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Identifying the Impacts of Burnout on Bullying During the COVID-19 Pandemic

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Abstract

Background: Bullying and burnout has the potential to negatively impact nurses both at work and in their everyday lives and has been studied on various occasions. However, during the COVID-19 pandemic, burnout amongst nurses has been on the rise. Researchers have studied incidences where patients have bullied health care workers. However, no such study has been carried out to examine bullying between nurses during the pandemic.

Purpose: The purpose of this study is to find whether burnout levels in nurses impacted bullying between nurses during the COVID-19 pandemic.

Methods: The research literature will discuss bullying and its effects on patients, which nurses are victims of bullying and burnout, and the impacts of COVID-19 on nurses and their mental health. This proposed quantitative correlational study will electronically deliver surveys through a snowball sampling method. Recruitment will occur by advertising through social media and monthly staff meetings in hospitals throughout the San Francisco Bay Area. The tools for assessment include the Maslach Burnout Inventory, Depression Scale, Sleep Quality Scale, Authentic Leadership Questionnaire, Anxiety Scale, and the Stress Scale. In order to rule out any extraneous variables, a multiple regression analysis will be conducted after collecting data using IBM SPSS statistical software v. 27.

Introduction

Health care settings call for positive work environments to promote the growth and development of everyone on the health care team. However, when members of the same team begin attacking each other, workplace bullying occurs. According to The Joint Commision, workplace bullying is “repeated, health-harming mistreatment of one or more persons by one or more perpetrators (The Joint Commision, 2021). Workplace violence can occur horizontally and vertically in the work ladder, meaning it can happen between nursing colleagues or between the nursing management and staff nurses. It can take many forms, from rude comments to nonverbal behaviors (Vessey, et al., 2010). This can lead to high rates of fatigue, burnout, and ultimately, turnover.

Certain people, however, are at a higher risk for burnout and bullying due to extrinsic and intrinsic factors. These factors include the work environment, workload, stress, negative affect, core self-evaluations, age, gender, etc. There are three different components to burnout: emotional exhaustion, cynicism, and personal efficacy (Laschinger, et al., 2014).

Currently, there is research to support interventions that combat bullying, such as creating trust in leadership and mindfulness based yoga exercises. Sadly, with the pandemic, there has been higher rates of burnout among healthcare workers. However, there has been little research to determine the extent of burnout and its effects on bullying between nurses.

This thesis will attempt to answer the question:

- How have burnout rates in nurses impacted bullying between nurses during the pandemic?

This thesis will also explore the literature regarding this topic and offer a proposal for further study.

Literature Review

This literature review explored the nature of bullying and burnout as it relates to the nursing field. Eight articles were selected based on studies that focused on nurse burnout, how they were targeted, how it affected them, how it affected their patients, and interventions implemented to reduce bullying and burnout. Articles were assessed based on the reliability and accuracy of tools, whether tools accurately measured the aims of the study, sample sizes, and methodology of the study. Most articles were found through the PubMed library, while others were found through other online databases such as sciencedirect.

The key words for this search were *nurse reported bullying, burnout and nursing, turnover in nurses, stress management in nurses, new grad nurse bullying, workplace violence, and meditation and nursing.*

The research articles were separated into 5 categories:

1. Nurses' reported bullying and its effects on patients
2. Patient reported bullying towards healthcare workers
3. Which nurses experience bullying and burnout?
4. The impacts of COVID-19 on burnout
5. Interventions to help reduce bullying and burnout in nurses

Nurses' reported bullying and its effects on Patients

Nurse-Reported Bullying and Documented Adverse Patient Events An Exploratory Study in a US Hospital is a study conducted in the U.S. used cross-sectional questionnaire data along with unit-level administrative data on patient adverse events to identify the relationship between nurse-reported bullying and adverse patient events (Arnetz, et al., 2020). The 41-item cross sectional questionnaire was sent to 1780 nurses through an online survey in a regional hospital in the Midwestern United States. Among the 1780 nurses, 432 nurses across 37 units responded. Nurses that refused to identify their unit were categorized into a 38th unit. Demographically, 92.9% of the nurses were female with an average age of 44.4 years old. Out of the 432 nurses, 37% reported being bullied within the last 6 months while 51.4% witnessed someone else being bullied. Rates for self-reported bullying on the unit level averaged 32% of the nurses with a median of 25%.

After conducting the survey, researchers focused specifically on 5 adverse events: (1) total patient falls; (2) central-line-associated bloodstream infections (CLABSIs); (3) catheter-associated urinary tract infections (CAUTIs); (4) unit-acquired pressure ulcers; and (5) ventilator-associated events (VAEs). A statistical analysis using IBM SPSS statistics (IBM Corp, Armonk, New York), version 25, Python's PyMC3 package (The PyMC Development Team, Apache License, V2, 2018) and Bayesian modeling found that self-reported bullying was positively associated with CLABSI per 1000-line days ($\beta = 3.69$, $P < .001$). Additionally, nurse staffing was positively associated with rates of CLABSI ($\beta = 0.08$), CAUTI ($\beta = 0.13$), and VAE ($\beta = 1.84$), with $P < .001$ in all 3 cases. There was no other statistically significant association between nurse reported bullying and falls, CAUTI, pressure ulcers, or VAEs. Researchers explained that this may be related to the nature of central lines and their more direct pathway to

the bloodstream. Additionally, it may be due to the fact that more factors are involved regarding other adverse events such as patient falls (comorbidities, medications, and patient behaviors) that might contribute to the event.

This was the first study to report a statistically significant association between workplace bullying against nurses and adverse patient outcomes. However, it was limited to a large single hospital in the Midwestern United States, and may not be generalized enough for other parts of the country. Additionally, the low response rate may be biased towards nurses who have been bullied at work. Furthermore, there were no questions on hand hygiene compliance which may affect the results regarding CLABSIs and CAUTIs. Finally, since this was a cross-sectional study, cause and effect cannot be determined. This study indicates that perhaps nurse reported bullying may affect nurses more than it does the patients.

Patient reported bullying towards healthcare workers

Risk of COVID-19-related bullying, harassment and stigma among healthcare workers: an analytical cross-sectional global study is a cross-sectional study assessed the effects of COVID-19 related stigma and bullying against healthcare workers (Dye, et al., 2020). Researchers recruited participants through Amazon Mechanical Turk's online workforce and Facebook. Their sample consisted of 7,411 people from 173 countries who were 18 years or older. All variables were cross-tabulated with "healthcare worker" since it was the variable of interest and the primary outcome "COVID-19-related harassment or bullying."

Surveys were sent out in English, Spanish, French, and Italian since these were the primary languages in the world where the most COVID-19 cases were emerging during their study (April 6, 2020 to May 29, 2020). The survey included questions on actions, perceptions, and experiences around COVID-19 using the Kaiser Family Foundation Coronavirus Poll and

other team constructed questionnaires (2020). Researchers found healthcare workers to experience higher rates of COVID-19 bullying. Healthcare workers were more likely to believe people gossip about those who have had or thought to have COVID-19. They also found that 21.9% of participants believed those who contracted COVID-19 lost respect in the community.

Overall, this study provided excellent evidence that healthcare workers were at a higher risk of being bullied. Researchers used appropriate tools and methods to acquire data and used a global sample size to do so. They also made sure to use the Strengthening the Reporting of Observational Studies in Epidemiology cross-sectional checklist when writing their report as well as the Consolidated Criteria for Reporting Qualitative Research guidelines. However, the researchers could have used more tools to assess their data, and only used a single question to measure bullying and harassment experiences. They also did not distinguish participants' roles within the healthcare setting they worked in. Finally, their recruitment method inhibits generalizability, since there are countries that limit social media access.

Which nurses experience bullying and burnout?

Emotional exhaustion as a predictor for burnout among nurses is a quantitative study was used to analyze burnout, feelings of emotional exhaustion (EE), depersonalization, and personal accomplishment, especially during stressful situations caused by the COVID-19 pandemic (Carbondale, et al., 2021). Researchers sent 11,000 emails to RNs in a large geographic region (including those that retired and left the profession) within the U.S. Of 11,000 emails, 114 completed the entirety of the Areas of Worklife Survey (AWS), which was used to evaluate workload, control, reward, community, fairness, and values (Leiter, Maslach, 1999). Due to the low response rate (0.01%), this can be considered a limitation of the study. The Maslach Burnout Inventory (MBI) tool was also used to examine emotional exhaustion,

depersonalization, and low personal accomplishment (Maslach, 1981). However, only 93 participants actually participated in the study.

The sample population consisted of 89% female, with an average of 50.63 years. More than half (62.4%) have been nurses for 16 years or longer. Approximately 40.9% have been with their current organization for 5 years or less. Additionally, 72% worked as frontline nurses.

According to the MBI, people experience burnout when the emotional exhaustion (EE) score is greater than or equal to 27. Participants scored an average of 25.13, with a minimum of 3 and a maximum of 51. Statistically, 47.3% had a total EE score of 27 or higher, indicating burnout. Results of the AWS showed that workload, control, and community were statistically and clinically significant indicators of emotional exhaustion. Nurses that perceived their workload as being unmanageable experienced more stress and higher scores of EE.

Which nurses are victims of bullying: the role of negative affect, core self-evaluations, role conflict and bullying in the nursing staff focused on the relationship between role conflict, negative affect, and core self-evaluations with bullying in nurses (Homayuna, et al., 2021). Role conflict occurs when individuals who experience lots of pressure while working become confused about the roles assigned to them. Negative affect refers to when individuals experience negative emotions such as anxiety and depression regardless of a situation. Finally, core self-evaluation is a stable personality trait that allows individuals to measure their own worth and competence through self-esteem, generalized self-efficacy, neuroticism, and locus of control.

Researchers used self-administered questionnaires to collect data on demographic characteristics, positive and negative affect, role conflict, core self-evaluations and negative acts. Negative affect was measured using the negativity affect scale from PANAS (Watson, et al., 1980). Role conflict was measured by 8 questions through Rizzo's role conflict and ambiguity

questionnaire (1980). Core Self-Evaluations Scale was used to measure core self-evaluations (Judge, et al., 2003). Finally, bullying behaviors were rated using the revised version of the negative act questionnaire (Einarsen, et al., 2009).

The sample population consisted of 329 nurses from public and private hospitals in Bandar Abbas, south of Iran. All participants had at least 1 year of experience as a nurse in a hospital and were willing to participate in research. Out of 329 participants 87.5% were female, 73.8% were married, 84.5% had a bachelor's degree, 43.% were between the ages of 39 and 39 years. Majority of the participants (38.6%) had more than 10 years of experience as a nurse.

Results indicated no significant differences in bullying in relation to marital status, education level, years of experience, age group, and work position. However, men were at a higher likelihood of being exposed to bullying behaviors than women. Younger nurses were less likely to be bullied. Additionally, nurses that worked in the operating room and maternity unit experienced more bullying than nurses in other units. Moreover, data showed a positive relationship between role conflict and negative affect with bullying and a negative relationship between core self-evaluations and bullying. Finally, bullying was associated with work overload and total years of work in nursing.

Because of the correlational design of this study, it can not determine cause and effect. Additionally, this study used a self reported survey that may have a potential bias. Researchers noted that respondents were only asked if they had experienced bullying and not if they had committed acts of workplace violence towards colleagues. They suggest future studies might want to consider looking into whether or not the nurse perpetrates acts of bullying.

Associations between workplace bullying and burnout, professional quality of life, and turnover intention among clinical nurses examined the relationship between workplace bullying and burnout, professional quality of life, and turnover intention among clinical nurses (Kim, et al., 2019). Researchers created a descriptive cross-sectional design using a sample of 324 nurses from hospitals in Seoul, Gyeonggi, and Chungnam. Of the participants, 312 (96.3%) were female. Less than half had less than 1.9 years of experience, with a total average of 5.4 years of experience. More than 90% were staff nurses and charge nurses and 73.9% had rotational shift work.

A questionnaire was given which contained a total of 84 questions and asked about general characteristics, workplace bullying, burnout professional quality of life (ProQoL), and turnover intention. The Negative Acts Questionnaire-Revised was used to examine bullying as it relates in the workplace (Einarsen, et al., 2009). Burnout was measured using the Maslach Burnout Inventory (Maslach, 1981). The ProQoL tool was employed to evaluate compassion fatigue. Finally, turnover intention was assessed using four questions developed by Lawler (1983).

After analyzing survey results, researchers found that nurses with less than five years of experience scored higher on personal and work-related bullying when compared to nurses with 10 or more years of experience. Additionally, staff nurses, part time nurses, and those dissatisfied with work had higher levels of burnout than charge nurses, full-time employment, and those satisfied with work. As for turnover intention, it was higher in nurses with less than five years of experience than those with 10 or more years, staff nurses than charge nurses, part time nurses than full-time, and dissatisfied nurses than satisfied or neutral nurses. Lastly, workplace bullying was found to be the most significant factor in turnover intention.

Because researchers selected nurses in limited regions, the results can not be generalized. Additionally, cause and effect cannot be determined due to the cross-sectional design of the study.

The Impacts of COVID-19 on Burnout

Impact of COVID-19 outbreak on nurses' mental health: A prospective cohort study used STROBE guidelines, this prospective cohort study surveyed nurses 3 times between March 31 and May 4, 2020 regarding personal factors, working conditions, family dynamics, and attitude towards COVID-19 (Sampaio, et al., 2020). This study was conducted in order to evaluate differences in nurses's sleep quality, symptoms of depression, anxiety, and stress during the COVID-19 pandemic and to see if the presence of potential risk factors influenced these symptoms. The sample size included 829 frontline nurses from Portugal, 675 (81.4%) of them were female and 154 (18.6%) were male. The average age was 39 years old and more than half were married. Approximately 70% graduated, 28.3% hada masters degree and 1.2% had a PhD.

Surveys were sent out beginning March 31 to April 6. There was a one-week interval between surveys for a total of 3 surveys. In order to assess mental health, the Depression scale was used to assess dysphoria, hopelessness, devaluation of life, self-deprecation, lack of interest/involvement, anhedonia, and inertia (Lovibond and Lovibond, 1995). The anxiety scale measured autonomic arousal, skeletal muscle effects, situational anxiety, and subjective experience effect. Next, the stress scale was used to assess difficulty in relaxing, nervous arousal, and being easily upset/agitated, irritable/over-reactive, and impatien (Lovibond and Lovibond, 1995). Finally, sleep quality was measured by asking participants "How would you rate your sleep quality in the last 7 days?" (Lovibond and Lovibond, 1995). This was answered on a 5-point Likert scale with answer choices ranging from "very good" to "very poor".

Researchers found that female nurses had a higher mean score for depression compared to males. Furthermore, nurse specialists had a lower mean score for depression. The univariable model suggested that the potential predictive factors of change in anxiety score were gender, age, nursing speciality, number and quality of face masks, number and quality of glasses/visors, quality of gowns, being displaced from residence, fear to be infected and fear to infect. The multivariable model, on the other hand predicted that time, gender, nursing speciality, quality of face masks, fear to be infected and fear to infect affected changes in anxiety scores. For instance, there was a lower mean score for anxiety for nurses who believed the quality of face masks was adequate.

Regarding stress, the univariable model suggested that gender, age, nursing speciality, number of gloves, quality of face masks, quality of gowns, quality of glasses/visors, fear to be infected and fear to infect others were predictive factors for changes in stress score. Gender, age, nursing specialist, number of gloves, quality of glasses/visors, fear to be infected and fear to infect others were all predictors for change of stress score in the multivariable model. Additionally, women had a higher stress score compared to men. Older nurses and nurse specialists also had lower mean stress scores. Finally, the higher the fear of being infected, the more symptoms of stress that they had.

The snowball sampling of this study is a limitation since it has a bias towards those already interested in the topic. Additionally, because of the absence of data using the same measurement tools in the same population before the COVID-19 pandemic, results may be unclear as to which factors actually impacted nurses' mental health.

Interventions to help reduce bullying and burnout in nurses

Holistic Nursing in Practice: Mindfulness-Based Yoga as an intervention to Manage Stress and Burnout This study used a randomized control trial to analyze the effects of a mindfulness-based (MB) yoga practice on stress, burnout, and indicators of well-being among nurses and health care professionals (Hilcove, et al., 2020). The sample size consisted of 80 people, 41 attended weekly yoga classes and practiced yoga independently while the control group did not. However, post intervention data could not be collected from 2 members of the control group due to personal time constraints. Both groups were primarily Caucasian (93% in the intervention group and 87% in the control). The mean age was 42.41 years old and the gender distribution was 95% female and 5% male. All participants worked in healthcare, however, 76% of them were registered nurses.

Researchers used 6 different questionnaires and instruments. The Perceived Stress Scale was used to measure stress (; the Maslach Burnout Inventory was used to assess emotional burnout (Maslach, 1981); the Vitality Scale was implemented to assess vitality, energy, and fatigue (L. F. Brown et al., 2011; Ware & Sherbourne, 1992); the Global Sleep Quality item was selected to assess sleep quality (Buysse et al., 1989); the Brief Serenity Scale was used to assess a peaceful serene state of mind (Kreitzer, et al., 2009)and finally the Mindful Attention Awareness scale was used to measure mindfulness (K. W. Brown & Ryan, 2003). Additionally, diurnal salivary cortisol levels as well as blood pressure were assessed pre and post-intervention.

For 6 weeks, half the group took yoga classes or did at home yoga. Afterwards, they logged in their number of minutes and any observations that were made from practicing yoga as a part of self-care. Prior to the intervention participants completed a baseline measure of their blood pressure and diurnal salivary cortisol samples three times a day over two days, within five

days of the intervention.

Over the 6-week period, there was a statistically significant decrease in stress and burnout scores in the individuals that practiced yoga. Additionally, there was a statistically significant improvement in the vitality, sleep quality, serenity, and mindfulness scores of the intervention group. Researchers saw little to no difference in cortisol levels and blood pressure values when they compared the baseline to post-intervention. It is important to note that for 19 participants, there were missing sufficient cortisol values. Furthermore, the participants diurnal cortisol levels were within normal ranges and showed healthy slopes, indicating the population was not chronically stressed. Finally, researchers lacked a measurement for chronic stress, which was necessary due to the lack of significant improvement in slope cortisol values.

New nurses burnout and workplace wellbeing: The influence of authentic leadership and psychological capital examined the relationship between authentic leadership, an organizational resource, psychological capital, and an intrapersonal resource on new graduate burnout, occupational satisfaction, and mental health while at work during the first year of employment using surveys (Laschinger, et al., 2014). However, many nurses did not respond to the second survey and researchers relied on a self-report survey that may affect common method bias.

Using standardized questionnaires with acceptable Cronbach alpha reliability, researchers used a two-wave survey of newly graduated nurses with less than two years of experience in acute care hospitals in Ontario. The 907 participants received the first set of questions in 2010, with the following set being sent in 2011. There was a return of 205 people with a rate of 59.9%. Demographically, 92% of the participants were female with an average age of 28 years and 1.04 years of nursing experience, and a bachelor's degree. The nurses worked on either medical-surgical units (55%) or critical care units (23%) on a full-time basis (62%) and part-time

basis (28%).

In order to analyze specific data points, different questionnaires were utilized. T*he Authentic Leadership Questionnaire* (ALQ) (Avolio, Gardner, & Walumbwa, 2007), was used to measure 4 types of leadership behaviors: (1) relational transparency (2) moral/ethical, (3) balanced processing, and (4) self-awareness. *Psychological Capital* (PsyCap) (Luthans et al., 2007a, Luthans et al., 2007b) was measured with the Psychological Capital Questionnaire which used 6 items on a 6-point Likert scale ranging from 1 (strongly disagree) to 6 (strongly agree). Thirdly, the Maslach Burnout Inventory-General Survey was used to measure *Emotional Exhaustion (EE)* and *Cynicism (CYN)* (1981). Finally, four items from Shaver and Lacey (2003) were used to measure work satisfaction and *Mental Health* was measured using the 5-item Mental Health Index of the SF-36 (Ware and Sherbourne, 1992).

Using the Latent Growth Model (LGM), results suggested that AL and PsyCap negatively influenced burnout. This meant that the more a leader was perceived to be authentic, the better the outcomes were for new graduate nurses and their EE and CYN scores. Additionally, there was an inverse relationship between high levels of job burnout and low levels of job satisfaction. Moreover, new graduate nurses with higher levels of confidence in themselves had a lower risk for job burnout and emotional exhaustion.

Literature Review Conclusion

Overall, each study uses adequate data collection tools in order to measure desired values. However, some articles recommended the addition of questions related to bullying and stress in order to gather more comprehensive data. Additionally, many articles used cross-sectional studies and could not determine cause and effect, but were still able to find relationships between data. Lastly, the articles previously mentioned found strong evidence to suggest that burnout and bullying have negative effects on mental health in nurses.

However, there is still a lack of data during the pandemic to suggest other influences on this phenomenon. For example, how might different coping strategies nurses implemented impact their home and work life when it came to burnout and/or bullying during the pandemic? Which hospital specialties experienced the most bullying and/or burnout during the pandemic? These are just a few questions that the literature review failed to answer, which is why further research should be conducted.

Discussion

Overall Research Question

- Did burnout levels in nurses have an impact on bullying between nurses during the pandemic?

Gaps identified in the research literature

There are various studies that look at bullying in the nursing field. For example, some explore the effects of bullying between nurses, the effects on their patients, or interventions to prevent bullying. With the COVID-19 pandemic, researchers began analyzing patient bullying

towards nurses. However, there are gaps developed during the COVID-19 pandemic. Particularly, whether or not burnout levels had an impact on nurse bullying during the pandemic?

The literature review examined nurses' reported bullying and its effects on patients, patient reported bullying towards healthcare workers, which nurses experienced bullying and burnout, the impacts of COVID-19 on burnout, and interventions to help reduce bullying and burnout in nurses. This proposed study will focus on the relationship between burnout and nurse reported bullying during the pandemic.

Theoretical Framework

For the purposes of this study, Hobfoll's Conservation of Resources Theory will be used. This theory asserts that individuals will respond to stress when there is a perceived threat of a loss to their resources, depletion of resources, or insufficient replenishment of resources following the expenditure of resources, (Hobfoll 2001). Hobfoll defines these resources as items, individual traits, situations or energies individuals value or that act as a mechanism for acquiring these items, individual characteristics, circumstances or energies (Allen, et al., 2014). When a person experiences stress from the lack of resources, it can overcome them due to inability to perform self care. This can lead to burnout.

Maslach's definition will be used as well. Maslach defines burnout as the combination of physical, emotional, and psychological exhaustion that affects individuals due to long work hours (Maslach et al. 2001, Schaufeli & Greenglass 2001, Schaufeli et al. 2009). He states that it is composed of three concepts: emotional exhaustion, depersonalization and reduced personal accomplishment (Maslach 1976).

Primary Research Aim

This proposed study aims to identify a correlation between burnout levels in nurses and bullying during the pandemic.

Ethical Considerations

Informed consent will be acquired prior to answering the survey questions. The questions that will be asked will be personal and have the potential to induce trauma in the participant. Finally, information has the potential to be leaked, since data will be collected through online surveys.

In order to assess these issues, The research should take into consideration that personal questions will be asked of the participants and they have the right to refuse to answer questions if they feel the need to do so or stop the survey altogether. They will also be informed of the nature of the questions prior to administration. Since it will be completed online, password protected files will be used to prevent any leaks in data. Participants will not need to reveal their identity. No alternative markers will be used to identify participants. Finally, this study will be reviewed by the Dominican University of California Institutional Review Board.

Research method

Using descriptive statistics, this proposed quantitative correlational study will use electronically delivered surveys through a snowball sampling method to collect data on participants. This method will be implemented to get a more general understanding of the nature of bullying as it relates to burnout during the pandemic. For convenience purposes, the area of

focus will be nurses across the Bay Area. Specifically, the San Francisco, Marin, Alameda, Contra Costa, San Mateo, and Santa Clara counties.

Inclusion criteria will be determined by occupation: only Registered Nurses and advanced practice nurses will be selected, regardless of their specialty. Exclusion criteria includes everyone that is not a nurse or advanced practice nurse.

After providing education on the nature of questions of the surveys, and obtaining informed consent, participants will be asked to answer a series of demographic questions: ethnicity, age, gender, marital status, and economic status. Subsequently they will be asked questions related to bullying and burnout using several different tools. In order to assess the degree of burnout, the Maslach Burnout Inventory will be implemented for a more comprehensive burnout assessment since it measures emotional exhaustion (EE), depersonalization, and low personal accomplishment. Based on the literature review, it is also important to measure factors that may be related to burnout. For these reasons, the *Global Sleep Quality* scale taken from the Pittsburgh Sleep Quality Index (Buysse, et al., 1989) and the short version of the Depression Anxiety Stress Scales (DASS-21) (Lovibond and Lovibond, 1995) will be utilized. Finally, since authentic leadership is known to have an effect on nurses and their burnout levels, the Authentic Leadership Questionnaire will be provided as well. This questionnaire will assess the nurse's perceptions on their leader, which uses 16 items on a 5-point Likert scale.

A multiple regression analysis will be conducted to rule out extraneous variables that are factors in the anxiety, depression, and stress that are not bullying related using IBM SPSS v. 27 software. However, all values will be cross-examined with the variables of interest (burnout and nurse related bullying) to determine relationships between these variables of interest. Data will

be depicted on a table and separated by the type of variable, classification, quantity, quantity in percentage, mean and standard deviation, and range.

Type of study

This proposed research will be a quantitative correlational study using descriptive statistics.

Sample Characteristics

A snowball sampling method will be implemented to electronically deliver surveys to 100 nurses in the Bay Area. These surveys are expected to take at least 30 minutes to 1 hour. Recruitment will take place over a six month time frame by advertising through social media and hospitals' monthly staff meetings.

Data Analysis

Content will be analyzed using IBM SPSS v. 27 software. Descriptive statistics will be used to assess demographic information and portrayed through frequency and percentage. A multiple regression analysis will be conducted to rule out extraneous variables that are factors in the anxiety, depression, and stress that are not bullying related using IBM SPSS software. All variables will be cross-examined with the values of interest: bullying and burnout.

Conclusion

Based on the literature review, burnout and workplace violence has an effect on nurses' well-being both in their daily lives and their work lives. Studies have been able to predict which nurses might experience burnout or bullying. Interventions have been implemented and reviewed for their efficacy in solving bullying and burnout. However, it still remains a problem. With the COVID-19 Pandemic, nurses around the globe experienced burnout from their increased workload and stress related infection. This proposed study has the potential to impact health outcomes by determining the extent burnout has had on bullying during the pandemic through studying the gaps within the body of literature currently available. By finding connections between burnout and bullying during the pandemic, people can better understand the response to the virus and how it has impacted nurses to prevent complications in future pandemics.

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Vessey, J. A., Demarco, R., DiFazio, R. (2010). Bullying, harassment, and horizontal violence in the nursing workforce: The state of the science. *Annual Review of Nursing Research, 28,* 133-157. doi:10.1891/0739-6686.28.133

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Appendix

Authors/Citation	Purpose/Objective of Study	Sample - Population of interest, sample size	Study Design	Study Methods	Major Finding(s)	Strengths	Limitations
Arnetz, Judith E. PhD; Neufcourt, Leo PhD; Sudan, Sukhesh MPH; Arnetz, Bengt B. MD; Maiti, Tapabrata PhD; Viens, Frederi PhD. (2019). *Nurse-reported bullying and documented adverse patient... : Journal of Nursing Care Quality*. Journal of Nursing Care Quality. Retrieved September 17, 2021, from https://journals.lww.com/jncqjournal/Fulltext/2020/07000/Nurse_Reported_Bullying_and_Documented_Adverse.4.aspx.	The purpose of the study was to examine the association between nurse-reported bullying and documented nursing-sensitive patient outcomes.	432 Registered nurses in a large regional hospital in the Midwestern United States.	This study combined analysis of cross-sectional questionnaire data on workplace bullying with retrospective unit-level administrative data on patient adverse events.	Nurses (n = 432) in a large US hospital responded to a survey on workplace bullying. Unit-level data for 5 adverse patient events and nurse staffing were acquired from the National Database of Nursing Quality Indicators. Generalized linear models were used to examine the association between bullying and adverse patient events. A Bayesian regression analysis was used to confirm the findings.	Self reported bullying correlated to a positive association with a CLABSI per 1000-line days. Higher unit levels of self-reported bullying were associated with a higher incidence of CLABSI at the 95% credibility interval. Nurse staffing levels were positively associated with CLABSI, CAUTI, and VAE which suggests adverse infection outcomes were more	This was the first study to report a statistically significant association between workplace bullying against nurses and adverse patient outcomes.	The study was conducted in a large single hospital in the Midwestern United States and may not reflect the situations in other hospitals. A low response rate (24%). No survey questions about hand hygiene compliance. Cross-sectional study meant cause and effect could not be determined.

					likely to occur when more nurses were involved in patient care. CLABSI was the only adverse health outcome associated with bullying, and the researchers argued the other outcomes were influenced by other factors such as patient behavior and less direct pathways to the bloodstrea m.		
Laschinger, H. K. S., & Fida, R. (2014, April 2). New Nurses Burnout and workplace wellbeing: The Influence of Authentic Leadership and psychological capital. Burnout Research. Retrieved September 17, 2021, from https://doi.org/10.101	The purpose was to investigate the influence of authentic leadership, an organizational resource, and psychological capital, an intrapersonal resource, on new graduate burnout development, occupational	A sample of 907 registered nurses from Ontario. 92% were female, averaging 28 years old with 1.04 years of experience	This study used a quantitative cross-section al design.	A two-wave survey of newly graduated nurses with less than two years of experience in acute care hospitals. PArticipants received a questionnaire package at	PsyCap (Psychologi cal Capital) and burnout were correlated with all study variables. “The more new graduated nurses perceive	This study was able to establish a link between burnout and leadership and psychological capital.	Nurses did not respond to the second survey sent. They rely on self-report survey measures about common method bias. They recommend supervisor ratings of some of the study variables in

6/j.burn.2014.03.002.	satisfaction, and workplace mental health over the first year of practice.	. All of whom had their bachelors. Most worked on either medical-surgical units (55%) or critical care units (23%) on a full-time basis (62%) and part-time basis (28%).		their home address .	their leader to be authentic the less they experience feelings of EE (emotional exhaustion) and CYN (cynicism). ” the more new graduate nurses experienced increasing levels of burnout over time the less they were satisfied with their job.		future studies.
Homayuni, A., Hosseini, Z., Aghamolaei, T., & Shahini, S. (2021, April 9). *Which nurses are victims of bullying: The role of negative affect, core self-evaluations, role conflict and bullying in the nursing staff*. BMC Nursing. Retrieved November 3, 2021, from https://bmcnurs.biomedcentral.com/articles/10.1186/s12912-021-00578-3#ref-CR22.	This study was conducted with the aim of studying the relationship between role conflict, negative affect and core self-evaluations with bullying in nurses.	The sample population consisted of 329 nurses from public and private hospitals in Bandar Abbas, south of Iran.	This study used a descriptive cross-sectional design for their methodology .	Self-administered questionnaires were sent to 329 nurses who were selected by census method.	There was a significant difference between mean bullying scores according to gender and ward of affiliation. Men are more likely to be bullied. Nurses in different wards experience different levels of	Their data demonstrates that a negative effect and core self-evaluations predicted bullying.	Since the study was A correlational design, it did not seek to establish cause and effect. This study relied on self-report measures which can skew responses especially if the person doesn’t complete the survey. The respondents were asked only about if they felt subjected to bullying behaviors in the

					bullying behaviors. Bullying occurs in the presence of negative job features and absence of positive ones. People that were bullied had higher scores on neuroticism , depression, and negative affect and lower scores on emotional stability and self-esteem and a higher score on temperame ntal emotional reactivity.		workplace and did not take into account if they had acted as perpetrators. The sensitive topic on bullying may have led to a response with denial or social desirability. The article mentions bullying may occur due to the stressful nature of the job but fails to measure it in their study.
Sampaio, F., Sequeira, C., & Teixeira, L. (2021, March). *Impact of covid-19 outbreak on nurses' mental health: A prospective cohort study*. Environmental research. Retrieved November 3, 2021,	To evaluate variations in nurses' sleep quality and symptoms of depression, anxiety, and stress during COVID and whether risk factors influenced these symptoms	At baseline, the sample comprised 829 Portuguese nurses.	This research used a qualitative study for their methodology .	A snowball sample of nurses were surveyed 3 times about personal factors, work conditions, family dynamics, and attitude towards	Male participants presented a lower mean score for depression when compared with women. Men presented a	Their research cites mental health outcomes of nurses in different parts of the world.	A snowball sample can be a limitation since it attracts respondents who are already interested in the topic which can lead to bias. The absence of data using the same measurement

from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7732227/.	over time			COVID-19 between March 31 and May 4, 2020.	lower mean score for stress when compared to women. Nurses who agreed that the quality of face masks was adequate presented fewer anxiety symptoms than those who disagreed.		tool in the same population (Portuguese nurses)
Carbondale, A. S. I. U. (n.d.). *Emotional exhaustion as a predictor for burnout among nurses : Nursing management*. LWW. Retrieved November 3, 2021, from https://journals.lww.com/nursingmanagement/fulltext/2021/01000/emotional_exhaustion_as_a_predictor_for_burnout.6.aspx.	To explore the experiences of burnout and facets of work life as measured by the MBI and the Areas of Worklife Survey (AWS) among RNs in the US.	Researchers gathered a sample population of 114 Registered Nurses in the U.S across the country.	A quantitative study method was implemented for this research.	Nurse's were sent an email to complete an online survey tool. The emails were obtained from a national data distribution firm.	No significance noted between demographic variables and emotional exhaustion. A positive correlation with workload and emotional exhaustion was observed. A negative correlation between control and emotional exhaustion.	The source cites the age ranges and levels of education of the participants and how long they spent at their organization.	Of the 11,000 individuals only 114 responded. 11 respondents were deleted due to failure to complete all aspects of the survey.
Hilcove, K., Marceau, C., Thekdi, P., Larkey, L., Brewer, M. A., & Jones, K.	The goal of this study was to to analyze the effects of a mindfulness-base	This sample consisted of 121 registered	Researchers created a randomized control trial and	One received yoga intervention and the other didn't. All	There was a statistically significant improvement in stress	This study successfully proved how mindfulness based yoga can help	Researchers lacked a measurement for chronic stress, which was

(2020). Holistic Nursing in Practice: Mindfulness Based Yoga as an Intervention to Manage Stress and Burnout. *Journal of Holistic Nursing*, *39*, 29–42.	d (MB) yoga practice on stress, burnout, and indicators of well-being among nurses and health care professionals	nurses from a communit y-based hospital system in the southweste rn U.S.	separated two groups to quantitativel y study the effects of yoga on BP, diurnal cortisol levels, and survey scores .	groups had blood pressures and diurnal cortisol levels measured prior to the start of the trial and were compared to the end of the trial.	and burnout in the individuals that practiced yoga. There was also a statistically significant improveme nt in the vitality, sleep quality, serenity, and mindfulnes s scores of the intervention group.	nurses decrease their stress and burnout.	necessary due to the lack of significant improvement in slope cortisol values. The participants of the study were not chronically stressed based on their diurnal cortisol levels.
Kim, Y., Lee, E., & Lee, H. (2019, December 20). *Association between workplace bullying and Burnout, professional quality of life, and turnover intention among clinical nurses*. PloS one. Retrieved November 3, 2021, from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6924657/.	To examine the relationship between workplace bullying and burnout, professional quality of life, and turnover intention among clinical nurses.	This sample contained 324 nurses from hospitals in Seoul, Gyeonggi, and Chungnam .	Researchers used descriptive cross-section al design	A questionnaire was given which contained a total of 84 questions and asked about general characteristics, workplace bullying, burnout, professional quality of life, and turnover intention.	Nurses with less than five years of experience scored higher on personal and work-relate d bullying. Staff nurses, part time nurses, and those dissatisfied with work had higher levels of burnout. Turnover intention was higher in nurses with less than five	Researchers used a wide range of accurate and valid The Negative Acts Questionnaire-Rev ised, Maslach Burnout Inventory, and Professional Quality of Life, and Lawler's questionnaire tools to assess the population.	Because researchers selected nurses in limited regions, the results can not be generalized. Additionally, cause and effect cannot be determined due to the cross-sectional design of the study.

					years of experience.		
Dye, T. D., Alcantara, L., Siddiqi, S., Barbosu, M., Sharma, S., Panko, T., & Pressman, E. (2020, December 30). *Risk of COVID-19-related bullying, harassment and stigma among healthcare workers: An analytical cross-sectional global study*. BMJ open. Retrieved November 7, 2021, from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7780430/.	The aim of the study was to assess COVID-19-related stigma and bullying against HCW controlling for social, psychological, medical and community variables.	The sample size consisted of 7,411 people from 173 countries that were 18 years or older.	Researchers used a cross-sectional study of COVID-19 related to stigma and bullying among healthcare workers with larger mixed-methods such as themative qualitative analysis.	The researchers sent out surveys through Facebook and Amazon Mechanical Turks. They asked questions on actions, perceptions, and experiences around COVID-19 using the Kaiser Family Foundation Coronavirus Poll and other team constructed questionnaires Researchers found healthcare workers to experience higher rates of COVID-19 bullying	Researchers found healthcare workers to experience higher rates of COVID-19 bullying and were more likely to believe people gossip about those who have had or thought to have COVID-19. They also found that 21.9% of participants believed those who contracted COVID-19 lost respect in the community.	They implemented appropriate tools and methods to acquire data and used a global sample size to do so. They also made sure to use the Strengthening the Reporting of Observational Studies in Epidemiology cross-sectional checklist when writing their report as well as the Consolidated Criteria for Reporting Qualitative Research guidelines.	Researchers only used a single question to measure bullying and harassment experiences. They also did not distinguish participants' roles within the healthcare setting they worked in. Finally, their recruitment method inhibits generalizability, since there are countries that limit social media access.