in their week to go. There were a handful of physicians that mentioned an Employee Assistance Program, but they were all unsure if treatments for burnout were an option through the program. Others reported reducing their clinic hours and/or leaving the practice.

Out of the treatments available, the majority of physicians opted for self-care promotion (56%, n=273). Some of the physicians opted for coaching and counseling (21%, n=101). CME

was selected in 9% (n=44) of the physician respondents. Only 7% (n=35) of the physicians chose administrative support with scribes, messages to patients, prior authorization, or financial incentives, although this specific value might be lower due to the treatment opportunities not being available.

Figure 4.13

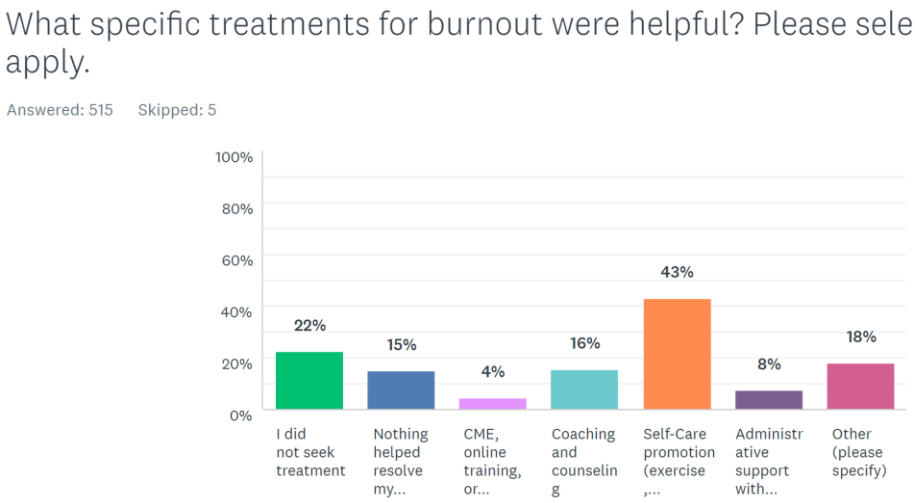


Many physicians (29%, n=141) offered additional feedback on the treatment options selected to treat their feelings of burnout. To treat burnout, many of the physicians reported taking time off, going on sabbatical, changing jobs, or reducing hours. Others switched from being employed with an organization to private practice. A few reported requesting administrative support, but they all reported being denied the request. There were also a few others that went to private counseling, so they could pay cash and keep it off the books. On physician reported hiring help to take care of the household duties so the little time at home could be spent with the family.

Of the treatments selected, 28% (n=141) of the respondents reported it was not effective at all and 52% (n=261) reported it was only somewhat effective. Only 1% (n=7) of the treatments selected were completely effective and 10% (n=48) were very effective.

Among the most effective treatments reported were administrative support and self-care promotion with exercise, meditation, or a reduction of hours. Of the 273 physicians that chose to pursue treatments with self-care promotion, 222 reported it was effective (81%). The next most effective treatment was coaching/counseling. For the 101 physicians that opted for treatment of burnout through coaching/counseling, 81 reported this as effective (80%). Only 35 physicians reported having the opportunity to treat their burnout with administrative support. There were 39 physicians that reported the administrative support was effective for treatment (111%). This slight disconnect between the quantitative data might be explained within the qualitative results. When previously inquiring about administrative support opportunities available to the physicians, there were additional reports collected in the qualitative data regarding administrative support. Unfortunately, 4 physicians reported asking for support, but being turned down. The treatments that ranked lower in effectiveness included CME, online training, or conventions/retreats. Out of the 44 physicians who reported utilizing CME, online training, or conventions/retreats, for treatment of their burnout, only 23 reported these to be effective (52%). Of the respondents, 15% (n=77) reported nothing was effective for their burnout.

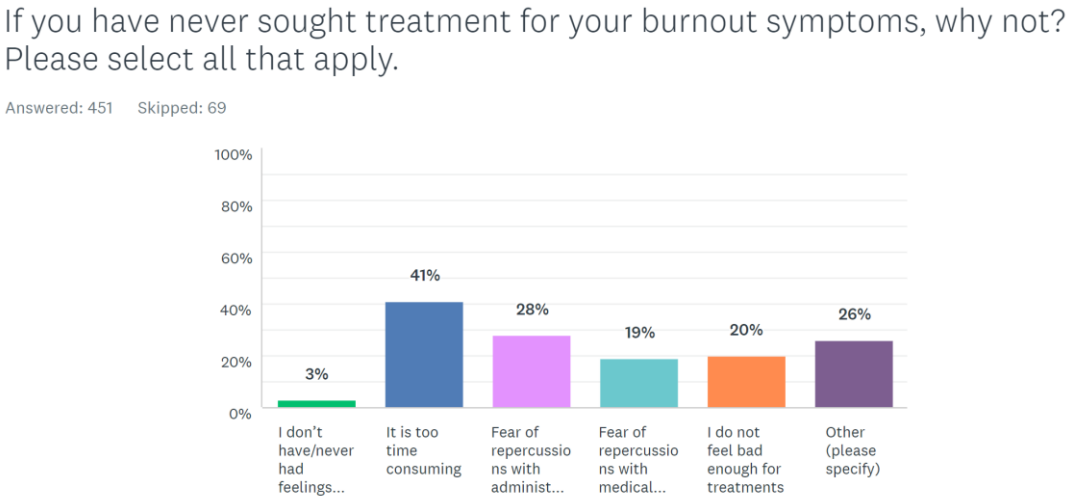
Figure 4.14



There were 18% (n=92) of the respondents that provided additional feedback on what burnout treatments were effective for them. The vast majority reported taking vacation, leaving their place of employment, reducing their hours, or leaving clinical medicine all together as being effective. A few specifically mentioned improved autonomy within their organization.

Even though there may be treatment options for burnout available to physicians, it is important to understand why they may not utilize the resources. Of the physician respondents, 41% (n=184) believed it was too time consuming to treat. If treatment was sought, many of the physicians had fears of possible repercussions from administration or leadership (28%, n=127) or repercussions with the medical licensing boards (19%, n=86). Some physicians did not feel like their burnout was bad enough to warrant official treatment (20%, n=90).

Figure 4.15

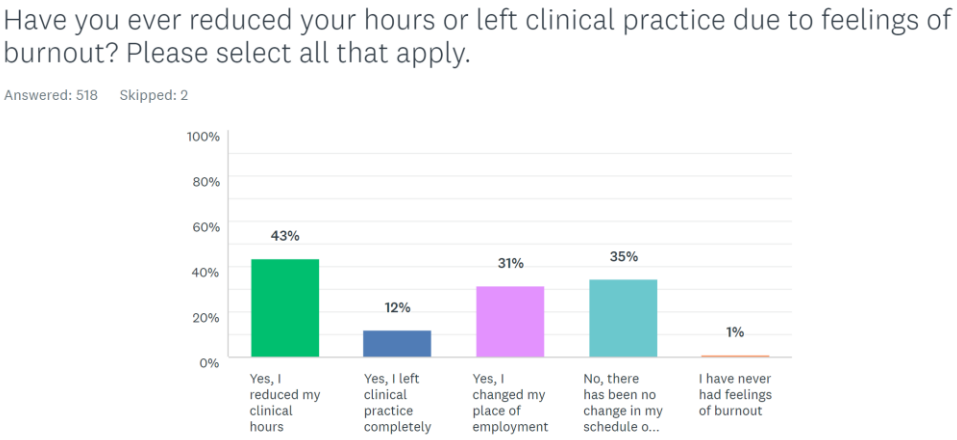


Quite a few physicians, 26% (n=117) had additional feedback as to why they did not seek treatment for their burnout. Many physicians believed burnout is more likely related to the actual toxic work environment than a personal failure to adapt. One replied, "The system is broken, so treating the individual is a temporizing solution at best." Others reported having significant time constrictions throughout the week to accommodate treatments or the options available occurred

during their clinical hours and they could not take off. A few physicians did not recognize their own symptoms of burnout when it started. Many of the other physicians reported leaving their place of employment, reducing their hours, and taking time off. A couple of the physicians reported feeling like quitting was the only option at the time.

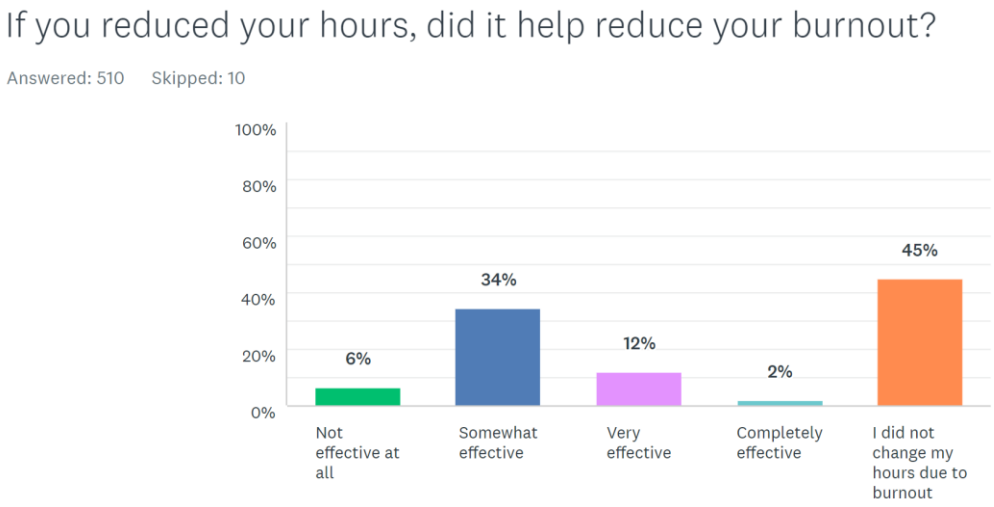
To further clarify the employment changes taken by the physician that might additionally impact patient access to care, the physicians were asked whether or not adjustments to their schedule or place of employment were taken because of their feelings of burnout. Of the respondents, 43% (n=225) reduced their clinical hours, 31% (n=162) changed their place of employment, and 12% (n=62) left clinical practice completely. Close to a third of the physicians (35%, n=180) denied making any schedule changes.

Figure 14.16



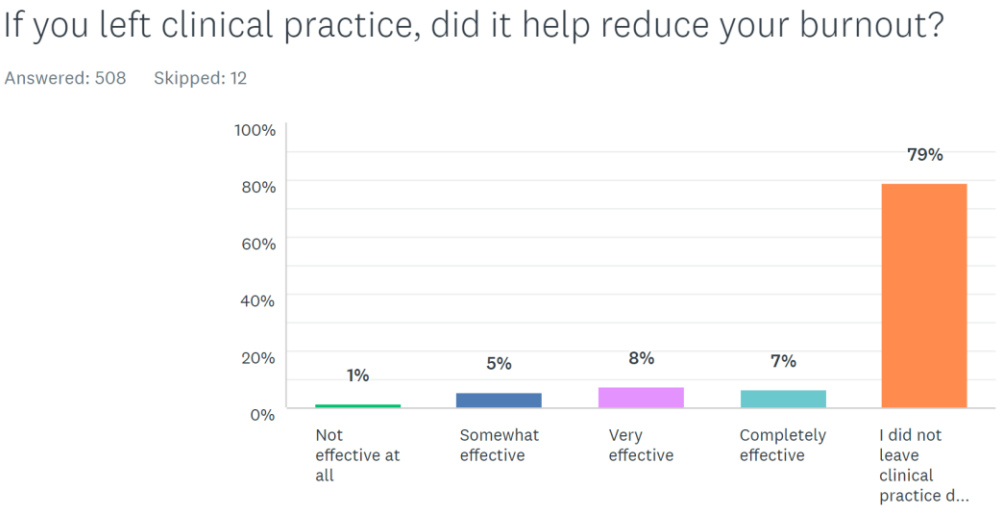
The effectiveness of the schedule adjustments, leaving the place of employment, or leaving clinical medicine altogether is another important area to investigate. Of the respondents, 45% (n=230) did not reduce their clinic hours due to burnout. Of the remaining physicians that reported reducing their clinical hours, 26% reported it was very/completely effective at reducing their burnout.

Figure 4.17



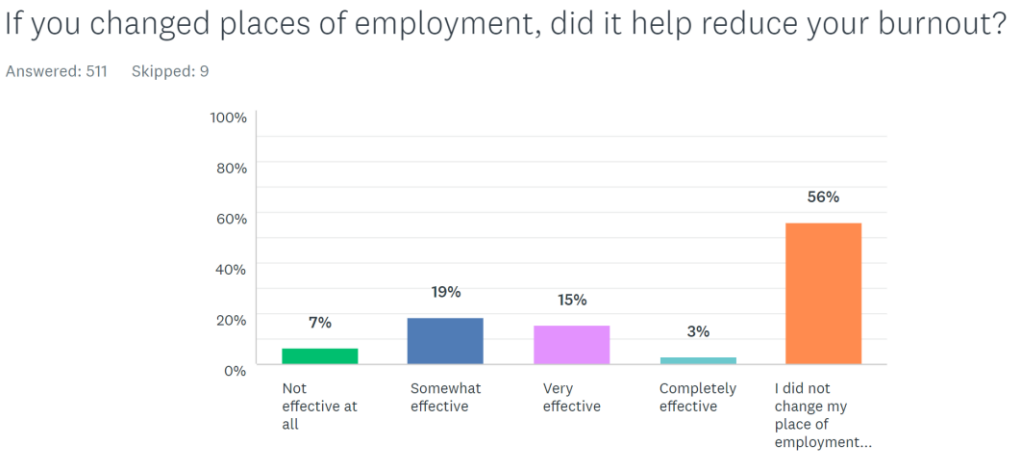
The majority of physicians surveyed did not leave clinical practice completely due to burnout (79%, n=401). Of the remaining physicians that did leave clinical practice, 71% reported it was completely/very effective at reducing burnout symptoms. Leaving clinical practice completely was the most effective at reducing the physician's symptoms.

Figure 4.18



Over half of the physicians did not change their place of employment due to burnout, 56% (n=287). Of the respondents that opted to change their place of employment due to burnout, 41% reported that it was very/completely effective.

Figure 4.19



Conclusion

The qualitative and quantitative data collected from the physician responses in the survey support the assumptions of the theory of change. If burnout is a significant contributor to reduced physician retention and moral injury has been identified as a contributor to burnout, addressing burnout and moral injury becomes even more crucial to improve the retention rates. Currently, three out of four physicians report not having opportunities available for treatment of burnout or not knowing of resources available to them. This could be underestimating what is actually available to the physician, but is worth noting. Of the treatment options currently available, only 11% (n=55) of the physicians reported the treatments were very or completely effective. Close to 86% of physicians report reducing their clinical hours, changing their place of employment, or leaving clinical practice altogether due to burnout. This highlights the importance of offering effective treatments to address burnout and moral injury and improve physician retention.

Chapter 5: Conclusions, Recommendations and Areas for Further Study

Introduction

With the upcoming estimated physician shortages and poor access to care for patients identified in the literature review, it has become even more critical to begin to identify and treat physician burnout and moral injury to mitigate physician loss. Nine out of ten of physicians report symptoms of burnout after residency training.

Theory of Change and Assumptions

The theory of change for this research study is: If physicians with burnout were recognized, if the process of moral injury is appreciated as a contributor to burnout, if physicians were offered effective treatments for moral injury and burnout, then physician retention rates would improve. As such, the three following assumptions were made:

Assumption 1 (A1): If physicians with burnout were recognized, then physician retention rates would improve.

Assumption 2 (A2): If the process of moral injury is appreciated and recognized as a concern, then physician retention rates would improve.

Assumption 3 (A3): If physicians were offered effective treatments for moral injury and burnout, then physician retention rates would improve.

The different etiologies of burnout and moral injury were investigated, along with the current organizational strategies in place to identify and treat them. The effectiveness of those treatments was assessed, and the correlation between burnout and moral injury with physician retention was evaluated. The results of the study support the study assumptions.

Identifying burnout and moral injury within the physician is a large component to addressing physician burnout. Simply identifying those physicians with symptoms is not enough

to improve physician retention alone. Offering effective treatments for those physicians with symptoms is just as important. Similar to the literature review, the physician respondents reported administrative duties as being one of the largest contributors to feeling burnout (35%, n=183). However, only 6% (n=29) of the physicians reported receiving administrative support to help with a reduction in their burnout symptoms.

Moral injury with the misalignment of patient care goals was identified as another major contributor in 39% of the physicians surveyed. Specific treatments for moral injury were not clearly delineated in the literature. Coaching/counseling and self-care options such as exercise, meditation, or a reduction in hours may help the physician cope with moral injury. CME, online training, or conventions/retreats may help the physician learn resiliency.

Despite the physicians reporting coaching/counseling and self-care among the most helpful options to treat their burnout (59%), the physicians surveyed also reported 80% of the current treatments available to the physician are only somewhat effective or not effective at all. Prior research has established that the incidence of burnout symptoms is more common in women. Although this study is not evaluating current incidence rates, the effectiveness of treatment for burnout may vary between the gender types. Understanding the individual etiologies underlying the physician's burnout may be needed to effectively establish a treatment plan for that physician.

Even if a physician is offered treatments, 41% of the physicians reported the treatments are too time consuming. Considering the work/life balance concerns identified in the literature review and the qualitative survey responses, time constraints were not an unexpected barrier for physicians to treatment. At least 73% of the options currently available to physicians require extra time outside of the clinical setting to perform; these included CME, online training,

conventions, retreats, coaching/counseling, and self-care. Unless steps are taken to allow sufficient time for the physician to receive treatment options, the physicians may still be hesitant to seek treatments.

Up to 86% of physicians surveyed reported reducing their clinical hours, leaving their place of employment, or leaving clinical practice completely due to feelings of burnout. The majority of physicians opted to reduce their hours (43%) or change their place of employment (31%). Out of the physicians that adjusted their schedules to improve their burnout symptoms, the most effective choices were leaving the place of employment (41%) and leaving clinical practice altogether (71%). If the goals are to improve physician retention, treating burnout and moral injury is needed before the physician decides to reduce their hours, leave their place of employment, or leave clinical practice altogether.

Recommendation 1

With the anticipated upcoming physician shortages, physician retention remains a public health concern. With burnout and moral injury as contributors to retention, it is important to address them early in the process. In this study, six out of ten physicians reported never being screened for burnout symptoms in their organizations. This presents a great opportunity for organizational improvement in the screening processes to properly identify those physicians that are in need of assistance or at retention risk for the organization. Improved detection and supportive referrals for treatment are critical.

The first recommendation for an employer or organization is to work toward improved detection of burnout among the organization's physicians. This can be achieved by deploying biyearly, standardized questionnaires, like the Maslach Burnout Inventory. The deployment of

these questionnaires should start as early as medical school and continue for the duration of the physician's career.

In addition to deploying the questionnaires biyearly, it is important for the employer or organization to understand and address a few areas that may impact the questionnaire results. According to the study, physicians are less likely to seek treatment for burnout due to fear of repercussions. Similar hesitancies to complete a questionnaire honestly may also exist. Prior to deploying the questionnaire, it is important to emphasize the results will not lead to punitive actions in the organization. This will encourage the physicians to provide open, honest responses.

In prior surveys, a contributor to burnout identified was the lack of work/life balance (Medscape, 2021). In this survey, another hesitancy among the physicians to seeking burnout treatments was the time it takes to do so. Many physicians are not able to take extra time outside their work to complete additional tasks. Either providing sufficient time to complete the questionnaire during the regular business hours or sufficient payment or reimbursement for completion should be considered.

Lastly, another factor identified in the qualitative review in this study was the lack of communication as to what happens after the questionnaire is completed. Many physicians reported completing the questionnaires, but were unaware of the changes or outcomes derived from it. Clearly communicating what options may be available to the physician if the physician is identified as having burnout is essential.

Recommendation 2

In order to mitigate physician loss, burnout identification is crucial. It is equally important to understand the additional, less obvious, process of moral injury that could be contributing to burnout and/or physician retention. Although it is a more complex area, the

specific component assessed in this survey was a misalignment of patient care goals between the physician and the organization, insurance companies, patients, and/or their own personal priorities.

Although moral injury does appear to be a contributor to burnout, not every burnout physician has moral injury. There may be a few outliers with moral injury that are not identified with the standardized burnout surveys. There are other specific surveys for moral injury that could be deployed; however, many of the moral injury surveys evaluate mental health disorders or feelings of distress. It may or may not directly capture the physicians struggling with feelings of misalignment of patient care goals. For this reason, identifying a physician's perspective of misalignment of goals should be achieved through a combination of formal evaluations. An organization should start with a biyearly, formal survey that specifically screens physicians for feelings of misalignment of patient care with administrators, insurances, patients, and/or their own self-interests.

If a physician is identifies as having a specific concern regarding a misalignment of goals with patient care, a more in-depth, individual formal meeting should be the next step. In this meeting, the physician should be encouraged to speak openly regarding the area of misalignment and perceived barriers to care. In the survey, up to 52% of physicians identified misalignment of patient care goals with the administration, but the largest majority identified misalignment with the insurance companies, 69%.

Recommendation 3

Physicians identified with burnout or moral injury need to be supported by their organization, employer, and colleagues. First, the current stigma of treatments and fear to seek help needs to be addressed. In order to decrease the stigma of receiving treatment, state licensing

boards should modify and standardize mental health disclosures. Screening and subsequent discrimination based off mental health treatment history is a violation of the Americans with Disabilities Act (ADA) (U.S. Department of Labor, n.d.). Although the Act is a civil rights law that protects individuals from discrimination, there is a current exception made for physicians and medical licensing screening. Although some screening may be appropriate given the concerns for public health safety of an impaired physician, many of the state licensing boards take their questioning to a more extreme level. Questioning physicians about current impairment that interferes with the physician's ability to provide sound care is reasonable. More aggressive questioning regarding the physician's history of any/all mental health treatments could be unintentionally discouraging physicians from receiving proper treatments due to the fear or repercussions from the medical boards.

Additionally, if a physician opts to seek treatment for their burnout symptoms, there needs to be protection from administrative or leadership punitive actions. Currently, burnout is not a protected medical health condition under the Federal Medical Leave Act (FMLA) of 1993 (Marshall, 2021). When the courts do not recognize it as a serious health condition, it interferes with the opportunity for physician to make necessary adjustments to their schedule to seek proper treatments. In the quantitative and qualitative responses, many physicians reported having difficulty seeking treatments due to time constraints. Up to 41% (n=148) of the physicians reported the treatments were too time consuming. A change in the FMLA policy list would allow the physician to adjust their schedules to allow sufficient time for treatment.

Outside of the recommended policy changes, organizations or employers can further support the physicians that have feelings of burnout and/or moral injury. Physician burnout and moral injury have multiple etiologies and thus require a multifaceted approach if the treatments

are going to be effective. In the medical field, in order for treatments to be successful, the treatment must be paired with the disease it is intending to treat. The same concept of pairing disease with treatment would be reasonable to apply to burnout or moral injury; the etiology to the condition should be paired with the treatment. This is why individualizing treatments to meet the needs of the burned out physician is crucial.

After a physician has been identified as having burnout or moral injury, the organization or employer should offer a variety of treatments at an organizational and personal level. There are a lot of various etiologies to burnout and/or moral injury; it is important to understand the individual cause of burnout or moral injury prior to initiating proper treatment. These etiologies can be evaluated in the formal biyearly meetings for those physicians identified on the standardized questionnaires.

According to the results of this study, the most common etiologies of burnout included moral injury and excessive administrative duties. Administrative duties were also the least favorite activity reported by 78% of the respondents (n=404). These duties included working with the EMR system, spending time on charting, and sending patient messages through the EMR system. Insurance related activities were the next reported least favorite administrative activity for 42% (n=218) of the respondents. These included processing prior authorization from the insurance companies for the ordered imaging studies or prescribed medications. It also included billing and/or coding related duties. Other physician duties, such as writing prescriptions, filling out patient forms, taking after hour calls, and/or working holidays were identified among the respondents. Besides taking after hour calls or working holidays, many of the other duties can be diverted to support staff to complete prior to physician review and sign off.

If administrative or insurance duties are identified as the major contributor to burnout for the physician, the next step would be to aim for a 20% reduction in the physician's time spent on administrative duties. First, an accurate assessment of the physician's time spent on administrative tasks is important. The physician can directly provide an estimate of the time spent. Alternatively, if the physician is unaware or cannot provide an estimate, a non-clinical staff member can monitor the physician for 2 days, taking note of the time spent on administrative or insurance related duties. Once this has been completed, the next step is for the organization to identify what tasks are taking up the majority of the physician's time. Depending on the task identified, the organization can provide a more directed approach to achieve a successful reduction in time spent.

If the identified time-consuming areas are the patient portal messages, a standardized template to call and schedule an appointment can be sent by support staff as a reply to those portal messages requesting medical advice or treatment. If the patient forms are too time consuming, the non-diagnostic information on patient forms can be filled out by non-clinical staff in the clinic (front desk or other support). If it is the EMR system, attempts to allow time built into the schedule for pre and post charting activities, or a medical scribe could be considered to better support the physicians. EMR trainers are also a great tool to teach EMR shortcuts in charting. The coding team can help educate the physicians on appropriateness of billing/coding and how to improve accuracy without necessarily decreasing efficiency. The prior authorization process can be streamlined as well. If a denial for a study request occurs, the support staff can make the initial call to the authorization company to try to obtain more information as to why the denial occurred. If there are missing documents, the support staff can

send it off in attempts to get the approval. In many cases, the physicians do not need to get involved in the process.

Prior to initiating changes to better support for the physician, there are a lot of factors to consider from an organizational standpoint. If individualized treatments are not an option for the organization or employer, a general approach aimed at the most common contributors should be considered. Depending on the organizational design, the support staff may not be able to handle the additional tasks to relieve the physician. There is also a cost consideration as to whether or not additional staff can be hired to cover the duties for the physician. Any time specifically allotted to the physician for completion of administrative duties will come at the expense of patient care time. This might not be financially reasonable. The intention with implementing systemic changes to treat burnout or moral injury should be to find a balance between directed treatments that are reasonable and sustainable for the organization and physician.

According to the survey, self-care promotion with exercise, mediation, or reduction in scheduled hours were among the most commonly available options at the organizational level at 29% (n=148). CME, online training, and/or conventions and retreats were the next most common option at 24% (n=125). These take time to complete and are often directed at physician self-improvement, resiliency, or time management to improve burnout symptoms. The CME options were among the least beneficial for the physician respondents with only 50% reporting some benefit. These treatment options should be reserved for physicians that have self-identified concerns with self-case, coping mechanisms, resiliency, or time management. A similar approach to the administrative and insurance contributors can be taken though. If these concerns arise during the follow up formal meeting for the physicians identified with burnout symptoms, training and/or additional time allotted for successful treatment can be implemented. The

physicians should be allowed to adjust their schedules to support the intervention. Otherwise, the time spent to complete the CME or self-care options may feel burdensome or interfere with their work/life goals.

If instead of burnout, moral injury and the misalignment of patient care goals are the identified contributors in the formal meeting, a different treatment approach may be more helpful. Coaching and counseling may be more beneficial to address the concerns of the physician. Additionally, identifying and addressing the more systemic issues involved may be necessary. If in the formal meeting the administration is identified, care should be taken to allow the physician to openly speak of the perceived misalignment. The physician feedback is an opportunity for the administration or employer to understand where the perception of misalignment has come from and begin to work together toward addressing it.

If the insurances are identified as the contributor to the feelings of misalignment of goals, it may be more difficult for the organization or administrator to address. Focusing on the actual work flow processes may help improve this physician perception of misalignment. In this study, 42% (n=218) of physicians reported certain insurance duties were among their least favorite. Looking for ways to make these processes more efficient and successful for the physician may help.

Another area of misalignment can occur with the patient. Only 3% (n=17) of physicians reported feeling their goals for patient care were misaligned with the patients all of the time and 10% (n=50) most of the time. Although it was not the most significant contributor to moral injury, it is important to note that this may come up in the follow up formal meeting as a cause. This is certainly an area that is more difficult to address. Increasing the time allotted for physician to patient communication may promote understanding with the treatments or barriers

to treatment. In the qualitative responses, many physicians reported feeling like there were significant constraints in appointment duration throughout the day. As the Peterson-Kaiser Foundation research has shown, the U.S. patient population is becoming more complex, not less (Peterson-Kaiser Foundation, 2020). These complex patients may require additional time to educate and encourage compliance with the necessary treatments. It is also just as important for the patient to have time to express the reservations to treatment, so the physician can properly communicate and address the concerns.

Lastly, the physician may express concerns with the goal of their clinical practices requiring extraneous self-sacrifices. The misalignment of goals within the clinic and the physician's personal needs was fairly significant. Over 29% (n=152) of the physician respondents reported they felt like they were making extraneous sacrifices all of the time and 37% (n=191) most of the time. Trying to help the physician obtain an adequate work-life balance will need to be addressed. This may include increasing the level of support staff in the clinic to improve the efficiency of the work flow. It may also include ensuring the physician has adequate time for administrative work templated into their day.

After 1 month of implementing the directed changes, a second formal meeting should occur as a follow-up on the physician's current feelings of burnout and address any lingering concerns. If the concern previously identified was regarding the administrative duties, a second assessment of time spent on the administrative duties should be performed to see if there was at least a 20% reduction. This follow-up formal evaluation provides an opportunity to review the success of the adjustments. If the symptoms have not improved or are only partially improved, the same steps of identification of the individual etiology to burnout or moral injury and pairing of the treatment should be repeated. It is important to consider the contributors to burnout or

moral injury may shift as other contributors are being addressed. These monthly follow-up formal meetings and reassessments should recur until the physician's symptoms of burnout or moral injury have resolved.

Conclusion

If moral injury and burnout are left untreated, physicians will continue to reduce their clinical hours or leave their medical practices. With the significant upcoming physician shortages, this has become a public health crisis. The burnout screening techniques have been inconsistent across the country and the treatments have been ineffective. In order to identify those physicians at risk for loss of retention, biyearly, standardized burnout questionnaires should be implemented starting as early as medical school. For those identified as having burnout, a one-on-one formal meeting should take place. This will provide an opportunity for the physician and organization to better understand the individual's unique etiology to burnout or moral injury. The next stage in treatments should be paired with the identified etiology, if feasible, within the organization or place of employment. Reassessments to the physician's symptoms and effectiveness of treatments should occur monthly.

Table 5.1

	Recommendation 1	Recommendation 2	Recommendation 3
Specific	Identification and Screening Burnout in Physicians	Recognize Moral Injury Among Physicians	Policy: ADA/FMLA Treatment: Effective
Measurable	Standardized Questionnaires, beginning in Medical School	Formal Survey, beginning in Medical School	Policy: State Licensing/ADA; Serious Condition/FMLA Treatment: Pairing etiology w treatments
Achievable	Biyearly For those identified: Follow up 1:1 Formal Meeting	Biyearly For those identified: Follow up 1:1 Formal Meeting	Policy: PA pursue legislative change Treatments: For those identified: After 1:1 Formal Meeting, monthly reassessments of effectiveness
Realistic	Non punitive/Time to Complete Results will be used to identify those at risk for loss in retention	Non punitive/Time to Complete Results will be used to identify those at risk	Policy: State disclosure standardization/ADA, Add burnout/MI to FMLA Treatment: Balanced
Time	Continue for duration of career	Continue for duration of career	Policy: 2023 Treatment: To resolution

In addition to offering effective treatments, physicians need to be allowed to accept the treatment options without discrimination from the state medical licensing agencies or face repercussions from their employers. Our public health administrators need to address the lack of standardization and appropriateness of medical disclosures on the state licensing applications. Changes should also be implemented with the list of serious medical conditions to allow burnout and moral injury recognition with FMLA.

When our health care system shifted to focusing on performance-based measurements over value-based metrics to measure efficiency, the changes appear to have come at a significant cost to the wellness of physicians and patients alike. Physicians are struggling to establish a balance between demands of the administrators, insurances, needs of the patients, and their own personal necessities. The system is leading to an increased rate of moral injury and burn out among our country's physicians; as a result, our physicians are leaving. We need to build an administrative model that supports delivery of healthcare by the physician and for the patient. Just as the physicians pledged in their white coat ceremony to "first, do no harm" to the patients, it is time to support our physicians with burnout or moral injury through the necessary healing processes.

Areas for Further Research

This study was focused on the physician's perception of burnout and moral injury etiologies, as well as treatment opportunities available and effectiveness of those treatments. There are areas not assessed in this study that may influence the etiologies to burnout, and may in turn, influence the effectiveness of treatments. The different age ranges of the respondents, the various specialties, and their stage in their post training career may all impact the etiologies to burnout or moral injury and the effectiveness of treatments. The type of clinical setting the

physician is employed in and potential gender or cultural differences would potentially influence these results as well. These were all insufficiently evaluated in this study. Considering the history of poor effectiveness in the current treatments for the physicians, conducting a more dedicated study pairing the etiology of burnout with the treatment selected and effectiveness is worth considering for better standardization of treatments.

Due to the limited time to complete the study, this study did not include the perceptions of organizations or administrators. As identified in the literature review, there is a possibility of programs being available to the physician that they are unaware of. With that said, even if there are programs available and not identified by the physicians in this study, it highlights the need for better communication of treatment options for the physicians. A comparative assessment from the administrative perspective of etiologies to burnout, moral injury, and retention with their employees to identify discrepancies would be beneficial to further identify areas of improvement.

Burnout and moral injury are not exclusive to physicians. Other healthcare workers may face similar challenges as the physicians in this study. The etiologies to burnout identified in this survey may be specific to physicians, but even in fields outside of medicine, there may be unique situations that lead to various etiologies to burnout or moral injury. These field specific etiologies and barriers to treatments may also be worthy of further evaluation.

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Appendix A: Survey Questions

https://www.surveymonkey.com/r/burnoutmoralinjury

INFORMED CONSENT:

My name is Diana Devera; and I am an Executive Master of Public Administration student at Golden Gate University in San Francisco. My capstone project is on the "Impact of Burnout and Moral Injury on Physician Retention: Perceptions of Physicians." Your responses are secure, confidential, and anonymous. These questions should take less than 5 minutes of your time. If you have any questions, please email me at: ddevera@my.ggu.edu.

1. What is your gender?
   - Male
   - Female
   - Others, please specify:
2. Are you employed and involved with patient care part time or full time?
   - Full Time
   - Part Time
   - Not Currently Employed or involved in patient care

3. During your medical career, have you EVER experienced feelings of burnout? Please select all that apply.
   - Yes, during medical school
   - Yes, during residency
   - Yes, after residency
   - No, I have never experienced feelings of burnout

4. Have you ever been screened or questioned by a place of employment for feelings of burnout?

- Yes
- No
- I am independently employed

5. If you were screened for feelings of burnout, what was the methodology selected? Please select all that apply.

- Formal questioning by leadership (meeting, formal conversations)
- Informal questioning by leadership (via email, phone, or casual conversation)
- Surveys (Maslach Burnout Inventory, Oldenburg Burnout Inventory, Well-Being, etc.)
- I have never been screened for feelings of burnout

6. How often did/do you experience feelings of burnout?

- Always
- Most of the time
- Sometimes
- Rarely
- Never

7. What was/has been the largest contributor to your feelings of burnout?

- I have never had feelings of burnout
- Excess Administrative Duties
- Financial Strain
- Witnessing activities in the medical field that contradict your values or are misaligned with your goals to provide quality patient care
- Others, please specify:

8. What were/are your least favorite job-related activities? Please select all that apply.

- Administrative duties: time spent on charting, EMR, portal messages
- Insurance duties: Prior authorizations, billing/coding
- Various physician duties: writing prescriptions, patient forms, taking after hour call, working holidays
- Other, please specify:

9. Does/did your place of employment, organization, or administration provide opportunities to treat or reduce burnout?

- Yes
- No
- I don't know

10. What types of opportunities are/were available to you to treat or reduce burnout? Please select all that apply.

- There are no opportunities available to me
- CME, online training, or conventions/retreats
- Coaching and counseling
- Self-Care promotion (exercise, meditation, reduction of hours)
- Administrative support with scribes, messages to patients, prior authorizations, or financial incentives
- Others, please specify:

11. If you have sought treatment for burnout, which did you choose? Please select all that apply.

- I have not/do not have feelings of burnout
- CME, online training, or conventions/retreats
- Coaching and counseling

- Self-Care promotion (exercise, meditation, reduction of hours)
- Administrative support with scribes, messages to patients, prior authorizations, or financial incentives
- Others, please specify:

12. Were any of your burnout treatments effective in reducing your symptoms?
    - I don't have/never had feelings of burnout
    - Not effective at all
    - Somewhat effective
    - Very effective
    - Completely effective
13. What specific treatments for burnout were helpful? Please select all that apply.
    - I did not seek treatment
    - Nothing helped resolve my feelings of burnout
    - CME, online training, or conventions/retreats
    - Coaching and counseling
    - Self-Care promotion (exercise, meditation, reduction of hours)
    - Administrative support with scribes, messages to patients, prior authorizations, or financial incentives
    - Others, please specify:
14. If you have never sought treatment for your burnout symptoms, why not? Please select all that apply.
    - I don't have/never had feelings of burnout
    - It is too time consuming

- Fear of repercussions with administration or leadership
- Fear of repercussions with medical board licensing
- I do not feel bad enough for treatments
- Other, please specify:

15. Have you ever reduced your hours or left clinical practice due to feelings of burnout? Please select all that apply.

- Yes, I reduced my clinical hours
- Yes, I left clinical practice completely
- Yes, I changed my place of employment
- No, there has been no change in my schedule or place of employment
- I have never had feelings of burnout

16. If you reduced your hours, did it help reduce your burnout?

- Not effective at all
- Somewhat effective
- Very effective
- Completely effective
- I did not change my hours due to burnout

17. If you left clinical practice, did it help reduce your burnout?

- Not effective at all
- Somewhat effective
- Very effective
- Completely effective
- I did not leave clinical practice due to burnout

18. If you changed places of employment, did it help reduce your burnout?

- Not effective at all
- Somewhat effective
- Very effective
- Completely effective
- I did not change my place of employment due to burnout

19. Do you ever feel like your goals for patient care are/were misaligned with your administration or work place goals/incentives?

- Always
- Most of the time
- Sometimes
- Rarely
- Never

20. Do you feel like your goals for patient care are/were misaligned with the insurance company's goals/incentives?

- Always
- Most of the time
- Sometimes
- Rarely
- Never

21. Do you feel like your goals for patient care are/were misaligned with what the patient desires for themselves?

- Always

- Most of the time
- Sometimes
- Rarely
- Never

22. Do you feel like your job causes/caused you to make extraneous personal sacrifices in life?

- Always
- Most of the time
- Sometimes
- Rarely
- Never

23. Do/did you feel like a misalignment of goals for patient care with administration, insurances, patients, and/or self-goals contributed to feelings of burnout?

- Always
- Most of the time
- Sometimes
- Rarely
- Never

24. Has any misalignment of goals for patient care ever caused you to reduce your clinical hours, change places of employment, or leave clinical practice all together?

- Yes, I reduced my clinical hours
- Yes, I left clinical practice completely
- Yes, I changed my place of employment
- No, there has been no change in my schedule or place of employment

- I have never had a misalignment of goals for patient care