

# Capstone project

## **Nurse Burnout Capstone Change Project**

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Course

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### **Background**

Stress and fatigue remain some of the most important and serious issues that are discussed in the professional field of healthcare. The relevance of these subjects is linked to the direct impact they have on the healthcare professionals and the output of work they engage in (Denning et al., 2021). Garcia and Marziale (2018) noted that unresolved episodes of stress and fatigue have the tendency of leading to burnout. Green et al. (2020) defined burnout as a form of exhaustion that is caused by continuous and constant feeling of tiredness and stress. Current figures on the prevalence and impact of burnout among healthcare workers is alarming. In a study by De Hert (2020), it was found that one third of healthcare workers experience burnout at any given time. What this infers is that burnout is almost a constant part of the healthcare profession that a worker experiences at every point in time.

In nominal terms, the percentage of healthcare workers found to be suffering from burnout differ but remain alarming across different jurisdictions. In the same study by De Hert (2020), it emerged that 10% of workers in European Union countries suffer from burnout, while 17% of workers in non-European Union countries but located in Europe suffer from burnout. Among individual countries, the prevalence rates are said to range from 4.3% to 20.6% in Europe. In the United States, the average prevalence rate was found to be 15%. The prevalence rates also differ among different healthcare workers. In a study that looked into the rates among physicians, anesthesiologists, pharmacists, and nurses, it emerged that nurses have the highest rate (Koutsimani et al., 2021). This worrying trend among nurses justify the need to critically address the problem by finding effective interventions that can help resolve it.

### **Clinical problem statement**

Burnout is an occupational issue that has been with healthcare workers for long. While it has never been a desirable situation for workers to experience burnout, the situation has become even worse with the COVID-19 pandemic. In principle, burnout among nurses has increased during the COVID-19 pandemic because of the increased workload in various healthcare facilities. A study by Konlan et al. (2022) meanwhile established that burnout actually “reduces the number, distribution and productivity of healthcare workers”. What this infers is that the goal of maximizing the role of nurses by making them work more is ineffective and inefficient if the situation results in burnout. The clinical problem that this study investigates therefore has to do with reduced productivity among nurses during this era of COVID-19 that has come about through increased workload on the nurse that has resulted in burnout in most of them.

## **Purpose of the change proposal**

The purpose of this change proposal is to evaluate an intervention that can help nurses manage their stress levels effectively in order to reduce burnout. The change that is expected is therefore one that establishes a healthcare system in which nurses use effective stress management strategies and techniques to avoid or reduce burnout. It may be asserted that the proposed change is reactionary in nature since it is not seeking to directly stop or prevent burnout. The reason for this is that the COVID-19 pandemic has created what has been deemed a new normal whereby healthcare workers have come to live with the fact that they must do more work than they usually did (Mohammed et al., 2021). This new normal however comes with the reality that if nurses do not manage their stress levels well, it will lead to burnout, which will affect their overall productivity and quality of patient care (Rapp et al., 2021).

## **PICOT question**

The change proposal is investigative in nature. That means it first seeks to investigate the effectiveness of an intervention and subsequently implement it within the healthcare setting. The PICOT question that will be used in performing this investigate, Do nurses who routinely practice stress management or other coping mechanisms tend to experience less burn out compared to nurses who do not over 6 months?

## **Literature search strategy employed**

The Preferred Reporting Items for Systematic Reviews and Meta-analyses (PRISMA) tool was the main literature search strategy that was used in selecting articles to investigate the PICOT question. As part of the PRISMA strategy, the researcher first identified three major electronic databases from which the search will be performed. The three databases were CINAHL, Science Direct and MEDLINE. Next, keywords were created relating to the PICOT question. The keywords used were stress, nurse work overload, burnout, nurse burnout, burnout prevalence, controlling burnout, stress management, and burnout during COVID-19. When the keywords were inputted into the databases, the first outcome produced more than 623 results. It was therefore important use an inclusion and exclusion criteria based on the PRISMA tool to reduce the number of articles. Among the inclusion and exclusion criteria was the need to eliminate all articles that were written before 2018. All articles that were not originally written in English language were also eliminated. The Sample, Phenomenon of Interest, Design, Evaluation, and Research Type (SPIDER) framework was also used as a guide to select articles based on the criteria in the table below.



Component	Criteria
Sample	Less than 20 for qualitative research and more than 100 for quantitative research
Phenomenon of interest	Nurse burnout during COVID-19
Design	Case study, survey and correlational
Evaluation	Statistical and perceptions
Research type	Qualitative and quantitative

Once the SPIDER framework was used with the inclusion and exclusion criteria, the number of articles reduced to 82. These 82 articles were then screened using the PRISMA guideline as provided in the flowchart below.

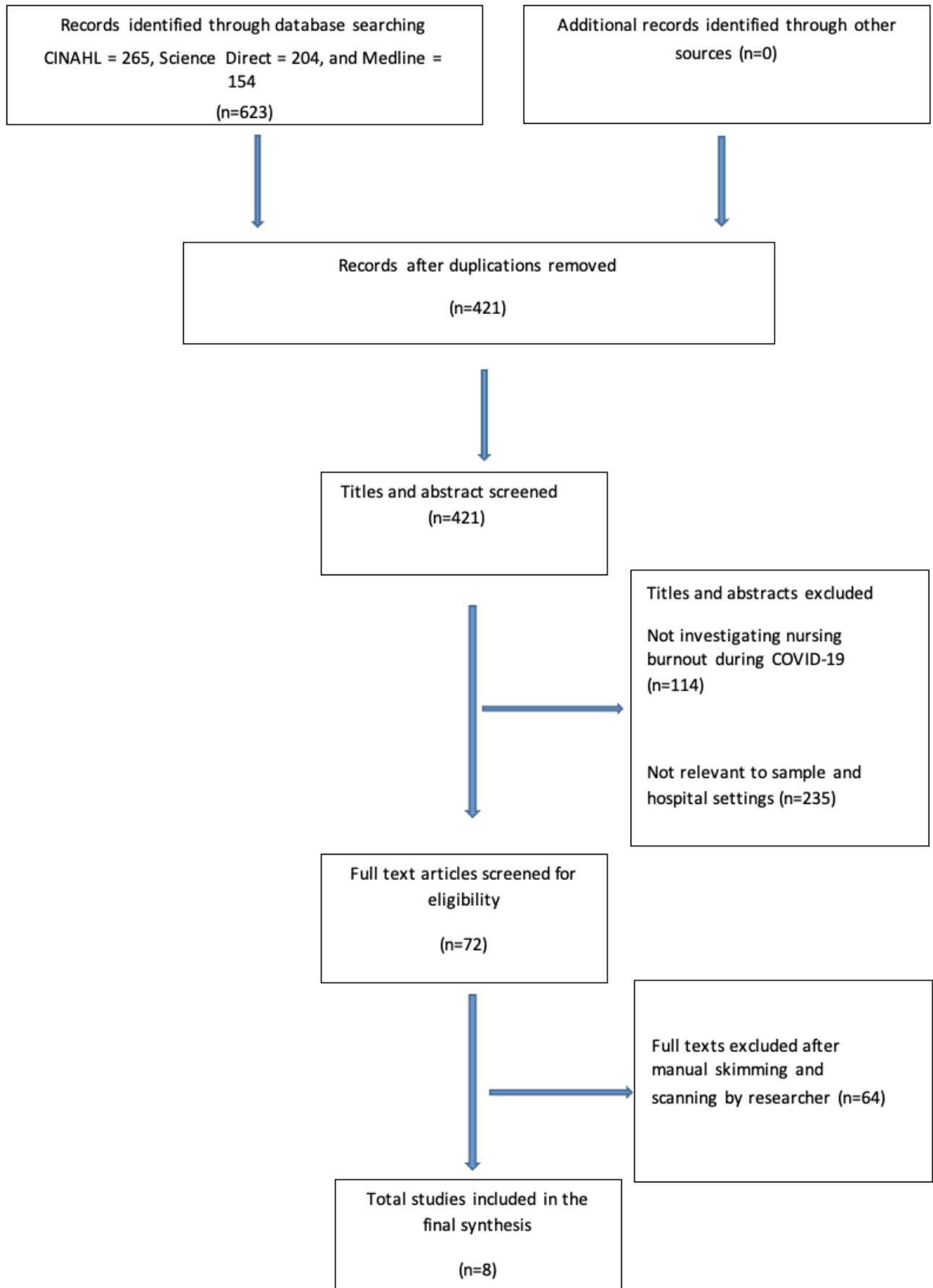


Figure 1: PRISMA Chart

The result of the literature search has been provided in the appendix section in the form of a literature matrix or table.

### **Evaluation of the Literature**

Most of the articles that were selected focused on the theme of burnout among nurses. The main emphasis was on coping strategies adopted by nurses in controlling burnout. Before delving into the coping strategies, all the eight articles confirmed burnout to be a realistic, yet worrying situation that majority of healthcare workers face. Bridgeman et al. (2018) appreciated the fact that in most healthcare settings, there are both individualized and institutional measures that are taken to address the problem of burnout among the workers. A careful review of literature however found the individualized interventions and strategies as more effective compared to the institutional ones. Other researchers have supported the use of individualized interventions and also given justification for their use. For example, Bhagavathula et al. (2018) opined that the individualized interventions are more effective mainly because they are user-based. That is, they are not generalized but specific to the unique needs of each worker. By inference, using the individualized interventions ensure that healthcare workers only use stress management strategies that work best for them. The studies by Denning, et.al. (2021); Green, et.al. (2020); Mohammed, et.al. (2021); Rapp, et.al. (2021), and Rehder, et.al. (2021) all identified and investigated various individualized strategies that can be used in decreasing burnout among nurses and other healthcare workers. As far as the strategies for decreasing burnout is concerned, three major interventions were identified. These include using yoga and meditation, having enough rest and sleep, and sharing responsibility with other healthcare professionals.

The use of yoga and meditation have been identified as effective stress management interventions largely because of relaxation impact it has on the brain (Magnavita et al., 2021). That is, after nurses have been overwhelmed with high rate of work, engaging in yoga and meditation helps them to cool off their stressful minds by relaxing and feeling refreshed. Elhadi et al. (2020) cautioned that the absence of such relaxation techniques result in mental fatigue and breakdown. On the use of rest and sleep, Rodrigues et al. (2018) noted that these are ideal stress management strategies that help nurses to totally replenish the brain and other growth and development cells. Mbanga et al. (2018) cautioned that nurses who do not get enough rest and sleep after several hours of work find it difficult to concentrate and have effective work-life balance. Also, the use of shared responsibility has been identified to be an important strategy that ensure that the overall burden of work on nurses is reduced. By reducing the burden of work, the overall stress levels can be

guaranteed to minimize (Dobroch et al., 2021). Bridgeman et al. (2018) also highlighted the point that shared responsibility as a stress management strategy enables healthcare workers to share in the stress and burden of each other.

The remaining three articles that were selected thus, Garcia and Marziale (2018); Koutsimani, et.al. (2021) and Sengul, et.al. (2021) centered on the effects of unresolved cases of burnout and stress among nurses. Their studies were common in noting that unresolved burnout can be the cause low productivity, high medication errors, low job satisfaction, mental breakdown, and ineffective work-life balance. Based on these alarming impacts, it is important for nurses to take pragmatic steps at managing burnout and stress. A careful review of the eight selected articles showed that the issue of burnout is mostly discussed from different perspectives based on the demographic differences of workers. For example studies by Denning, et.al. (2021); Green, et.al. (2020); Mohammed, et.al. (2021) and Rapp, et.al. (2021) investigated nursing burnout among different demographics. The results of these studies tilted towards evidence that nurses who are aged from 21 to 55 were more likely to experience burnout as compared to those that were younger or older. Also, females were found to report higher levels of burnout than males. The impact of these demographic difference to the study is that the more vulnerable a group of workers are, the better it is for them to utilize stress management strategies to prevent the onset of burnout.

### **Applicable change or nursing theory utilized**

The applicable change that is desired from the study is a healthcare workforce with good mental health that is devoid of the effects of burnout. In line with this and based on the PICOT, the researcher will be investigating the impact of stress management strategies as against not using any stress management strategies. From the body of literature however, Magnavita et al. (2021) asserted that the personality type of a person could have both and indirect impact on their ability to handle stress. In order to achieve the goal of helping nurses adopt the most effective stress management strategy, it is important to ensure that the type of intervention they select are those that work with their personality type (Alvares et al., 2020). Based on this understanding from literature, the five-factor theory will be utilized as the main theoretical foundation for the study. According to the five-factor theory, there are five personality traits that influence the behavior and emotional reaction of people to stress. The five traits are extraversion, neuroticism, openness to experience, agreeableness, and conscientiousness (Bhagavathula et al., 2018). These personality traits will be used to gain deeper understanding on how the personality of individuals can interfere with their choice of stress management strategy. The basis for using the

five-factor theory is because of the need to ensure individuality with the various stress management strategies given that one strategy cannot be deemed to fit for all people (Elhadi et al., 2020).

### **Proposed implementation plan with outcome measures**

Burnout could be part of the daily lifestyle of nurses if not checked properly (Alvares et al., 2020). Based on this understanding, the proposed implementation plan for the intervention will be for nurses to inculcate the new changes into their daily routine with the goal of improving their mental health by minimizing the impact of burnout. The implementation plan can therefore be noted to be self-administering in nature. That is, each nurse in the experimental group will select a stress management strategy that aligns with their personality type based on the five-factor theory. They will subsequently adopt them as part of their daily routines during a period of the day when it is most idle for them. Once the implementation plan has been instituted, there are some outcome measures that must be experienced in order for the intervention to be deemed as effective. Three of the change project outcomes that expected are:

- i. Nurses will develop stress management strategies to reduce burnout
- ii. Nurses will feel like they are providing better care to their patients
- iii. There will be a reduction in employee dissatisfaction

A careful assessment of the outcomes would show that they are transcending in nature. This means they do not only affect the personal wellbeing of nurses but also cuts into the provision of better care for patients. What is more, it includes the professional development of nurses as evidenced through employee satisfaction.

### **Evidence-based practice used in creating the intervention plan**

The intervention being tested is the use of stress management strategies in controlling burnout among nurses. The intervention plan is to use a self-administrating method to support each nurse to implement their own intervention based on their personality type. The decision to use such an intervention plan is strongly rooted in evidence-based research and practice. A study by Rodrigues et al. (2018) highlighted the relevance of worker-centered stress management strategies. In the study, the researchers compared the use of individualized strategies to institutional strategies. The results from the study found that workers that adopted the individualized strategies achieved better outcomes with stress management than those that relied on the institutional strategies. More importantly, it was found that the institutional strategies had lapses and weaknesses with implementation. In some instances, there was lack of commitment towards the change and apathy towards

the changes. It is based on this evidence that the proposed intervention plan is one that will put the nurse at the center of the change process. The researcher strongly asserts that through the worker-centered approach, nurses can gain better understanding about themselves, their emotions, and the personal preferences. Having said this, it will be appreciated that the nurses will require strong sense of commitment to stay true to the intervention plan. Since the implementation will be at the personal level, there could be the tendency that some individuals will abandon them with time.

### **Plan for evaluating the proposed nursing intervention**

As reflected in the PICOT question, the intervention will be implemented over a period of 6 months. At the end of this period, it will important to measure the outcomes that have been set above. The measurement of outcomes will constitute the overall evaluation of the proposed nursing intervention. As part of the evaluation process, a survey will be conducted among the participants. There will be two main groups of participants. These are the experimental and control groups. The experimental group are the ones that will receive the intervention while the control group will not use any intervention. Ahead of the intervention implementation, a self-reported questionnaire will be administered to the participants to answer questions on evidence of stress, extent of stress, impact of stress on their job, stress management, personality traits, and overall professional development. This pre-intervention survey will help the researcher to have fair assessment about the nature of stress among nurses, the levels of stress and the impact it has on their professional development. Next, the intervention will be administered. After administering the intervention, the researcher will have another survey to measure same outcomes as the pre-intervention ones. Using both descriptive and inferential statistical analysis, the researcher will interpret the impact of the intervention on the nurses. Specifically, a correlation analysis will be used to determine the relationship between stress levels and stress management strategies. Based on the results of the survey, a determination will be made on how effective the intervention is.

### **Identification of potential barriers to plan implementation**

While it is anticipated that the intervention could contribute to improving the mental health of nurses, there are some challenges that can be faced with its implementation. These challenges, if not effectively addressed could go a long way to negatively affect the outcome of the entire change process. One of these barriers or challenges to the implementation plan is lack of commitment to the implementation on the part of the nurses. As part of the ethical considerations for the change process, participants will be at liberty to withdraw from the study at any point at all.

Based on this, some of them may not want to stick with the intervention to the end. In order to overcome this barrier, the researcher will sensitize the participants on the need for them to stick to the research due to the potential benefits it has on their professional development, personal wellbeing, and their patients.



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