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LOMA LINDA UNIVERSITY
School of Religion
in conjunction with the
Faculty of Graduate Studies

Using Nominal Group Technique among Resident Physicians
to Identify Key Attributes of a Burnout Prevention Program

by

Vicki Nelson

A Dissertation submitted in partial satisfaction of
the requirements for the degree
Doctor of Science in Religion and Health

April 2021

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Each person whose signature appears below certifies that this thesis/dissertation in his/her opinion is adequate, in scope and quality, as a thesis/dissertation for the degree Doctor of Science.

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ABBREVIATIONS

ASD	Acute Stress Disorder
BO	Burnout
CBC	Choice-Based Conjoint Analysis
EHR	Electronic Health Record
EMR	Electronic Medical Record
EI	Emotional Intelligence
FBO	Faith Based Organization
GME	Graduate Medical Education
ID	Identification
IRB	Internal Review Board
MBI	Maslich Burnout Inventory
NGT	Nominal Group Technique
OBGYN	Obstetric-gynecology
PHQ-2	Patient Health Questionnaire-2
PI	Principle Investigator
P/I	Prevention/Intervention
PTSD	Post Traumatic Stress Disorder
R/S	Religion/Spirituality

ABSTRACT OF THE DISSERTATION

Using Nominal Group Technique among Resident Physicians
to Identify Key Attributes of a Burnout Prevention Program

by

Vicki Nelson

Doctor of Science, Graduate Program in Religion and Health
Loma Linda University, March 2021
Dr. Oleksandr Dubov, Chairperson

Physician burnout is a work-related syndrome characterized by emotional exhaustion, depersonalization, and a sense of reduced personal accomplishment. It is present in epidemic proportions and is estimated to occur in over 50% of practicing physicians and in up to 89% of resident physicians. While there have been numerous burnout studies and many prevention or intervention programs introduced, the rates of utilization in resident physicians remain low and the rate of burnout continues to increase. Therefore, the purpose of this study is to generate an understanding of burnout prevention attribute preferences within a resident physician population using Nominal Group Technique (NGT). The results will be used to design a Conjoint Based Analysis study to inform the development of resident burnout prevention programs. To inform this study an initial focus group study helped to identify attributes for inclusion in the conjoint analysis. This study identified the need to address multiple organizational factors with complex interventions that target systemic and program level factors rather than focusing only on individual interventions. These results may help by aligning burnout interventions with resident preferences which could improve the efficacy of burnout

prevention programs, enabling residents to fully benefit from current and future models of burnout prevention.

A second theme that developed because of an unexpected focus group finding is the need to generate an understanding of the current state of religion and spirituality (R/S) in healthcare. Residents rated spiritual care and nurturing attribute as 21st out of 23, showing low priority for this intervention, yet research shows that consideration of the whole person, including R/S improves outcomes, health, and wellbeing. We notice empirically, though, that many times healthcare providers, their organizations, medical training institutes, and public health entities, fail to include R/S in their consideration of health and well-being issues. Therefore, the purpose of the secondary study is to generate an understanding of the current state of R/S in healthcare, with its related health and well-being issues, to make recommendations for changes in policies and practices that will help to enhance health and wellbeing of individuals, communities, and populations.

CHAPTER ONE

INTRODUCTION: DESCRIPTION OF THE PROBLEM

Physician burnout is a work-related syndrome characterized by emotional exhaustion, depersonalization, and a sense of reduced personal accomplishment. It is present in epidemic proportions and is estimated to occur in over 50% of practicing physicians and in up to 89% of resident physicians in the U.S. Burnout can lead to depression, suicidal ideation, and relationship problems that may progress to substance abuse, increased interpersonal conflicts, broken relationships, poor quality of life, withdrawal, major depression, and suicide (Dyrbye & Shanafelt, 2016; Rothenberger, 2017; West, Dyrbye, & Shanafelt, 2018). The estimated rate of physician suicide is 300-400 annually (Collier, 2017; Eckleberry-Hunt & Lick, 2015; Harvey, 2019).

Unfortunately, it sometimes takes a tragedy like the one suffered at a New York City hospital where two first-year residents died by suicide within four days of each other, to draw attention to the seriousness of the problem (Slavin & Chibnall, 2016; Yaghmour et al., 2017). A 2017 study of residents and causes of death found that “suicidal ideation increased 370% over the first three months of the first year of training.” The early months of training as well as the first and third quarters of the academic year showed increases consistent with the hypothesis that transition from medical school to residency is stressful and may increase risk in susceptible residents (Yaghmour et al., 2017).

Burnout affects not only physician health and well-being, but also negatively impacts friends and family, patient care and safety, as well as healthcare organizations and systems. Contributing factors are deeply entrenched in healthcare organizations and

systems and include unmanageable workloads, inefficient work practices, clerical burdens generated by electronic medical record (EMR), lack of autonomy and input, work-home issues, support structure, and leadership culture (Babyar, 2017; Dyrbye & Shanafelt, 2016; Rothenberger, 2017; West et al., 2018). In a Medline 2020 national report on physician burnout and suicide, participants identified “too many bureaucratic tasks” as the primary driver of burnout with “spending too many hours at work,” and “lack of respect from administrators, employers, colleagues, or staff” close behind. Baby boomers also identified increasing electronic health record (EHR) demands as a key contributor to burnout (MEDSCAPE, 2020). Two additional studies also focused on the increased stress following adoption of new EMR’s. Though physicians were trained extensively prior to rollout of new systems, they reported increasing burnout symptoms at moderate to high levels after implementation (Elnicki, 2020; Price, Calder-Sprackman, Cheung, Clapham, & Kwok, 2020).

Study Purpose

This study will be used to help design an ideal program for burnout prevention informed by user preferences that will result in maximum uptake by resident physicians. The initial study helped to identify attributes for inclusion in future research. The process and format followed that demonstrated by researchers conducting a resident focus group to study reduced work hours and patient safety (Fletcher, 2008). This initial analysis consisted of three focus groups of 10-14 individuals recruited with the assistance of residency program directors. Initial contact was made with the directors of a large for-profit medical center, a university residency program, and a community hospital

residency program, requesting an opportunity to present the proposed research and solicit participation in the focus group. Each focus group met a single time following a prescribed format. The resulting attributes will be shared and incorporated into future research. The expected outcome is to identify preferences and acceptability of burnout interventions that will enable resident physicians to fully benefit from current and future models of burnout prevention. Therefore, the purpose of this study is to generate an understanding of burnout prevention attributes within a resident physician population using Nominal Group Technique.

Specific Aims

The *specific aims* are to:

1. Prioritize a list of 23 factors for burnout prevention programs using NGT.
2. Conduct an individual, confidential ranking of the 23 factors by importance from 1-23.
3. Conduct a qualitative group discussion of each attribute, including a group review of the rankings.
4. Offer an opportunity to alter original ranking across participants.

CHAPTER TWO

CONCEPTUAL AND EMPIRICAL FOUNDATIONS

This study is innovative because it will be guided by NGT methods to survey resident physicians to determine preference for burnout prevention program attributes. Qualitative methods will then be utilized following NGT guidelines to search for prominent themes. Most intervention/prevention programs are developed intuitively, and few consider resident preferences to design a program informed by preferences and acceptability of a burnout prevention program. This study endeavors to use the NGT focus group format to capture information that can inform evidence-guided burnout prevention programs for resident physicians.

Empirical Foundation: Review of the Literature

Interface of Resident Physicians, Burnout Incidence, and Risk Factors

Within the U.S. physician residency programs, the prevalence of burnout has reached epidemic proportions at over 50% with some specialties reporting as high as 89% burnout. All physicians in training are at risk for the ravaging effects of burnout including depression, suicide ideation, and suicide.

Burnout was first identified in 1974 by psychologist Herbert Freudenberger who used the term to describe the results of living with severe or extensive stress and anxiety for those working in the healthcare profession. Traits often noted in these professionals include high ideals, and a sacrificial serving attitude. Burnout develops over time and includes a pattern of 12 stages that can occur in order and include each stage, but also

occur in part and in unique combinations and patterns, making it difficult to identify early (Chaukos et al., 2017; Dyrbye & Shanafelt, 2016; Rothenberger, 2017; West et al., 2018).

A 2016 study of first year residents found that those who scored higher on measures of perceived stress, fatigue, worry and depression symptoms, scored lower on mindfulness and coping ability as might be expected (Chaukos et al., 2017). Another study found that residents identifying symptoms of burnout acknowledged higher levels of deficits in empathetic care (Picard et al., 2016), and were also less likely to share stressful clinical situations with their supervisor. These residents were also more likely to engage in unhealthy coping mechanisms (Kealy, Halli, Ogrodniczuk, & Hadjipavlou, 2016).

Coping strategies utilized during physician training appear to predict outcomes according to findings of a 10-year longitudinal study. Those who exhibited characteristics of taking action, and dealing directly with problems, are more likely to avoid future burnout but may also be less content with their career choice and may also exhibit a decreased level of competence (Tartas et al., 2016).

A select review of literature on medical professionals and extreme stress showed that lack of adequate support contributes to the risk factor. It is also noted that this population can be “impulsive, introverted, neurotic and perfectionist, with low emotional intelligence and agreeableness, as well as low and external locus of control.” In addition, beginning resident physicians often have unrealistic expectations, further compounding anxiety. Finally, those at highest risk of developing burnout are also characterized as having the “strongest detachment” and are more unstable with a greater inclination to experience negative emotions (Walkiewicz & Tartas, 2017).

A qualitative study of general medicine residents and empathy found conflicting results showing that while empathy is often connected to lower rates of burnout, there are times that empathy contributes to burnout (Picard et al., 2016). It is suggested that further study is needed to determine the types of empathy that are protective versus causative for burnout (Kealy et al., 2016; Picard et al., 2016).

Depression is also found to be a significant risk factor for residents in training (Chaukos et al., 2017; Mata, Ramos, Kim, Guille, & Sen, 2016). In addition, residents who score positive for burnout criteria score higher in perceived stress, fatigue, and worry and score lower on mindfulness and coping ability (Chaukos et al., 2017).

A study of burnout, anxiety and depression connected to social skills found that there is a negative correlation between burnout and social skills and that those with higher social skills had significantly lower levels of anxiety, depression, and burnout. In addition, social skills are teachable and a potentially valuable intervention (Pereira-Lima & Loureiro, 2015).

Existing Programs Greatly Underused

There are numerous studies on intervention for prevention and treatment of burnout, however, the plans for interventions vary greatly among research and there is currently no standardized treatment, though evidence-based interventions are emerging. A recent review of evidence-based interventions that promote resident wellness included nine assessment tools for inclusion, highlighting pros and cons. Despite numerous articles on psychosocial interventions – over 15,000 in the last twenty years – very few were intervention studies and only a few included pre-and post-assessments. The highest

quality of these agreed that “relaxation training, behavioral interventions, and self-care were the most effective” interventions (Parsons et al., 2020). Other studies yielded fragmented results of a variety of interventions with some showing lack of efficacy, although many are showing some promise (Harvey, 2019; Wiederhold, Riva, Gaggioli, & Wiederhold, 2016).

It is becoming increasingly clear that solutions for prevention and treatment of burnout must be a shared responsibility and are not solely the responsibility of the individual physician (Babyar, 2017; Eckleberry-Hunt & Lick, 2015; Shanafelt & Noseworthy, 2017; West, Dyrbye, Erwin, & Shanafelt, 2016). In fact, many researchers report that organizational factors are the primary drivers of burnout (Shanafelt & Noseworthy, 2017). Researchers suggest that physician wellness is both an ethical and public health issue (Walker & Pine, 2018), and that it will take the multidisciplinary effort of the healthcare industry, academic community, and individual physician to affect change (Eckleberry-Hunt & Lick, 2015; A. F. Winkel, 2018). To that end, it has been recommended that a fourth aim be added to the *Triple Aim of the Institute for Healthcare Improvement* that currently focuses on improving patient care experience; improving population health; and reducing per capita costs. This fourth aim would be to “improve physician and staff well-being,” a task that currently shows more improvement through organizational strategies than through individual interventions (Andolsek, 2018).

To address this need, one healthcare center created an interventional program that hired administrative assistants to work as members of medical teams in-order-to manage much of the administrative duties residents normally assume. This intervention resulted in increased time for direct clinical care, increasing their job satisfaction (Takei et al.,

2020). Other studies looked at the culture and climate of Graduate Medical Education (GME), discussing the need for instruments to evaluate environmental work factors. There is also a need for leadership to embrace and practice change themselves (Atherley & Meeuwissen, 2020; Carneiro Monteiro, Capitanio Baeza, & Hauck, 2020).

Individual intervention, or self-care, remains an essential element of prevention and treatment for burnout but is often met with resistance if not part of a broader strategy that includes the organization addressing the system and environment. Mayo Clinic, in an attempt to address this, has included self-care as part of their system of incentives and provides tools for self-calibration and training; and resources for self-care to improve physician well-being (Shanafelt & Noseworthy, 2017). Resident physicians who utilize acceptance, active coping, and spiritual attitudes showed lower rates of burnout in a study at Yale University (Doolittle & Windish, 2015). Several other universities provide face-to-face education about burnout, depression, and suicide to their target groups as well as online resources for anonymous use by any resident physician (Haskins et al., 2016; Moutier et al., 2012).

In 2017 the Accreditation Council for GME added a requirement that all accredited residency programs must incorporate a comprehensive well-being program (Stamm, Yu, Lineback, & Bega, 2020). Yet a recent study of pediatric residents, covering their 3 years of training, showed that greater than 65% reported symptoms of burnout within 6 months of beginning training. Researchers suggest the need for a comprehensive examination of the training programs of residents and factors that are contributing to such high rates of burnout (Koressel, Groothuis, Tanz, Palac, & Sanguino, 2020). Other residencies including Otolaryngology, Neurology, OBGYN, Pediatric, and Psychiatry,

are working to make comprehensive wellness curricula easily accessible (Hategan & Riddell, 2020; Reed, Mamidala, Stocks, & Sheyn, 2020; Ronan, 2020; Stamm et al., 2020; Abigail Ford Winkel et al., 2020).

A study with Neurosurgery residents showed that high levels of grit and resilience correlated with decreased social and personal stress, leading to interventions that increase grit and resilience (Shakir et al., 2020). Another study showed statistics comprising 40 years of data from a single Neurosurgery residency program. The data showed that increased sleep, meaningful relationships with colleagues, social events with the institution, and a strong sense of mission contributed to decrease in burnout symptoms (Tang et al., 2020). An Internal Medicine residency study recommended a model for a wellness program that utilizes senior residents as role models and mentors for newer residents, teaching normalization of emotions, vulnerability, and necessity of self-care (Moore, O'Brien, & Thomas, 2020).

Other self-care strategies include web-based tools and mobile applications that may assist with concerns regarding confidentiality, stigma, potential negative career implications, and time constraints (Pospos et al., 2018). Physical care for resident physicians is also a preventive self-care measure and includes exercise, sleep, and healthy nutrition. A lack of good nutrition at work is correlated with a lower sense of well-being and burnout in a study of surgical residents (Brandt, 2017). Urology residents identify exercise and socializing as key interventions to improve wellness (Cheng et al., 2020). Self-awareness and self-monitoring are also essential elements of self-care programs and lead to resilience that is shown to be protective against burnout (Epstein & Krasner, 2013; Kemper & Khirallah, 2015).

A final self-care area of focus is sense of control. Studies suggest that a neuropsychiatric pathway exists that may help prevent and treat burnout. This neurocognitive construct, identified from resilience research, offers a “more scientifically informed approach to prevention” (Southwick & Southwick, 2018).

In addition, meditation, and mindfulness (Kirby & Luck, 2014), as well as emotional intelligence (EI) training (Shahid, Stirling, & Adams, 2018), can help to diminish obsessing over things that residents cannot change as well as providing a sense of control over thoughts, emotions, and outlook. A recent study showed that EI “was found to be a strong predictor of residents’ well-being...It has been shown to protect individuals against mental health abnormalities including depression and burnout” (Sataloff, 2020). The greater the degree of control an individual can exercise over a stressor, the more positive the impact on the emotional, behavioral, neurobiological, and physiological systems (Khan, 2017; Southwick & Southwick, 2018).

COVID-19 and Burnout

Burnout had reached epidemic proportions prior to the COVID-19 pandemic which hit the United States in 2020. This world-wide pandemic has quietly contributed to a second “silent pandemic” – a dangerous increase in incidence of burnout. A literature search showed 44 applicable peer-reviewed articles on COVID-19 and burnout in physicians in general with an additional nine focusing specifically on residents. Some are calling the pandemic a perfect storm with the additional risk factors created by the upheaval. These include the emotional toll of threat to personal and family safety. There is increased fear of the unknown and sadness about being stuck in the present

circumstances. How long will this last? Will it worsen? When might we get back to normal? There is anger at the government, healthcare systems, and some places of work. There is fear of redeployment to areas which are less familiar and perhaps at greater risk of exposure. There are financial hardships for many, and social isolation for most (Dort et al., 2020). Other factors creating increasing risk of burnout include lack of control, infection control measures, a false notion of safety precautions, poor communication directives with often changing guidelines, lack of preparedness, inadequate emotional support, perceived fatality (Shah K, 2020), and absence of family time (Wittenberg, Goldsmith, Chen, Prince-Paul, & Johnson, 2021).

COVID-19 also presents residents with an additional threat to well-being in the form of drastic changes to their training programs. Surgical residents report a 96% decrease in their clinical experience opportunities. This includes over 50% reduction in volume of available operations. At these rates they will be unable to meet minimum requirements for board certification. A recent survey revealed that over 21% of the residents responded in the affirmative for every single negative screening question connected to burnout (Coleman, Abdelsattar, & Glocker, 2021). An additional study of surgical residents showed a concern that their program would not only experience a slowdown but also be shut down. They had no opportunity to reprioritize, reflect, and reset expectations (Romanelli et al., 2020).

OBGYN residents also report delays in training advancement with inadequate clinical opportunities. They are experiencing intensified risk of burnout as well with increased anxiety and depression and increased psychological morbidity (Chan, Kanneganti, Yasin, Ismail-Pratt, & Logan, 2020).

Residents training in endoscopy report a 99% reduction in cases with 71.9% fearing that their training time will be extended. Over 52% report anxiety with 18.6% reporting symptoms of burnout. “Anxiety is independently associated with female gender, inadequacy of personal protective equipment (PPE), and lack of institutional support” (Pawlak et al., 2020).

Sports Medicine Fellows also describe decreased case volumes as well as reports of rescinded job offers, and voided contracts. Nearly a third were redeployed to areas of need with several of those being mandatory redeployments. An additional concern was reported by 58% who were uncertain about their readiness for their profession, and 94.4% reported anxiety about future career plans. Over 86% had financial concerns, while 58.8% reported stress in personal relationships, with 41.2% experiencing signs and symptoms of depression. They are concerned that web-based didactics are replacing clinicals. And, finally, 6% matriculated to new, unplanned fellowships (Perrone, Youssefzadeh, Serrano, Limpisvasti, & Banffy, 2020).

All of this supports Marano’s, “Healers Hurting,” reporting that the burden of caring for sick patients while also trying to care for oneself, with increasing administrative demands, overwork, emotional exhaustion, and loss of sense of purpose, is resulting in an increase in rates of death from suicide. Complicating this is the tendency for many in residency to deny distress and to resist asking for help when they might benefit (2020).

Current research predominantly reports increasing burnout symptoms with clinicians admitting anger, tearfulness, and anxiety (Locklear, 2021). Physician wellness surveys report increasing risk of burnout along with statistically reduced wellness,

decreased sense of control and happiness, and an increased difficulty in falling asleep. Many report a sense of dread before coming to work, and stress on their days off – thinking about going to work. They are greatly concerned about their health and the health of their families (Fitzpatrick, Patterson, Morley, Stoltzfus, & Stankewicz, 2020).

Residents are described as being in “extreme danger” both physically and emotionally. They are very often the first to see a patient, before it is known if they are positive for COVID-19. Residents will often see the patient even without PPE, as the diagnosis is being made. Some describe a “harsh, hierarchical system” that unduly pressures residents while caring little about their well-being. They are very often asked to give “everything,” but the system “fails” to protect them. They are very willing to work long hours for little pay in-order-to receive the education and opportunities it provides for their future. They are used to altering personal plans to meet the needs of the system. And most of all, they are often passionate about caring for mankind; they want to make a difference. Prior to COVID-19 “self-preservation was out of reach” and residents were not adept at voicing their needs. “Now, with no one to guard them – [they are] completely overshadowed” (Hashmonay, 2020).

This pandemic is also being called a “war unlike this society has ever seen,” especially in the country’s largest cities like Los Angeles, New York, and Chicago (Rogers, 2020). Resident physicians are expected to “deploy” to the “frontline” and are reminded daily of “casualties” with assaults to their system from the challenges of scarce resources, and choices between patient acuity and who receives the ventilator (Dort et al., 2020). In looking back at 2020 one report shows a 63.4% increase in burnout and a 61.2% decrease in career satisfaction for physicians in general (Hennessy Sr, 2020).

Moral injury is on the rise with related feelings of betrayal; guilt; shame; moral concerns; religious struggles; loss of faith, meaning and purpose; difficulty with forgiveness; loss of trust; and increased self-condemnation (Mantri, Lawson, Wang, & Koenig, 2020). Clinicians are making life and death decisions for patients and families. They must often ration care even while treating patients who are deteriorating quickly. They find themselves as a sole support of the patient due to strict no visitor policies (Dort et al., 2020). The combination of burnout and the added stressor of a pandemic is contributing to a rise in acute stress disorder (ASD). Previous studies show the incidence of ASD is 5-20% following a traumatic event. It is important to intervene early to prevent this from developing into post-traumatic stress disorder (PTSD) (Restauri & Sheridan, 2020; Tucker & Czaplak, 2021).

Many burnout prevention and intervention measures have been introduced and expanded quickly throughout this pandemic. Dr. Dyrbye and Dr. Shanafelt of Mayo Clinic, developed a Well Being Index that is being successfully used to measure well-being and stressors so that appropriate interventions can be offered. Their recent report shows that some residents involved in COVID-19 patient care reported high levels of distress in 2020 at the rates of 24% from Mar-Apr, 11.86% from May-Jun, and a rate of 18.26% from Jul-Aug ("Mayo Clinic Well Being Index," 2021).

One study at a large community hospital showed that internal medicine residents who were part of a crisis plan put in place early in the pandemic reported that they felt heard, protected, prepared, supported and cared for. They had adequate PPE, were offered assistance with childcare costs and transportation, and were given access to up-to-

date information. Up to 88% of the residents reported their well-being needs were being met (Detterline et al., 2020).

One study highlighted leadership change based on Kotter's 8-step change management model. This study suggested interventions for program, institutional, as well as "extra-institutional" levels. They hope to transform education in-order-to safeguard trainee's well-being. It encourages focus on telehealth, tele-education, and various ways to stay connected (Weiss & Li, 2020).

Another study described "listening sessions" early on in the pandemic in order to discover resident's and physicians' stressors and needs (Ayyala, Taylor, & Callahan, 2020), while another attempted to bolster resilience using the BRIEF (Brigham Resilience in COVID-19 Pandemic Emergency Forum). Two emergency departments participated in optional nightly briefings offered for six weeks. There were 81 participants overall with an average of three per night. Participants reported increased morale and improved safety and quality of patient care arising from the discussions (Azizoddin, Vella Gray, Dundin, & Szyld, 2020).

Other programs include a mindfulness intervention, "Mindfulness in Motion." This is an 8-week optional program offered onsite during work hours. It encourages mindfulness – "nonjudgmental, present-moment awareness with non-reactivity to introspective perceptions" to help shape emotional regulation and improve cognitive resilience by decreasing attention lapses in high stress situations. Researchers report a 27% reduction in emotional exhaustion and depersonalization, and an increase in personal accomplishment, resiliency, and work engagement scores. They also report a significant reduction in perceived stress. They conclude that burnout can be diminished

by system-initiated intervention combined with personal participation and awareness. They suggest that though burnout is contagious, “so is resilience” (Klatt et al., 2020).

Additional interventional activities include narrative medicine to assist with the processing of emotions (Lee & Chavez, 2020) , video-based debriefing for Emergency Department clinicians to stay connected and to increase their sense of community (Monette, Macias-Konstantopoulos, Brown, Raja, & Takayesu, 2020), diaphragmatic breathing for managing immediate stress symptoms while decreasing blood pressure and salivary levels of cortisol (Fessell & Cherniss, 2020), dog therapy, and art therapy (Morgenstern, Heitz, Bond, Milne, & Choo, 2020). Intensive care unit clinicians are encouraged to participate in debriefing sessions modeled after “Death Cafés” to discuss death, dying, loss, grief, and illness. These gatherings offer community and collaboration and may reduce burnout, depression, and anxiety (Bateman et al., 2020).

General recommendations encouraged to help reduce burnout during the pandemic include ensuring adequate PPE, adjusting scheduling to shift work (He, Stolarski, Whang, & Kristo, 2020), improving usability and relevance of health IT with actionable data easily accessible (Locklear, 2021), and providing essential beds, medicines, and ventilators. Additional staff should also be recruited to meet needs and help to offload clinicians non-clinical work such as EMR. Licensing and visa requirements could be simplified and expedited in conjunction with initiating an early start of residency programs for those already matched. Finally, residents should be protected and supported by creating an action plan and temporary deferral of rules for GME training and board eligibility (Shah K, 2020).

Surgery residents are encouraged to look for the “light at the end of the tunnel.” Some see this as an opportunity to reimagine what residencies could be like with an improved surgical training system that helps to create a healthier world, one that effectively utilizes telehealth, offering better patient care, hospitals, and clinics (Dort et al., 2020).

This search showed promising ideas and possibilities whose efficacy will become clearer over time. Additional research is needed to address this life-threatening issue and best intervention and prevention efforts. Chapter three presents the NGT research report and findings, a first step towards solutions.

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CHAPTER THREE

USING NOMINAL GROUP TECHNIQUE AMONG RESIDENT PHYSICIANS TO IDENTIFY KEY ATTRIBUTES OF A BURNOUT PREVENTION PROGRAM

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ABSTRACT OF THE DISSERTATION

Using Nominal Group Technique Among Resident Physicians to Identify Key Attributes
of a Burnout Prevention Program

By

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Loma Linda University, April 2021

Dr. Alex Dubov, Chairperson

Purpose

To identify preferred burnout interventions within a resident physician population, utilizing the Nominal Group Technique (NGT). The results will be used to design a discrete choice experiment (DCE) study to inform the development of resident burnout prevention programs.

Methods

Three resident focus groups met (10-14 participants/group) to prioritize a list of 23 factors for burnout prevention programs. The NGT consisted of three steps: an individual, confidential ranking of the 23 factors by importance from 1 to 23, a group discussion of each attribute, including a group review of the rankings, and an opportunity to alter the original ranking across participants.

Results

The total number of residents (36) were a representative sample of specialty, year of residency, and gender. There was strong agreement about the most highly rated

attributes which grouped naturally into themes of autonomy, meaning, competency and relatedness. There was also disagreement on several of the attributes that is likely due to the differences in residency programs and types of hospital setting.

Conclusion

This study identified the need to address multiple organizational factors that may lead to physician burnout. There is a clear need for complex interventions that target systemic and program level factors rather than focusing only on individual interventions. These results may help residency program directors understand the specific attributes of a burnout prevention program valued by residents. Aligning burnout interventions with resident preferences could improve the efficacy of burnout prevention programs by improving adoption of, and satisfaction with, these programs.

Introduction

Physician burnout is a work-related syndrome characterized by emotional exhaustion, depersonalization, and a sense of reduced personal accomplishment (Maslach C, 1986). Burnout is present in epidemic proportions and was estimated to occur in over 50 percent of practicing physicians and in up to 89 percent of resident physicians pre-COVID 19. The burnout epidemic is growing; a recent national survey of US physicians reported an 8.9 percent increase in burnout between 2011 and 2014 (T. Shanafelt et al., 2015). Rates of physician burnout have also increased (Civantos et al., 2020) during the COVID-19 pandemic with a new classification of “pandemic burnout” experienced by over 52 percent of healthcare workers as early as June of 2020 (Khasne, Dhakulkar, Mahajan, & Kulkarni, 2020). Physician burnout can lead to depression, suicidal ideation, and relationship problems that may progress to substance abuse, increased interpersonal conflicts, broken relationships, low quality of life, major depression, and suicide (Dyrbye & Shanafelt, 2016; Rothenberger, 2017; C. P. West, Dyrbye, & Shanafelt, 2018). The estimated rate of physician suicide is 300-400 annually (R. Collier, 2017; Eckleberry-Hunt & Lick, 2015; Harvey, 2019).

It often takes a tragedy like the one suffered at a New York City hospital where two first-year residents died by suicide within four days, to draw attention to the seriousness of the problem (Slavin & Chibnall, 2016). A 2017 study of medical residents and causes of death found that suicidal ideation increased 370 percent over the first three months of the first year of training (Yaghmour et al., 2017). Burnout also negatively affects physicians’ friends and family, patient care and safety, as well as healthcare organizations and systems. In a clinical setting, evidence demonstrates that burnout

results in prescription errors, and reduces the quality of medical services potentially affecting inter-professional relationships (Dyrbye & Shanafelt, 2016; Han et al., 2019; Rothenberger, 2017; C. P. West et al., 2018). According to recent estimates, the burnout epidemic costs the healthcare system approximately \$4.6 billion a year (2019).

Existing research on burnout prevention among residents focuses primarily on physician-directed interventions, such as building personal resilience (Haramati, Cotton, Padmore, Wald, & Weissinger, 2017) and practicing mindfulness-based stress reduction (T. D. Shanafelt, 2009). A recent meta-analysis of 20 controlled studies evaluating over 1500 physicians found that these interventions are associated with insignificant benefits that can be boosted by adoption of organization-directed approaches (Panagioti et al., 2017). Thus, there is an urgent need to design and deliver effective interventions aimed to reduce burnout that will result in high uptake by medical residents that may extend to other physician groups. Understanding how residents value various aspects of burnout interventions is vital to both the design and evaluation of burnout prevention programs (Kiran R. Busireddy et al., 2017). Aligning burnout interventions with residents' preferences could improve the effectiveness of burnout prevention programs by improving adoption of, and satisfaction with, these programs.

Discrete choice experiment (DCE) research can be used to understand how stakeholders value specific components of possible programs or interventions. For example, this approach was used to model the physician preferences regarding a pay-for-performance incentive program (Chen, 2016), adherence promoting programs (Müller, 2020), or residency choices of medical students (Wang, 2011). Programs developed based on stakeholders' preferences result in improved adoption and satisfaction with the

program. Existing burnout prevention programs are rarely informed by medical residents and are consequently underutilized. We seek to design a burnout prevention program based on the preferences of medical residents using a future DCE study. The first step in designing a DCE study is to identify which attributes to include in the study design. The purpose of this focus group study is to identify the attributes to include in a future DCE study using the Nominal Group Technique (NGT).

Methods

Three resident focus groups (consisting of 10-14 participants/session) were conducted in July and August 2020, in three medical centers in California to prioritize resident preferences for burnout intervention attributes. We purposely chose programs based at diverse healthcare organizations. The first program was based at a university with several hundred resident physicians across multiple graduate programs. Residents rotated at both the university hospital and the affiliated Veterans Affairs Medical Center. The second program was based at a large (476 beds) not-for-profit medical center with family medicine, internal medicine, and emergency medicine residency programs (over 100 residents in total). The third program was based at a community teaching hospital with 14 residents enrolled in a family medicine residency program.

All residents were emailed an invitation to participate in a focus group at a predetermined time. Anyone who presented the day of the focus group could participate. Due to the COVID-19 pandemic, two focus groups had to meet via Zoom, while one group met in person. Participants were considered eligible for inclusion in the study if they were currently part of a residency program at one of these three centers. They were

purposely selected to represent the full program spectrum of age, gender, specialty, and year of residency.

The moderator had no reporting relationships with residents or faculty in any participating programs, and a neutral note-taker was present during each focus group. Participants provided oral informed consent before discussions began. Focus groups were audio-recorded and transcribed; all identifiers were removed before analysis. After each focus group, participants were provided with information on available resources for addressing burnout. The Loma Linda University institutional review board approved the study.

Study design

NGT was selected as a strategy for identifying relevant attributes and relative ranking of importance. NGT is a qualitative exploratory research method often used in situations that require complex problem solving, decision-making, priority-setting, and consensus reaching.(Bromley, 2014) It is defined as “a structured method for group brainstorming that encourages contributions from everyone and facilitates quick agreement on the relative importance of issues, problems, or solutions”(Bromley, 2014; *Guidelines for Conducting a Focus Group*, 2005; Hiligsmann et al., 2012; "Nominal Group Technique," 2020). Participants present their favorite ideas, and the suggestions are then discussed and prioritized by the entire group. In this way NGT combines the importance ratings of individual group members into the final weighted priorities of the group.

NGT combines quantitative and qualitative data collection in a group setting while avoiding the issues of group dynamics present in other group methods such as Delphi methods or brainstorming. Additional advantages of NGT over other group methods include reduced researcher bias due to the structured nature of the process, expedient achievement of data saturation, and its ability to simultaneously address problem identification, development of solutions, and establishing priorities for action. This method can be implemented within a narrow timeframe and it is easily understood by participants. Responses are weighted by participants, and the process is transparent, inclusive and can be easily replicated. NGT promotes even participation and facilitates representation of the implicit views of the group (Fournier et al., 2014; Justice & Jang, 1990; McMillan, King, & Tully, 2016).

Procedures

We conducted a literature search to identify systematic reviews of interventions to reduce burnout in groups of physicians (medical residents, interns, practicing physicians). Both individual and organization directed interventions were included. We restricted our review of existing studies to a time limit of 10 years and found eight systematic reviews (Kiran R. Busireddy et al., 2017; Clough et al., 2017; DeChant et al., 2019; Kalani, Azadfallah, Oreyzi, & Adibi, 2018; Panagioti et al., 2017; Perski, Grossi, Perski, & Niemi, 2017; Walsh et al., 2019; Colin P. West, Dyrbye, Erwin, & Shanafelt, 2016). Twenty-three potential important attributes of intervention programs were established from this literature review. Table 1 lists the attributes numbered from one to twenty-three.

Table 1. List of potentially important attributes/interventions

1. Mindfulness and self-care training
2. Limiting duration of shifts
3. Enforcing sensible patient censuses
4. One-on-one counseling geared to improve wellness
5. Flexible scheduling allowing for time off work
6. Increased direct patient contact, protected time with patients
7. Group meetings with physician-leaders, physician communities, peer-discussion groups
8. Brief evidence-based stress reduction interventions during shifts
9. Periods of protected sleep time during shift
10. Incentivizing physical exercise programs/gym attendance
11. Communication skills training (e.g., dealing with difficult patients)
12. Stress management training (focus on distress, emotional exhaustion etc.)
13. Non Physician staff support to offload clerical burdens
14. Time banking intervention, allowing time to focus on professional development/meaningful activities
15. Hold a forum for residents to voice concerns and influence change
16. Improvement in physical work environment – better sleep rooms, creating shared spaces/break rooms
17. Emphasize learning over service – protect formal educational time, minimal responding clinical duties during educational conferences
18. Schedule residents to work together on consistent teams
19. Encourage faculty to provide more frequent positive feedback
20. Spiritual nurturing and care
21. Creative art therapy
22. Residency-wide social events
23. Develop formal, accessible mechanisms for reporting and investigating sexual harassment and racial discrimination

The NGT process consisted of three steps. After a welcome from the facilitator, participants were asked to introduce themselves, including specialty and year of residency. The facilitator then described the purpose of the study, the process, and the survey list of potential attributes with a description of each attribute. These attributes were displayed in Google Sheets for all participants to view in real-time. Participants were then asked to complete the survey, ranking each potential attribute from 1-23 with one being the most important and twenty-three being the least. Ranking occurred anonymously using Google Sheets. Each participant was assigned an individual sheet displaying the list of attributes in one column and the drop-down list of ranking values (1-23) in the adjacent column. Participants ranked each attribute, assigning only one

number per attribute. The aggregate ranking of each attribute was instantly updated on a separate summary sheet available to the group facilitator. The summary sheet displayed individual anonymous rankings of each group member (e.g., column B) together with the list of attributes sorted according to the rank order at the group level.

During a second step (discussion and sharing ideas), a group discussion on each of the attributes was held and included a group review of the aggregate score of the initial ranking, displayed in the summary sheet and presented to participants. This discussion reviewed if the group endorsed the highest-ranking attributes and contextualized responses and the rank-ordering. After the three group discussions, the rank order of the attributes was tallied. Finally, residents had an opportunity to reconsider their initial ranking of the attributes based on the group discussion. They were not pressured to alter their ranking nor to achieve consensus. The facilitator endeavored to ensure that all participants were given the opportunity to contribute. None of the participants opted to change their ranking of attributes following discussion.

Results

A total of 36 residents participated across the three sites with 10, 12, and 14 participants per focus group. As seen in Table 2, the residents were a representative sample of specialty, year of residency, gender, and program. Internal Medicine and Family Medicine were the specialties represented by the greatest number of participants ($n = 16$ and $n = 14$) followed by a small number of residents from anesthesia, surgery, and emergency medicine. The groups were almost equally divided by gender and year of residency.

Table 2. Participants' characteristics.

Total Participants 36 (N=36)	
Women	(n=19, 53%)
Men	(n=17, 47%)
Facility	
University Hospital	(n=10, 28%)
Medical Center	(n=12, 33%)
Community Hospital	(n=14, 39%)
Year of residency	
PGY1	(n= 9, 25%)
PGY2	(n=11, 30%)
PGY3	(n=13, 36%)
PGY4 and over	(n= 3, 9%)
Specialty	
Internal Medicine	(n=16, 44%)
Family Medicine	(n=14, 39%)
Anesthesia	(n= 3, 9%)
Surgery	(n= 2, 5%)
Emergency Medicine	(n= 1, 3%)

Table 3. Rank order of attributes.

Rank	INTERVENTION	Sum	Mean	Std Dev
1.	Flexible scheduling allowing for time off work	201	6.09	4.91
2.	Limiting duration of shifts	218	6.61	5.80
3.	Incentivizing physical exercise programs/gym attendance	284	8.61	5.47
4.	Periods of protected sleep time during shifts	289	8.76	6.44
5.	Enforcing sensible patient censuses	307	9.30	6.71
6.	Emphasize learning over service – protect formal educational time, minimal responding clinical duties during educational conferences	316	9.58	4.74
7.	Non-physician staff support to offload clerical burdens	323	9.79	6.37
8.	Hold a forum for residents to voice concerns and influence change	346	10.48	6.10
9.	Residency-wide social events	352	10.67	6.32
10.	Mindfulness and self-care training	365	11.06	7.40
11.	Stress management training (focus on distress, emotional exhaustion)	404	12.24	6.47
12.	Encourage faculty to provide more frequent positive feedback	410	12.42	5.83
13.	Time banking intervention, allowing time to focus on professional development/meaningful activities	413	12.52	6.06
14.	Improvement in physical work environment – better sleep rooms, creating shared spaces/break rooms	424	12.85	5.91
15.	One-on-one counseling geared to improve wellness	459	13.91	5.57
16.	Increased direct patient contact, protected time with patients	462	14.00	5.81
17.	Group meetings with physician-leaders, physician communities, peer-discussion groups	484	14.67	5.33
18.	Brief evidence-based stress reduction interventions during shifts	490	14.85	5.46
19.	Schedule residents to work together on consistent teams	495	15.00	6.38
20.	Communication skills training (e.g., dealing with difficult patients)	503	15.24	4.88
21.	Spiritual nurturing and care	507	15.36	7.52
22.	Develop formal, accessible mechanisms for reporting and investigating sexual harassment and racial discrimination	518	15.70	6.39
23.	Creative art therapy	549	16.64	6.42

Table 3 shows the sum, mean scores, and standard deviations of the level of agreement on program attributes. The mean values for importance show the group aggregate rank, whereas standard deviation show the spread, i.e. disagreement of the group’s responses around that result. As the standard deviation represents the majority of participants’ variation around the mean, Table 3 shows attributes with fewer outliers indicating lower disagreement and attributes with more outliers showing decreased convergence. The highest agreement among participants with the resulting smallest standard deviation was from attribute 6 – emphasize learning over service – with participants agreeing that it is a useful intervention (4.74 standard deviation). Next

highest agreement, attribute 20 – communication skills training – with participants agreeing that it is not a useful intervention (4.87). The highest prioritized intervention was attribute 1 – flexible scheduling – with participants agreeing that this is the most wanted intervention, though with a higher standard deviation (4.91). The highest disagreement among participants with the resulting highest standard deviation was attribute 21, spiritual nurturing and care (7.51), followed by attribute 10, mindfulness and self-care training (7.40) and attribute 5, enforcing sensible patient censuses (6.71). This disagreement can be attributed to the differences in residency programs and types of hospital setting. We review 10 priority interventions and provide participants’ quotes that help contextualize these interventions in the following sections.

Flexible schedule allowing for time off work

This attribute was identified as the essential aspect of the burnout prevention programs. In all three focus groups, residents prioritized time for personal and professional needs as the most critical aspect of burnout prevention. Residents talked about their time constraints preventing them from practicing self-care, mindfulness, or meaningful learning. Time off work and flexibility in scheduling was discussed as a baseline for any other wellness intervention. When on-call schedules do not allow residents to meet basic needs such as sleep and self-care, any additional intervention to prevent burnout is meaningless.

“Scheduling is so important. This is a change that doesn’t take much work to implement and will have a real, immediate impact. It is no stretch of the imagination to think working fewer days in a row could mean a better quality of life. More rest between shifts means a better quality of life. More time-off requests granted means more of us are happier in the long-term. This is the most

immediate and tangible solution instead of stress management or meditation promoted by some programs.”

Limiting the duration of shifts

Residents discussed the importance of fatigue as a precursor to burnout. They talked about how long hours, heavy workloads, and constant pressure are emotionally taxing. Participants emphasized the ability to spend time away from work to reenergize, engage in activities that can prevent burnout, and maintain a life outside of work.

“Having shorter shifts means I have time either before or after my shift to spend time with my family, work out, cook meals, and be a normal person outside of the hospital.”

“Having a shorter shift structure would let me recover sooner after night shifts.”

“You are not completely wiped out at the end of your shift.”

Physical exercise

Residents described the protective mechanisms of physical fitness and exercise. Participants spoke about the benefits of exercise not only for physical, but also for their mental health and well-being. There was a discrepancy in ranking this intervention. University hospital residents ranked it lower than the other two programs, most likely due to their easy access to a state-of-the-art recreation and wellness center.

“Exercise is the best way for me to sweat off stress and anxiety. I keep talking to my patients about the importance of physical activity, yet my schedule is so hectic that I cannot find enough time to exercise regularly. It takes about 20 minutes to get to the gym, and I feel like our minutes are precious. I am struggling to integrate exercise into my routine.”

Protected sleep time

Despite the work hours restrictions, it remains challenging to get enough sleep while in residency. Residents linked sleep deprivation to burnout and discussed this issue

as requiring system change rather than individual attention. They mentioned difficulties in noticing and addressing their sleep deprivation, exacerbated by an “I can handle it” mentality.

“Once I ended up being on call for six days in a row. Near the end, I was so tired that I stopped smiling. I was so tired of running on no sleep. During that time, we were getting late-night calls from the ER, but you are expected to see patients during the day as well. So, you are running on no sleep. At the end of the sixth day, I developed a fever and had to call in sick.”

Sensible patient census

Residents articulated the distinction between hours worked per shift and the number of admissions during the shift. Because of work hour restrictions by accreditation policies (Antiel RM, 2010), programs may only focus on hours rather than patient numbers. While their programs seemingly understand the connection between burnout and workload, residents perceived their program directors being more concerned with burnout resulting from hours worked per shift rather than the intensity of work completed during those hours. Enforcing sensible patient census to control workload was a priority for the university hospital and medical center, but less critical for the community hospital residency.

“I can have several long shifts scheduled back-to-back but uneventful and still feel fine. Sometimes my shifts are more staggered and seem more manageable, but I end up caring for a lot more patients or dealing with many end-of-life situations and feel much more run down. It is not only about how many hours I spent in the hospital, but also what happens during those hours that matters for burnout.”

Protected learning time

Meaningful learning experiences are essential during residency. Participants emphasized the fact that residency is an educational experience. They work long hours for minimal pay in exchange for the benefits of clinical education. For residents to receive the most benefit from their training, programs need to prioritize their learning by securing uninterrupted educational time. This protected time would show residents that hospitals value their personal growth and training over their service.

“It is refreshing to have an opportunity to invest in your education and improvement as a physician. At least in part, my burnout experience was connected to a feeling of not being prepared to face some of the more challenging clinical situations. One solution is taking some time away from chaos, turning off your pager, and having a meaningful learning experience. I listen better, ask more questions, and learn more when I can have no responding duties during educational conferences.”

Non-physician staff to offload EHR imposed stress

According to a recent study, the average physician spends 28 hours on clinical documentation during nights and weekends each month (Bromley, 2014). Residents in this study reported a high level of stress from Electronic Health Record (EHR) systems and dissatisfaction from reduced direct face time with patients. One resident commented:

“At times, I feel like EHR robs me of everything that gives me meaning in my profession – it makes me less efficient, less able to spend time with my patients. It is very disruptive to the flow of my work.”

Voice for residents to influence change

Residents identified programs’ unresponsiveness to residents’ feedback as one of the factors contributing to burnout. Residents perceived themselves as being at the

bottom of the hospital hierarchy and rarely having control over their hours, schedule, and work environment. Having a sense of control and being able to influence change can moderate the intensity of workload and burnout. Residents prioritized the ability to have a forum where they can voice concerns and see them addressed.

“Giving residents a voice as much as possible is a great way to sustain our motivation and prevent apathy. Let us tell you what works and what interventions are effective (or not). We are the ones on the frontlines.”

Social Connections

Participants discussed multiple ways in which residency programs and healthcare practice can lead to a sense of isolation and loneliness, resulting in burnout. They talked about many hours spent in front of their computers working on medical records, high case workload, and online learning, leading to reduced face-to-face interactions. They highlighted the connection between social support and reduced burnout.

“One of my priorities as of late is to invest in relationships. Residency can be lonely and isolated. This sense of isolation can lead to burnout. I believe we need more personal, human interaction beyond quick, professional exchanges. We need opportunities to talk with each other about our work and lives. We need to vent about bad stuff, to talk about meaningful experiences at work, to share tips about surviving this place without losing our sanity.”

Mindfulness

Some residents found mindfulness useful for combating stress and burnout. They talked about the importance of self-awareness and positive self-reinforcement to reduce their emotional response to stressors.

“I’ve been focusing on self-care and fostering my sense of connection, not only to family and friends, but to myself. I am figuring out what really inspired me, what really motivated me. This practice of mindfulness can be very cathartic or Zen.”

However, there was a high level of disagreement between the usefulness of mindfulness and stress-management classes to reduce burnout. Residents at the community hospital ranked this intervention remarkably high, while residents at the university hospital ranked it exceptionally low.

“Our program focuses a lot on this. Pretty much every retreat we go through, that is the one thing they do. And I am so glad to see the agreement that this is not helpful.”

Discussion

Although burnout during residency training has been widely acknowledged, there is less consensus regarding ways to address this problem (K. R. Busireddy et al., 2017; Panagioti et al., 2017). Little is known about which interventions among this variety of burnout prevention strategies residents value the most. This study provides an overview of the interventions residents value most to combat burnout, and what makes those interventions valuable. Our findings offer insight that may help focus future prevention efforts.

The study results suggest that residents prioritize interventions targeting systemic and program-level factors contributing to burnout over the individual interventions. This finding is in line with several recently published studies (Roger Collier, 2018; Gregory, Menser, & Gregory, 2018; Oetgen, 2018). Participants connected burnout experience to their working conditions and characteristics of their programs rather than their failure to maintain a proper work-life balance or inability to manage stress. A variety of factors contribute to residents' burnout: reduced sense of control over their schedule, their workload, time spent with patients, and their learning; reduced sense of belonging and

social connectedness; reduced time for self-care and patient care; reduced sense of meaning and purpose. As a result, participants considered systems factors the most critical target for interventions, rather than individual strategies such as stress management. They prioritized flexible schedules and protected learning time to increase control over their work and learning environment and have a voice and ability to influence change. Residents wanted their programs to cultivate meaning in residency training by bringing them back to the bedside (e.g., relieving the EHR burden). They talked about addressing the reasons why they are pulled away from the bedside, such as high patient census and high volume of administrative tasks. Participants referred to time as the priority for interventions to reduce burnout – limiting durations of shifts to allow for self-care and protecting sleep time. Finally, they mentioned the importance of social connectivity and practicing within a work environment that fosters a sense of belonging.

Residents prioritized several individual-level interventions such as physical exercise programs and mindfulness training. However, these interventions were on the list of the attributes with the highest disagreement among participants as judged by the standard deviation. Residents of one program were dissatisfied with the sole focus of their program administration on boosting physicians' resilience as the best strategy for dealing with burnout. It is also worth mentioning the contextual differences between programs that factored into residents' preferences. While a physical exercise program was highly prioritized by medical center and community hospital residents, it was scored lower by the university hospital residents, possibly due to the on-site state-of-the-art wellness center. Stress management and mindfulness training were a high priority for community hospital residents, while scoring low for medical center and university

hospital residents potentially due to differential access to supportive services, cultural differences, or selection bias.

The results of our study support the need for interventions able to address multiple organizational factors leading to burnout as opposed to addressing a single issue such as workload or shift patterns. There is a need for complex interventions that will target several systemic and program level factors (Dzau, Kirch, & Nasca, 2018; Romani & Ashkar, 2014) while including individual-level interventions when indicated.

Organizational psychology suggests several factors that may support intrinsic motivation of residents: autonomy, meaning, competence, and relatedness. As our study shows, these factors tend to be reduced during residency and may result in burnout. Interventions prioritized by residents can be grouped according to these four factors: autonomy (e.g., flexible schedule, forum to influence change), meaning (e.g., sensible patient census, support staff to offload clerical burdens), competence (e.g., protected learning time, feedback from faculty), and relatedness (e.g., social support).

The literature has not clarified guidance on NGT sample size, and this study, like others before, used a small number of focus groups. We were aware that the restriction of our project timeframe to conduct focus groups may have led to limited depth of discussion of each attribute. Subsequent groups may have been able to broaden the scope and breadth. We used eight systematic literature reviews of interventions, both individual and institutional, for prevention of burnout, to develop the list of 23 attributes. In addition, we spoke with experts to refine our list. However, we cannot rule out other burnout program attributes that are important to some residents or that additional groups of residents may have added other attributes not mentioned in the current study methods.

In addition, the samples for the focus groups contained a relatively high proportion of internal medicine and family medicine residents but a limited representation of several other specialties. Participants also represented three diverse healthcare centers. Some might consider our selection of participants to be less generalizable to all residency programs and medical specialties. Future studies could do this procedure on each medical specialty, and compare and contrast the program attribute rankings in interesting ways. A further limitation is that we have not compared the attributes derived from NGT with other approaches (e.g., Delphi, best-worst scaling, brainstorming). Head-to-head comparisons of different techniques could help to assess and understand strengths and weaknesses between approaches.

This study identified and ranked burnout prevention preferences in a resident population, showing that there is a need to address multiple organizational factors leading to burnout. There is also a need for complex interventions that will target several systemic and program level factors. While there was variability about attributes the groups perceived to be less important, as well as variability between healthcare centers, there was strong agreement about the most highly rated attributes. The attributes group naturally into themes of autonomy, meaning, competency, and relatedness. The next steps in this process will enable the researchers to refine the methods to determine measures for each attribute. The results of this study may help residency program directors understand what specific attributes of a burnout prevention program residents will value. The results will also be used to design a DCE study that would model residents' burnout prevention program preferences. This may advance understanding and support for evidence-based, best practices as well as increase residents participation in, and adoption of, burnout

prevention programs resulting in a potential decrease in rates of resident burnout. These same attributes could also be explored with physicians across specialties to determine whether the four themes of autonomy, meaning, competency, and relatedness also apply after board certification and across specialties,

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CHAPTER FOUR

RELIGION/SPIRITUALITY AND HEALTH

Introduction

Current models of health consistently show that health is more than the absence of disease. It involves more than just physical and mental health and is concerned with more than genetic history. Wellness is dependent on all that comprises an individual: their biological, psychological, social, religious/spiritual (R/S), and environmental composition. It is impacted by beliefs, practices, choices, and circumstances. Science shows that a person's zip code is now a stronger predictor of health than genetics. There is a growing recognition and appreciation that social determinants of health are central not only to population health, but to individual health as well. Ethical healthcare, then, must be directed at the whole person – considering all factors that influence health and wellbeing.

Healthcare organizations, too, have a responsibility to consider the whole person of those they employ as well as those they train. Public health entities also have a duty to contemplate the sum of social determinants that impact communities and individuals. Research shows that consideration of the whole person improves outcomes, health, and wellbeing, yet what we notice empirically, is that many times – even most times – healthcare providers, their organizations, medical training institutes, and public health entities, consider only some of the determinants of health and wellbeing. Patients, communities, healthcare workers, and institutions pay the price.

This paper will show that inclusion of spiritual care may be one of the missing pieces in healthcare practices, healing centers, medical training facilities, and public

health entities. A review of the history of religion and health will show that, though deeply connected initially, over time those ties were severed with the advancement of science and reason, with a concomitant fracturing of wholeness to focus on specialized systems. Focus on prevention lessened while acute care flourished, leaving little time for considering the whole person which includes spirituality. And the health of Americans has, ultimately, worsened. We will also show that public health, though deeply concerned about social determinants of health and consideration of the whole person, does not officially include religion or spirituality as one of the social determinants of health. And population health is worsening. We will review the role of R/S in healthcare, showing that though it is mandated by accrediting agencies, patients report that they often are not asked about their R/S and leave the hospital without “spiritual care.” We will then look at two current healthcare crises through the lens of R/S and health and show that spiritual care has been largely overlooked.

The purpose of this study is to generate an understanding of the current state of R/S in healthcare with its related health and well-being issues in order to make recommendations for changes in policies and practices that would help to enhance the health and wellbeing of individuals, communities, and populations.

Part I – Religion/Spirituality and Health Historical Review

Religion and Health have a turbulent history spanning thousands of years. Ancient cultures operated within polytheistic or monotheistic systems where religion and health met at every level. Religious leaders were also the healers. Illness was thought to be caused by naturalistic causes, by sin of the individual or an ancestor, or by a direct curse

from capricious gods. Every illness resulted in shame for the patient (Avalos, 1999). The question to be asked was “Who had sinned?” Like Job’s friends, everyone would look for sins that were responsible for the suffering.

Eligibility for health care was determined by social and religious standing. Social standing was determined by contribution to community and society. Thus, a disabled person who was unable to work was deemed ineligible for health care – even if he could pay. He could not contribute to society so health care resources should not be “wasted” on him. In Judaism, as well as many contemporary polytheistic cultures, religious standing was based on a ritualistic system that determined whether a person was clean or unclean. If a person was unclean, due to a skin disease, bleeding, or even infertility, they were judged as unworthy of health care.

Jesus entered this world bringing a drastically different paradigm. He came to save and to heal the sick, not the healthy. He offered healing to the whole person and made health care available to even the most despised outcast. His influence helped to simplify the healthcare system, perhaps the most significant contribution of Christianity according to Avalos (1999).

This interconnected practice of religion and health slowly changed over time with the decline in the influence of the church as the center of society (H. G. Koenig, 2000). Descartes’ Dualism contributed to the disconnect between religion and health with his Western view of distinct separation between the mental and physical domains. The physical body, made of matter, fit well into the scientific model of discovery, while “the mind has been seen as the seat of the soul and of free will, something immaterial, mysterious, and not constrained by the causal, deterministic nature of external reality

(Idler, 2014).” This concept influenced the Western understanding of the connection of mind and body for several hundred years, resulting in the separation of humanities, social sciences, and religious study from the “hard sciences.” The Enlightenment saw religion set aside in favor of science and reason (2014).

Religious institutions, however, continued to thrive and during the 18th and 19th Centuries were responsible for developing the first hospitals, clinics, and medical institutions (Levin, 2016). Religious organizations often advanced a strong public health reform as well as advocating for social justice. They played significant roles in the advancement of individual and public health, often intervening in communities to influence change to improve quality of air and water, to educate about hygiene and healthy living conditions, and to care for the physically and mentally ill in their churches and communities. Their efforts were largely unknown in the wider medical community though they often impacted real change and positive health outcomes.

Religious leaders such as John Wesley, worked tirelessly to organize small support groups (societies), provide clinical care, as well as advance education about what we would now call the social determinants of health. He published a little tract called *Primitive Physick*, that shared the latest medical knowledge with many who had no access to healthcare. Wesley addressed health concerns that impacted the whole body including air, diet, sleep and exercise (Wesley, 1743). Many religious groups followed a “healing ministry of Jesus” paradigm that led to improved well-being with efforts directed at healing of the whole person. Ellen White, an early health reformer wrote: “pure air, sunlight, abstemiousness, rest, exercise, proper diet, the use of water, trust in divine power--these are the true remedies” (White, 1905).

Views on the causes leading to poverty slowly began to shift from that of “pauperism” that defined the poor as “people who are structurally and almost necessarily idle, ignorant, intemperate, and more or less vicious, who are failures, or the descendants of failures, and who for the most part belong to certain races” to a view that society and vast inequities create poverty (Idler, 2014) . As religious organizations worked from a social gospel perspective, religion and the newly emerging field of public health found some common ground, perhaps lessening the distrust that kept them from collaborating, though efforts by faith-based organizations (FBOs) to include salvation as part of wholeness and health, continued to create tension between them.

Not all religious teaching and care were health-producing. The Comstock Laws serve as an example of injurious health-related initiatives that have had lasting consequences. Anthony Comstock was a religious fundamentalist who fought tirelessly to eradicate alcohol use as well as sexual immorality. Religious fundamentalism can be defined as: “an unyielding ‘attachment to a set of irreducible beliefs . . . that forestalls further questions,’ that is, ‘anachronistic, anti-intellectual,’ and anti-scientific.” Comstock determined that birth control of any type perpetuated sexual immorality. He battled until laws were instituted that made it illegal to advertise or make available any contraception or abortion material. The ban on any sexual content extended to education and issues of reproductive health, making any health education on the subject illegal. As a result, “private and public health suffered. Information about human reproduction dried up – condemned as obscene. Even medical texts detailing human reproduction could not be mailed.” Comstock was able to impose his own moral view on the public through the law. Gradually, over time, the support for Comstock’s laws lessened as key factors, like

the right to privacy, were called into question. However, some of the remnants of the act lasted well into the 1990s (C-Span; Idler, 2014).

Though there have been, and continue to be, religious influences that are destructive and in opposition to health and well-being, the preponderance of research shows that religious organizations, and related R/S, and a whole-person approach to health, have generally offered positive outcomes in the pursuit of health (H. Koenig, King, & Carson, 2012; H. G. Koenig, 2013; Reinert, Campbell, Bandeen-Roche, Lee, & Szanton, 2016; *Spirituality, Health, and Wholeness An Introductory Guide for Health Care Professionals*, 2009).

While religious organizations were building hospitals and working through various avenues to enhance well-being, the Western view of healthcare in general continued its paradigm of complete separation of medicine and religion, with only a brief engagement of medicine with organized religion from 1961-1974 that ended abruptly over disagreements regarding abortion (D. T. Kim, Curlin, Wolenberg, & Sulmasy, 2014). In the late 20th century disciplines like psychoneuroimmunology emerged which helped begin the process of reintegration of mind, body, and spirit. This field of study, described by Dr. Robert Ader in 1981, looks at the connection between psychological processes, the neurological system, and immunology. A textbook by Daruna, expanding on Ader's research, shows clear, scientific evidence of the integrated nature of mind and body (Daruna, 2012). Change began slowly. Advances in medicine had tended to dis-integrate medical care into treatment of systems with multiple highly-specialized practitioners in every field of medicine. Prevention was neglected as pharmaceuticals and interventional medicine expanded and health care focused primarily on curing disease.

Mental health and religion, also distinctly separate for many years, is also in the process of transformation. Research is showing that mental health practices (religious and spiritual) affect the brain, mental health, and physical health. Studies are showing an interconnectedness and synchronization that enhances health, well-being, and quality of life. In 1948 the WHO defined health as “a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity” (WHO, 1948). They clarified that definition in 1986 by adding that health is: “A resource for everyday life, not the objective of living. Health is a positive concept emphasizing social and personal resources, as well as physical capacities” (WHO, 1986).

Most recent definitions of health have shifted to a description of wellness such as this one from the WHO: “Wellness is the optimal state of health of individuals and groups. There are two focal concerns: the realization of the fullest potential of an individual physically, psychologically, socially, spiritually, and economically, and the fulfillment of one’s roles and expectations in the family, community, place of worship, and other settings” (CSDH, 2008; Felman, 2020). Park effectively argues that “religion and spirituality are major players in both global meaning systems (beliefs, goals, values, and sense of purpose) as well as how meaning is made in specific contexts” (*Handbook of The Psychology of Religion and Spirituality, 2nd Edition*). It is becoming more apparent that R/S factor in the health and wellbeing of both individuals and groups, and that best practices in healthcare must consider and include each of these dimensions. Section II will look at public health and its relationship with R/S, seeking to understand the influence on health and wellbeing.

Part II – Religion/Spirituality and Public Health

In 2008 the World Health Organization, in an effort to close the gap between health inequities, reported the results of findings from a commission to study the social determinants of health. The report titled: “Closing the Gap in a Generation: Health Equity through Action on the Social Determinants of Health,” clarified that “social determinants” are “the circumstances in which people are born, grow up, live, work, and age, and the systems put in place to deal with illness. These circumstances are in turn shaped by a wider set of forces: economics, social policies, and politics” (CSDH, 2008).

Remarkably, religious organizations and R/S were not mentioned in any part of the “circumstances in which people are born, grow up, and live” nor in “the systems put in place to deal with illness, nor as a “wider set of forces.” The commission’s work highlights the growing awareness that the living conditions that one faces provides greater influence on health than do health care and medical services. Thus, the well-known phrase: “zip code is more important than genetics and health care services.”

The commission’s exclusion of religious institutions, and R/S, as social determinants of health, illustrates a profound gap and oversight according to Ellen Idler, Director, Religion and Public Health Collaborative, Emory University. In 2005 Emory University began a study of “Religion and the Public Health Collaborative.” The research is broad and extensive, from the history of religion and health to current trends in collaboration between public health entities and religious organizations, to recommendation of policy change that includes religion as a social determinant of health. The collaborative work of many scholars presents compelling evidence that there is a clear “ethical mandate to include so fundamental a part of social life [religion] in research

on the social determinants of health theoretically and methodologically.” They conclude that:

Religion is and should increasingly be taken into account as a social determinant of health. It is also predicated on the WHO definition of health: ‘Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.’ This idea of health can be conceptualized from two perspectives: a focus on the health of an individual or a focus on the health of a population. Here we are looking at the policy implications from the population-based perspective. The paradigm change is that religion is added to the social determinant themes (Idler, 2014).

Idler, the editor of the report of the faculty seminar collaborative, *Religion as a Social Determinant of Public Health*, summarizes necessary steps to move forward by asking if religion and public health are on a collision course, or is there another option? She answers the question: “we must end the exclusion of the essential sector of religion from the paradigm of social health determinants if fully effective challenges to the world’s current and future public health challenges are to be found” (2014). Recent health care has tended to focus on downstream factors, those interventions that impact health after disease processes are in play. However, social determinants of health begin as upstream factors, affecting every stage of life and have the greatest impact on health.

Idler concludes:

Religion is present in most societies both downstream and upstream and should be considered alongside its social, political, and economic counterparts if we are to have a complete framework of the social determinants of health. . . religions have a singular capacity to refocus our attention upstream. By directing attention to shared values and common purposes and lending their social capital, religions can help to create the conditions for social change that are critical to altering conditions of inequality and improving public health (2014).

This work has been impactful in advancing the efforts to include R/S, along with the other social determinants of health, in public health dialogue and action. The collaborative has also worked to facilitate many partnerships between FBOs and public

health entities, resulting in improved health outcomes for many communities and individuals. Some have suggested that the spiritual dimension of self is “the component that determines the constancy and continuity of self as a whole which is necessary for health” (Faull & Hills, 2006). There is much more to be done that could advance the understanding and practice of including R/S in public health initiatives and programs. Section III will look at healthcare clinicians and their inclusion of R/S as integral parts of health and wellness.

Part III – Religion/Spirituality and Healthcare Clinicians

According to the *Organization for Economic Co-operation and Development*, the U.S. has the highest rate of health care expenditures of all 15 countries included, with Norway, the 2nd closest, being 50% less per capita. In addition, the increase in health care expenditures each year in the U.S. is among the highest with experts predicting that “the current level of spending is unsustainable” (H. G. Koenig, 2013). The disease burden is also higher in the U.S. than comparable countries. In addition, the U.S. ranks last in measures of health care access and quality among peer countries, while also reporting higher rates of amenable mortality (Kurani, 2020). Lifestyle diseases have reached epidemic proportions with experts estimating that over 80% of all disease is caused by lifestyle choices. Anxiety and depression are out of control. Is it possible that the separation of R/S from the practice of healthcare is contributing to poor health outcomes?

Research shows that spiritual care for patients can reduce healthcare costs, improve mental health, enhance quality of life, predict greater longevity, increase physical health, and improve health outcomes, yet only about 10% of physicians address

spirituality with their patients. In fact, nearly 50% of them never take a spiritual history. Many are still operating from a purely “scientific” paradigm and see little value in spiritual care (Collier, 2020). A survey of patients and spiritual care shows that 75-90% of seriously ill patients acknowledge spiritual or religious needs during hospitalization, with 70% of those never being addressed or only minimally so. Patient surveys show that “addressing emotional and spiritual needs is among the lowest ranked of all clinical care indicators and highest in need of quality improvement” (H. G. Koenig, 2013).

Reports based on surveys from medical school deans showed that up to 90% offer some sort of spirituality training in their curriculum. Yet formal inclusion of R/S courses throughout medical training is still rare. Loma Linda University School of Medicine is one of the exceptions as they include formal R/S training throughout the four years of medical school. There is, however, no current national standard for R/S in medical training, and at most universities, this offering might be a single lecture on the topic, a course dedicated to spirituality, or part of another lecture on another topic. In addition, courses that were branded as addressing spirituality ranged from ethics, to palliative, and to human values courses (H. G. Koenig, 2013).

Medical students report that though the Association of American Medical Colleges developed and instituted a core set of competencies in 1999, and a Liaison Committee on Medical Education framework for incorporating a spirituality curriculum into undergraduate medical education, 78% have never witnessed a spiritual discussion with a patient by an attending physician or professor (Collier, 2020).

Clinicians are increasingly recognizing the need for spiritual development in their own lives as well. A 2009 conference of palliative care providers met to discuss

“Interprofessional Spiritual Care within palliative care.” Participants concluded that spirituality is a vital component of professional development, reporting these recommendations:

- (1) Healthcare settings should support and encourage the healthcare professional’s attention to self-care, reflection, retreat, and attention to stress management.
- (2) Professional development should address spiritual development especially as it relates to the healthcare professional’s sense of calling to their profession, the basis of relationship-centered care, and the provision of compassionate care.
- (3) The interprofessional team should be encouraged and given time for regular and ongoing self-examination and reflection about one’s interaction with patients (Puchalski & Guenther, 2012).

A 2013 conference expanded the work of the previous palliative conference to develop standards and recommended practices for the integration of spiritual care “across the entire continuum, not just palliative care.” It is now clearly recognized that spiritual care is central to the highest quality “compassionate health care and it is most effective when it is recognized and reflected in the attitudes and actions of both patients and health care providers” (H. Koenig et al., 2012).

A recent systematic review of spiritual care training for healthcare professionals showed that the spiritual vacuum that exists in healthcare organizations may be addressed by spiritual care training. In addition, research suggests that spiritual care for patients will be offered only as medical practitioners tend to their own beliefs and practices surrounding spirituality (P. Paal, Helo, & Frick, 2015). May and Meade also report that spirituality is an essential part of patient-centered care (2012).

There is certainly a paradigm shift that is combining empirical research in healthcare practices with faith, along with patient illness narratives in order to develop a new understanding of the connection between spirituality and medicine. Neuroscience is

revealing the mechanisms involved in meditation and mindfulness and many healthcare professionals are attempting to bridge the gap between science and religion. “Faith and spiritual practices may become an essential component for the physician-patient relationship and treatment plan” (Kopel & Habermas, 2019). Some suggest that spiritual health may be “THE” central component of health and well-being, infusing and integrating all other dimensions of health. From this broadened perspective, spiritual health and well-being embrace “all extant world-views from the ardently religious to the atheistic rationalist” (Fisher, 2011).

Physicians report, however, that there are many barriers to providing spiritual care. Many are uncomfortable and are uncertain how or when to initiate discussions. They feel they do not have time and would not know what to do with the information anyway. They often do not understand why they should take the time and they question whether it falls within their purview (H. G. Koenig, 2013).

One family practice physician shared his own personal perspective on the reluctance to offer spiritual care to patients. He reports that physicians undergo many years of logical, reasonable, education dependent upon the scientific method. They are taught to mistrust the heart – the seat of “intuition, creativity, spirituality, and love.” Out of his own complete breakdown, he rediscovered that “heart” must be involved in the practice of medicine. He found that as he rested, rediscovered his creativity, and engaged in spiritual practices such as gratitude, mindfulness, service and prayer, he returned to a state of health and well-being (Osborn, 2016). A key aspect of providing spiritual care is to develop a sensitivity to a patient's spirituality which necessitates a recognition of one's own beliefs and attitudes (Ledford et al., 2015).

Perhaps the disconnect between patient needs in spiritual care and physician response is largely connected to personal R/S understanding and integration. According to Koenig, most physicians (96%) acknowledge that spiritual well-being is a crucial element of health, that they should pay attention to the patient's R/S outlook (85%), and that they are authorized to initiate discussion (89%), but only 31-76% "feel that they should ask about patients' beliefs. A recent survey asked physicians if it is "usually or always appropriate" to bring up R/S beliefs. 55% indicated yes, while 45% said it was "usually or always inappropriate." In reality, only 10% ask about patients' R/S.

Researchers found that the physician's own R/S is the strongest predictor of spiritual care offered either personally by the physician or by referring to chaplaincy or counselors. Koenig concludes that spiritual care of patients "should not be determined by how religious he or she is [the clinician], but rather by the spiritual needs of the patient and the potential impact on health care and medical outcomes." Accrediting agencies require that health professionals respect patients' spiritual beliefs which would require an awareness of what those beliefs are. This awareness can only be found by seeking information – more than just asking a patient's religious affiliation and if they would like to see a chaplain – questions sometimes asked at admission by a clerk (2013). Though most physicians concur that R/S is an essential element of health and well-being, the actual inclusion of care remains suboptimal, possibly influencing health outcomes, costs, and quality of healthcare. Part IV will focus on healthcare organizations and possible methods of improving inclusion of R/S through a shift that focuses on spirituality in the workplace.

Part IV - Religion/Spirituality in Healthcare Organizations

Moving forward within the paradigm that includes R/S as a social determinant of health and central to quality compassionate care, there are several innovative approaches to inclusion of R/S that appear in recent research. Workplace spirituality is an emerging construct that is in the early stages of development with challenges from lack of conceptual clarity, as well as standardized definitions and terms, but is, nonetheless, receiving considerable attention with development of several areas of focus (*Handbook of The Psychology of Religion and Spirituality, 2nd Edition*).

The first of these is spiritual leadership which offers a promising model that addresses the issues of R/S in healthcare leadership. Researchers report that a review of over 150 studies showed clear alignment between spiritual values and practices, and successful leadership. In addition, leadership effectiveness was shown to be connected to spiritual practices in daily life. Spiritual leadership begins with an exploration of the traits that embody a good leader. These include fair treatment, expressing care and concern, listening responsively, recognizing the contributions of others, engaging in reflective practice (Reave, 2005), and having integrity, trust, respect, honesty, and compassion. The goal of a spiritual leader is to help others find meaning and significance in their work which contributes to the development of community. Numerous studies reveal the positive outcomes such as “spiritual well-being, lower spiritual distress, spiritual development, attention to the dimensions of inner life, meaningful work, interconnectedness, transcendence and alignment between values” (Piret Paal, Neenan, Muldowney, Brady, & Timmins, 2018). Spirituality in leaders first requires “good working relationships and human connectedness” (Bolton, 2010). Spiritual leaders offer

their employees opportunities to explore and express their own spirituality. They plan for and encourage community involvement with the “recovery” of one dying hospital as a testament to the transformational power of spiritual leadership as reported by Wolf (2004).

A vibrant spiritual culture is also being described as an approach that includes R/S in healthcare settings. This term is used to describe the underlying values, beliefs, practices, and ways of interacting that contribute to the work environment, thus encouraging and promoting attention to individual and community spirituality (Piret Paal et al., 2018). It is closely related to spiritual climate, a term also used to describe practices that affirm, confer a sense of belonging, and celebrate and advance competence. Workplace spirituality, an overarching term, refers to the awareness and support of individual spiritual practices which help to bring meaning and satisfaction.

A healthy spiritual climate enhances teamwork, organizational commitment, and job satisfaction, relating to low turnover intention (Zhang et al., 2019). When spiritual climate is encouraged, employees tend to “bring their whole selves” to work through recognition and acceptance of their spirituality. “The recognition that employees have an inner life that nourishes and is nourished by meaningful work that takes place in the context of community” – opens the door to create a spiritual climate that contributes to improved workplace spirituality (Doram et al., 2017). A robust workplace spirituality is related to higher positive affectivity, resilience, self-efficacy, and workplace engagement while a low intensity level is related to higher negative feelings (Dal Corso, De Carlo, Carluccio, Colledani, & Falco, 2020).

Research in workplace spirituality and related constructs shows promising outcomes and also reveals the need for robust, ongoing studies to further develop the understanding and use of constructs, models and terms.

Another area of exploration of R/S in health care is the expanding role of the Spiritual Care Department. “Spiritual care is not standing at the end of the bed with a Bible like a televangelist, attempting to influence the patient into making a decision. Spiritual care is coming close to the heart of patients so we become aware of their burdens, both above and below the surface” (*Spirituality, Health, and Wholeness An Introductory Guide for Health Care Professionals*, 2009). This is the foundation of spiritual care and begins with wounded healers who make themselves available to simply be present with wounded people (Nouwen, 2009).

Some hospitals have a robust spiritual care/chaplaincy department with an adequate staff to offer presence in the entire healthcare facility, often assigning chaplains to cover specific units where they will attempt to see every patient over the span of their hospitalization with the intent to develop deep and trusting relationships. This approach, as modeled at Loma Linda University, is predicated on the belief that spiritual care is necessary and should be offered to all – even if they have not requested it. This presence on the unit also offers the potential for daily encounters with staff and may help to facilitate development of supportive relationships there as well.

Many spiritual care departments, though, are understaffed with a limited number of chaplains responsible for patient care for the entire facility, leading to visits primarily for those who request it. This leaves the balance of patients, about 80% of those in acute care, without a key element of whole person care. Other facilities, 36-46% of all U.S.

hospitals, have no chaplain on staff, relying on volunteer clergy to fill the void. Chaplains are also rarely present in long term care facilities, outpatient medical facilities, or psychiatric centers (H. G. Koenig, 2013).

Exemplary systems can be modeled after that at Emory University Hospital where there is an additional spiritual care department dedicated to hospital staff and students. Robin Brown-Haithoc, Director of Spiritual Health and Staff Support, describes the care that is offered for individual and group support, and staff debriefings following challenging and potentially distressing events. She also provides team building education and training, conflict resolution support, compassion fatigue information and interventions, moral distress sensitivity training and debriefing, workplace transition support, and skills training for working with challenging patients and families (Brown-Haithco, 2020). This system utilizes spiritual care professionals' training and expertise in ways that expand and deepen their influence and scope.

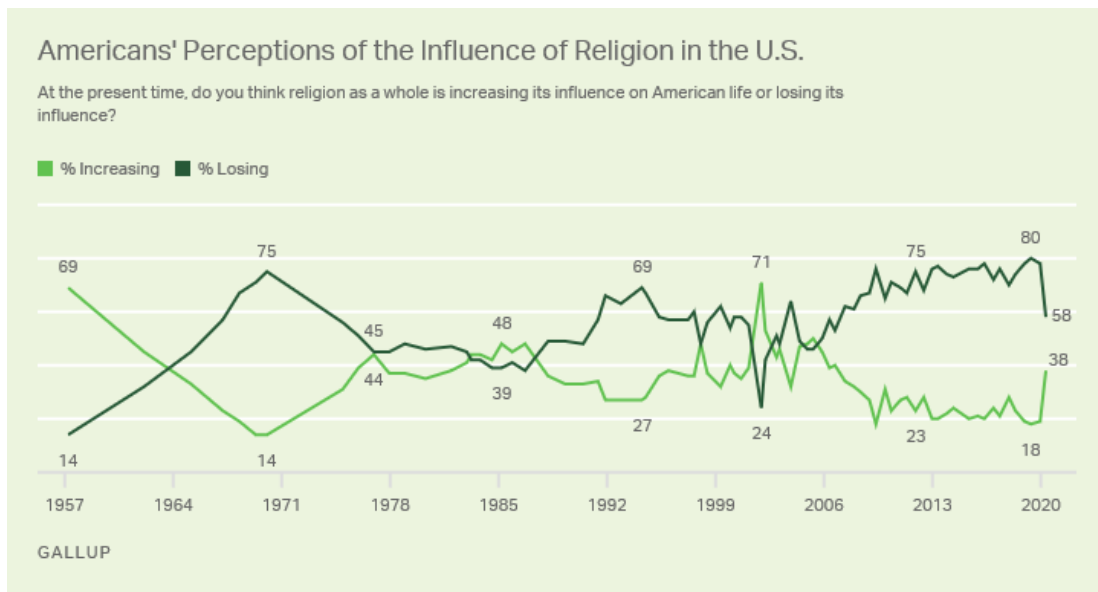
Loma Linda University, with its commendable spiritual care department, also offers a separate employee Spiritual Care and Wholeness Department. This team is dedicated to the spiritual needs of employees. A third program, the Physician Vitality system, offers extensive wellness resources for established physicians as well as for residents and fellows.

A study of intensive care unit medical staff dealing with moral distress, showed that the support of a chaplain on site helped to alleviate the negative impact of moral distress. Researchers concluded that improving access to chaplaincy may be a cost-effective burnout preventive measure (Pereira-Lima & Loureiro, 2015).

Expanded spiritual care should also be made available for those who do not identify as R/S. A brief reference to definitions of religion and spirituality is necessary to identify key issues. Religion is “an organized system of beliefs, practices, rituals and symbols designed (a) to facilitate closeness to the sacred or transcendent (God, higher power or ultimate truth/reality) and (b) foster an understanding of one’s relationship and responsibility to others in living together in a community” (H. Koenig et al., 2012).

Spirituality, on the other hand, is “a dynamic and intrinsic aspect of humanity through which persons seek ultimate meaning, purpose, and transcendence, and experience relationships to self, family, others, community, society, nature, and the significant or sacred. Spirituality is expressed through beliefs, values, traditions, and practices” (Puchalski, Vitillo, Hull, & Reller, 2014). Historically, religion and spirituality were conjoined and inseparable, but this is no longer the case.

Figure 1. Americans’ perceptions of the influence of religion in the U.S.



Recent Gallup polls show, in figure 1, that in 2019, 80% of individuals believed that religion is losing its influence, while only 18% believed it is gaining influence

(Newport, 2020). Generally, religion appears to be losing its influence, with exceptions such as significant spikes and drops connected to the 9/11/2001 terrorist attack on the United States, and the 2020 pandemic. It is also important to note that spirituality as a separate entity from religion is gaining influence.

Figure 2. Percent of U.S. adults identifying as a religious and/or spiritual person.

Most of those who say they are spiritual but not religious also identify with a religious group

	U.S. adults	Religious and spiritual	Religious but not spiritual	Spiritual but not religious	Neither religious nor spiritual
<i>% who identify as ...</i>	%	%	%	%	%
Protestant	46	63	47	35	18
Catholic	21	24	37	14	19
Unaffiliated	22	4	6	37	54
Other	8	8	8	11	7
Don't know/refused	2	1	2	3	3
	100	100	100	100	100
<i>% who say they attend religious services ...</i>					
Weekly or more	35	55	36	17	8
Monthly/yearly	31	31	40	32	27
Seldom/never	33	13	20	49	63
Don't know/refused	1	1	3	2	2
	100	100	100	100	100
<i>% who say religion is ...</i>					
Very important	50	79	49	27	11
Somewhat important	23	18	35	27	26
Not too/not at all important	25	3	14	44	61
Don't know/refused	1	<1	2	2	3
	100	100	100	100	100

Note: Figures may not add to 100% due to rounding. Results for U.S. adults based on the random half of respondents who were asked whether they consider themselves to be a religious person and whether they consider themselves to be a spiritual person. Respondents were asked separate questions about whether they consider themselves to be "a religious person" and whether they consider themselves to be "a spiritual person." The "spiritual but not religious" category includes those who responded affirmatively to the question about being a spiritual person and also responded that they do not consider themselves to be a religious person.
Source: Survey conducted April 25-June 4, 2017.

PEW RESEARCH CENTER

About a quarter of U.S. adults (27%) now say they think of themselves as spiritual but not religious, up eight percentage points in five years, according to a Pew Research Center survey conducted between April 25 and June 4 of 2017.

The apparent declining state of religion and the growing trend towards spirituality in the U.S. present new challenges in the efforts to improve quality of healthcare with consistent inclusion of R/S. Spiritual care professionals prepare for the task by:

... respecting and providing sensitive care to people of diverse abilities, beliefs, cultures, and identities. Chaplains include in their assessments the identification of care recipients' cultural and spiritual/religious issues, beliefs, and values, because these factors may impact the plan of care... Through practice and education, the chaplain assists other members of the care team in incorporating respect for diversity into the care recipient's plan of care (*Chaplains Report*, 2018).

The mandate for the healthcare interdisciplinary team, as described by the WHO, is to focus on the physical, psychological, social, spiritual, and economic components of those we care for so that they may meet their fullest potential. Each member of the team is to see the patient through an integrated lens that considers the whole person. Part V will review two current health crises looking for evidence of inclusion of R/S in practice.

Part V – Religion/Spirituality and Current Health Challenges

Burnout in Resident Physicians

Burnout is at epidemic proportions in resident physicians and there is ongoing, intense scrutiny and research to address this potentially life-threatening issue. It is now considered an ICD-11 diagnosable condition “resulting from chronic workplace stress

and encompassing a constellation of exhaustion, cynicism, and reduced efficacy” (Kopacz, Ames, & Koenig, 2019).

Researchers have explored numerous causative factors with moral distress and moral injury, compassion fatigue, systems challenges, individual characteristics such as resiliency and empathy, educational climate, administrative mandates, and lack of autonomy all implicated in some way. Multiple studies have explored extensive prevention/intervention (P/I) programs and activities, reporting positive results in many cases. However, the rates of burnout continue to rise, even pre-pandemic. We suggest that lack of attention to R/S may be a key component that is missing. Perhaps residents are not fully aware of the value of an integrated whole that, by its very nature, includes spirituality (Sperry, 2012).

A review of current literature regarding spirituality and burnout produced an abundance of articles connected to spirituality in healthcare and other professions but very few studies that include any sort of spirituality P/I measures to mediate burnout in physicians or, more specifically in resident physicians. Over the last 10 years PubMed published seven articles that included spiritual matters in burnout prevention for residents. An additional search, widened to include all physicians, not just those in training, yielded an additional 11 articles. The preponderance of articles examined the personal spiritual and/or religious practices of residents and physicians rather than specific P/I measures. Research in spirituality and burnout in other health care disciplines was abundant and will be included in our discussion of spirituality and burnout.

Interesting data came out of our recent focus group study on resident physician preferences for burnout P/I programs. Residents were given the opportunity to rate a list

of attributes – possible interventions – in order of importance from 1-23 with 1 being the most valued intervention. Spiritual nurturing and care were listed as one of the 23 attributes. Residents from three separate healthcare organizations, when scores were compiled, rated the intervention 21st out of a total of 23 attributes. Two of the organizations were faith based, rating the attribute at 14 and 16, while the third was a for-profit organization with residents rating the attribute at 22, nearly last. Also interesting, the interventions that rated highest can be categorized as issues of autonomy, meaning, competence, and relatedness. R/S are at the core of all of these (*Handbook of The Psychology of Religion and Spirituality, 2nd Edition*; Puchalski & Guenther, 2012) yet many residents are not seeing value in R/S as sources of P/I from burnout. These findings highlight the need for further research to discover more about the rating. Where would these participants place themselves in self-identified indicators of R/S? Are they aware that spirituality is central to the themes they identified as important? Have they been exposed to the research that suggests spirituality is an essential part, if not “THE” essential core of health – perhaps the component that holds it all together and provides the framework (Sperry, 2012)?

Is it possible that R/S nurturing and care may be a glaringly missing piece of burnout P/I programs for physicians? “Perhaps we have tended to ignore those parts of medicine that give a person meaning. Those parts are not in the vocabulary of science” (Collier, 2020). Spirituality falls into Maslow’s highest order of needs – those that go beyond sufficiency to being all you can be. These include self-actualization needs and transcendence needs. These highest levels speak to realizing one’s potential, seeking personal growth, and transcending beyond self through religious faith, spirituality, or

service to others. A study by Puchalski et.al., showed that by improving the spiritual dimension of whole person care not only is patient perception of compassionate care, satisfaction, and sense of well-being improved, but health care professionals experience an improved sense of meaning, purpose in work, and spiritual well-being with decreased moral distress, compassion fatigue and burnout. Spirituality offers transcendence, a call to service, altruism, comfort with mystery, and a knowledge and desire to relieve suffering (2014). The benefit to health professionals is that they become healthier (H. G. Koenig, 2013).

COVID has added unique challenges to the issue of burnout. Dr. Timothy Kirk, an associate professor of philosophy from City University of New York, recently spoke of the moral distress facing healthcare professionals in response to COVID at a conference webinar for Cedar-Sinai Medical Center. Kirk described an expanded biopsychosocial healthcare model, first presented by George Engel, that now includes spirituality. He defines ethical care as whole-person care, that is grounded in the biopsychosocialspiritual model. The COVID protective orders mandated by government entities, bypassing public health entities nearly entirely, were largely dominated by political voices and lobbyists, according to Kirk. They focused on “crude attempts to minimize mortality and transmission” without considering the iatrogenic effects of visitation policies on the patients, families, and clinicians. Healthcare workers were required to follow guidelines without consideration of best care for the patient, creating the possibility of considerable moral distress in providers which increases the potential for burnout.

Kirk shared the story of a first-year intern who described her attempts to “be everything” for the patient and how this led to exhaustion and high levels of moral distress. She realized it was not sustainable and asked that the system be examined and updated to meet current needs while considering the whole person care of patients as well as the needs of clinicians. Kirk recommends that, moving forward, we:

- Engage policy makers
- Demand broader stakeholder participation in policy development
- Identify and measure intended and secondary effects of policies
 - Not all that is valuable can be measured
- Apply continuous quality improvement to COVID policies
- Resist retreating to biological essentialism
- Resist crude population-based nonmaleficence as an ethics framework
- Advocate for conditions necessary to deliver ethical biopsychosocialspiritual care (Kirk, 2021).

Spiritual care P/I studies show that often, many of the factors that contribute to burnout may be addressed through spiritual practices. A pro-spiritual climate, spiritual leadership, and workplace spirituality have all been correlated with decreasing levels of burnout (Arnetz et al., 2013; Yang & Fry, 2018). Increased spirituality correlates with decreased emotional exhaustion, increased personal accomplishment and job satisfaction (Kumar, 2015), increased resilience, and decreased burnout (Carneiro, Navinchandra, Vento, Timóteo, & de Fátima Borges, 2019). Spiritual well-being is correlated with decreased burnout in ICU nurses (H. S. Kim & Yeom, 2018), and spiritual openness is an independent predictor of empathy in medical students, unless they are depressed (Damiano, DiLalla, Lucchetti, & Dorsey, 2017). Spirituality can improve performance while burnout can reduce it, though this study showed that spirituality has no effect on burnout (Ariani, 2020). Spirituality also mitigates the effects of negative experiences

including burnout (Hermans & Kornet, 2020), and is considered to be a strong resiliency factor (Watson, Saggar, MacDowell, & McCoy, 2019).

Several studies in residents also reported that spirituality had no effect on burnout or correlation with any burnout domain (Ariani, 2020; Doolittle, 2020), yet the predominant theme supported positive results when considering spirituality as a tool for burnout P/I. Additional studies are needed that look specifically at resident physicians and spirituality as a burnout P/I attribute as well as ways to educate about the role of spirituality in individual health and well-being.

COVID-19 Pandemic

The COVID-19 pandemic created a worldwide public health crisis unique in human history. Though religion is not yet declared an official social determinant of health, the recent findings of the “Religion and the Public Health Collaborative” show that religion, religious centers and activities, as well as spirituality are, indeed, social determinants of health (Idler, 2014). It is from this paradigm that we will approach the discussion on COVID-19 and R/S, seeking to find what has been, and looking towards the future of what can be through strong collaboration between religious organizations and public health.

Ironically, the collaborative study out of Emory University, directed by Dr. Idler, included a review of the most recent previous health pandemic, the 2009 H1N1 influenza crisis. It infected over sixty million people in the U.S. leading to 12,000 deaths. The first program involving FBOs and mobilizing community resources involved attempts to meet vulnerable population needs during the pandemic. FBOs were able to develop trust and

engagement, reaching over 400,000 individuals with educational materials, H1N1 prevention material, and vaccine information. In addition, many FBOs were established as centers for administration of over 78,000 vaccines to at-risk groups and those with transportation issues or financial challenges. Multiple FBOs were active in sharing information, preferred over any governmental, political, or other avenue. FBOs were also seen to be centers of resilience – for support of the community as well as sources of social capital, defined as “features of social organization such as networks, norms and trust, that facilitate coordination and cooperation for mutual benefit.” In this environment barriers of mistrust were broken down through the work of FBOs (2014).

A review of literature on COVID-19 and religious organizations yielded 80 articles with 18 specific to the United States. A common theme was the role of FBOs in prevention by supporting the guidelines set forward by the CDC and other government agencies for social distancing, requirements for meeting together in person, health monitoring of participants, and use of masks (Barker, 2020; Bonnar, 2020; Feuerherd, 2020; Galiatsatos et al., 2020; Schiefelbein-Guerrero, 2020). Several also reported on push back and protests against the health mandates. A report from a Jewish neighborhood indicated strong support in favor of shutdowns though there were also protests driven by Hasidic Jews opposed to Governor Cuomo’s decision to close yeshivas as well as limit numbers of synagogue attendees in New York (Shimron, 2020).

Social mission was another theme prevalent throughout the research with FBOs active in providing food, access to healthcare, and transportation (Baker, Martí, Braunstein, Whitehead, & Yukich, 2020; Palmer, 2020; Schlumpf, Winters, & McElwee, 2020; Weinberger-Litman, Litman, Rosen, Rosmarin, & Rosenzweig, 2020). Pope

Francis shared his “See, Judge, Act” method as inspiration for Catholic FBOs to accept and act on the social mission of the church (Croos, 2020).

FBOs are also sources of pastoral care, emotional and spiritual support for stress, anxiety, fear, suffering, and death (Bonnar, 2020; Johnson, 2020; Levin, 2020; Weinberger-Litman et al., 2020). A report from a surgeon, Dr. Daniel Hall, who is also a priest and Medical Director for High-Risk Populations and Outcomes for a large health-care system, details the hidden problem caused by banning clergy from visiting their parishioners in most hospitals. He suggests that they should be considered essential workers at this critical time when patients are suffering immeasurably. He sees it as a tragedy that this life-supporting service is not being made available (2020). Ethicist, Dr. Timothy Kirk, agrees and sees this as an ethical issue, suggesting that the pandemic does not negate the whole person care mandate that is essential to patient-centered care. In fact, he wonders if patient outcomes might be improved if isolation mandates were altered and relevant healthcare professionals, R/S support networks, and family were allowed to care for the biopsychosocialspiritual needs of the patient (Kirk, 2021).

Social support as well as social capital are two additional roles of FBOs. For many people, church is the primary source of social interaction and the loss of that connection has been profound. Social capital is evident in the trust that communities are placing in the FBOs that share timely and critical information. A qualitative study showed that high levels of stress and anxiety, caused by inadequate and often incorrect health-related information from local health departments, were mediated by faithful, accurate, and trusted information from local FBOs (Weinberger-Litman et al., 2020). One FBO offered community calls to disseminate accurate information and to facilitate

discussion with community leaders to discuss struggles and successes (Galiatsatos et al., 2020).

Another role that emerged is that of the role of FBOs in sharing theological discussion and dialogue. Many see the pandemic as part of God's will, or as punishment, or as a directive to repent. The church can provide balance and context to this perspective by sharing the message of God's love and grace, helping to dispel fear and panic (Schiefelbein-Guerrero, 2020). The outbreak also presents ethical challenges and FBOs have an opportunity to be a safe space for discussion and processing (Levin, 2020).

FBOs are in a unique position to address current religious and spiritual dynamics as their faith-based practices are necessarily being transformed. This crisis offers unprecedented opportunities for exploration into how religious institutions, congregations and individuals are being impacted by the social changes of COVID-19. There is also the need for research to discover the best ways of moving forward (Baker et al., 2020). Bendor-Samuel also offers insight on global missions, World Christianity, and the process of realignment which, he suggests, may be enhanced by conditions imposed by COVID-19 (2020).

Finally, Jaffe reports that President Biden reestablished the U.S. White House Office of Faith-Based and Neighborhood Partnerships on February 14, 2021. This partnership seeks to promote cooperation between government and FBOs, of special import during this critical period (2021).

News reports of religion and the COVID-19 pandemic have often been negative, showing results of refusal to comply with restrictions with some negative outcomes. Behind-the-scenes, though, many FBOs are continuing to do what they do in good times

and bad – support the individuals and communities in which they reside. Moving forward, public health and religious organizations have an opportunity to focus more on consideration of all the social determinants of health, including R/S, synergistically working together to improve health outcomes and wellbeing of individuals and communities.

Discussion

We have shown that though religion and healthcare were connected in the past, whole person care was, for a time, set aside in favor of science and reason. The last few decades have seen a shift back towards a whole-person-centered approach with increasing awareness of the value and necessity of inclusion of R/S in healthcare paradigms. However, we see that the actual practice of inclusion of R/S in healthcare institutions, public health entities, and individual clinicians’ practices, remains largely untapped with personal, community, and population health suffering from the gap. Pargament, in his seminal work, “Spiritually Integrated Psychotherapy,” presents the case, and a way forward, for inclusion of R/S in psychotherapy. He introduces extensive research supporting the rationale while suggesting a way forward. He posits that:

spirituality is a natural and normal part of life... [and it] contributes to a more complete accounting of human strengths and weaknesses... [it is] a therapeutic fact of life. The reality is we cannot divorce spirituality from the therapeutic process... Therapeutic neutrality toward spirituality is impossible... [and we are] now in a position to move from theory to practice...spirituality can be assessed as carefully, thoughtfully, and systematically as any other dimension of life. Questions about a client’s spirituality are just as important as questions about his or her medical history, social relationships, and emotions...practitioners who overlook spirituality in treatment diminish their effectiveness as helpers, for they neglect the part of life that makes people most distinctively human (Pargament, 2007).

Pargament writes from the perspective of the psychology profession, but he also suggests that his theory and research may be of benefit to healthcare institutions and clinicians. He details the need for formal education for clinicians that includes training and development, but also the need for personal growth through self-awareness and authenticity, spiritual knowledge, an openness to others, and tolerance of diversity. He suggests that therapists, whether “spiritual” or identifying as “nonspiritual” can learn to offer therapeutic spiritual care to those who acknowledge their own spiritual needs but also to those who are “nonspiritual” – those who may be unaware of the role spirituality has in their life.

Other healthcare leaders such as those at Loma Linda University Health, who developed a whole person care system, instrument, and training curriculum – CLEAR – agree that spiritual care is inextricably connected to whole person care (LLUH, 2017). Kevern, on the other hand, suggests that only certain nurses should be given the training and responsibility of offering spiritual care to their patients based on their own religious and spiritual leanings while others are deemed “not suitable” for the task (Kevern, 2012).

In addition to Pargament’s work, Sperry has also written extensively on spirituality in clinical practice, also from the perspective of a psychoanalyst. *Spirituality in Clinical Practice, 2nd Ed*, recommends expanding beyond merely recognizing the need to include spirituality, to actually integrating spirituality in all of psychotherapy. Thus, the biopsychosocial model of health care becomes biopsychosocialspiritual. Sperry describes the model with spiritual in the middle surrounded by biological or somatic, psychological, moral, and social, showing that the spiritual element interacts with all

other dimensions. Research is showing that we are all spiritual beings, indeed spirituality appears to be “hardwired” into the core of our being (Sperry, 2012), and that integration of spirituality contributes to health, healing and wellbeing.

A framework for spiritually integrated therapy is introduced that has similarities with the social determinants of health, though this model already includes religious and spiritual orientation. The framework includes the 10 domains of: age, developmental or acquired disabilities, religion and spiritual orientation, ethnicity, socioeconomic status, sexual orientation, indigenous heritage, national origin, and gender (Hays, 2008).

A third influential work, edited by Paloutzian and Park, presents current research in the psychology of R/S. Like Pargament and Sperry they show that paradigms have changed and that though some healthcare professionals still consider any patient interventions in R/S to be unethical, there are ways to offer care that is sensitive to the patient’s perspective, does not espouse a particular religious perspective or belief system, but encourages patients to seek to understand their own R/S in order to, for instance, find meaning, hope, or forgiveness within the R/S tradition of their choosing. This is not only an ethical action but is now also considered to be an essential part of whole person care based on the biopsychosocialspiritual model. In fact, omitting any of those components could result in unethical patient care. They go on to discuss challenges due to lack of consensus on definitions of religion, spirituality, workplace spirituality, culture, and climate but conclude that:

Mental health service providers are increasingly recognizing the importance of religious meaning systems to their clients, and increasingly attending to religious and spiritual issues at assessment and throughout. Such recognition of the importance of religious and spiritual meaning systems to clients and patients will continue to spread through the healthcare system(*Handbook of The Psychology of Religion and Spirituality, 2nd Edition*).

An intentional focus on R/S is equally important in the lives of clinicians and healthcare organizations as it is for those they serve. It is also important in religious organizations and the individuals and communities they care for. It is our belief that as spiritually integrated care expands in all these realms, health outcomes, individual health and well-being, as well as population health will be positively impacted.

Conclusion

Moving forward we make the following recommendations based in part on the work of Pargament, Sperry, Paloutzian, and Park, suggesting that they offer valuable insight that can also be applied to healthcare institutions, clinicians, religious organizations, and public health entities.

Recommendations

1. Utilize the history, experience, methods, and recommendations for future research of the psychoanalytic community as they shifted years-long paradigms that kept R/S separate from the field of psychology to acceptance, inclusion, and integration of spiritual into the biopsychosocial model of care.
2. Develop a standardized R/S curriculum for medical students and residents to:
 - a) Explore their own R/S and search for meaning, purpose, and inner fulfillment
 - b) Teach R/S tools and resources to enhance personal health, wellbeing, and wholeness

- c) Teach evidence-based research about the ethical inclusion of R/S in whole patient care
 - d) Teach methods of addressing R/S in whole person care
 - e) Develop a rigorous continuing education program in R/S in whole person care
3. Encourage Public Health and Religious organization collaboration to:
- a) Add R/S to social determinants of health in theory and in practice
 - b) Develop systems and protocol to address social determinants of health together in communities with collaboration between FBOs, Healthcare institutions, Public health, and Businesses.
- (Cutts, 2017; *Florida Hospital Partners with the Bithlo Transformation Effort*, 2009; "Stakeholder Health, Transforming Health Through Community Partnership," 2012-2021)
4. Encourage Healthcare Institutions to:
- a) Participate in further research to clarify and standardize terminology, definitions, and practices for workplace spirituality
 - c) Implement spiritual care support for all staff including satellite and office settings (workplace chaplaincy)
 - d) Expand spiritual care team to include spiritual care for all patients while engaging in research on efficacy, benefits, and costs
 - e) Expand administrative, medical staff, and auxiliary staff education to create understanding of R/S best practices with acceptable language for inclusion of all persons whether identifying as R/S or not

5. Encourage creation of Burnout P/I evidence-based curriculum to:
 - a) Educate clinicians, staff, and residents of the value of R/S as “Center” of integration of well-being (include moral distress, meaning, autonomy, belonging)
 - b) Include R/S measures in prevention/intervention program development
 - c) Conduct further research of resident preferences (using CBC and conjoint analysis methods)
6. Encourage dialogue and collaboration of government policy makers, public health leaders, and healthcare stakeholders regarding COVID to:
 - a) Open dialogue about “cost” of caring for patients (cost to patients, clinicians, families, and communities)
 - b) Open dialogue about ethics of pandemic-style patient care
 - c) Create a whole person care pandemic plan
7. Participate in research in Workplace Spirituality to:
 - a) Further clarify conceptual definitions
 - b) Develop validated measurement tools
 - c) Add to theoretical development
 - d) Explore legal concerns

It is our hope that as all stakeholders collaborate to advance the understanding and inclusion of R/S in policies, education, and practices these steps might help to address missing elements that are contributing to poor health and wellness outcomes for individuals, communities, and populations.

Dissemination

Findings will be disseminated towards a diverse range of health professionals, researchers, and policy makers in both the academic and health care industries.

Manuscript for chapter three has been submitted for publication and is presently in the peer review process. We will also share findings from chapter four with the healthcare community, academic community, health care policy makers, public health entities, FBOs and resident physician program directors to engage in dialogue regarding future research agendas and practice adjustments for inclusion of R/S in all sectors.

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