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Running Head: MORAL DISTRESS AMONG NPS

Unaddressed Challenges for the "Most Honest and Ethical Profession:"

A Pilot Study of Web-Based Learning Strategies to Prevent Moral Distress

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May 2020

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Abstract

Background: Nurses and nurse practitioners (NPs) face greater responsibility to address the ethical challenges that present during the course of patient care, due to advances in medical technology and pharmaceutical innovation, and because of widening disparities within the U.S. healthcare system. These ethical questions, which arise during the course of routine patient care, are increasing in both number and complexity in nearly every patient care setting. Even with codified ethical standards, unresolved and/or ongoing ethical questions and dilemmas pose further issues such as the development of moral distress. This pilot project was designed to help NPs and other healthcare workers (HCWs) in the out-patient setting mitigate these conflicts and resulting moral distress experienced in practice. Methods: A "one-stop-shopping" website containing ethics education and resources for reducing moral distress and promoting moral resilience was created and marketed to NPs and other HCWs via social media, email and inperson contact. Web analytics, a demographics survey, and two brief feedback surveys were used to elicit qualitative feedback and measure usefulness of the materials using 5-point Likert scale ranging from extremely useful to not useful at all. Results: 44 participants completed at least one survey with the majority indicating the ethics educational videos were either extremely or very useful and that this website repository was a good resource for addressing ethical problems and preventing moral distress in practice. Over 143 unique visitors and 569 page views were recorded during active data collection. Conclusion: All survey participants reported usefulness of the overall website and applicability to their current practice. Longer-term implications include the reduction of moral distress and development of moral resilience practices among nurse practitioners.

Keywords: ethics, ethical problem, education, moral distress, burnout, resilience

Table of Contents

SECTION I:

	Abstract	3	
	Table of Contents	4	
SECTION II: Introduction7			
	Defining Moral Distress	8	
	Problem Description	9	
	Available Knowledge	9	
	Review of the Literature	10	
	Determining Ethical Issues and Moral Distress in Primary Care	10	
	Moral Distress Among CRNAs	11	
	Level of Practice Authority and Moral Distress	12	
	Moral Distress in the Emergency Department	13	
	Confounding Factor: The Role of Religion/Spirituality		
	in Ethical Beliefs and Moral Distress	13	
	Burnout, Dissatisfaction, Disengagement, and Turnover	16	
	How Ethics Education is Provided in Healthcare Training Programs	17	
	Strategies to Counteract Moral Distress	19	
	Development of moral resiliency	19	
	Identifying commonalities in the definition		
	of and development of moral resiliency	20	
	The promise of DNP-prepared nurse practitioners	21	
	Rationale	22	

	Specific Aims	24
Se	ction III: Methods	25
	Ethical Considerations	25
	Context	26
	Intervention	26
	Communication Matrix	27
	Gap Analysis	27
	Timeline	30
	SWOT	31
	Return on Investment	33
	Methods of Evaluation	33
	Analysis	35
SE	ECTION IV: Results	35
	"The Basics" Evaluation	36
	"Resources" Evaluation	37
	Demographics	38
	Additional Feedback	38
	Web Analytics	39
SF	ECTION V: Discussion	40
	Summary	40
	Interpretation	42
	Barriers and Limitations	43
	Conclusion	45

SECTION VI: Other Information		
Funding	46	
SECTION VII: References	47	
SECTION VIII: Appendices	55	
Appendix A: Evidence Table	55	
Appendix B: Evaluation Table	57	
Appendix C: Non-Research Approval Documents	61	
Appendix D: Work Breakdown Structure	62	
Appendix E: Communication Chart	63	
Appendix F: GANTT Chart	64	
Appendix G: Gap Analysis	65	
Appendix H: Website Screenshots	66	
Appendix I: Flyer	69	
Appendix J: SWOT	70	
Appendix K: Budget	71	
Appendix L: "The Basics" Survey	72	
Appendix M: "Resources" Survey	74	
Appendix N: Demographics	75	

Unaddressed Challenges for the "Most Honest and Ethical Profession:" A Pilot Study of Web-Based Learning Strategies to Prevent Moral Distress Among Nurse Practitioners

Nurses and nurse practitioners (NPs) face greater responsibility to address the ethical challenges that present during the course of patient care, due to advances in medical technology and pharmaceutical innovation, and because of widening disparities within the U.S. healthcare system. These ethical questions, which arise during the course of routine patient care, are increasing in both number and complexity in nearly every patient care setting. Ethics imbues every aspect of nursing; it was codified as part of the profession since the American Nurses Association (ANA) first published the *Code of Ethics for Nurses with Interpretive Statements* (CoE) in 1950. Even with codified ethical standards, however, unresolved, and/or ongoing ethical questions and dilemmas pose further issues such as the development of moral distress. The literature demonstrates that moral distress contributes to dissatisfaction, disengagement, and burnout which negatively affects patient safety, quality of care, labor costs, and sometimes the permanent loss of NPs who change careers due to this stress (De Milt, Fitzpatrick & McNulty, 2011). Glassdoor (www.glassdoor.com) reports that the average nation-wide salary for NPs runs between \$105,000 and \$138,000 with an average of \$117,000 (2019). Turnover costs escalate after benefits and sign-on bonuses are factored in; new vacancies also increase costs associated with longer wait times for patients to see providers.

This DNP quality improvement project addressed the ethical problems the ethical problems encountered by NPs who work in a primary care setting, the distress that results from unresolved ethical dilemmas and conflicts and possible solutions to mitigate the development of moral distress. While the majority of the literature focuses on ethical issues faced by acute care practitioners, more research must address the nature and resolution of ethical issues faced by primary care NPs. The urgency of this issue cannot be overstated given the projected primary

care physician shortage of more than 23,000 by 2025 with only eight percent of graduate medical trainees entered primary care residencies in 2018 yet 87% of new NPs in 2018 received their graduate training in primary care programs (AANP, 2019) helping to fill an acute shortage of trained providers (Pohl, Thomas, Bigley & Kopanos, 2018). While "...it may be impossible to practice nursing without encountering some degree of ethical conflict" (Radzvin, 2011, p. 43) and "...it is doubtful that moral distress can ever be eradicated from healthcare settings" (Epstein & Hamric, 2009, p. 11), nurses and NPs must receive ongoing support and interventions to help mitigate the conflicts and resulting moral distress experienced in practice. The consequences of doing nothing are potentially disastrous: moral distress can lead to disengagement and burnout, which can lead to poor coping mechanisms including alcohol and substance use, development of somatic symptoms and vulnerability to illnesses. Additional consequences include turnover costs, provider shortages, and patient outcomes compromised by delays in receiving care.

Defining Moral Distress

In nursing, as in all healthcare professions, moral distress occurs when "we know the right thing to do while being in a situation in which it is nearly impossible to do it" (Jameton, 1984, 2017). In 1984, Andrew Jameton conceptualized the definition of moral distress as the following: "(a) the psychological distress of (b) being in a situation in which one is constrained from acting (c) on what one knows to be right" (p. 6). Although this definition has developed more nuance over the years, his core concept remains. Jameton also notes that the published research on moral distress has increased dramatically in the last ten years and has spread to other disciplines outside of nursing (2017). Included in this body of literature, are many attempts to both define and refine not only the concept of moral distress, but associated terminology such as "moral uncertainty," "moral residue," and "moral injury." N.B.: "moral injury" is typically used

in military trauma literature but was co-opted by physicians in 2018 as a replacement for "moral distress." Per Rushton, although this is an under-studied phenomenon, "what both of these terms signify... is a sense of suffering that clinicians are experiencing in their roles now, in ways that they haven't in the past." (Bailey, 2020, para. 7). The parsing of the terminology is outside of the scope of this article for this purpose, Jameton's core concept will be utilized throughout.

Problem Description

The purpose of this pilot project is to address the moral distress that results from unresolved ethical problems encountered by NPs who work in a primary care or other out-patient setting by providing post-graduate ethics education as a potential solution to mitigate the development of moral distress. While the vast majority of literature on ethical dilemmas and moral distress tends to focus on acute care nursing, the review of evidence demonstrates that the moral distress experienced by NPs in primary care and other out-patient settings bears a similarity to both acute care nursing <u>and</u> physician experiences although the dilemmas themselves may be different based on the specialty area of practice. Regardless, NPs have a need for ongoing support and interventions to help mitigate the dilemmas and resulting moral distress experienced in practice.

Available Knowledge

A systematic search was conducted using PubMed, CINAHL, and Scopus with the assistance of USF librarian Claire Sharifi. This search was conducted in June 2018 and January 2019 and included the search terms: nurse practitioner, primary care provider, general practitioner, primary care, physician, physician assistant, ethics, ethical stress, moral, distress, moral distress, dilemma, moral resilience, medical education. Criteria for inclusion required that the article be written in English, published from 2005 to present, and addressed either ethics or

department and those who are Certified Registered Nurse Anesthetists (CRNAs), both specialty areas outside of primary care were also included due to a lack of literature specific to primary care NPs. Articles published outside of the U.S. were also included and reviewed for relevance. Exclusion criteria included articles specific only to nursing and physicians who work in an acute care setting. Due to a dearth of literature specific to APRNs regarding this subject matter, the customary five to ten-year publication period had to be extended. An additional search of gray literature was conducted, using the Google Scholar and Google websites to aid in discovery of alternative search terms and secondary references. A total of 40 abstracts were hand-reviewed for relevance and seventeen articles were selected for further review. Ten articles were ultimately chosen for review (Appendix A). The selected articles were evaluated for strength of research design (Appendix B) using the Johns Hopkins Nursing Evidence Based Practice Research Evidence Appraisal tool (Dang & Dearholt, 2017).

Determining Ethical Issues and Moral Distress in Primary Care

Laabs (2005), conducted a preliminary investigation of primary care NPs designed to: identify ethical issues encountered in primary care; analyze the moral problems that resulted as a consequence of those ethical issues; and determine when NPs were experiencing moral distress. While only 33 percent of respondents reported occasionally or commonly experiencing the listed ethical issues - such as feeling "constrained to treat patients who are unable to make payment"; "pressure to see [too many] patients"; and "clinical decisions made by other providers" - other problems included conflict between ensuring patient autonomy while providing beneficent care. Overall findings indicate that the level of distress and frequency of ethical issues encountered by primary care NPs is

comparable to those found in acute care nurses.

Within a managed care organization (MCO), 55% reported daily to weekly problems with MCO interfering in the plan of care and 47% reported being asked by a patient to exaggerate their condition to ensure coverage for care (Ulrich et al., 2006) Almost all respondents agreed that it was unethical to "game the system," with the majority reporting they would likely intervene on behalf of the patient to cover treatment by going through an appeals process, for example however, 29% of respondents simultaneously acknowledged that sometimes advanced practice providers (APPs) have to "bend the rules" to help patients get the care recommended by their providers. The researchers found that providers who found it acceptable to "bend the rules" did so because they felt it was their responsibility to do so as advocates for their patients, but such perceived responsibilities were associated with higher ethical conflict scores.

Moral Distress Among CRNAs

Radzvin (2011) found that Certified Registered Nurse Anesthetists (CRNAs) age 24 – 30 reported more moral distress than older practitioners and noted that, while not statistically significant, CRNAs with more years of experience reported decreasing moral distress with longer years in practice. This may be due to younger CRNAs lacking experience or comfort level in dealing with ethical situations as they present during patient care. Conversely, it could be that older and more experienced CRNAs are experiencing the "moral residue crescendo" resulting in numbed moral sensitivities as studied by Epstein and Hamric (2009). Doctor of Nursing Practice (DNP)-prepared CRNAs were found to have the highest levels of moral distress within this study (Radzvin, 2011). In a more recent study conducted by Wands, CRNAs who perceived themselves to have a high skill level at addressing ethical concerns were less likely to report

feelings of moral distress, irrespective of whether the CRNA practiced independently, had a supervisory relationship with a physician, or was under full direction from a physician (2018).

Level of Practice Authority and Moral Distress

Per the AANP, "Full Practice Authority is the authorization of nurse practitioners (NPs) to evaluate patients, diagnose, order and interpret diagnostic tests and initiate and manage treatments—including prescribe medications—under the exclusive licensure authority of the state board of nursing" (2018). Currently, NPs in fewer than half of the states in the U.S. have full practice authority (FPA). Non-FPA states require restricted or reduced authority via forced contracts with physicians or state medical boards. Mandatory physician oversight in non-FPA states has been linked to geographic health care disparities, increased burden of chronic disease, and higher costs of care compared to FPA states where NPs are more likely to practice in rural and under-served areas (AANP, 2018; Spetz, 2019). Barriers to FPA are largely the result of concerted efforts by physician organizations such as the American Medical Association and Physicians for Patient Protections which, citing safety concerns, are adamantly opposed to FPA (Cheney, 2019). This opposition comes despite serious physician shortages in primary care, especially in under-served areas, and similar quality and safety outcomes across the board for physicians, NPs, and PAs (Spetz, 2019).

The difficulty in determining whether there is a correlation between moral distress and NP scope of practice or practice authority lies in whether NPs within a given sample consider moral distress as part of stress and burnout when they respond to study questionnaires (Laabs, 2005 & 2007). Furthermore, survey data obtained via convenience sampling may not be reflective of NPs as a whole and can be complicated by data from NPs in a state with full practice authority vs NPs from other states with a more limited scope of practice. Although a

cross-sectional study of job satisfaction and intent to leave among a national NP sample demonstrated that the most common reason NPs intend to leave the profession is related to retirement (De Milt, Fitzpatrick, & McNulty, 2011), the most common reasons behind intent to leave their *current* positions included "little control over practice" and "limited opportunities for internal career advancement" (p. 47). Whether future studies of NPs can demonstrate a correlation between moral distress and practice independence remains to be seen.

Moral Distress in the Emergency Department

Trautmann, et al. (2015) examined NPs in the ED (to which, incidentally, many patients go seeking primary care) and the relationship between both intent to leave the profession and level of practice authority. The authors found no statistical significance between independent practice as a predictor of moral distress; however, NP gender neared statistical significance with more women than men reporting moral distress. Interestingly, the authors found the most likely causes of moral distress were specific to poor communication between staff and patients and perceived (in)competence of co-workers. This differs from other studies which demonstrate patient non-adherence, insurance difficulties, and productivity are causative factors for moral distress among NPs (Poghosyan, Liu, Shang & D'Aunno, 2017). Additionally, practice independence was determined not to be a causative factor for moral distress as anticipated by the authors based on their literature review.

Confounding Factor: The Role of Religion/Spirituality in Ethical Beliefs and Moral Distress

Within the various healthcare disciplines, there are healthcare workers who identify themselves as being religious or spiritual and, undoubtedly, some of them feel that their religion informs their biomedical decision making. Karen Armstrong, former Catholic nun and premiere scholar on world religions often discusses the commonalities between religions as well as how religion has been used by various followers throughout history. In a 2018 interview, she notes "I found that every single religious tradition has formulated the [that] Golden Rule - and said that it is that - and not a particular doctrine, that is the fundamental teaching of their tradition" (Badruddin, 2018). Furthermore, she posits that the Golden Rule, or compassion, is the root ethical belief in all religions despite a long history of people using religious doctrine to justify conflict and violence throughout history.

In a 2017 Pew Research Center study, 54% of Americans consider themselves "religious" while 75% identify themselves "spiritual" (Lipka & Gecewicz); it stands to reason that religion/spirituality would impact ethical beliefs of healthcare workers. The extent of the effect, however, varies by study. In a study of 1,100 nurses in Idaho, far more respondents said their work/life experiences (34%) and religion influenced their ethical beliefs (29.4%) above even the COE (9%) (Davis, Schrader & Belcheir, 2012). This study also demonstrated that overall, 75% of respondents felt that a patient's right to healthcare superseded the nurse's right to conscientious objection, although the group influenced most by religion were less likely to agree that a patient's right superseded conscientious objection unless in a life or death situation. The authors postulate that because conscientious objection has been associated with unresolved moral distress in other studies, this phenomenon may explain why the religious belief group reported the highest percentage of moral distress.

In a small study of physicians and medical residents, Prairie, Wrye and Murfree found that those who were inclined to refuse treatment to LGBT+ patients in a hypothetical situation cited religion as their reasoning and did so without any prompting about religion/spirituality. The remaining participants were against the right to refuse treatment to this patient population and

cited the Hippocratic Oath or other ethical reasons. The authors note that while most respondents in this study who felt it was unacceptable to refuse care to LGBT+ patients were medical residents who were generally younger than the practicing physicians, this correlation has not been shown in other research. Not discussed in the article but pertinent to the topic of moral distress is the ethical quandary that may be experienced by a medical resident who wishes to provide care to a LGBT+ patient but who works under an attending physician who does not want to provide care to that patient population. While conscientious objection may allow a physician to refuse to participate in physician-aid-in-dying, for example, it does not permit refusal to treat LGBT+ patients simply because a physician does not agree with how a patient lives her/his life (Hull, 2019). In a situation where a medical resident who feels constrained to do what is right (providing care to a LGBT+ patient) because the attending physician refuses to treat a LGBT+ patient, may result in moral distress for the resident.

Finally, two studies of military healthcare personnel demonstrated mixed results regarding religion/spirituality. In a 2016 study of Naval physicians who received varying degrees of pre-deployment ethics training, participants denied that religion contributed either positively or negatively in situations of ethical compromise or frequency of ethical problems during deployment (Gaidry & Hoehner). The authors also found that participants relied more upon medical ethics than military ethics and suggest that status quo military-only pre-deployment ethics education did little to encompass the complexity of providing medical care in the military setting during deployment. This put Naval physicians at risk for developing moral injury, which can result in depression and risk of suicide (2016).

Conversely, a study of military flight nurses deployed to Iraq and Afghanistan showed that spirituality could be either helpful or harmful during deployment with some nurses reporting

that their spirituality in combination with the work of flight, or "en route" nursing, led to development of moral injury and moral distress (Simmons, et al., 2018). The ethical dilemmas common to military healthcare especially during modern times of war, where neither treatment option is deemed "right" or "good," left several study participants feeling guilty for not having "done enough" and "needed to ask for forgiveness from God" (2018, p. 65). Most commonly, these situations involved children and some participants described difficulty reintegrating with society upon returning home, noting that the cry of a child was deeply upsetting. While most of the participants in the study reported that their spirituality provided comfort and strength during the difficulties of deployment, it is clear that the impact of religion/spirituality on ethics and moral distress requires further study.

Burnout, Dissatisfaction, Disengagement, and Turnover

Burnout as a result of moral distress manifests as an accumulation of feelings of guilt, anger, emotional detachment and exhaustion, cynicism, and personal and professional disillusionment. (Burston & Tuckett, 2012; Cipriano, 2015). Neumann, et al., (2017) surveyed over 900 hematopoietic cell transplantation (HCT) professionals and found that across various disciplines there was a 40% reported prevalence of burnout. Burnout also manifests in physical and emotional forms such as generally feeling unwell and depression. In seminal research conducted by Elpern, Covert, and Kleinpell, one nurse stated: "some days I feel [physically] sick" and another stated: "I have noticed experiencing anxiety and depression after taking care of patients. Then I also have a feeling of dread when I anticipate having to face the same situation returning to work" (2005, p. 527). Burnout has other more serious consequences and can result in compromised patient care that results in increased hospital-acquired infections and increased patient mortality ratios. Burnout instigated by moral distress negatively affects physicians and

surgeons resulting in major medical errors and subsequent malpractice suits (Dyrbye, et al, 2017).

Nurses cite many reasons for dissatisfaction and disengagement and resulting turnover including staffing ratios, health benefits, working conditions, salary/wages, opportunities to advance, level of autonomy in practice, and work schedule (McHugh, Kutney-Lee, Cimiotti, Sloane, & Aiken, 2011). Moral distress and moral residue certainly contribute toward feelings of dissatisfaction and disengagement and in research conducted by Elpern, Covert, & Kleinpell, nurses stated that they felt like they were "just keeping dead people alive" and "maybe I should go work in a doctor's office" and "I have definitely thought of leaving the nursing profession and oftentimes the [medical] ICU" (2005, p. 525). Not only does dissatisfaction and disengagement have a potentially negative effect on patient outcomes, but when it leads to turnover, it costs hospitals and other healthcare organizations millions of dollars per year (Dyrbye, et al, 2017).

How Ethics Education is Provided in Healthcare Training Programs

Ethics education in undergraduate nursing programs is lacking "best practice" subject matter outside of what is delineated in the Code of Ethics (Grace & Milliken, 2016). Historically, medical school ethics education has fared no better according to a 2004 study of U.S. and Canadian medical schools (Soleymani-Lehmann, Kasoff, Koch, & Federman). In Carrese et al. Romanell Report on The Essential Role of Medical Ethics Education in Achieving Professionalism (2015), the authors suggest there remains a continued lack of consensus around the essential knowledge of ethics and ethics competencies for medical students as well as best practices for assessment of those skills. Furthermore, physician residency programs vary in how the individual programs are conducted within the various facilities which includes access to ethics education and ethics resources. It is clear there is room for improvement in how ethics

education is provided and a need for consensus on required materials across healthcare disciplines. Rozmus, Carlin, Polczynski, Spike, and Buday (2015) developed an innovative method to provide ethics education involving the schools of medicine, nursing, dentistry, public health, and biomedical informatics; however the method lacked truly interprofessional engagement, because it was conducted individually within each health professions school rather than incorporating interdisciplinary participation.

In a review of Lin et al.'s 2013 study of interprofessional problem-based learning of ethics between Taiwanese nursing and medical students, Kurtz and Starbird discuss several challenges inherent to both interprofessional education in general and interprofessional ethics-specific education (2016). While in Lin et al.'s study, the interprofessional learning group demonstrated higher self-evaluation scores on communication and collaboration than did the medical student only group, outcome measures were limited to self-report and are not necessarily indicative of future behaviors and attitudes. Furthermore, in Taiwan, both medical and nursing education occurs at the undergraduate level, so there is less variability in age and experience as seen in the United States. Lastly, learning and teaching guidelines for students and faculty must be in place to ensure successful implementation of interprofessional ethics education (2016).

More work must be done to research best practices for provision of ethics education, particularly interprofessional educational opportunities such as shared didactics, case study review, problem-based learning, and/or experiential learning opportunities within healthcare training programs - even if that means collaboration between disparate colleges and universities. In a study of ethics confidence and quality of care among NPs and PAs, Ulrich, et al concluded that innovative interdisciplinary education models to provide the complex ethics education required to treat increasingly complex patient populations in primary care (2014).

Furthermore, interprofessional education must include other disciplines outside of just nursing and medicine. It must bring in physical, respiratory, occupational, and speech therapy as well as social work, pharmacy, and dietetics. Without the inclusion of the other healthcare disciplines involved in patient care in an interprofessional education (IPE) program, it is not really *interprofessional* education. IPE ethics education also serves to develop mutual respect for roles and values inherent within the various disciplines on the healthcare team (Ulrich, et al, 2014).

Strategies to Counteract Moral Distress

Development of moral resiliency.

Moral resiliency is a new and growing field of interest for all healthcare professions, as it has been identified as one of many required skills for mitigating the effects of moral distress.

Moral resilience can be defined as "the ability to respond positively to the distress and adversity caused by an ethically complex situation" (Rushton, 2017, p. S11) and is a means of "shifting the narrative from one of distress and depletion to one of solutions and possibilities..." (p. S13).

Strategies to improve moral resilience include Rushton's Mindful Ethical Practice and Resilience Academy (MEPRA) workshops which strive to help nurses in the acute care setting (2017). The recent creation of a Resiliency Center for the employees at the University of Utah Health is intended to confront the ever-present "traumatic and stressful events" experienced by physicians, physician-trainees, and other health care workers (HCWs) (Morrow, Call, Marcus, & Locke, 2018, p. 293). There is a dearth of published literature on moral resilience best practices, but the authors anticipate that promotion of health and wellness via the Resiliency Center will demonstrate improvements in satisfaction and engagement survey results (Morrow et al., 2018). In the absence of a dedicated center for resiliency, there remains a lack of formal programs for

providers within the workplace to promote resilience. The creation of a Chief Wellness Officer (CWO) within the C-suite is a very recent phenomenon and thus far is limited to large hospital systems. While it is a necessary step in the right direction (Kishore et al, 2018), there remains a gap for out-patient clinics and the providers who work in them.

Identifying commonalities in the definition of moral resiliency.

Holtz, Heinze, and Rushton (2017) conducted a qualitative descriptive study to analyze interprofessional healthcare workers (HCWs) self-reported definitions of "moral resiliency." Both licensed HCWs and non-clinician HCWs (including chaplains) selected from various educational programs around the U.S. were asked to participate by responding to a single question about their personal definition of moral resilience. The responses were categorized into three main themes and three sub-themes: personal integrity, relational integrity, buoyancy, self-regulation, self-stewardship, and moral efficacy. This analysis contributes to the body of literature around development of moral resiliency as a means to negate moral distress. The themes of personal and relational integrity correspond to the framework developed by Laabs (2007) discussed earlier in this paper.

A systematic review of resilience of physicians in a primary care setting found variability between the various definitions of resilience, and the personal characteristics and workplace environment correlated with resilience (Robertson et al., 2016). Interestingly, of the 13 studies included, more than half defined resilience in a way that either compared and contrasted resilience to burnout; the remaining studies defined resilience either as the ability to "bounce back" from difficult events or a development of positive adaptation skills for dealing with adversity. It is clear from this review that developing resilience is a multifaceted process that requires both personal and professional strategies to counteract the adverse effects experienced

by healthcare professionals, especially primary care providers.

Rushton proposes several methods for personal cultivation of moral resilience within healthcare professions, including practicing meditation and mindfulness, which help practitioners care for their mental, physical, and emotional selves; cultivating reflection and insight; developing moral efficacy and self-attunement; and cultivating regular self-care/-stewardship (2018). Developing moral efficacy "...requires knowledge and cognitive capabilities...analysis and behavior or action..." (Rushton, 2018, p. 166) which one acquires from both education and experience. As mentioned earlier in this article, ethics education is being taught in most healthcare training programs. But, with the exception of the behavioral health sciences like social work and psychology, which have required continuing education credits in ethics in nearly every state, there is no nation-wide mandate for the other professions to obtain ethics-specific continuing education. Currently, requirements vary by state, profession, and board certification requirements. Moral distress has negative implications for every healthcare profession and these studies demonstrate the potential of using researched and defined qualities of moral resilience to promote reduction of moral distress for NPs in all settings.

The promise of DNP-prepared nurse practitioners.

Despite the NP Core Competency update in 2017, concerns exist for ethics education in Doctor of Nursing Practice (DNP) programs, including a lack of standards for who teaches the content, what the content should include, and methods for education outcomes (Laabs, 2015). Grace (2018), however, discusses the importance of remembering that "ethical nursing" goes beyond the four basic bioethical principles and provision of care whether in health or illness, to encourage "everyday nursing ethics." DNP programs place a lot of emphasis on leadership development for NPs, and this creates an ideal opportunity to help DNP students develop the

transformational leadership skills best-suited for ethical provision of care, understanding and meeting the goals of the profession, and then working to further the profession – all of which falls under the CoE and the DNP essential domains. The tools to understand and provide ethical care are insufficient without development of transformational leadership skills (Grace, 2018). Finally, there is an urgent need for DNP nurses to fill the faculty vacancies where they can be "ethically skilled" educators for students as well as currently practicing nurses in all areas of healthcare.

Rationale

In 2007, Carolyn Laabs developed and published a theoretical framework for addressing the reconciliation of moral integrity among Nurse Practitioners (NPs) who work in the primary care setting. Since 2005, Laabs has published extensively on ethical dilemmas and the resulting moral distress among NPs in primary care in an effort to identify the types of ethical problems and level of distress experienced within this population. Laabs' Grounded Theory of Maintaining Moral Integrity in the Face of Moral Conflict describes the process by which NPs in primary care process and manage the ethical concerns encountered in their work as well as the consequences of moral problems (2007). According to Laabs' theory, the process includes four phases developed within the context of the work environment: relationship to the patient, level of experience, knowledge, and values. The phases include a presentation of a situational conflict; the drawing of a theoretical line the NP would or would not cross within the situation; attempts to meet the needs of the patient while not crossing the theoretical line; and, finally, evaluating each NPs own sense of integrity as a result of the chosen action taken in the given scenario. Laabs notes that NPs who are able to reconcile their sense of integrity do not then experience any further distress but NPs who are unable to do so will experience distress for an indeterminate

period of time.

Laabs' theory of maintaining moral integrity provides an introductory framework for examining research on ethical issues and moral distress among NPs. Laabs' concept around the development of moral distress based on the NP's ability to reconcile an ethical situation without compromising her personal and professional integrity applies to a common source for moral distress such as a patient's inability to pay for care (2005). If the NP is able to resolve that conflict in a manner that does not violate her sense of integrity, then it is expected that she would be less likely to experience moral distress. This framework demonstrates a need for assistance with ethical decision making which affects moral integrity and resources for preventing moral distress. Ongoing ethics education supports the NPs ability to engage in ethical decision making (Rushton, 2018). The same can be said for Radzvin's research on CRNAs who not only report feelings of moral distress over being asked to provide care she feels is futile, but also moral distress caused by working with staff perceived to be incompetent and organizational policies with which she does not agree (2011). This phenomenon is also seen in the study conducted by Ulrich et al. among NPs and PAs within a managed care organization (MCO) (2006). In all these studies, nurses who were able to reconcile an ethical dilemma without compromising their own sense of moral integrity were less likely to suffer from a lingering feeling of moral distress. Perhaps these nurses had good resiliency practices that also influenced their response to, or development, of moral distress.

As Laabs points out, the ethical issues encountered in primary care are often quite different from those that are encountered in other specialties such as the emergency department (ED) or pain management thus the amount of moral distress and level of

burnout may be different as well (2005). Although each NP will have a different sense of personal and professional integrity that impacts the development of moral distress, the creation of a project that provides ethics education and guidance on ethical decision-making, as well as offering strategies for managing moral distress, will assist NPs as they strive to provide ethical care without compromising their integrity or developing moral distress.

Specific Aims

The aim of this project was to promote ethical decision making and foster moral resilience by developing, implementing and evaluating an ethics education and training program for reducing moral distress for individual healthcare providers (marketing focus on APRNs, PAs, physicians, and students) via website. The project website was created as a stand-alone product with the ability to market to any and all out-patient providers; however, the content is also applicable to those in the acute care setting. Visitors to the website are encouraged to participate in any or all of the three brief surveys designed to collect information on perceived usefulness and demographics, with the option to provide qualitative feedback for suggested improvement and/or additional resources to include on the site. Long-term goals include continued ethics and moral resilience content development applicable for all disciplines within healthcare

Aim Statement

By May 1, 2020, this pilot project will develop, implement, and evaluate an ethics education and training program for reducing moral distress for individual healthcare providers via website with an emphasis on NPs, PAs, physicians, and students, thereby assessing usefulness of both the website and its components as a means to provide ongoing

ethics education and moral distress reduction strategies within each participant's practice setting, as evidenced by survey results.

Methods

Ethical Considerations

Ethical consideration goes beyond the bioethical principles of autonomy, beneficence, non-maleficence, justice, and fidelity. Nurse Practitioners are first and foremost registered nurses and the Code of Ethics requires adherence to all nine of the provisions including the aforementioned principles. Of the nine provisions, the two that pertain most to this project are Provisions 5 and 6. Provision 5 states that nurses have the same obligation to self as to others which includes promotion of health, safety, preservation of both character and integrity, and continued personal and professional development. Provision 6 states that nurses have an obligation to maintain and improve the ethical working environment within their respective practice setting in which said environment is conducive of the provision of safe, quality patient care (ANA, 2015). This project serves to help preserve and enhance practitioners' physical and psychological well-being, and since all survey responses were anonymous, provider privacy was maintained throughout the project. No formal ethics review was conducted however, development of all project materials and resources were reviewed by member of this author's DNP committee, Dr. Kathleen Raffel, MSW, MBA, PhD, and bioethics subject matter expert.

This project was deemed to be an evidence-based practice quality improvement project and exempt from Institutional Review Board (IRB) for the Protection of Human Subjects approval for implementation by the University of San Francisco School of Nursing and Health Professions Doctor of Nursing Practice faculty (Appendix C). All rules and regulations outlined

by the Health Insurance Portability and Accountability Act (HIPAA) were upheld and no identifying patient information was used. No conflicts of interest were identified by this author.

Context

The key stakeholders in this project include currently practicing NPs, PAs (Advanced Practice Providers or APPs) and physicians as well as APP students. Currently practicing APPs and physicians will likely be aware of the ethical dilemmas they encounter in daily practice compared to FNP students who may or may not already be exposed to ethical dilemmas during clinical rotations. However, clinicians and/or students who are experiencing moral distress may not consider it problematic or may feel unsure about how best to address their distress and resiliency. Patients are also stakeholders, as seen in published data on reduced quality outcomes in acute care settings relating to clinician dissatisfaction and burnout which can be the result of moral distress (Dyrbye, et al, 2017). Finally, no matter the practice setting, employers are stakeholders because turnover costs are significant not just in replacement costs but in lost revenue if fewer patients can be seen due to provider turnover. At this author's organization, APP turnover cost is over \$200,000 per APP (personal communication June 14, 2018) including wages, benefits, and on-boarding costs.

Intervention

In nursing, as in medicine, programs lack consensus on both quality and quantity of ethics education. Furthermore, nursing has no requirement for continuing education units on ethics upon graduation as is seen in some disciplines and state licensing boards. Much of the literature points to the lack of ongoing ethics education as one of the factors that can lead to the development of moral distress. While the Practice Essentials, as laid

out by the American Association of the Colleges of Nursing, requires ethics education during training, there is wide variation in the competencies (Laabs, 2012). Although the Nurse Practitioner Core Competencies document was updated in 2017, the curriculum content suggestions are "neither required nor comprehensive" and is merely suggestive of content to support the core competencies per the National Organization of Nurse Practitioner Faculties (2017). In the absence of mandatory ongoing ethics education and provision of formalized strategies to reduce moral distress and promote resilience, this author worked closely with DNP committee advisors with clinical expertise in biomedical ethics to develop the pilot project. This author held primary responsibility for all phases of the project and a breakdown structure was created for delineation of initiation, planning, implementation, management, and evaluation (Appendix D). Communication methods (Appendix E) utilizing emails and Zoom meetings facilitated project planning and evaluation with committee advisors with timing and frequency dictated by phases of implementation (Appendix F).

Study of the Intervention

Gap analysis.

The literature demonstrates not only a lack of consensus in ethics education in NP, PA, or physician training programs but a total absence of training and resources for preventing development of moral distress. Recommendations include incorporating resiliency training and development of personal self-care practices as part of curriculum by providing education and resources on ways to improve moral resilience and the importance of self-care on a regular basis. Additionally, there is an absence of ongoing continuing education (CEU/CME) requirements for ethics education outside of the behavioral health sciences. Continuing education on ethics and

analysis of ethical dilemmas and conflicts should be provided to all clinicians for as long as they maintain their licensure (Appendix G). There is no single solution to reducing moral distress and provision of ongoing ethics education to clinicians should be one part of the solution. Finally, there is a lack of formal programs for providers within the workplace to promote moral resilience. The creation of a Chief Wellness Officer (CWO) within the C-suite is a very recent phenomenon and thus far is limited to large hospital systems. While it is a very necessary step in the right direction (Kishore et al, 2018), there remains a gap for out-patient clinics and the providers who work there.

DNP project development began in October 2018, following the completion of this author's Master of Science in Behavioral Health (MSBH) capstone quality improvement project utilizing similar ethics educational materials along with case study review and discussion in small group sessions using web-based video conferencing. Feedback from this project demonstrated interest in ongoing opportunities to engage in *interdisciplinary* case study review and discussion, however, the biggest barrier to participation was related to availability during the workday and length of time needed (at least one hour) during which time participants needed to be engaged in patient care. As such, participants had to schedule their sessions on their days off and in accommodation of shift workers. While most participants liked using video conferencing for sessions, they preferred in-person methods first and video conferencing second but were also open to other methods of engagement including phone conferencing and online discussion boards. Most importantly, participants wanted more opportunities for sessions like this; and wanted support from their management teams, regardless of the method by which the sessions took place.

Initial DNP project plans began in January 2019 and included development of a one hour

interdisciplinary "lunch and learn" program with ethics education, brief case study review and presentation of evidence-based resiliency practices; however it became readily apparent that in the fast-paced environment in which providers routinely eat lunch while charting, a one-hour presentation would have to be compressed into only five minutes. Subsequent project revision in August 2019 included development of an ethics and moral resilience "tool kit" that would include educational videos that could be viewed by providers at their leisure: on a short lunch break, while commuting to work on the train, etc. An online repository for both the videos and "took kit" materials would be necessary, so a website was created.

Recommendations for participants use of the website include having individual providers review the educational materials and incorporating the proposed project interventions as part of their current professional practice, staff meetings and/or daily/weekly huddles. This method permits providers to review the materials independently and as their schedule allows. It also permits the option to revisit materials at a later date since the website will remain active even after the project is complete. Additionally, the information and resources on the website can be utilized by an entire clinic or department as part of staff meetings or daily/weekly huddles. The materials on the website are generalizable enough that all staff can benefit and participate in discussions about ethical problems, moral distress, self-care, and resiliency practices. Materials can be downloaded and included in staff emails or on a corkboard in the staff lounge. Including resiliency training and development of personal self-care practices as part of office culture can help to both mitigate and prevent development of moral distress for all staff, not just providers.

Timeline.

Timeline development for this project is illustrated in a GANTT chart (Appendix F) which was updated with each completed project task and/or timeline adjustment. Due to the

unforeseen coronavirus pandemic in the United States in March 2020, timeline projections were altered in concurrence with shelter-in-place orders necessitating changes in both tasks and timeline. The total project timeframe encompassed a 20-month period beginning in September 2018 and ending May 2020.

Final project revision in October 2019 involved the following:

- Creation of a website platform for educational materials including: weblinks,
 videos, and downloadable pdf documents as well as the ability to make
 suggestions and engage in discussion via the weblog.
- Creation of ethics "refresher" material on the four basic bioethical principles of autonomy, beneficence, non-maleficence, and justice utilizing two-minute videos per principle. Also includes a two-minute introduction video.
- An introduction to Jonsen, Siegler, and Winslade's "Four Box Method" for parsing
 ethical problems as they arise utilizing a case study in an 18-minute step-by-step video
 which demonstrates the importance of ethical self-efficacy.
- A curated resources page with weblinks, downloadable pdfs, videos, books, and
 applications designed to educate providers on moral distress and promotion of resilience;
 also includes additional resources for biomedical ethics.
- Includes a weblog or "blog" for discussion of current events in ethics (such as ventilator scarcity during the current coronavirus pandemic).
- Maintenance of patient confidentiality is paramount, so all patient identifiers were removed during creation of case studies.
- Ability to utilize website content for a 60-minute on-site "lunch and learn" style program that includes didactics, case study review, and discussion (available upon request).

Video production and final editing was completed in early February 2020 and the website was made available for beta testing in late February. A total of three surveys were developed with guidance from DNP committee chairs and embedded on the website. The website officially went public utilizing its new domain name www.healthcareethicsawarenesslibrary.com on March 1, 2020 after which, only minor changes were made to the site and no further changes made to the content (Appendix H). By early March, branded flyers (Appendix I) and business cards were printed for in-person marketing opportunities. In mid-March, a Facebook social media account was created to facilitate web-based marketing of the project. Following publication and marketing of the site, survey data was collected until May 1, 2020, analyzed and presented to DNP faculty members on May 13, 2020.

Strengths, weaknesses, opportunities, and threats.

This project was built on this author's previous quality improvement project and included the use of evidence-based strategies by and for NPs as well as other providers and healthcare workers. Easy accessibility via the web at any time of day allowed providers to review the site at their leisure as well as the option to return to the site as needed for information and resources (Appendix J). Additionally, the provision of resources as writable pdf documents permitted downloading for printing and emailing within a clinic or office setting. Cost-avoidance regarding reduction of turnover is a major strength and an opportunity as approximate cost for salary and benefits is over \$200,000 per NP whereas cost of implementation costs very little by comparison. Additional benefits include increased patient safety and quality of care when providers are able to bounce back from distress and burn out.

Weaknesses include overcoming biases that providers already know "what to do" to mitigate moral distress and burnout and/or denial that they are experiencing the somatic sequelae

of unresolved moral distress. Providers are also very busy and often work through their lunch hours or need to leave early to attend to personal or family needs so stakeholder buy-in is paramount to ensure that they take the time to utilize the resources during moments of "down time" at work or at home.

Many opportunities exist within this project and the most important may be normalizing feelings and emotions around ethical dilemmas and reducing feelings of loneliness among providers. Additional opportunities include reducing the accumulation of distress while promoting resiliency of all clinic staff – not just providers. While the main focus was on the providers, other licensed and non-licensed staff can and have experienced similar feelings of distress and burnout related to working in healthcare. Non-licensed staff were encouraged to visit the website, utilize the provided resources and provide feedback on areas where they would like more information.

Threats to success included provider availability for one-on-one "elevator pitches" due to patient scheduling and overbooking. Even with the best of intentions, providers were pressed for time which made it harder for them to participate in educational activities while at work.

Additionally, as an FNP student without a post-master's certificate in healthcare ethics, this author may not have been viewed as either a credible source for ethics education or sufficiently knowledgeable in the ethical problems specific to the provider role. Finally, the biggest threat came in the form of the coronavirus pandemic which forced the cancellation of all non-essential gatherings and a shelter-in-place order that was mandated by the governor of California starting March 18th and lasting until May 4, 2020. Under this mandate, previously planned presentations at local CANP chapter meetings and the CANP Annual Education Conference were cancelled. This also included all clinical locations which included this author's clinical site at Foothill

Community Health Center as well as other projected opportunities at APP Grand Rounds at this author's place of employment. Commitments to promote the project on social media accounts run by this author's organization were supplanted by information related to pandemic management.

Return on Investment.

Average salary for out-patient NPs in the Bay Area run between \$130,000 to \$175,000 based on information gleaned from online salary databases (www.glassdoor.com) and proprietary budget information at this author's employer. Including benefits, estimated cost of turnover is over \$200,000 per NP compared to an actual cost of \$0 to implement assuming no overtime is accrued as a result of time spent attending the project presentation. Actual cost of time, website, domain, maintenance, web developer support, and materials created by this author is \$14,072 was provided in-kind (Appendix K).

Methods of Evaluation

Since this was a pilot project, data collection took place in the form of three feedback surveys provided at the bottom of three different pages within the site: one survey for the educational portion (The Basics) that included the videos on ethics, moral distress and how to use the Four Box Method; one survey for the resources portion (Resources); and one demographics survey (About H.E.A.L.) to collect data on who visited the site. It should be noted that the site has a built in "contact me" option which provided an additional opportunity to provide feedback. Due to the layout of the site, and with guidance from DNP committee members, it was advisable to create separate surveys for the educational and resource-specific pages given that participants could freely navigate the website and may only visit once, thereby, multiple opportunities to provide feedback was advised. All surveys were created in Survey

Monkey and survey-specific weblinks were embedded into the appropriate page.

The Basics

This survey featured two qualitative questions about whether the use of videos is a good learning format as well as eliciting feedback on whether the content was perceived as being incomplete, and if so, what did participants think was missing. The remainder of the survey asked questions in Likert-style format regarding the usefulness of each of the five original content videos: introduction to the bioethical principles, one for each of the four principles as well as the video on usage of the Four Box Method (Appendix L).

Resources

This survey featured two qualitative questions about whether the resources provided were useful to participants' practice as well as eliciting feedback on topics that participants felt were missing. Also included was a yes/no question about whether participants had visiting any of the resources listed and a Likert-style question asking participants to rate the usefulness of the provided resources (Appendix M).

Demographics

For future content development, a ten question demographics survey was also included but deliberately created as a separate survey and located on a different page to avoid survey fatigue for participants. Survey items included questions about profession, student status, workplace specialty, highest degree of education, number of years spent working in healthcare, practice setting, geographic work location, client insurance type, age, and gender (Appendix N).

Miscellaneous Feedback

Every page on the site included a section for participants to provide feedback via the "contact me" option to enable participant feedback that may be separate from or in addition to

survey responses.

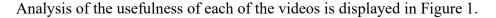
Analysis

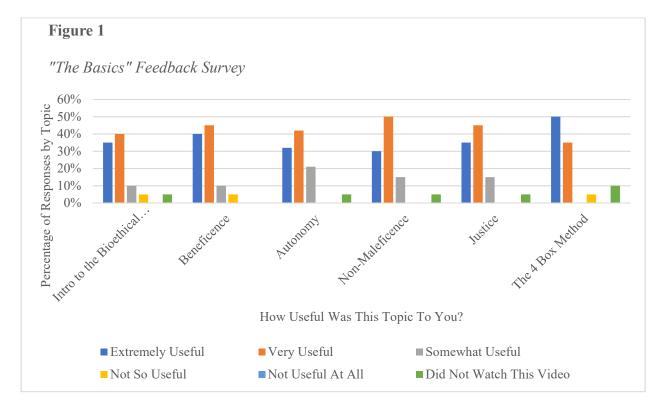
Both survey collection and analysis were performed using Survey Monkey and associated analytics. Additional analytics such a page views, individual internet service provider (ISP) visitors, amount of time spent on each page, etc. was procured via Google Analytics. Number of QR code scans from marketing materials was collected from QRCodeGenerator.com which furnished said code. Number of video views (and comments, if any) was made available from YouTube. Additional analytics from the H.E.A.L. Facebook page provided information on number of likes, shares, followers, and "post reach." A bar graph was created to support visualization of selected data.

Results

The following results and analytics data were collected from February 22, 2020 to May 1, 2020 with the exception of Google Analytics which was only collected from April 1, 2020 to May 1, 2020.

"The Basics" Evaluation





Twenty respondents participated in the "The Basics" feedback survey, with 100% reporting that the use of videos is a good method for reviewing the bioethical principles. Of the respondents, 80% (n=16) rated the Intro to the Bioethical Principles, Beneficence, Non-Maleficence, and Justice videos as either extremely or very useful with 15% (n=2) rating those videos as somewhat or not so useful. Only 54% (n=14) of respondents found the video on Autonomy to be extremely or very useful with 21% (n=4) rating that video as somewhat useful. Each of the aforementioned videos had a five percent (n=1) rating of did not watch the video. The instructional video for The Four Box Method garnered a rating of 85% (n=17) as extremely or very useful, with five percent (n=1) rating this video as not so useful, and ten percent did not watch the video.

From the qualitative question "Is the content on this website something you would use in

practice? If yes, why? If no, why not?" and 100% (n=20) of respondents said they would use this content in their practice, including one recently retired NP who commented that while she was newly retired, she thought it would be an excellent resource for novice NPs. Other comments included statements like "these issues come up all the time," "we should all use this content to remind us of being ethical in our practice," the website "provides resources that are easily accessible at work," and "this website...makes me feel validated that a lot of [us] experience difficult situations." From the qualitative question "What topic was missing that you think would be helpful to include?," one respondent requested statistics on burnout and reasons why people stay [even been burned out] and another respondent suggested information on the ethical principle of fidelity, as well as an inclusion of "micro and macro level examples of each ethical principle." There was an additional suggestion for a video on self-care.

"Resources" Evaluation

Fourteen respondents participated in the "Resources" feedback survey, 92% (n=13) of whom viewed at least one item on the Resources page while seven percent had not viewed any items. One hundred percent of respondents rated the resources as either extremely or very useful. From the qualitative question "Are the resources provided on this website something you would use in practice? If yes, why? If no, why not?" thirteen of the respondents commented that the resources were useful to their practice. Comments included "very comprehensive – it's something I would like to revisit" and "I will share this with my colleagues, and look forward to using [it] myself." From the qualitative question "What topic or resource was missing that you think would be helpful to include?" one respondent commented with "when is it NOT moral injury?" and one respondent requested resources "more specifically related to Advanced Practice Providers." Two respondents suggested additional self-care practices and information related to

exercise, nutrition, aromatherapy and sleep.

Demographics

Of the ten respondents to the demographics survey, all of them identified themselves as RN/LPN/LVN and worked in acute care in either Critical Care, Emergency, Medicine or Oncology departments. One respondent also identified as an NP student. Although not all survey respondents participated in the demographics survey, several overall respondents disclosed within their comments in the other surveys that they were NPs and one respondent disclosed being an EMS/fire first responder. Fifty percent (n=5) had bachelor's degrees, 40% (n=4) had a master's degree and ten percent (n=1) had a doctoral degree. Number of years worked in healthcare was evenly split with at least one respondent falling into each category with 40% (n=4) falling in the six to ten-year category (see Appendix N). One hundred percent worked at hospitals in an urban vs suburban setting and all respondents worked at sites that accepted all forms of insurance. Sixty percent (n=6) of respondents identified as being between ages 26 to 35 years old with the remaining 40% (n=4) identified as being between ages 46 to 65 years old. Eight respondents (n=8) identified their gender as female. Sixty percent (n=6) heard about this project from a friend or co-worker and 40% (n=4) heard about it from social media.

Additional Feedback

Two visitors to the website utilized the "Contact Me" option to provide feedback. One visitor suggested a resource for the Resources page and the other sent a message of thanks:

Many thanks for providing support for these types of pitfalls in many professions, not only in medical care. I am a retired educator, and now an EMT. So far, I have faced many more ethical and moral dilemmas in my educator's life. What you have provided opens the door for more thinking about how we can assure in all

aspects of our lives that what is good for the patient, student is also good for the institution that provides those services.

Web Analytics

Google analytics.

Analytics data demonstrated a total of 143 users of which 124 were new and 18 were returning visitors. Number of sessions per user was 1.50 over the course of 214 sessions and 569 page views. Average session duration was 03:59. The majority of visitors had internet service provider (ISP) addresses located in the U.S., two in Canada, and three in Europe. The majority of sessions were viewed via desktop computer (58%), followed by mobile phone (3%), and tablet (5%). Direct acquisition (users who typed the URL into the address bar) comprised 63% of visits, social media comprised 31% of visits and six percent of visits were organic (found via search results based on a keyword search). Bounce rate, or when a visitor leaves the website without visiting a second page, was highest among those who found the site via social media, with the second highest bounce rate among direct visitors. Those who found the site via an organic search had the lowest bounce rate. Most of the page views occurred on the home page with 192 total page views, 143 views of the Basics and Resources page, 33 views of the About page, 16 views of the Contact Me page and one to six page views per blog post.

Facebook analytics.

A H.E.A.L. Facebook page was created and shared to this author's social media network with a request to "follow" and "like" the page as well as share on their own Facebook pages to increase awareness of the H.E.A.L. page. This author declined to pay for "boosts" of posts. Total number of individual organic page followers and page "likes" was 68 with zero paid followers. A total of nine posts reached a minimum of 16 and a maximum of 128 unique viewers with varying

numbers of reactions, comments, or post shares. There were no comments.

YouTube analytics.

A total of seven videos were created and uploaded to H.E.A.L Channel on YouTube Studio for hosting. Each video had its own link embedded in the H.E.A.L. website. All videos were viewable to the public from YouTube. Channel analytics demonstrated 45 unique viewers, 136 views with 3.0 average views per person. Minimum number of views for any one video was 12 views and maximum number was 33 views and average viewing duration of 1:26. All but six of the videos are under two minutes and fifteen seconds and the video on The Four Box Method is 18:21. This video had an average viewing duration of 5:33.

QR code analytics.

A QR code linking to the H.E.A.L. website was added to both flyers and business cards which were distributed at this author's place of employment and one CANP chapter event for NP students. The code was scanned a total of 19 times with 15 unique users.

Discussion

Summary

Anecdotally, moral distress is often considered the biggest open secret within healthcare. As Jameton notes, the published literature on moral distress has exploded in less than a decade yet those who work in healthcare recognize that despite the increased attention, moral distress remains a problem. Although the number of survey respondents is low, the feedback indicates that videos are a good method to provide education and that education on ethics and ethical decision-making is valuable to all healthcare providers, not just NPs, as well as other healthcare disciplines. Having an online repository, e.g. the H.E.A.L. website, allows providers to revisit the information as often as needed as ethical challenges arise in practice. Several key findings

include the comment from a survey respondent that said she/he felt "validated" by the fact that so many healthcare providers are experiencing these difficult ethical situations. Another respondent said she/he liked the blog page on the website because "I learn from hearing about others [sic] experiences." Another respondent stated "I would use this content to teach newly graduated nurses in our residency program about healthcare ethics. The videos and resources take complex principles and make them easier to understand." Finally, a respondent who identified as a first responder commented that first responders don't have the "luxury of time" to think about moral dilemmas as they present out in the field but that the materials and resources on the website "could help us make better decisions not only for the patient but for our own personal longevity in our careers and personal life."

Regarding the web analytics available across the aforementioned platforms used, it should be noted that for the longevity of the website, this analytic data will provide information on continued growth, user data, acquisition of the site (how the user found the website), and most visited pages. This data can guide decisions on enhancement of existing content, addition of new content, as well as success of marketing strategies that drive traffic to the website whether it be from keyword search (organic), directly typing in the website URL (direct), or via social media platforms. Long-term success of the site will depend on an increasing number of both new and returning visitors, an increase in average session duration, as well as decreased bounce rate.

An additional finding was the comment asking about the difference between moral distress and moral injury. As mentioned earlier in this paper, moral injury is being used more frequently; notably in opinion pieces regarding frontline staff in areas hit particularly hard by the coronavirus pandemic. The delineation between moral injury vs moral distress certainly bears the need for more research and discussion, especially now as more and more providers are talking

about the emotional trauma sustained during the pandemic and the first death by suicide by an emergency department physician and medical director who worked in one of the hard hit hospitals in New York (Watkins, Rothfield, Rashbaum & Rosenthal, 2020).

This project varies from other published program such as the Clinical Nurse Ethics
Residency (CERN) conducted by Robinson, Lee, Zollfrank, Jurchak, Frost and Grace (2014), at
two academic medical centers on the East Coast where it was limited to only nurses and APRNs
and was a formalized and structured ten-month program. It also varies from Rushton's Mindful
Ethical Practice and Resilience Academy (MEPRA), launched by the Johns Hopkins School of
Nursing and Hospital which comprises six sessions teaching mindfulness and resilience
techniques in addition to ethics education. This pilot program began in 2016 and outcomes have
not yet been published. While it would be helpful to have organization support for a work-based
program, the benefit to having educational materials on a website that is accessible from work or
home, has its own benefit, including the ability to revisit materials as often as needed.

Interpretation

The anticipated project outcomes from this project were that healthcare providers would find ethics and ethical decision-making education useful and applicable to their practice and that provision of resources to develop resilience would help mitigate moral distress. Despite lower than anticipated feedback survey respondents, results indicated that both the education and resources were useful and applicable to practice. Furthermore, the ethical problems presented by the coronavirus pandemic such as decision-making considerations when a hospital runs out of ventilators, rationing of scarce personal protective equipment (PPE), and the inequity of work requirements during the pandemic has placed a spotlight on ethical care during a pandemic and the moral distress experienced by providers during such extraordinary circumstances. The most

successful outcome of this project could be that it sheds more light on a very serious problem that plagues healthcare providers in both the U.S. and abroad. Encouraging providers to give voice to the ethical problems they face and educating students to do the same within the safe environment of the H.E.A.L. website will help foster a sense of resilience that is needed to mitigate the deleterious effects of moral distress.

Plans for dissemination include further content development of the website beyond this project. This includes development of ethics education for interdisciplinary healthcare workers (HCWs) such as respiratory and physical therapists, registered dieticians, and pharmacists, as well as non-licensed personnel such as medical assistants and front-office staff. Other targeted groups include HCWs who work in the acute care setting and healthcare students. Expanded content would likely include more videos and frequent blog posts in addition to posting of new resources for development of moral resilience as they become available. Additional opportunities include addition of case studies, creation of interactive content such as polls, and assessment of continued usefulness of existing resources and content.

This author anticipates the ability to present at previously projected events for dissemination such as Bay Area California Nurse Practitioner (CANP) monthly/bi-monthly chapter meetings, the Center for Advanced Practice grand rounds at this author's organization, and the 2021 CANP Annual Education Conference. Accounts for social media sites such as Instagram and LinkedIn and further enhancement of the existing Facebook site would provide additional opportunities for dissemination.

Limitations

The biggest barrier was related to website publication a full month later than anticipated due to the unforeseen challenges that come with teaching oneself new technology, particularly

website development. There is a reason that web developers can command an average salary of \$92,000 per year in the Bay Area (www.glassdoor.com) because this work is far more complex than most of the public realizes. Afterall, not even the members of Congress, who have the ability to regulate the internet, understand how websites and the internet work (Kelly & Bjarnason, 2018). Website development and maintenance was extremely time-consuming and involved issues such as ensuring web security and preventing malware, quick site loading times, frequent assessment of all hyperlinks to ensure functionality, and creation of new content such as blog posts and the addition of a Covid-19 resources page. Management of social media platforms and posting was nearly as time-consuming since it also involved maintenance in addition to creation and dissemination of new content and a responsibility to respond to comments. Creating a website plus educational materials from scratch is not a project that would be feasible for most working professionals, and in fact, exceeded the anticipated 135 hours for this author's DNP practicum. Outside of an academic setting, the best use of time and resources for a DNP graduate would be the creation of educational content and hiring a web developer to build and load the content while a marketing professional assisted with establishing and maintaining social media content and accounts.

The second largest barrier was related to the coronavirus pandemic that prompted shelter-in-place (SIP) orders and cancellation of all meetings and events and prompted out-patient healthcare providers to work in clinic in isolation/from home while conducting telehealth visits. Flyers (Appendix I) and business cards were printed in anticipation of in-person marketing opportunities but were only used for a short time before SIP was in effect. While this author was fortunate to be a student member of a local chapter of CANP and was able to market this project to the members of the board (but not other chapter members), it is forbidden by CANP by-laws

for DNP students to email CANP members to participate in DNP or other research projects.

Another barrier was small sample size affecting survey outcomes but even when potential participants have the best of intentions, participation with an adequate N can be challenging. Recognition that healthcare workers and providers are very busy and asking them to participate in a quality improvement project when they are already at capacity with their daily patient panel is a considerable request so the creation of a compelling "what's in it for me?" marketing program will be paramount to long-term success of the website. Since this inception of this project, this author intends to continue running the website, updating site content, expanding blog post topics, and providing information that is more discipline-specific such as respiratory therapy and pharmacy. This author anticipates opportunities to utilize existing marketing materials once SIP orders are relaxed and in-person meetings are permitted. Until then, social media platforms will be used for website marketing and promotion.

Conclusions

The literature demonstrates that moral distress leads to dissatisfaction, disengagement and burnout which negatively affects patient safety, quality of care, labor costs, and sometimes the permanent loss of NPs due to career changes as a result. Undoubtedly, more than one approach will be necessary to tackle this issue as there is no simple solution to addressing moral distress. Multiple strategies are necessary to continually educate NPs and other providers on biomedical ethics and ethical decision-making and steps must be taken at the personal, educational and organization levels to assist all healthcare workers with developing moral resiliency. Short-term implications of this project include the possibility of reducing moral distress among currently practicing providers and longer-term implications include the continued reduction of moral distress and development of moral resilience practices.

For 18 consecutive years, nursing has been voted the most honest and ethical profession by 85% of Americans in an annual poll conducted by Gallup (Reinhart, 2020). The trust the public places in nursing above all other healthcare disciplines is both a cause for pride and a reminder of our duty to the patients and communities we serve. Part of maintaining that trust is being competent in providing ethical care and addressing moral distress in practice. Alleviation of moral distress is a multifaceted process but one that NPs and the organizations and facilities that employ them must prioritize to prevent burnout, promote quality of care for patients, and retain knowledgeable and caring NPs in all practice settings.

Funding

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Appendix A

Evidence Synthesis Table

Study	Design	Sample	Outcome
Grace, P. (2018), Enhancing nurse moral agency: The leadership promise of doctor of nursing practice preparation	N/A	DNP-prepared RNs in all healthcare settings	improved leadership in ethical nursing in any healthcare setting
Holtz, H., et al (2018), Interprofessionals' definitions of moral resilience	qualitative descriptive study	healthcare workers around the U.S. N=207	development of three main themes and three sub- themes re: moral resilience in healthcare workers
Simmons, A., et al (2018), The role of spirituality among military en route care nurses: Source of strength or moral injury?	exploratory mixed-methods survey	en route (aka flight nurse) military nurses deployed to Irag/Afghanistan from 2003 - 2010; N = 119	Spirituality may insulate military nurses from negative behavioral health symptoms. Supervisory awareness and intervention of moral injury may decrease long-term effects
Neumann, J.L., et al (2017), Burnout, moral distress, work–life balance, and career satisfaction among hematopoietic cell transplantation professionals	cross-sectional interdisciplinary survey	5,579 potential hematopoeitic cell transplantation (HCT) interdisciplinary professionals; N = 914	burnout, moral distress, and inadequate work-life balane was found in all participants and varied by profession, yet all still reported high career satisfaction
Trautmann, J (2015), Relationships among moral distress, level of practice independence, and intent to leave of nurse practitioners in emergency departments: Results from a national survey	cross-sectional correlational study design	n=71	no statistical significance between DPBS as a predictor of MDS-R scores (p=0.854); years in practice and gender neared statistical significance regarding moral distress with p=0.08 and p=0.065, respectively. Intent to leave practice questions resulted in 52% stating they have considered leaving or actually did leave a position related to moral distress.

Study	Design	Sample	Outcome
Davis, S., et al (2012), Influencers of ethical beliefs and the impact on moral distress and conscientious objection	exploratory study	Convenience sample of 1,144 RNs in Idaho	nurses' ethical beliefs are influenced more by work/life experience, religious beliefs, family values than professional code of ethics
De Milt, D.G. et al (2011). Nurse practitioners' job satisfaction and intent to leave current positions, the nursing profession, and the nurse practitioner role as a direct care provider	cross-sectional descriptive study	convenience sample of 254 NPs at a national conference	Most NPs did not intend to leave practice but job retention remains a high priority for quality & continuity of care & patient safety
Radzvin, L.C. (2011), Moral distress in certified registered nurse anesthetists: Implications for nursing practice	exploratory descriptive study	800 potential participants who are practicing CRNAs; N=283 surveys returned	statistically significant correlation between the Ethics Stress Scale sub-scales and demographics
Ulrich, C. M., et al (2006). Ethical conflict in nurse practitioners and physician assistants in managed care	cross-sectional self-administered questionnaire	3,900 randomly selected NPs & PAs working in primary care and related subspecialties; 50.6% adjusted response rate	Similar to physicians in primary care, NPs & PAs experience ethical conflict related to ability to provide quality care; ongoing societal justice and fairness in allocation of resources and meeting obligations to patients in a constrained healthcare system
Laabs, C. (2005), Moral problems and distress among nurse practitioners in primary care.	descriptive study design	anonymous survey questionnaire developed by the author was mailed to 191 members of a local NP organization who practiced in a setting resembling primary care. 191 surveys mailed; N=71	levels of distress and frequency of ethical issues were comparable to those found in acute care nurses as well as additional problems related to conflicts between ensuring patient autonomy while providing beneficent care

Appendix B

Evaluation Table

Citation:	Framework	Design/ Method	Sample/Setting	Variables Studied	Measurement of Variables	Data Analysis	Findings	Level of Evidence & Quality
Grace, P. (2018), Enhancing nurse moral agency: The leadership promise of doctor of nursing practice preparation	Transformational leadership in DNPs to enhance ethical leadership in nursing	N/A	DNP-prepared RNs in all healthcare settings	N/A	N/A	N/A	DNP-prepared nurse leaders are well-prepared with transformational leadership skills to be ethical leaders in nursing no matter the healthcare setting	Level V-A
Holtz, H., et al (2018), Interprofessionals' definitions of moral resilience	building resilience as an individual strategy	qualitative descriptive study	healthcare workers around the U.S. N=207	personal definition of moral distress	content analysis techniques published by Miles & Huberman (1984)	text coding and consensus reached by discussion among researchers	three main themes and three sub-themes: personal integrity, relational integrity, buoyancy, self- regulation, self- stewardship, and moral efficacy	Level V-A
Simmons, A., et al (2018), The role of spirituality among military en route care nurses: Source of strength or moral injury?	spirituality as safeguard/buffer against moral distress/moral injury	exploratory mixed-methods survey	"en route" (aka flight nurse) military nurses deployed to Irag/Afghanistan from 2003 - 2010; N = 119	spirituality, behavioral health, demographics	Post-Traumatic Growth Inventory	SPSS for descriptive statistics and demographics ; NVivo8 for qualitative statistics and theme sorting	while military RNs are clinically proficient, they are sent to war with little preparation mentally and spiritually; spirituality can be a buffer from moral distress/injury for some but mental health professionals should be available to all	Level III-B

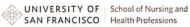
Citation:	Framework	Design/ Method	Sample/Setting	Variables Studied	Measurement of Variables	Data Analysis	Findings	Level of Evidence & Quality
Neumann, J.L., et al (2017), Burnout, moral distress, work—life balance, and career satisfaction among hematopoietic cell transplantation professionals	response to National Marrow Donor Program / Be The Match System Capacity Initiative	cross-sectional interdisciplinar y survey	5,579 potential hematopoeitic cell transplantation (HCT) interdisciplinary professionals; N = 914	prevalence of, and factors contributing to work-related distress (burnout & moral distress) among APPs, RNs, pharmacists, SWs, physicians	Maslach Burnout Inventory & Moral Distress Scale - Revised	multivariate and univariate analysis of burnout by profession using Tukey- Kramer procedure	moral distress was a significant contributing factor to burnout of all HCT professionals	Level III-A
Trautmann, J (2015), Relationships among moral distress, level of practice independence, and intent to leave of nurse practitioners in emergency departments: Results from a national survey	NP moral distress and the crescendo effect	cross-sectional correlational study design	n=71	moral distress experienced by NPs in the emergency department (ED) and the relationship to both intent to leave the profession and level of independent practice; demographics	Moral Distress Scale-Revised (MDS-R) survey and Dempster Practice Behavior Scale (DPBS)	Pearson's r to evaluate strength of the relationship between the survey and the scale	no statistical significance between DPBS as a predictor of MDS-R scores (p=0.854) however years in practice and gender neared statistical significance regarding moral distress with p=0.08 and p=0.065, respectively. Intent to leave practice questions resulted in 52% stating they have considered leaving or actually did leave a position related to moral distress. Logistic regression demonstrated an increase of one point on the MDS-R corresponded to a 1.034 increased odds of contemplating leaving/having left.	Level III-A

Citation:	Framework	Design/ Method	Sample/Setting	Variables Studied	Measurement of Variables	Data Analysis	Findings	Level of Evidence & Quality
Davis, S., et al (2012), Influencers of ethical beliefsand the impact on moraldistress and conscientiousobjection	Rest's model of ethical decision making and Attitude Theory	exploratory study	convenience sample of 1,144 RNs in Idaho	influencers of ethical beliefs and level of moral distress	de novo survey designed to elicit baseline data for Idaho RNs	SPSS for logical content analysis using Kendall's tau as a measure of association, ANOVA and Chi Square	34% claimed work/life experience was most important influencer, almost 30% claimed religious beliefs, 24% family values, 9% nursing code of ethics and 3% governing laws	Level III-B
De Milt, D.G. et al (2011). Nurse practitioners' job satisfaction and intent to leave current positions, the nursing profession, and the nurse practitioner role as a direct care provider	nursing retention for cost containment	cross-sectional descriptive study	convenience sample of 254 NPs at a national conference	NP job satisfaction compared to intent to leave the current position, the nursing profession, and the NP role as a direct care provider	Misener NP Job Satisfaction Scale & the Anticipated Turnover Scale	descriptive statistics of total scores, subscale scores & demographics	NPs overall satisfied with autonomy, challenge & benefits; minimal satisfaction with professional growth, intrapractice partnership and collegiality; higher job satisfaction scores and low intent to leave vs significant negative relationship between job satisfaction and intent to leave	Level III-B
Radzvin, L.C. (2011), Moral distress in certified registered nurse anesthetists: Implications for nursing practice	Wilkinson's moral distress model	exploratory descriptive study	800 potential participants who are practicing CRNAs; N=283 surveys returned	used Pearson's r to determine correlations in ESS sub-scales	Raines' and Tymchuk's Ethics Stress Scale (ESS) and a demographics questionnaire	Raines' and Tymchuk's Ethics Stress Scale (ESS) and a demographics questionnaire	statistically significant correlation between the sub-scales and demographics occurred with age. CRNAs age 24 – 30 years reported more moral distress than did older practitioners. Other findings include reporting of somatic manifestations of moral distress and intent to consider leaving or changing specialties consistent with findings from other research studies	Level III-A

Citation:	Framework	Design/ Method	Sample/Setting	Variables Studied	Measurement of Variables	Data Analysis	Findings	Level of Evidence & Quality
Ulrich, C. M., et al (2006). Ethical conflict in nurse practitioners and physician assistants in managed care	Rest's model of ethical decision making and Jones' issue-contingent model of ethical decision making	cross-sectional self- administered questionnaire	3,900 randomly selected NPs & PAs working in primary care and related subspecialties; 50.6% adjusted response rate	frequency and type of ethical issues, ethical concerns, ethics confidence and demographics	adaptation of a previously studied questionnaire (by Ulrich in 2003) "The Ethical Conflict in Practice Scale" and demographics questionnaire	SPSS for univariate descriptive statistics, bivariate correlations, linear regression models	daily/weekly reported insurance constraints, patients who ask providers to mislead insurance company in order to get coverage; perceived obligation to exaggerate severity of symptoms in order to advocate for patients was most significant predictor of ethical conflict	Level III-A
Laabs, C. (2005), Moral problems and distress among nurse practitioners in primary care.	theory of moral integrity	descriptive study design	anonymous survey questionnaire developed by the author was mailed to 191 members of a local NP organization who practiced in a setting resembling primary care. 191 surveys mailed; N=71	NP process to manage moral problems by NPs in primary care	open coding of one-on-one interviews	SPSS for frequency distributions	41 percent of NPs reported somewhat or moderate distress while eight percent where highly stressed, and ten percent were not stressed at all. The findings indicate levels of distress and frequency of ethical issues were comparable to those found in acute care nurses as well as additional problems related to conflicts between ensuring patient autonomy while providing beneficent care.	Level III-A

Appendix C

Non-Research Approval Documents



EVIDENCE-BASED CHANGE OF PRACTICE PROJECT CHECKLIST *

Instructions: Answer YES or NO to each of the following statements: Project Title: Interprofessional Education to Prevent Moral Distress Among Nurse Practitioners in Primary Care: A Pilot Study	YES	NO
The aim of the project is to improve the process or delivery of care with established/ accepted standards, or to implement evidence-based change. There is no intention of using the data for research purposes.	х	
The specific aim is to improve performance on a specific service or program and is a part of usual care. ALL participants will receive standard of care.	X	
The project is NOT designed to follow a research design, e.g., hypothesis testing or group comparison, randomization, control groups, prospective comparison groups, cross-sectional, case control). The project does NOT follow a protocol that overrides clinical decision-making.	х	
The project involves implementation of established and tested quality standards and/or systematic monitoring, assessment or evaluation of the organization to ensure that existing quality standards are being met. The project does NOT develop paradigms or untested methods or new untested standards.	X	
The project involves implementation of care practices and interventions that are consensus-based or evidence-based. The project does NOT seek to test an intervention that is beyond current science and experience.	X	
The project is conducted by staff where the project will take place and involves taff who are working at an agency that has an agreement with USF SONHP.	X	
The project has NO funding from federal agencies or research-focused reanizations and is not receiving funding for implementation research.	X	
The agency or clinical practice unit agrees that this is a project that will be implemented to improve the process or delivery of care, i.e., not a personal esearch project that is dependent upon the voluntary participation of colleagues, students and/ or patients.	X	
Tthere is an intent to, or possibility of publishing your work, you and apprivising faculty and the agency oversight committee are comfortable with the following statement in your methods section: "This project was undertake as an Evidence-based change of practice project at X hospital or agency and as a such was not formally supervised by the Institutional Review Board."	X	

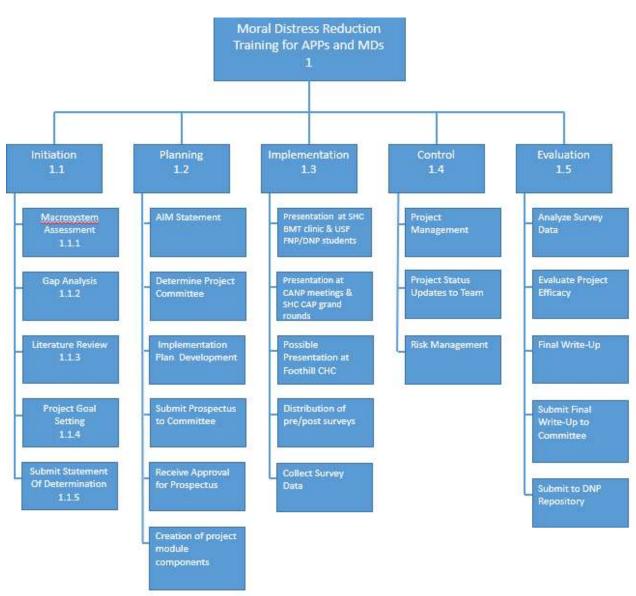
ANSWER KEY: If the answer to ALL of these items is yes, the project can be considered an Evidence-based activity that does NOT meet the definition of research. IRB review is not required. Keep a copy of this checklist in your files. If the answer to ANY of these questions is NO, you must submit for IRB approval.

*Adapted with permission of Elizabeth L. Hohmann, MD, Director and Chair, Partners Human Research Committee, Partners Health System, Boston, MA.

	DATE
Signature of Supervising Faculty Member (Cha	ir):
SUPERVISING FACULTY MEMBER (CHAIL	R) NAME (Please print):
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Signature of Student:	1 1
STUDENT NAME (Please print): Kelly A. Stra	ight
SAN FRANCISCO Health Profession	ns
UNIVERSITY OF School of Nursing	g and

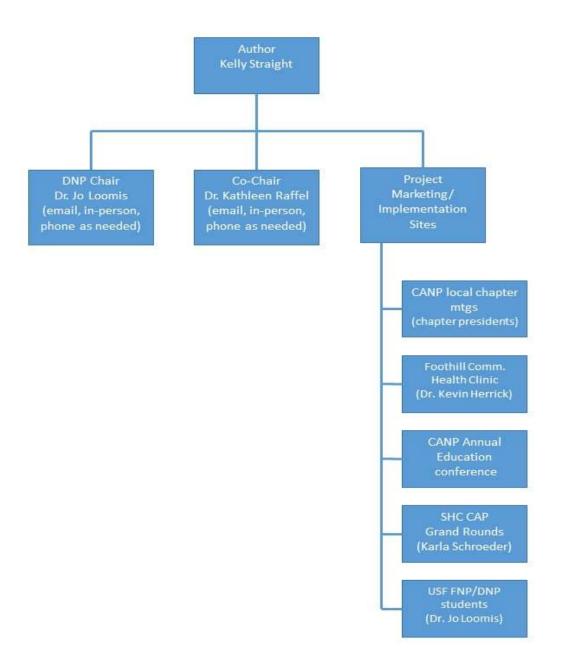
Appendix D

Work Breakdown Structure



Appendix E

Communication Matrix



Appendix F

GANTT Chart

		2018								2019				100			20	020		70.
Timeline for Project Implementation	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Development		,,,,,,								,	,									
Macrosystem Assessment - Project																				
Identification																				
Literature Review																				
Gap Analysis																				
Project Goal Setting																				
Develop Implementation Plan																				
Submit Manuscript (Quals N749)																				
Submit Prospectus (Quals N749)																				
Refine Manuscript																				
Refine Prospectus																				
Refine Implementation Plan																				
Project Development																				
Creation of educational videos and pdfs																				
Website development & creation of																				
additional site content																				
Creation of project and demographic																				
surveys																				
Website beta testing																				
Publication of website																				
Printing of business cards and flyers for marketing																				
Creation of project acct on social media																				
Project marketing via email, 1:1																				
personal communication & social																				
Evaluation																				
Survey collection																				
Draft of final write up																				
Analysis of survey & web analytics data																				
Prepare DNP presentation for cmte																				
Final write up & DNP presentation																				
Upload all documents to USF Online																				
Repository																				

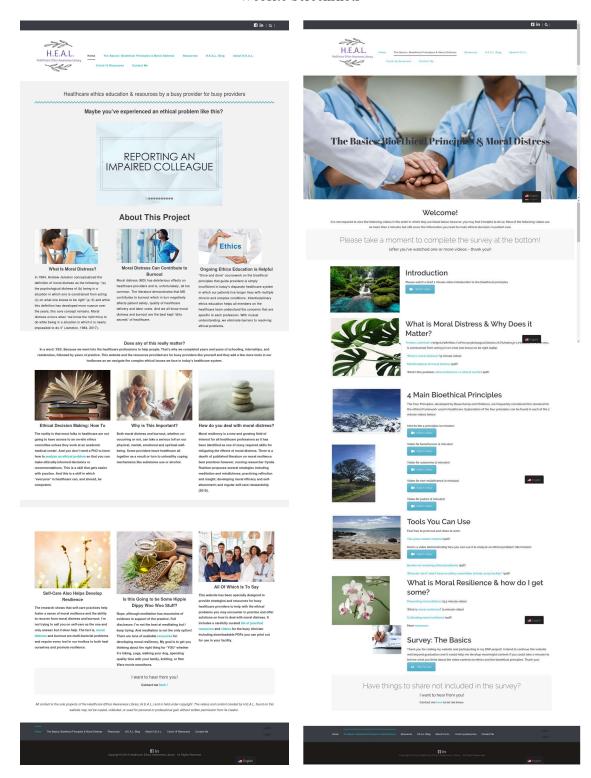
Appendix G

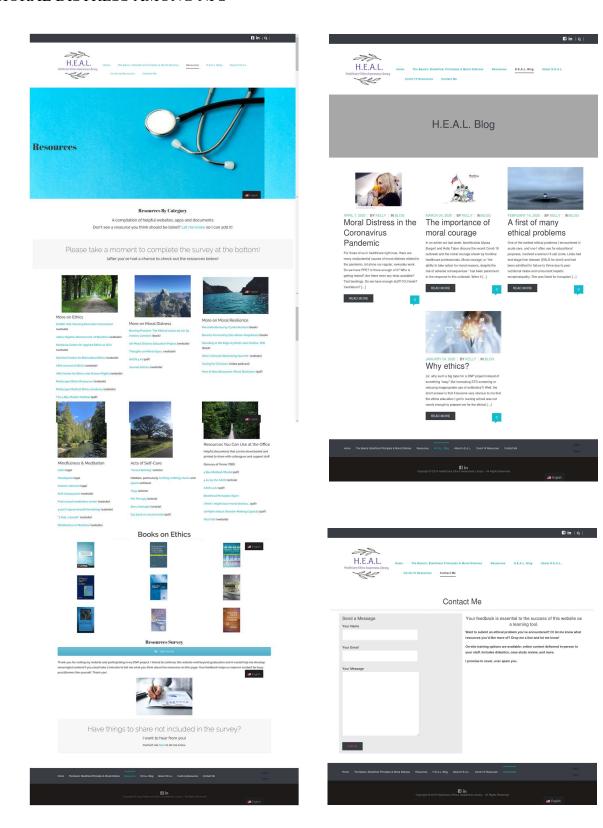
Gap Analysis

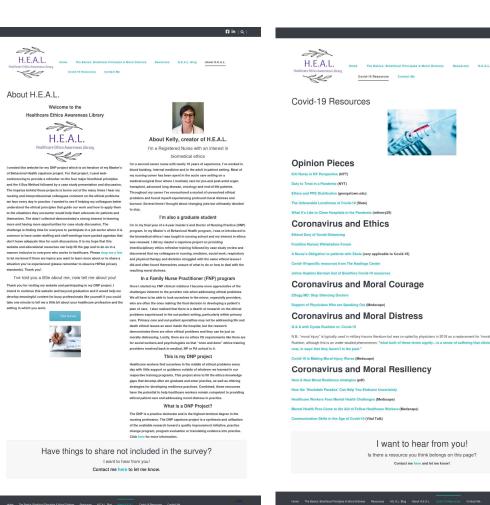
Primary	Care and other Out-Patie	nt Clinics
Current State	Best Practice	Proposed Solution
Lack of training and resources for preventing development of moral distress in NP, PA, or MD training programs	Recommend incorporating resiliency training and development of personal self-care practices as part of curriculum.	Provide education and resources on ways to improve moral resilience and the importance of self-care on a regular basis on an individual level
Absence of ongoing CEU/CME requirements for ethics education	Continuing education on ethics and how to parse ethical dilemmas and conflicts should be provided to all clinicians	Provide ongoing ethics education to clinicians as part of solution to reducing moral distress on an individual level
Lack of formal programs for providers within the workplace to promote moral resilience	Recommend incorporating resiliency training and development of personal self-care practices as part of monthly/quarterly/annual staff meetings	Provide education and resources on ways to improve moral resilience and the importance of self-care on a regular basis by incorporating into daily huddles, lunch meetings, staff meetings on a department/clinic-wide level

Appendix H

Website Screenshots











Appendix I

Flyer

Tired. Angry. Depressed. Anxious. Cynical. Disconnected from family, friends or work. Sleep problems. Weight gain/loss.

Or do you ever feel like you're struggling to provide patient care within the complexities of our healthcare system?

These are signs of moral distress

Scan the QR code below or go to: https://healthcareethicsawarenesslibrary.com

Available resources include:

*ethics education *tools for analysis

*a curated listing of resources for more information on
ethics, moral distress, resilience, and more
*includes both videos and downloadable PDFs

By a busy provider, for busy providers





Appendix J

SWOT Analysis

Strengths

- FNP-driven
- Evidence-Based
- Cost avoidance re: turnover
- Increased quality & patient safety
- Improved relationships with patients
- Potentially zero cost to employer –provider can visit website during lunch time

Weaknesses

- Must convince providers to take the time to participate
- Busy work environment
- Overcoming bias resulting in inadequate stakeholder buy-in

Opportunities

- Reduce feelings of loneliness among providers
- Normalize feelings and emotions around ethical problems
- Reduce accumulation of distress
- Promote resiliency, satisfaction and retention
- Inclusive of all clinic staff
 not just providers

Threats

- Provider availability for 1:1 marketing due to scheduling/overbooking
- Lack of provider engagement
- Willingness to be vulnerable re: feelings and emotions
- DNP student not viewed as a credible source of information
- Coronavirus pandemic/ shelter-in-place

Appendix K

Proposed Budget / Cost-Benefit Analysis

Direct Expense	Projected	Actual
Creation of education content, website, surveys & marketing materials: NP hours at \$60/hr	\$12,000	\$0 (In-Kind)
Website Creation & Development:		
Domain name x 1 year	\$10	\$10
Conversion to Word Press (web developer fee)	\$800	\$800
PRN web maintenance at \$75/hour	\$75	\$75
GoDaddy.com website hosting x 1 year	\$144	\$144
Deluxe Managed Word Press Hosting x 1 year	\$132	\$132
Web security x 1 year (includes SSL and essential security services)	\$147	\$147
5GB essential backup service x 1 year	\$36	\$36
Deluxe web security x 6 months	\$75	\$75
Other expenses:		
Logo design	\$25	\$25
Biteable.com - video making software x 4 months	\$400	\$400
Survey Monkey (student rate) x 4 months	\$104	\$104
Business cards x 250 qty	\$29	\$29
QR code x 1 year	\$60	\$60
Flyers for marketing	\$35	\$0
Subtotal Direct Expenses:	\$14,072	\$2,037 (actual)
Cost Avoidance:		
NP salary & benefits	\$250,000	
Project Direct Expenses	\$14,072	\$0 (In-Kind)
Potential Cost Avoidance of Project per NP	\$235,928	\$250,000

Did not watch this video

Appendix L

"The Basics" survey

,
This pilot project is still under development and your feedback is essential. Thank you for participating!
1. Is this content on this website something you would use in practice? If yes, why? If no, why not?
Is the use of videos a good way to cover the bioethical principles? Yes No
3. How would you rate the video on Intro to the Bioethical Principles? Extremely useful
Very useful Somewhat useful
Not so useful Not at all useful
Did not watch this video
How would you rate the video on Beneficence? Extremely useful
Very useful
Somewhat useful Not so useful
Not at all useful Did not watch this video
How would you rate the video on Autonomy? Extremely useful
Very useful
Somewhat useful
Not so useful Not at all useful

6. How would you rate the video on Non-Maleficence?
Extremely useful
Very useful
Somewhat useful
Not so useful
Not at all useful
Did not watch this video
7. How would you rate the video on Justice?
Extremely useful
Very useful
Somewhat useful
Not so useful
Not at all useful
Oid not watch this video
8. How would you rate the video on The 4 Box Method?
Extremely useful
Very useful
Somewhat useful
Not so useful
Not at all useful
Did not watch this video
9. What topic was missing that you think would be helpful to include? Output

Appendix M

"Resources" survey

This pilot project is still under development and your feedback is essential. Thank you!
1. Did you view/visit any of the resources on this page?
Yes
○ No
2. Are the resources provided on this website something you would use in practice? If yes, why? If no, why not?
3. How would you rate the resources provided on this page?
Extremely useful
Very useful
Somewhat useful
Not so useful
Not at all useful
What topic or resource was missing that you think would be helpful to include?

Appendix N

Demographics Survey

I need your help!	
	out yourself so I can tailor content that's relevant to
your practice. Thank you!	
1. What is your current profession?	
RN/LPN/LVN	Social Worker
Advanced Practice Registered Nurse (FNP/ACGNP/Psych/Anesthetist/Midwife/CNS)	Pharmacist
Physician (MD / DO) - attending	Physical/Occupational/Speech Therapist
Physician (MD / DO) - resident	Psychologist
Physician (MD / DO) - intern	Student
Physician Assistant	Medical/Nursing Assistant/Patient Care Technician
Registered Dietitian	Housekeeping
Respiratory Therapist	Secretary/Administrative Assistant
In what setting & specialty are you currently work	ing? For example: out-patient oncology or acute care ICU
In what setting & specialty are you currently work	ing? For example: out-patient oncology or acute care ICU
In what setting & specialty are you currently works What is the highest degree of education obtain	
4. What is the highest degree of education obtain	ned?
What is the highest degree of education obtain High School	ned? Master's Degree
4. What is the highest degree of education obtain High School Associate's Degree	ned? Master's Degree Doctoral Degree (PhD or practice doctorate)
4. What is the highest degree of education obtain High School Associate's Degree Bachelor's Degree	ned? Master's Degree Doctoral Degree (PhD or practice doctorate)
4. What is the highest degree of education obtain High School Associate's Degree Bachelor's Degree 5. How many years have you worked in	ned? Master's Degree Doctoral Degree (PhD or practice doctorate)
4. What is the highest degree of education obtain High School Associate's Degree Bachelor's Degree 5. How many years have you worked in 0 - 5	ned? Master's Degree Doctoral Degree (PhD or practice doctorate)
4. What is the highest degree of education obtain High School Associate's Degree Bachelor's Degree 5. How many years have you worked in 0 - 5 6 - 10	ned? Master's Degree Doctoral Degree (PhD or practice doctorate)

6. Practice setting?	
Solo	Hospital-based
Group Practice: 2 - 10 providers	Other
Group Practice: 10+ providers	
7. Geographic work location?	
Urban	
Suburban	
Rural	
Tele-health	
Client insurance type? Please select all that apply.	_
Private	Managed Care
Medicaid	Uninsured/cash pay
Medicare	
	problems, please select from the following age ranges:
18 - 25 yrs old	56 - 65 yrs old
26- 35 yrs old	66 - 75 yrs old
36 - 45 yrs old	76 + yrs old
46- 55 yrs old	
Optional: with what gender do you identify?	
11. How did you hear about this project	ct/website?
Flyer	
Word of mouth	
Friend/Co-worker	
Social media	