

Association of Psychological Well-being and Work-Related Quality of Life on Compassion Fatigue among Staff Nurses

Gil P. Soriano^{1*}, Kathyrine A. Calong Calong², Alvin M. Hernandez¹, Carissa Juliana Balaria³, Jean N. Guillasper⁴

¹Department of Nursing, College of Allied Health, National University, 1005 Metro Manila, Philippines

²College of Nursing, San Beda University, San Miguel, 1008 Metro Manila, Philippines

³College of Nursing, Wesleyan University, Cabanatuan City, 3100 Nueva Ecija, Philippines

⁴College of Nursing, Nueva Ecija University of Science and Technology, Cabanatuan City, 3100 Nueva Ecija, Philippines

*Corresponding Author's Email: gpsoriano@national-u.edu.ph

ABSTRACT

Background: Nurses experience compassion fatigue, which can be one of the factors affecting the provision of quality care to their patients. **Aim:** This study aimed to determine the correlation between psychological well-being and work-related quality of life on compassion fatigue among staff nurses. **Methods:** This study utilized a descriptive-correlational research design. Respondents were selected through purposive sampling, and data were collected using the Compassion Fatigue Short Scale (CFS), Psychological Well-Being (PWB), and Work-Related Quality of Scale (WRQoL). The data was analyzed using mean, standard deviation, and Pearson's *r*. **Results:** The findings revealed that there is no significant relationship between compassion fatigue and psychological well-being. However, a significant negative correlation was noted between work-related quality of life and compassion fatigue. **Conclusion:** Nurses need protection not only physically but also mentally and emotionally. It is also critical that hospital administrators are fully aware of threats to nurses' physical, mental, and emotional health, and that they have the capability to assess the warning signs exhibited by their staff and provide guidance to nurses to prevent the worst situations.

Keywords: *Compassion Fatigue; Psychological Well-Being; Staff Nurses; Work-Related Quality of Life*

INTRODUCTION

Nurses are surrounded by an enclosed atmosphere, limited time, intense pressures, constant noise, and abrupt swings from intense to mundane activities, undesirable views or sounds, and standing for long hours (Govasli & Solvoll, 2020). They are prepared to cope with these factors, but when additional stressors are present, stress takes a toll. According to Bernstein *et al.* (2008), stress is considered to be an adverse emotional, cognitive, behavioural, and physiological process that arises when an individual attempts to cope with or adapt to stresses. It is known to cause emotional exhaustion in nurses, leading to negative feelings towards work or compassion fatigue (Ahmed *et al.*, 2022). Another negative effect of nurses' work-related stress is compassion fatigue, which reduces their ability to provide care (Maddigan *et al.*, 2023; Yesil & Polat, 2023).

Compassion fatigue is a condition encountered by nurses working with traumatised clients (Taşdemir *et al.*, 2024). Abou Hashish and Ghanem Atalla, (2023) coined the term compassion fatigue to describe a common experience among skilled caretakers such as nurses, doctors, civil servants, and psychotherapists.

Received: November 24, 2023 Received in revised form: July 7, 2024 Accepted: July 21, 2024

Compassion fatigue greatly influences the well-being of an individual; however, individual differences may cause variances in people's responses to situations: what an individual may perceive as a stressful situation may be viewed by another as challenging. Although different types of traumas require different healing techniques, compassion fatigue focusses more on nurses' stress that results from exposure to traumatising situations or individuals that could affect their psychological well-being and work-related quality of life.

Psychological well-being and the ways to enhance it have been the focus of a considerable number of psychiatric studies over the past decade. Nurses are in a remarkable position to observe and deter psychological distress and anxiety in vulnerable populations. Yet nurses themselves are frequently exposed to traumatic events, which may have an effect on their psychological well-being and on their work performance (Shyu, 2019). This makes nurses highly vulnerable to occupational stress. A high level of occupational stress can cause changes in one's sense of self, mood swings, and sleep disturbances. Stressors related to the nursing occupation, such as task balance, interpersonal conflict, mental anxiety, and exhaustion, can all have an impact on nurses' subjective well-being (Okuhara, Sato & Kodama, 2021).

Quality of work life or work-related quality of life has received increased attention in hospital settings in the past years. Medical professionals are the most important healthcare providers, and nurses are the most numerous groups of workers in a medical groups. Also nursing is the largest number of professional groups in the front and closest to the suffering, pain, and misery experienced by patients and their families (Ananda, 2019). A discontentment for one's own work life can lead to issues concerning employee satisfaction, mental torment, burnout, and staff retention. These factors, in turn, could influence the quality of care provided by nurses (Khatatbeh *et al.*, 2021). Hence, this study was done to determine the relationship of psychological well-being and work-related quality of life on compassion fatigue among staff nurses.

METHODOLOGY

Research Design and Population

This study employed a descriptive-correlational research design (Sousa, Driessnack & Mendes, 2017). The respondents of the study were selected using purposive sampling in chosen hospital institutions located in Metro Manila. Respondents were selected based on the following inclusion criteria: (1) registered nurse; (2) 25-55 years old; (3) minimum of one year of service in the hospital; (4) does not have any mental disorder; (5) is oriented and is able to answer the given questionnaires; and (6) is willing to participate in the study. Data collection was taken towards the end of the pandemic in an online flat form using Google Form.

Instrumentation

The researchers utilised standard research instruments, which included a demographic profile sheet, the Compassion Fatigue Short-Scale, the Psychological Well-being Scale, and the Work-related Quality of Life Scale. The demographic profile sheet was used as a basis for selecting the participants with reference to the inclusion criteria. The Compassion Fatigue Short-Scale (CFS), revised by Adams, Boscarino and Figley, (2004), consists of 13 items of questions that examine secondary trauma and job burnout, reflecting their experience. Respondents use a 10-point, visual, analogue-type Likert-type scale (1 = *never or rarely*, 10 = *very often*). For the secondary trauma and job burnout subscales, reliabilities are at $\alpha = 0.80$ and 0.90, respectively.

Psychological Well-Being (PWB) by Ryff and Keyes (1995) measures six aspects of well-being and happiness: autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, and self-acceptance. Respondents rated 18 statements using a 7-point scale (1 = strongly agree; 7 = strongly disagree). The Cronbach's alpha of the subscales are: autonomy (0.37), environmental mastery (0.49), personal growth (0.40), positive relations with others (0.56), purpose in life (0.33), and self-acceptance (0.52).

Easton and Van Laar (2007) developed the Work-Related Quality of Life Scale (WRQoL), a 23-item 5-point agreement scale, to evaluate workers' perceived quality of life based on six psychological and social sub-factors.

Data Analysis

Data analysis was performed by using IBM SPSS Statistics for Windows, Version 23.0. Mean, standard

deviation, and Pearson’s correlation coefficient (*r*) were used to analyse the data gathered.

Ethical Consideration

The researchers obtained ethical clearance from the Research Ethics Board of San Beda University, Philippines with reference number SBU-REB 2020-041 on 15th April, 2021.

RESULTS

A total of 120 participants were included in the study, with a mean age of 25.02 (±0.46). There were 32 males (26.7%) and 88 females (73.3%).

Table 1: Compassion Fatigue, Psychological Well-Being, and Work-Related Quality of Life among the Participants (n=120)

	Mean ± SD
Compassion Fatigue	4.31 ± 1.75
Secondary Trauma	4.36 ± 1.98
Job Burnout	4.30 ± 1.74
Psychological well-being	3.27 ± 0.46
Self-acceptance	3.19 ± 0.63
Purpose in Life	3.23 ± 1.03
Environmental Mastery	3.14 ± 0.71
Personal growth	2.54 ± 0.79
Positive relations with others	4.10 ± 0.96
Autonomy	3.39 ± 1.25
Work-related Quality of Life	2.72 ± 0.71
Control at Work	2.47 ± 0.86
Job and Career Satisfaction	2.33 ± 0.91
Home-work Interference	2.84 ± 0.98
Stress at Work	2.98 ± 0.95
General well-being	2.80 ± 0.70
Working Conditions	2.79 ± 0.69

Note: SD (Standard Deviation)

Table 1 shows the mean score of compassion fatigue, psychological well-being, and work-related quality of life among the participants. In terms of compassion fatigue, the overall mean is 4.31 (±1.75). Specifically, the mean scores of its subscales are 4.36 (±1.98) for secondary trauma and 4.30 (±1.74) for burnout. For psychological well-being, the overall mean is 3.27 (±0.46), while its subscales self-acceptance, purpose in life, environmental mastery, personal growth, positive relations with others, and autonomy have mean scores of 3.19 (±0.63), 3.23 (±1.03), 3.14 (±0.71), 2.54 (±0.79), 4.10 (±0.96), and 3.39 (±1.25), respectively.

On the other hand, the overall mean score for work-related quality of life is 2.72 (±0.71), while its subscale has a mean score of 2.47 (±0.86) for control at work, 2.33 (±0.91) for job and career satisfaction, 2.84 (±0.98)

for home-work interference, 2.98 (± 0.95) for stress at work, 2.80 (± 0.70) for general well-being, and 2.79 (± 0.69) for working conditions.

Table 2: Relationship of Psychological Well-Being and Work-Related Quality of Life on Compassion Fatigue Among the Participants

	Psychological well-being		Work-Related Quality of Life	
	r coefficient	p value	r coefficient	p value
Compassion Fatigue	-0.127	0.167	0.349	*0.000
Secondary Trauma	-0.156	0.090	0.359	*0.000
Burnout	-0.901	0.322	0.312	*0.001

*p value is significant at 0.01 level

Table 2 shows the relationship between compassion fatigue, psychological well-being, and work-related quality of life among the respondents. Results reveal that no significant relationship exists between compassion fatigue and psychological well-being. However, a significant negative correlation is noted between compassion fatigue and work-related quality of life. Each of the compassion fatigue subscales (i.e., secondary trauma and burnout) is negatively correlated with work-related quality of life.

DISCUSSION

The purpose of this research was to determine the relationship between compassion fatigue and the psychological well-being on the work-related quality of life among staff nurses. The healthcare providers that were trained to care for other people frequently overlook the importance of self-care. The participants were shown to have a high level of job burnout. When people experience job burnout, they are not motivated to make a positive difference. The daily work stress begins to outstrip their professional and personal resources (Veda & Roy, 2020). Inadequate resources and workforce in the workplace contribute to increased burnout (Al Sabei *et al.*, 2020; Wei *et al.*, 2022). Individuals who are burnt out feel harassed and emotionally drained by the same career they were once so enthused about. Job burnout is often linked to Secondary Traumatic Stress (STS). However, secondary traumatic stress is acute, while burnout is a progressive state of emotional depletion (Tasdemir *et al.*, 2024).

Secondary traumatic stress is defined as the stress reaction generated in healthcare professionals because of being exposed to a shared traumatic event with clients. The study shows that the nurses were experiencing high levels of secondary traumatic stress. The incidence of STS during the COVID-19 phase was reported to be low to moderate in a study conducted with healthcare professionals by Erkin, Konakçı and Duran (2021). But according to İlhan and Küpeli (2022), healthcare providers who worked with COVID patients have higher STS levels than those who did not.

Compassion fatigue was also revealed to be high among the respondents. Since data were collected during the COVID-19 pandemic, it could be possible that the harrowing conditions brought about by the pandemic had magnified the work stressors of the nurses, contributing to high levels of compassion fatigue. Compassion fatigue is usually referred to as the combination of job burnout and secondary traumatic stress. Abou Hashish & Ghanem Atalla (2023) developed the word “compassion fatigue” as a reference to nurses and burnout, and it has been linked as the best alternative for secondary traumatic stress (Tasdemir *et al.*, 2024). Healthcare providers encountering compassion fatigue might also encounter self-loathing, feeling of low satisfaction in a job, psychosomatic ailments, absenteeism, and other adverse outcomes that can affect their psychological well-being and work-related quality of life. If compassion fatigue is high, nurses's mental and physical health will often suffer, leading to inadequate clinical competence, including medical errors related to bad judgement and lessened wisdom, inefficient and low-quality clinical care, and patient discontentment (Gustafsson & Hemberg, 2021; Stoewen, 2020).

The nurses have above-average psychological well-being, specifically on the subscale of positive relations with others. Having positive relationships with others is an essential component in developing trusting and

lasting relationships, as well as belonging to network communication (Curado *et al.*, 2022). This is important, especially in a hospital setting, because nurses frequently spend their time communicating. In addition, a calm and relaxed approach reflects maturity and leads to more interaction and better consideration with others. Communication is an important part of team interaction (Jiang, Wang, & Feng, 2023; Lee *et al.*, 2022). In a medical team setting, positive relationships with other nurses and staff often result in increased knowledge, empowerment, and improved performance.

Work-related quality of life has an overall slightly above average level among the participants. The stress at work subscale has the highest mean score of 2.98. Nurses are taught to think about the lives of their patients and rarely about themselves. Godsey, Houghton & Hayes (2020) had gone over findings on stress in critical care nursing and discovered several causes of stress among nurses in critical care units. The high degree of knowledge and skill that are necessary to the urgency of responding swiftly in an emergency, the very high workload and understaffing, and the lack of support and inability to 'escape' for a break were all identified as stressors. The study of Jakimów *et al.* (2024) found that the WRQoL scores of doctors who were not working in hospitals were higher than for those who were working in the hospitals. This means that the place of work can be considered a factor affecting the work-related quality of life.

In their study, Flaubert *et al.* (2021) highlighted that effective workplace health promotion, recruiting, and retention initiatives must address critical issues such as nursing workload and health indicators. Dighe (2020) stated that alleviation of occupational stress results in a decreased attrition rate and more and more nurses switching from the nursing profession. Other factors found were working situations such as rank in job, work shift, and patient behaviour (Labrague & Delos Santos, 2021). Nurses must be stress-free and in excellent health when meeting the physical and emotional needs of their jobs. Results in the current study reveal no significant relationship between compassion fatigue and psychological well-being. This contradicts the result of the study by Singh *et al.* (2020), where compassion fatigue was seen to have a negative effect on the mental well-being of professionals, which could impair the tasks of providing clients with a high quality of care. The current result also opposes the conclusion of Potter, Pion & Gentry (2015) that nurses with 11 to 20 years of experience encounter the most compassion fatigue, which could affect their psychological well-being.

Furthermore, Wang *et al.* (2023), Tasdemir *et al.* (2024), and Ustun & Dogan (2022) found that young nurses with few years of nursing experience have higher levels of compassion fatigue than nurses aged 40 years and older. According to Arribas *et al.* (2020), 41.8% of oncology staff nurses had a moderate level of compassion fatigue. The studies mentioned above show that nurses' moderate and high compassion fatigue levels are due to work experiences, and this could affect their psychological well-being. A possible reason why compassion fatigue and psychological well-being do not have a significant relationship in this study could be that the respondents have moderately high psychological well-being. A Chinese study by Akpor, Olusayo and Olorunfemi (2023) concluded that stressors such as workload, interpersonal conflict, time constraints, lack of self-care, death, and conflict with other workers can be stressful or traumatic to nurses. But despite these obstacles, resilience helps nurses deal with their work situation while maintaining stable and healthy mental well-being. It could then be that another factor (e.g., resilience) not accounted for in this study affects either or both compassion fatigue and psychological well-being, contributing to the current non-significant relationship.

Another possible reason for no significant relationship between the two variables could be that the working conditions of the nurses could have been exacerbated by the dire conditions brought about by the COVID-19 pandemic. This might have contributed to high levels of compassion fatigue among the respondents. On the other hand, a significant negative correlation is seen between compassion fatigue and work-related quality of life. The quality of care given by nurses is affected by the compassion fatigue they experience. Most staff nurses work 8.5 or 12.5-hour shifts and are often compelled to work extra hours (Manuela, Bauer & Doris, 2020), most especially so during the pandemic. According to the nursing literature, high ratio levels of nurse-patient and nursing staff exhaustion are potential causes for client fatalities and incidents (Sharma & Rani, 2020; Tamayo *et al.*, 2022). Additional stress and the potential mental distress associated with compassion fatigue can cause the nurses to drive away from the medical field. Dos Santos *et al.* (2024) discovered a connection between an individual's personal traits and their nursing profession. They believe that the level of support they receive in managing

compassion fatigue, along with their self-care practices or lack thereof, either serve as protective factors or triggers for this phenomenon.

Limitations

The study has some limitations that need to be recognized. First, the researchers were unable to determine directionality and causation since a correlational study design was used. Thus, additional research is necessary to evaluate causal inferences between variables. Second, employing several self-report surveys may result in response bias and common method variation. The variation in compassion fatigue and compassion satisfaction may potentially be explained by other factors that were not included in our investigation. Third, the data were collected during the time of the COVID-19 pandemic, which could have magnified the responses of the participants.

CONCLUSION

Nurses play an important role in the healthcare team. They work with doctors and spend time with the patients to provide the care they need. Nurses need protection not only physically but also mentally, emotionally, and spiritually for them to carry out their important functions in the healthcare system effectively. Hence, it is essential that hospital administrators detect and acknowledge the warning signs of compassion fatigue in their staff and know the possible threats of this condition to provide the necessary guidance and assistance to nurses.

To prevent nurses from emotional exhaustion and guarantee that staff nurses can manage their jobs, it is vital to provide nurses with assistance, particularly in controlling and eliminating sources of workplace stress. Some strategies such as improving the working environment for nurses and supporting their self-growth through training courses are highly recommended to alleviate workplace stress. These strategies can result in a positive impact on the physical and psychological well-being of staff nurses, and the quality of care they provide will be enhanced. Future studies may be done that can focus on other factors that may affect compassion fatigue, such as resilience, workplace humour, and compassion. Also, increasing the scope of the study by involving nurses working in different areas, such as public health nursing and occupational health nursing, may be examined.

Conflict of Interest

The authors declare that they have no conflict of interests.

ACKNOWLEDGMENT

The authors would like to express their gratitude to all the nurses who participated in the study.

REFERENCES

- Abou Hashish, E. A., & Ghanem Atalla, A. D. (2023). The relationship between coping strategies, compassion satisfaction, and compassion fatigue during the COVID-19 pandemic. *SAGE Open Nursing*, 9, 23779608231160463. <https://doi.org/10.1177/23779608231160463>
- Adams, R. E., Boscarino, J. A., & Figley, C. R. (2006). Compassion Fatigue--Short Scale. *American Journal of Orthopsychiatry*, 76(1), 103–108. <https://doi.org/10.1037/t30396-000>
- Ahmed, W. A., Abdulla, Y. H. A., Alkhadher, M. A., & Alshameri, F. A. (2022). Perceived stress and coping strategies among nursing students during the COVID-19 pandemic: a systematic review. *Saudi Journal of Health Systems Research*, 2(3), 85-93. <https://doi.org/10.1159/000526061>
- Akpor, O. A., Olusayo, A. V., & Olorunfemi, O. (2023). Occupational Stress: An Impediment to Quality Nurse–Patient Relationship—A Rapid Review. *CHRISMED Journal of Health and Research*, 10(2), 125-131. http://dx.doi.org/10.4103/cjhr.cjhr_66_22
- Al Sabei, S. D., Labrague, L. J., Miner Ross, A., Karkada, S., Albashayreh, A., Al Masroori, F., & Al Hashmi, N.

- (2020). Nursing work environment, turnover intention, job burnout, and quality of care: The moderating role of job satisfaction. *Journal of Nursing Scholarship*, 52(1), 95-104. <https://doi.org/10.1111/jnu.12528>
- Ananda Y. (2019). The Relationship between Nursing Service Quality and the Level of Patient Satisfaction in the Inpatient Care of Dr. Rasidin Padang. *Malaysian Journal of Medical Research (MJMR)*, 3(2), 61-64. <https://doi.org/10.31674/mjmr.2019.v03i02.006>
- Arribas-García, S., Alboniga-Mayor, J. J., & Iturrioz, E. B. (2020). Compassion satisfaction and compassion fatigue in oncology nursing staff: descriptive and correlational study. *Enfermería Global*, 19(4), 133-144. <https://doi.org/10.6018/eglobal.417261>
- Bernstein, D.A., Penner, L.A., Stewart, A.C. and Roy, E.J. (2008) *Psychology. 8th Edition*, Houghton Mifflin Company, Boston, New York. <https://pdfroom.com/books/psychology-eighth-edition/QEBgjzmMgoN/download>. Accessed on 12th August 2022.
- Curado, C., Henriques, P. L., Jerónimo, H. M., & Azevedo, J. (2022). The contribution of communication to employee satisfaction in service firms: A causal configurational analysis. *Vision*, 0(0). <https://doi.org/10.1177/09722629221101157>
- Dighe, S. V. (2020). Occupational stress among nurses. *International Journal of Science and Healthcare Research*, 5(3), 25-29. https://ijshr.com/IJSHR_Vol.5_Issue.3_July2020/IJSHR005.pdf. Accessed on 24th January, 2024
- Dos Santos, L. B. P. A., de Andrade Alvarenga, W., Leite, A. C. A. B., Neris, R. R., de Lima, R. A. G., de Montigny, F., ... & Nascimento, L. C. (2024, May). Compassion Fatigue: A Comprehensive Discussion on its Development and Repercussions Among Oncology Nurses. *In Seminars in Oncology Nursing*, 40(4). WB Saunders, USA. <https://doi.org/10.1016/j.soncn.2024.151655>
- Easton, S., & Van Laar, D. (2018). *User Manual for the Work-Related Quality of Life (WRQoL) Scale: A Measure of Quality of Working Life*. (2nd ed.). University of Portsmouth, United Kingdom. <https://doi.org/10.17029/EASTON2018>
- Erkin, Ö., Konakçı, G., & Duran, S. (2021). Secondary traumatic stress in nurses working with patients with suspected/confirmed COVID-19 in Turkey. *Perspectives in Psychiatric Care*, 57(4), 1664–1672. <https://doi.org/10.1111/ppc.12733>
- Godsey, J. A., Houghton, D. M., & Hayes, T. (2020). Registered nurse perceptions of factors contributing to the inconsistent brand image of the nursing profession. *Nursing Outlook*, 68(6), 808-821. <https://doi.org/10.1016/j.outlook.2020.06.005>
- Govasli, L., & Solvoll, B. A. (2020). Nurses' experiences of busyness in their daily work. *Nursing Inquiry*, 27(3), 1-8. <https://doi.org/10.1111/nin.12350>
- Gustafsson, T., & Hemberg, J. (2022). Compassion fatigue as bruises in the soul: A qualitative study on nurses. *Nursing Ethics*, 29(1), 157-170. <https://doi.org/10.1177/09697330211003215>
- İlhan, B., & Küpeli, İ. (2022). Secondary traumatic stress, anxiety, and depression among emergency healthcare workers in the middle of the COVID-19 outbreak: A cross-sectional study. *The American Journal of Emergency Medicine*, 52, 99-104. <https://doi.org/10.1016/j.ajem.2021.11.051>
- Jakimów, K., Ciesielka, J., Bonczek, M., Rak, J., Matlakiewicz, M., Majewska, K., ... & Winder, M. (2024, July). Work-Related Quality of Life among Physicians in Poland: A Cross-Sectional Study. *In Healthcare* 12(13). <https://doi.org/10.3390/healthcare12131344>
- Jiang, Z., Wang, Z., & Feng, C. (2023). Choosing a better communication style: revealing the relationship between communication style and knowledge hiding behaviour. *Humanities and Social Sciences Communications*, 10(1), 1-11. <https://doi.org/10.1057/s41599-023-02063-5>

- Khatatbeh, H., Pakai, A., Al-Dwaikat, T., Onchonga, D., Amer, F., Prémusz, V., & Oláh, A. (2022). Nurses' burnout and quality of life: A systematic review and critical analysis of measures used. *Nursing Open*, *9*(3), 1564-1574. <https://doi.org/10.1002/nop2.936>
- Labrague, L. J., & de Los Santos, J. A. A. (2021). Resilience as a mediator between compassion fatigue, nurses' work outcomes, and of care during the COVID-19 pandemic. *Applied Nursing Research*, *61*, 151476. <https://doi.org/10.1016/j.apnr.2021.151476>
- Lee, E., Kang, M., Kim, Y., & Yang, S. U. (2022). Exploring the interrelationship and roles of employee-organization relationship outcomes between symmetrical internal communication and employee job engagement. *Corporate Communications: An International Journal*, *27*(2), 264-283. <https://doi.org/10.1108/CCIJ-12-2020-0167>
- Maddigan, J., Brennan, M., McNaughton, K., White, G., & Snow, N. (2023). The prevalence and predictors of compassion satisfaction, burnout and secondary traumatic stress in registered nurses in an eastern Canadian province: A cross-sectional study. *Canadian Journal of Nursing Research*, *55*(4), 425-436. <https://doi.org/10.1177/08445621221150297>
- National Academies of Sciences, Engineering, and Medicine; National Academy of Medicine; Committee on the Future of Nursing 2020–2030, Flaubert, J. L., Le Menestrel, S., Williams, D. R., & Wakefield, M. K. (Eds.). (2021). *The Future of Nursing 2020-2030: Charting a Path to Achieve Health Equity*. National Academies Press, US. <https://www.ncbi.nlm.nih.gov/books/NBK573914/>. Accessed on 28th February, 2024.
- Okuhara, M., Sato, K., & Kodama, Y. (2021). The nurses' occupational stress components and outcomes, findings from an integrative review. *Nursing Open*, *8*(5), 2153-2174. <https://doi.org/10.1002/nop2.780>
- Potter, P., Pion, S., & Gentry, J. E. (2015). Compassion fatigue resiliency training: The experience of facilitators. *The Journal of Continuing Education in Nursing*, *46*(2), 83-88. <https://doi.org/10.3928/00220124-20151217-03>
- Ryff, C. D., & Keyes, C. L. M. (1995). The structure of psychological well-being revisited. *Journal of Personality and Social Psychology*, *69*(4), 719-727. <https://doi.org/10.1037//0022-3514.69.4.719>
- Sharma, S. K., & Rani, R. (2020). Nurse-to-patient ratio and nurse staffing norms for hospitals in India: A critical analysis of national benchmarks. *Journal of Family Medicine and Primary Care*, *9*(6), 2631–2637. https://doi.org/10.4103/jfmpc.jfmpc_248_20
- Shyu, Y. I. L. (2019). Maintaining and improving psychological well-being. *Journal of Nursing Research*, *27*(3), e19. <https://doi.org/10.1097/jnr.0000000000000333>
- Singh, J., Karanika-Murray, M., Baguley, T., & Hudson, J. (2020). A systematic review of job demands and resources associated with compassion fatigue in mental health professionals. *International Journal of Environmental Research and Public Health*, *17*(19), 6987. <https://doi.org/10.3390/ijerph17196987>
- Sousa, V. D., Driessnack, M., & Mendes, I. A. C. (2007). An overview of research designs relevant to nursing: Part 1: quantitative research designs. *Revista Latino-Americana de Enfermagem*, *15*, 502-507. <https://doi.org/10.1590/s0104-11692007000300022>
- Stoewen D. L. (2020). Moving from compassion fatigue to compassion resilience Part 4: Signs and consequences of compassion fatigue. *The Canadian Veterinary Journal*, *61*(11), 1207–1209. https://pmc.ncbi.nlm.nih.gov/articles/PMC7560777/pdf/cvj_11_1207.pdf. Accessed on 20th January, 2024.
- Tamayo, R. L. J., Quintin-Gutierrez, M. K. F., Campo, M. B., Lim, M. J. F., & Labuni, P. T. (2022). Rationing of nursing care and its relationship to nurse practice environment in a tertiary public hospital. *Acta Medica Philippina*, *56*(3), 64-71. <https://doi.org/10.47895/amp.vi0.3124>
- Taşdemir, H. İ., Aydın, R., Dursun Ergezen, F., Taşdemir, D., & Ergezen, Y. (2024). Unveiling the burden of

- compassion fatigue in nurses. *Nursing Ethics*, 31(2-3), 371-387. <https://doi.org/10.1177/09697330231200571>
- Ustun, G., & Dogan, N. (2022). Emotional Labor Behavior and Compassion Fatigue in Nurses Caring for Individuals with COVID-19: A descriptive Cross-Sectional Study. *International Journal of Caring Sciences*, 15(3), 1640-1648. <https://www.internationaljournalofcaringsciences.org/docs/1.ustusn.pdf>. Accessed on 20th February, 2024
- Veda, A., & Roy, R. (2020). Occupational stress among nurses: A factorial study with special reference to Indore City. *Journal of Health Management*, 22(1), 67-77. <https://doi.org/10.1177/0972063420908392>
- Wang, Y., Li, Y., Li, W., Chen, A., & Sun, Z. (2023). Effect of compassion fatigue on the caring ability of young psychiatric nurses: A dominance analysis and chain mediation model. *Nursing Open*, 10(7), 4313-4320. <https://doi.org/10.1002/nop2.1674>
- Wei, H., Aucoin, J., Kuntapay, G. R., Justice, A., Jones, A., Zhang, C., ... & Hall, L. A. (2022). The prevalence of nurse burnout and its association with telomere length pre and during the COVID-19 pandemic. *PloS One*, 17(3), e0263603. <https://doi.org/10.1371/journal.pone.0263603>
- Yeşil, A., & Polat, Ş. (2023). Investigation of psychological factors related to compassion fatigue, burnout, and compassion satisfaction among nurses. *BMC Nursing*, 22(1), 12. <https://doi.org/10.1186/s12912-023-01174-3>