



Compassion Fatigue and Adversity Quotient among Medical Frontliners

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Abstract

The COVID-19 pandemic took its toll not only emotionally but also mentally for many people across the globe. It placed an unprecedented strain on many countries' healthcare systems, adding to the stress experienced by people working in helping professions, notably medical frontline workers. Individuals in caring professions are at risk of long-term Compassion Fatigue (CF) and hopelessness while providing care to patients (Cocker & Joss, 2016). Professional Quality of Life or ProQoL is crucial not only for helping professionals but also for patients since patient treatment is linked to medical professionals' level of ProQoL. Stoltz (1997) added the concept of the Adversity Quotient to the growing body of research in resilience which shows us how an individual can withstand and manage adversity. In this paper, the researchers would like to add to the existing body of knowledge a study on the relationship between medical frontline worker's Compassion Fatigue and Adversity Quotient. The researchers utilized two instruments: (1) the Professional Quality of Life (ProQoL) Scale, and (2) the Adversity Quotient® Profile.

Keywords: *Compassion Fatigue, Philippine healthcare workers, ProQoL scale, Adversity Quotient® Profile*

Introduction

The emergence of the COVID-19 pandemic took its toll not just on the emotional but also on the mental state of many people. It created an unprecedented burden on many countries' healthcare systems, bringing additional stress for those in helping professions, particularly medical frontlines. Providing care to patients puts individuals in helping

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professions at risk of long-term compassion fatigue (CF) and hopelessness (Wentzel & Brysiewicz, 2018). Noticeably enough, the growing interest in the occupational health of individuals in the healthcare field focuses primarily on compassion and professionals' quality of life, or how an individual feels towards his or her work (Stamm, 2010). As stated by Galiana (2017), several researchers have also been pointing out for many years that working in social and health services can be particularly stressful due to repeated exposure to disease and death. Furthermore, some studies suggest that the COVID-19 pandemic increased stress, burnout, anxiety, depression, and sleep disturbances among medical front liners (Trumello, et al., 2020; Wang, 2020; Kandula & Wake, 2021), while other studies report higher compassion satisfaction and lower secondary traumatization (Buselli, et al., 2020). Even the stigma and social isolation brought about by the COVID-19 pandemic correlated with biopsychosocial damage and decreased quality of life, including anxiety, stress, and work overload among medical frontline professionals (Tiziana, 2020; Fincanha, et al., 2020). With this in mind, exploring the quality of life of medical health professionals during the COVID-19 pandemic can help enhance their ongoing welfare and even address possible subsequent development of mental health disturbances (Kandula & Wake, 2021).

Achieving Professional Quality of Life (ProQoL), a concept introduced as a combination of Compassion Satisfaction (the positive aspect) and Compassion Fatigue (the negative aspect), is substantially paramount in any profession, especially for those in which life and death are involved (Cocker & Joss, 2016). While Compassion Fatigue (CF) is further subdivided into Burnout and Secondary Traumatic Stress, it refers to a combination of physical, emotional, and spiritual exhaustion in providing support to patients who are experiencing significant distress and emotional pain (Stamm, 2010; Lombardo, 2011). On the other hand, Compassion Satisfaction (CS) is defined as the pleasure one gets from being able to perform tasks quickly and effectively.

ProQoL is not only important for helping professionals but also for patients, as the way patients are handled is significantly attributed to the negative ProQoL of medical professionals (Adolfo, 2019). A study conducted by Labrague and De Los Santos (2021) found that frontline nurses in the Philippines who were reported to be experiencing Compassion Fatigue (CF) had the quality of care they provided to their patients as well as their work outcomes adversely affected. However, it is important to mention that there are several predictors for assessing ProQoL (Adolfo, 2019). For example, in a recent cross-sectional survey study, it was found based on qualitative responses that the ProQoL of

healthcare employees was insufficient in gauging other factors of stressors, particularly outside of work (Dwyer, Alt, Brooks, Katz, & Poje, 2021).

For many years, even today, there has been a wealth of research on the link between compassion fatigue and resilience. Resilience is referred to as an individual's ability to bounce back or recover quickly from difficulties and stressful situations, which enables individuals to remain efficient in carrying out tasks (Robertson & Cooper, 2013). In a recent study conducted by Litam and colleagues (2021), it was found out that resiliency had a strong positive relationship with compassion fatigue among professional counselors during the COVID-19 pandemic, which emphasized the importance of cultivating resilience among helping professionals. Given the extensive body of knowledge on compassion fatigue and resiliency, as well as its emphasis on the importance of intervention, many researchers have started to focus on building interventions to improve compassion fatigue resiliency, particularly for those in helping professions who are predisposed to compassion fatigue due to caseloads and vicarious traumatization (Flarity, et al., 2016).

Relating to the growing body of knowledge on resilience, the concept of Adversity Quotient was introduced by Dr. Paul G. Stoltz, which tells us how an individual can resist and cope with adversities (Rafols, 2015). The Adversity Quotient® Profile has been widely used in different fields of study to measure and strengthen human resilience. Moreover, AQ tools and techniques help identify and improve individuals' AQ by building their resilience (Stoltz, 1997). Although several studies have explored Compassion Fatigue (CF) and Adversity Quotient (AQ) among various norms, more efforts have yet to be made to explore the link between compassion fatigue and adversity quotient among Filipino Medical Frontliners, especially since the COVID-19 pandemic started. This study aims to know if there is a relationship between Compassion Fatigue and Adversity Quotient among Filipino Medical frontliners.

Methodology

Research Design and Locale

This study is quantitative research that specifically used a correlational design to determine the relationship between Compassion Fatigue and Adversity Quotient among Filipino Medical frontliners and to provide an objective measure of the analysis of the data gathered through standardized questionnaires. The research was conducted in Metro Manila. This location was selected as it offers the best conditions for gathering respondents and

collecting the necessary data. In the Philippines, Metro Manila was the most impacted area and the location for the majority of the cases reported. In addition, on March 15, 2020, a community quarantine and a state of calamity were declared in the area (Talabong, 2020; Philstar Global, 2020). Therefore, Metro Manila offers the best location to find the frequency of available and purposive characteristics of Filipino medical frontliners.

Population and Sampling

The target respondents for this study are medical frontliners, including doctors, nurses, medical technologists, medical first aiders, psychologists, etc., who directly dealt with assisting COVID-19 patients in the Philippines, particularly in Metro Manila. To be eligible for the study, the researchers set criteria of being at least 25 years old, working as a medical frontliner directly involved in assisting COVID-19 patients and residing in Metro Manila. Through a snowball sampling technique, the questionnaires were sent randomly to the targeted respondents virtually, and only 42 qualified respondents completed the said questionnaires. 86% of the respondents are in the age bracket of 25 to 40 years old, 76% of them reside in Metro Manila, and 95% of them were directly involved in dealing with COVID-19 patients.

Instrumentation

The researchers conducted a survey virtually through Google Forms, containing informed consent, demographics, and the two (2) standardized questionnaires used in this study, namely the Professional Quality of Life Scale (ProQoL) Version 5 (2009) and the Adversity Quotient® Profile.

The first test used to measure the Compassion Fatigue of the respondents was the Professional Quality of Life Scale (ProQoL) Version 5 (2009), developed by B. Hudnall Stamm (NovoPsych, 2021). It is a concept that was introduced as a combination of Compassion Satisfaction (the positive aspect) and Compassion Fatigue (the negative aspect). Compassion Satisfaction (CS) is defined as the pleasure one gets from being able to do their work efficiently (Stamm, 2010), while Compassion Fatigue (CF) - is then further divided into two components, namely Burnout (BO) and Secondary Traumatic Stress (STS) - refers to a combination of physical, emotional, and spiritual exhaustion in providing support to patients who are in significant distress and emotional pain (Stamm, 2010; Lombardo, 2011). This test consists of 30 items, utilizing a 5-point Likert scale ranging from 1 - "Never", 2 - "Rarely", 3 - "Sometimes", 4- "Often", and 5 - "Very often". Every scale component was combined and utilized as a total. As an illustration, consider the summing items (3, 6, 12, 16, 18, 20, 22,

24, 27, 30) in CS. 1–4, 8, 10, 15, 17, 19, 21, 26, and 29 are the summary components that make up BO. Summing items for STS = (2, 5, 7, 9, 11, 13, 14, 23, 25, 28). The total scores for each category range from 10 to 50. A lower CS level is indicated by a score of ≤ 22 . Average values range from 23 to 41, while ≥ 42 indicates elevated quantities. A score of less than 22 for BO and STS indicates decreases; 23–41 denotes moderate levels, and ≥ 42 denotes high BO levels. Cronbach's alpha for the CS scale was 0.88, for the BO scale it was 0.75, and for the STS scale, it was 0.81 (Stamm, 2010). According to Adolfo (2020), this scale has good psychometric properties and is used internationally in places like Australia (Heritage et al., 2018), Canada (Geoffrion et al., 2019), and Hebrew (Samson et al., 2016). It has also been translated into several languages, including Spanish and Portuguese (Galiana et al., 2017), Iranian (Hassan et al., 2019), and Hebrew. Adolfo (2020) also found that the instrument is very reliable (CS subscale, $\alpha=0.81$; BO subscale, $\alpha=0.73$; STS subscales, $\alpha=0.76$) when used in conjunction with a Philippine norm.

The second test used to measure the Adversity Quotient of the respondents was the Adversity Quotient® Profile, developed by PEAK Learning, led and founded by Dr. Paul G. Stoltz. It is a 14-item digital assessment that covers the subject's perception of a response to a diverse series of hypothetical adverse events, which are being scored using an interactive 10-point Likert scale to respond to the presented scenarios that measure its four (4) domains, namely: Control, Ownership, Reach, and Endurance. The Adversity Quotient® Profile elicits a pattern of response based on the 14 items. Ten out of 14 items are scored. Total scores for each subscale are determined by the sum of the scored items within that scale. Together with a thorough profile summary, the assessment aims to shed light on the nature and extent of a person's hardwired habit of coping with adversity. After the researchers sent the developer an email requesting permission, the request was approved. The developer made the questions available via an encrypted URL that could only accept 125 answers. According to the agreement with PEAK Learning, Inc., the questionnaire can be completed in 7 to 10 minutes, even though they were not given access to the entire number of test items. Computed raw scores were provided after a certain period agreed upon with PEAK Learning, Inc. This agreement also stated that the questionnaire could not be published or appended in any way. It was also indicated in the manual that the AQP's all four subscales have extremely high reliability (.85 to .93). Additionally, Total AQ has an excellent overall reliability score (.92).

Data Gathering Procedure

Due to COVID-19 situation constraints, the researchers gathered data online through a Google Form. The link included a brief description of the study, informed consent, and the standardized questionnaires, which were then sent through email and various social media platforms. The respondents were instructed to upload a screen capture of the page upon completing the test. The respondents were also reminded to complete the test every week from the first to the third week of November to facilitate a higher response rate.

Data Analysis Procedure

Upon collecting the data, the researchers proceeded to analyze the data using SPSS to get an objective measure of the data. To present a valid and reliable interpretation of the data, the researchers used the mean score, standard deviation, and Pearson R, or the Pearson Correlation Coefficient, to provide a quantitative description of the data.

Results and Discussion

Table 1 below shows the result of the mean and standard deviation of the composite score of compassion fatigue ($\bar{x} = 29.43$, $sd = 2.92$) and adversity quotient ($\bar{x} = 132.24$, $sd = 19.62$). The mean of both compassion fatigue and adversity quotient fell under the average level, which means that Filipino medical frontliners experience a normal range of stress and exhaustion in their practice as a usual part of their profession as well as a normal capability to cope with and overcome these adversities. This also indicates that despite their exposure to secondary life-threatening events like the pandemic, they are still able to become efficient at work and endure work-related secondary stress like the surge in COVID-19 patients (Stamm, 2009). Whereas the average level of Adversity Quotient indicates that Filipino medical frontliners can sufficiently take control and ownership of their role as front liners while being able to endure and get past the adversity they are facing (PEAK Learning, 2020).

Table 1: Mean and Standard Deviation of the Composite Scores of Compassion Fatigue and Adversity Quotient

	Mean (\bar{x})	Standard Deviation (sd)	Data Interpretation
Compassion Fatigue	29.43	2.92	Average
Adversity Quotient	132.24	19.62	Average

Compassion Fatigue comprises two dimensions namely, Burnout and Secondary Traumatic Stress. Table 2 below shows the mean and standard deviation scores of the Compassion Fatigue Scale, or the Professional Quality of Life (ProQoL) Scale, which is composed of three (3) subscales, namely the Compassion Satisfaction Scale ($\bar{x} = 41.31$, $sd = 5.08$), the Burnout Scale ($\bar{x} = 22.24$, $sd = 4.29$) and the Secondary Traumatic Stress Scale ($\bar{x} = 24.81$, $sd = 6.59$), in which the latter two are the dimensions of Compassion Fatigue.

Table 2: Mean and Standard Deviation of the Dimensions of Professional Quality of Life (ProQoL)

	Mean (\bar{x})	Standard Deviation (sd)	Data Interpretation
Compassion Satisfaction Scale	41.31	5.08	Average
Burnout Scale	22.24	4.30	Low
Secondary Traumatic Stress Scale	24.81	6.60	Average

Scores on the Burnout Scale are classified as low range level, which indicates a reflective probability of positive feelings about the ability to be effective at work. Whereas Secondary Traumatic Stress scores are classified on the average range level, indicating endurable stress from work-related secondary exposure to traumatic stressful events, in this case, the surge in COVID-19 patients (Stamm, 2009). The average range level of Compassion Satisfaction indicates that Filipino medical frontliners have sufficient levels of drive for them to be able to do their work well. According to Stamm (2009), this may manifest in having sufficient pleasure to help their patients through their work, or even feeling positively about their colleagues and being able to contribute to their work setting by doing good to society.

To assess the relationship between the subscales and dimensions of Compassion Fatigue and Adversity Quotient, the researchers analyzed these scores through Pearson's correlation coefficient.

Table 3: Pearson's correlation of Compassion Satisfaction Scale and Adversity Quotient

	Pearson's correlation (r)	Sig. (2-tailed)	Data Interpretation
Compassion Satisfaction Scale and Adversity Quotient	.24	.13	No significant relationship

Table 3 above shows that the Compassion Satisfaction Scale and Adversity Quotient have a Pearson's correlation score of ($r = .238$) with a significance of ($\alpha = .129$), which therefore indicates that they do not have a significant relationship with each other.

This result may indicate that despite the Filipino medical frontliners being able to face and positively cope through the adversities they were experiencing, their level of Compassion Satisfaction stands alone from their level of Adversity Quotient and their Compassion Satisfaction may come from other external factors like positive reinforcements that make them feel they are growing at work. Meaning, these individuals may benefit from engagements, opportunities for continuing education, and even good relationships with their colleagues and patients (Stamm, 2009), which may also contribute to their level of compassion satisfaction at work. This also indicates that they can cope with the stressful COVID-19 patient surges, not due to their compassion satisfaction but by their level of adversity quotient alone.

Table 4: Pearson's correlation of Burnout Scale and Adversity Quotient

	Pearson's correlation (r)	Sig. (2-tailed)	Data Interpretation
Burnout Scale and Adversity Quotient	-.30	.053	No significant relationship

Table 4 above revealed that the Burnout Scale and Adversity Quotient have a Pearson's correlation score of ($r = -.301$) with a significance of ($\alpha = .053$) and indicated as well that both do not have a significant relationship. The Adversity Quotient generally helps alleviate feelings of burnout (Shamim, 2021). However, Table 4 shows that there is no relationship between Burnout and Adversity Quotient, indicating that Filipino medical frontliners can cope positively with adversities regardless of their burnout levels. This result

may also correspond to their low-level scores of Burnout (see Table 2), which shows that they do not experience this in the face of the stressful events of COVID-19. Other external factors such as engagements, opportunities, and work relationships (Stamm, 2009), as mentioned previously, may have contributed to higher levels of satisfaction and lower levels of burnout, thus, making Filipino medical frontliners cope independently through their levels of adversity quotient alone, despite their burnout levels. *. *Correlation is significant at the 0.05 level (two-tailed).*

On the other hand, table 5 above shows that the Secondary Traumatic Stress Scale and Adversity Quotient have a Pearson's correlation score of ($r = -.34$) with a significance of ($\alpha = .03$) and therefore show a significant relationship with each other.

The results show that Filipino medical frontliners' secondary traumatic experience during the COVID-19 pandemic negatively correlates with their level of adversity quotient, indicating that the higher their capability to cope with and overcome stressful events like the pandemic, the lower their possible experience of traumatic stress. According to Stamm (2009), exposure to other people's traumatic events because of work can lead to secondary trauma. A study by Kalaitzaki & Rovithiz (2021) found that perceived life-threatening situations, in this case, the direct exposure of Filipino medical frontliners to COVID-19 cases, can cause unhealthy coping strategies which increases the chance of experiencing secondary traumatic stress. For example, frontliners need to learn and accept that the pandemic is beyond their control as professionals. The Adversity Quotient promotes Control and Ownership as two of its subcomponents, which help individuals develop healthier coping strategies by learning to what extent they can influence the situation and when they should and should not step up in stressful events (PEAK Learning, 2020). Thus, the higher the level of adversity quotient, the lower the possibility of experiencing secondary traumatic stress, and this supports the results gathered.

Table 6: Pearson's correlation of the composite score of Compassion Fatigue and Adversity Quotient

	Pearson's correlation (r)	Sig. (2-tailed)	Data Interpretation
Compassion Fatigue and Adversity Quotient	-.18	.40	No significant relationship

Lastly, when the composite scores of Compassion Fatigue with Adversity Quotient were analyzed, it showed a Pearson's correlation score of ($r = -.18$) with a significance of ($\alpha = .40$), which therefore indicates that they do not have a significant relationship with each other.

Overall, there is no significant relationship between the ProQoL or the Compassion Fatigue of an individual, particularly the medical frontliners, and their level of Adversity Quotient. This has been consistent with some research studies suggesting that the relationship between compassion fatigue and the adversity quotient is still unclear (Sinclair et al., 2017). Although fatigue is considered one of the challenges medical frontliners experienced during the COVID-19 pandemic, factors such as their health conditions, occupational exposures, and protective equipment, as well as psychological stressors such as anxiety, exhaustion, and depression are all necessary as well, and play an important role in the well-being of both the patient and the medical professional (Thi et al., 2021; Carpio-Orantes et al., 2020; Sapaniuc et al., 2022). The respondents of this study, although pooled from the same locale, came from different types of medical institutions and therefore had a range of various experiences during the pandemic. Lastly, one's professional quality of life could also be influenced by external factors such as age, monthly compensation, and working hours (Adolfo, 2021).

Conclusion and Recommendations

Compassion Fatigue and the Adversity Quotient do not have a relationship overall. However, certain factors like the severity of adverse conditions, the nature of the job of medical frontliners, and individual differences in responding to adversities should be considered. Compassion Satisfaction is also found to not have a relationship with Adversity Quotient, indicating that despite the COVID-19 adversities, medical frontliners still felt satisfied from being able to execute their tasks successfully and assist people through their profession. Moreover, Burnout, one of the two components of Compassion Fatigue, was found to not have a relationship with Adversity Quotient which can be explained by the fact that despite being exposed to adverse situations, Filipino medical frontliners could still perform their job efficiently and with ease, without the unpleasant emotions of undue stress and hopelessness. On the other hand, the second component of Compassion Fatigue, Secondary Traumatic Stress, was found to have a relationship with the Adversity Quotient, indicating that the higher the adversity quotient of Filipino medical frontliners, the higher their secondary traumatic stress response from exposure to COVID-19 patients. Thus,

constant exposure to traumatic events like assisting COVID-19 patients, coupled with its dangers, plays an important role in the development of secondary traumatic stress among Filipino medical frontliners.

A wider range of scope is suggested for future studies relating to Compassion Fatigue and Adversity Quotient, specifically larger sample size and a more varied locale. Lastly, to combat Compassion Fatigue and possibly increase the Adversity Quotient of Filipino medical frontliners who may experience indirect or secondary traumatic stress from being exposed to and assisting COVID-19 patients, we suggest adequate mental health services be provided, focusing on rehabilitation and counseling, especially for individuals frequently exposed to stressful and traumatic situations. It is also optimal to recognize the early signs of Secondary Traumatic Stress so that institutions can provide immediate and appropriate intervention while emphasizing measures to promote a healthy Adversity Quotient.

AUTHOR INFORMATION

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References

- Adolfo, C. (2021). Predictors of professional quality of life among nurses: A cross-sectional study. *International Journal of Advanced and Applied Sciences*, 8(2), 44-53.
doi:10.21833/ijaas.2021.02.006
- AQ - PEAK Learning. (2020, May 26). *PEAK Learning*. <https://www.peaklearning.com/aq/>
- Buselli, R., Corsi, M., Baldanzi, S., Chiumiento, M., Del Lupo, E., Dell'Oste, V., Bertelloni, C. A., Massimetti, G., Dell'Osso, L., Cristaudo, A., & Carmassi, C. (2020). Professional quality of life and mental health outcomes among health care workers exposed to Sars-Cov-2 (Covid-19). *International Journal of Environmental Research and Public Health*, 17(17), 6180–. doi:10.3390/ijerph17176180
- Cocker, F., & Joss, N. (2016). compassion fatigue among healthcare, emergency and community service workers: A systematic review. *International Journal of Environmental Research and Public Health*, 13(6), 618–618.
<https://doi.org/10.3390/ijerph13060618>
- Dwyer, M. L., Alt, M., Brooks, J. V., Katz, H., & Poje, A. B. (2021). Burnout and compassion satisfaction: Survey findings of healthcare employee wellness during COVID-19 Pandemic using ProQOL. *Kansas Journal of Medicine*, 14, 121–127.
<https://doi.org/10.17161/kjm.vol1415171>
- Flarity, K., Nash, K., Jones, W., & Steinbruner, D. (2016). Intervening to improve compassion fatigue resiliency in forensic nurses. *Advanced Emergency Nursing Journal*, 38(2), 147–156. doi:10.1097/tme.000000000000101
- Ficanha, E. E., Silva, R. P., Badke, M. R., Cogo, S. B., Silva, & Jacobi, L. F. (2020). Aspectos biopsicossociais relacionados ao isolamento social durante a pandemia de Covid-19: uma revisão integrativa. *Research, Society and Development*.
<https://www.semanticscholar.org/paper/Aspectos-biopsicossociais-relacionados-ao-social-a-Ficanha-Silva/51dd38b892f118698244bf564c7547a291c4b0d3>
- Galiana, L., Arena, F., Oliver, A., Sansó, N., & Benito, E. (2017). Compassion satisfaction, compassion fatigue, and burnout in Spain and Brazil: ProQOL validation and cross-cultural diagnosis. *Journal of Pain and Symptom Management*, 53(3), 598–604.
doi:10.1016/j.jpainsymman.2016.09.014
- Kalaitzaki, A., & Rovithis, M. (2021). Secondary traumatic stress and vicarious posttraumatic growth in healthcare workers during the first COVID-19 lockdown in Greece: The role of resilience and coping strategies. *Psychiatriki*, 32(1), 19-25.

- Kandula, U. R., & Wake, A. D. (2021). Assessment of quality of life among health professionals during COVID-19: Review. *Journal of Multidisciplinary Healthcare*, 14, 3571–3585. <https://doi.org/10.2147/jmdh.s344055>
- Labrague, L. J., & De Los Santos, J. A. A. (2021). Resilience as a mediator between compassion fatigue, nurses' work outcomes, and quality of care during the COVID-19 pandemic. *Nursing Research*, 61, 151476. <https://doi.org/10.1016/j.apnr.2021.151476>
- Carpio-Orantes, L., Munguía-Sereno, A. E., Guerrero-Mancinas, Z. O., Aparicio-Sánchez, E. E., Segura-Rodríguez, O. I., García-Hernández, O., Escobar-Huerta, A., Dorantes-Nava, C., Garcés-García, E., Ortiz-Espinoza, C., Torres-Sánchez, J. L., López-Varela, L. D., Pascual-Epigmenio, S., & Márquez-Rodríguez, L. A. (2020). Frontline doctors infected with Covid-19 during a hospital outbreak in Veracruz, Mexico. *Open Forum Infectious Diseases*. <https://www.semanticscholar.org/paper/430.-Frontline-doctors-infected-with-Covid-19-a-in-Carpio-Orantes-Mungu%C3%ADa-Sereno/647273db39e9eada6fe485463422178be12b879e>
- Litam, S.D.A., Ausloos, C.D. & Harrichand, J.J.S. (2021), Stress and Resilience Among Professional Counselors During the COVID 19 Pandemic. *Journal of Counseling & Development*, 99, 384-395. <https://doi.org/10.1002/jcad.12391>
- Lombardo, B. & Eyre, C. (2011). Compassion fatigue: A nurse's primer. *OJIN: The Online Journal of Issues in Nursing*, 16(1). 10.3912/OJIN.Vol16No01Man03.
- NovoPsych. (2021, March). *The Professional Quality of Life Scale – 5 (ProQOL)*. NovoPsych. [https://novopsych.com.au/assessments/clinician-self-assessment/the-professional-quality-of-life-scale-5proqol\(ProQOL\)](https://novopsych.com.au/assessments/clinician-self-assessment/the-professional-quality-of-life-scale-5proqol(ProQOL)).
- Philstar Global. (2020, March 12). Walang Pasok: Duterte suspends Metro Manila classes until April 12. *The Philippine Star*. <https://www.philstar.com/headlines/2020/03/12/2000353/walang-pasok-duterte-suspends-metro-manila-classes-until-april-12>
- Ramaci, T., Barattucci, M., Ledda, C., & Rapisarda, V. (2020). Social Stigma during COVID-19 and its Impact on HCWs Outcomes. *Sustainability*, 12(9), 3834. <https://doi.org/10.3390/su12093834>
- Talabong, R. (2020, March 12). *Metro Manila to be placed on lockdown due to coronavirus outbreak*. Rappler. <https://www.rappler.com/nation/254101-metro-manila-placed-on-lockdown-coronavirus-outbreak>
- Robertson, I., & Cooper, C. L. (2013). Resilience [Editorial]. *Stress and Health: Journal of the International Society for the Investigation of Stress*, 29(3), 175–176.

<https://doi.org/10.1002/smi.2512>

- Sapaniuc, C., Lacatusu, G., Mihai, I., Rascanu, M., Bran, D., & Manciu, D. (2022). Burnout or anxiety?! A medical trial regarding resident doctors in a first line University Hospital during COVID 19 pandemic. *European Psychiatry*. <https://www.semanticscholar.org/paper/Burnout-or-anxiety!-A-medical-trial-regarding-in-a-Sapaniuc-Lacatusu/ae861a785705250852abeac313f46e625029b3a7>
- Shamim, T. (2021). The necessity to master the fifteen skill set of adversity quotient to circumvent occupational stress at the workplace. *Journal of Family Medicine and Primary Care*, 10, 4335 - 4335. https://doi.org/10.4103/jfmpe.jfmpe_1104_21.
- Sinclair, S., Raffin-Bouchal, S., Venturato, L., Mijovic-Kondejewski, J., & Smith-MacDonald, L. (2017). Compassion fatigue: A meta-narrative review of the healthcare literature. *International Journal of Nursing Studies*, 69, 9–24. <https://doi.org/10.1016/j.ijnurstu.2017.01.003>
- Stamm, B. H. (2009). Professional quality of life: Compassion satisfaction and fatigue version 5 (ProQOL). Center for Victims of Torture. https://proqol.org/ProQol_Test.html
- Stamm, B.H. (2010). *The concise ProQOL manual*. Pocatello. www.ProQOL.org
- Thi, P., Bao, T., Anh Gia, P., Duong, K., Gloria, V., Vo, B., & Phung, T. L. (2021). Psychological stress risk factors, concerns and mental health support among health care workers in Vietnam during the Coronavirus disease 2019 (COVID-19) Outbreak. *Frontiers in Public Health*. <https://www.semanticscholar.org/paper/Psychological-Stress-Risk-Factors%2C-Concerns-and-in-Nguyen/a289efdc4cdfcbc6581280c605cd54357198cfea>
- Trumello, C. Bramanti, S. M., Ballarotto, G., Candelori, C., Cerniglia, L., Cimino, S., Crudele, M., Lombardi, L., Pignataro, S., Viceconti, M, L., & Babore, A. (2020). Psychological adjustment of healthcare workers in Italy during the COVID-19 Pandemic: Differences in stress, anxiety, depression, burnout, secondary trauma, and compassion satisfaction between frontline and non-frontline professionals. *International Journal of Environmental Research and Public Health*, 17(22), 8358. <https://doi.org/10.3390/ijerph17228358>
- Wang, W., Song, W., Xia, Z., He, Y., Tang, L., Hou, J., & Lei, S. (2020). Sleep disturbance and psychological profiles of medical staff and non-medical staff during the early outbreak of COVID-19 in Hubei Province, China. *Frontiers in Psychiatry*, 11, 733.

<https://doi.org/10.3389/fpsy.2020.00733>

Wentzel, D., & Brysiewicz, P. (2018). A survey of compassion satisfaction, burnout, and compassion fatigue in nurses practicing in three oncology departments in Durban, South Africa. *International Journal of African Nursing Sciences*.

<https://doi.org/10.1016/j.ijans.2018.03.00>