The correlation between the professional quality of life and job satisfaction of physicians and nurses currently working in COVID-19 areas of tertiary hospitals in Metro Manila and CALABARZON (Region IV-A)

Alessi Chloie T. Alvarez; Angelika Loren Y. Aleta; Lawrence Vincent Y. Aleta; Karina Nicole A. Almase, RN; Mark Joel L. Aguit; Sarah Fayes R. Al-Balawi, PTRP; Alana Rae R. Alarcon; Alliah Shantal M. Alcantara, RMT; Janelle S. Alejandro; John Robert R. Almadin; Leopoldo P. Sison Jr., MD, MPH¹; and Maribel Emma Co-Hidalgo, MD, MSPH²

Abstract

Introduction The COVID-19 pandemic put the healthcare worker's professional quality of life (ProQoL) and job satisfaction (JS) at risk. This study determined the correlation between ProQoL, and the nine facets of and overall JS of physicians and nurses working in COVID-19 areas in Metro Manila and CALABARZON tertiary hospitals. It also determined their demographics, and measured the ProQoL, and overall JS and its nine facets.

Methods Physicians and nurses working in COVID-19 areas of tertiary hospitals in Metro Manila and CALABARZON were recruited and asked to answer the Professional Quality of Life Scale Version 5 and Job Satisfaction Survey. Correlation between ProQoL and JS was determined through Spearman's correlation coefficient.

Results High overall JS among 90 physician and nurse respondents correlated with high compassion satisfaction ($\rho = 0.310$), low burnout ($\rho = -0.480$) and secondary traumatic stress ($\rho = -0.240$). Correlations were found between ProQoL, and overall JS and pay, supervision, contingent rewards, coworkers, nature of work, and communication. A strong negative correlation between pay and burnout was observed ($\rho = -0.500$).

Conclusion The overall JS of physicians and nurses has a moderate positive correlation with compassion satisfaction, moderate negative correlation with burnout, and low negative correlation with secondary traumatic stress. Pay and burnout have a strong negative relationship.

Key words: Professional quality of life, job satisfaction, COVID-19, compassion satisfaction, compassion fatigue

Correspondence:

Alessi Chloie T. Alvarez, Department of Preventive and Community Medicine, College of Medicine, University of the East Ramon Magsaysay Memorial Medical Center, Inc., 64 Aurora Boulevard, Barangay Doña Imelda, Quezon City, PH 1113; Email: alessialvarez@gmail.com

¹Department of Preventive and Community Medicine, College of Medicine, University of the East Ramon Magsaysay Memorial Medical Center, Inc., Quezon City, PH

²College of Medicine, University of the East Ramon Magsaysay Memorial Medical Center, Inc., Quezon City, PH

OVID-19 was declared a public health emergency of international concern by the World Health Organization (WHO) in the first quarter of 2020. As of November 2021, the Philippines had more than 2,800,000 recorded cases, with approximately 23,000 active cases and 46,000 deaths. The National Capital Region (NCR) had the largest percentage, followed by Region IV-A (CALABARZON), with approximately 850,000 and 490,000 recorded cases, respectively. In August 2020, the Philippine College of Physicians (PCP) raised an alarm regarding healthcare

workers experiencing burnout from the increasing number of patients, falling ill while caring for them, and called for recalibration of the strategies in place to mitigate COVID-19.3 More than a year into the pandemic, the cases continue to rise, with community transmission of the virulent Delta variant of SARS-CoV-2 bringing a new surge of active cases.4 Despite the quarantine restrictions and protocols, hospitals are still overwhelmed and the healthcare workers exhausted due to the increasing demand for medical attention. Protests demanding for better working conditions, increased hospital workforce, and an end to government neglect and unpaid benefits, such as risk allowances and hazard pay, were held by the Philippine Nurses Association in September 2021.5

Professional quality of life is a relevant issue now more than ever as it deals with one's feelings towards their work that is altruistic in nature, such as those of healthcare workers. It includes compassion satisfaction and compassion fatigue. The elements of compassion fatigue are burnout and secondary traumatic stress. Job satisfaction is composed of nine dimensions, which are pay, promotion, supervision, fringe benefits, contingent rewards, operative procedures, co-workers, communication, and nature of work.⁷ A study on Slovakian helping professionals showed that a relationship exists between professional quality of life and job satisfaction.8 However, in the Philippines, there is insufficient evidence addressing the relationship between the professional quality of life and overall job satisfaction especially among Filipino nurses and physicians, and more so during this pandemic. This study aimed to determine the correlation between the professional quality of life (ProQoL) and overall job satisfaction (JS) levels and each of the nine dimensions of JS of physicians and nurses working in COVID-19 areas of tertiary hospitals in Metro Manila and CALABARZON. It further aimed to determine the demographic characteristics, to measure the ProQoL using the Professional Quality of Life Scale Version 5, to determine the levels of JS across the nine subscales, and to determine the overall JS levels of physicians and nurses using the Job Satisfaction Survey.^{6,7}

Methods

This is a correlational study that determined the relationship of ProQoL and JS among physicians and nurses employed in COVID-19 areas of tertiary

hospitals in Metro Manila and CALABARZON. This study utilized convenience sampling, and targeted physicians and nurses 20-65 years old, working in a COVID-19 intensive care unit, ward, operating room, or emergency room for at least three months. Those who have been clinically diagnosed with a mental illness were excluded. Sample size calculation, done through the UCSF Clinical and Translational Science Institute online sample size calculator for clinical research, yielded 82 participants.

Data collected using a self-administered questionnaire which consisted of a screening portion, informed consent form in English and Filipino, demographics questionnaire, ProQoL Scale and Job Satisfaction Survey via Google Forms. The screening questionnaire determined whether the respondents were eligible to participate in the study. The participants' demographic characteristics (e.g., age, sex, civil status, profession, years of working experience, specific COVID-19 area, and the location of their respective hospitals) were collected using the demographics questionnaire. The location of the hospital was based on the districts of Metro Manila: District 1 (City of Manila), District 2 (Mandaluyong, Marikina, Pasig, Quezon City, San Juan), District 3 (Caloocan, Malabon, Navotas, Valenzuela) and District 4 (Las Piñas, Makati, Muntinlupa, Parañaque, Pasay, Pateros, Taguig).

The Professional Quality of Life Scale Version 5 (2009) by Stamm was used to determine the level of ProQoL.⁶ It is a 30-item self-reported questionnaire pre-categorized into compassion satisfaction (CS) and compassion fatigue (CF) with subscales for burnout (BO) and secondary traumatic stress (STS) using a Likert-type scale, ranging from 1 as "never" to 5 as "very often." Scores of 10 to 22 indicate low, 23 to 41 moderate, and 42 to 50 high levels, respectively, of CS, BO and STS. The alpha reliability of CS, BO, and STS were 0.88, 0.75 and 0.81, respectively.⁶

The Job Satisfaction Survey (1994) by Spector was used to measure JS. It is a 36-item scale composed of nine facets (pay, promotion, supervision, fringe benefits, contingent rewards, operating procedures, coworkers, nature of work and communication). Each facet is assessed through four items, scored from 1 to 6, with 1 as "disagree very much" and 6 as "agree very much". Items that were negatively worded were scored reversely. For each facet, a total score of 4 to 12 indicates dissatisfaction, 13 to 15 ambivalence, and 16 to 24 satisfaction. For the overall JS, a score of 36 to

108 indicates dissatisfaction, 109 to 143 ambivalence, and 144 to 216 satisfaction. This survey had a total alpha reliability of 0.91.⁷

The data gathered for the demographic characteristics were tabulated with their frequency and percentage within the total number of respondents. Total scores for ProQoL levels were interpreted as low, average, or high while levels of JS were determined by getting the total scores, and classified as dissatisfaction, ambivalence, or satisfaction, both with their corresponding percentages within the total respondents. Mean and standard deviation values for ProQoL and JS were also calculated. Spearman's correlation coefficient was used to determine the strength of correlation between JS and ProQoL, analyzed using GNU PSPP ver 1.4.1. The results were visualized through scatter plots made via Microsoft Excel.

This study was approved by the Ethics Review Committee of the UERMMMCI Research Institute

for Health Sciences. Informed consent was obtained from the participants.

Results

As shown in Table 1, there were 90 participants in this study, consisting of 43 physicians and 47 nurses. Around 75% were 20-39 years old, two-thirds were female, single, and with more than 10 years of working experience. Two out of three respondents were assigned in a COVID-19 ward or in the Emergency Room. Half of the respondents worked in a hospital in Districts 2 and 4 of Metro Manila. In terms of ProQoL, the participants experienced average levels of CS, BO, and STS. Majority of the participants had average levels of CS, BO, and STS; while none had experienced low CS, and only 1.11% had high BO and STS. Tables 2 and 3 show the frequency of levels and the mean scores and standard deviation of ProQoL. Majority of the participants showed satisfaction in

Table 1. Demographic profile.

		Number (n)	Percentage (%)
Age (years)	20-29	37	41.11
	30-39	31	34.44
	40-49	13	14.44
	50-59	8	8.89
	60-65	1	1.11
Sex	Male	28	31.11
	Female	62	68.89
Civil Status	Single	61	67.78
	Married	28	31.11
	Widowed	1	1.11
Profession	Physician	43	47.78
	Nurse	47	52.22
Years of Working Experience	<10 years	32	35.56
Tours of Worming Emperiorise	>10 years	58	64.44
Specific COVID-19 Area	ICU	15	16.67
	Ward	32	35.56
	Operating Room	17	18.89
	Emergency Room	26	28.89
Location of Hospital	District 1, Metro Manila	15	16.67
2004101 01 1100p1411	District 2, Metro Manila	23	25.56
	District 3, Metro Manila	1	1.11
	District 4, Metro Manila	27	30
	Cavite	9	10
	Laguna	4	4.44
	Batangas	1	1.11
	Quezon Province	10	11.11

terms of supervision, coworkers, nature of work, and communication. Majority of the participants showed dissatisfaction in pay, fringe benefits, and operating procedures. The participants showed almost equal distributions among satisfaction, dissatisfaction, and ambivalence in promotion and contingent rewards. Table 4 shows the frequency of levels of JS and the corresponding percentage.

Table 2. Levels of professional quality of life.

	Level	Number (n)	Percentage (%)
Compassion Satisfaction (CS)	High	32	35.56
	Average	58	64.44
Burnout (BO)	Low High	0	0.00
burnout (bO)	Average	66	73.33
	Low	23	25.56
Secondary Traumatic Stress (STS)	High	1	1.11
	Average	60	66.67
	Low	29	32.22

Table 3. Mean scores and standard deviation of ProQoL scale components.

	Mean + SD	Level
Compassion Satisfaction (CS) Burnout (BO) Secondary Traumatic Stress (STS)	38.58 ± 6.46 26.20 ± 5.78 26.29 ± 7.20	Moderate Moderate Moderate

Table 4. Levels of job satisfaction.

	Level	Number (n)	Percentage (%)
Pay	Satisfied	17	18.89
	Ambivalent	31	34.44
	Dissatisfied	42	46.67
Promotion	Satisfied	31	34.44
	Ambivalent	31	34.44
	Dissatisfied	28	31.11
Supervision	Satisfied	42	46.67
	Ambivalent	31	34.44
	Dissatisfied	17	18.89
Fringe benefits	Satisfied	11	12.22
	Ambivalent	29	32.22
	Dissatisfied	50	55.56
Contingent rewards	Satisfied	24	26.67
	Ambivalent	31	34.44
	Dissatisfied	35	38.89
Operating procedures	Satisfied	9	10.00
	Ambivalent	25	27.78
	Dissatisfied	56	62.22
Coworkers	Satisfied	56	62.22
	Ambivalent	27	30.00
	Dissatisfied	7	7.78
Nature of work	Satisfied	62	68.89
	Ambivalent	21	23.33
	Dissatisfied	7	7.78
Communication	Satisfied	43	47.78
	Ambivalent	32	35.56
	Dissatisfied	15	16.67

The results of the Spearman correlation analyses seen in Table 5 showed multiple significant (p \leq 0.050) relationships between the components of ProQoL and the nine facets of JS. High levels of overall JS were correlated with high levels of CS (ρ = 0.310; p < 0.050) and low levels of BO (ρ = -0.480; p < 0.050) and STS (ρ = -0.240; p < 0.050). There was a strong correlation between low levels of pay and high levels of burnout (ρ = -0.500; p < 0.050), as seen in Figure 1.

Discussion

Levels of Compassion Satisfaction, Burnout, and Secondary Traumatic Stress

The overall ProQoL of the participants was average; in terms of CS, they neither derived significant satisfaction from their job nor did they have issues with their job. The same is applicable

Table 5. Spearman correlations between professional quality of life and job satisfaction.

	CS		ВО		STS	
	ρ	p	ρ	p	ρ	p
Pay	$0.390^{\rm m}$	0.000*	-0.500s	0.000*	-0.2501	0.020*
Promotion	0.200	0.060	-0.120	0.253	0.020	0.889
Supervision	0.360^{m}	0.001*	$-0.390^{\rm m}$	0.000*	-0.250^{1}	0.018*
Fringe benefits	-0.12	0.241	-0.120	0.27	-0.040	0.705
Contingent rewards	0.260^{1}	0.015*	-0.290^{1}	0.006*	-0.230^{1}	0.031*
Operating procedures	0.050	0.625	-0.110	0.292	-0.140	0.204
Coworkers	0.320^{m}	0.002*	-0.220^{1}	0.039*	$-0.300^{\rm m}$	0.004*
Nature of work	$0.490^{\rm m}$	0.000*	$-0.420^{\rm m}$	0.000*	-0.220^{1}	0.034*
Communication	0.310^{m}	0.003*	$-0.370^{\rm m}$	0.000*	-0.260^{1}	0.015*
Overall job satisfaction	0.310^{m}	0.003*	$-0.480^{\rm m}$	0.000*	-0.240^{1}	0.024*

CS - compassion satisfaction; BO - burnout; STS - secondary traumatic stress

¹ - low correlation; m - moderate correlation; s - strong correlation

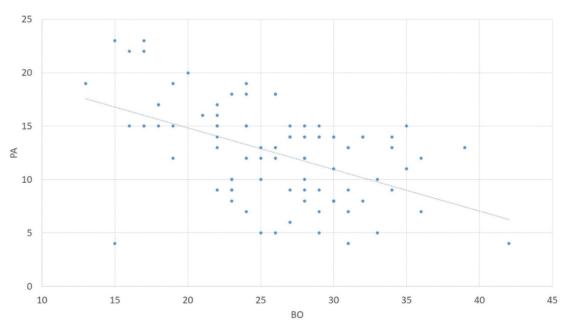


Figure 1. Scatterplot of correlation between Pay (PA) and Burnout (BO).

 $[\]rho$ - Spearman correlation coefficient; p - significance

to the components of compassion fatigue (CF) as these individuals neither felt that they had positive feelings about the effectiveness of their work nor felt burnt out by it; and they neither felt that their work was frightening nor necessarily an object of concern.

Job Satisfaction and its Nine Facets

The components of JS that the respondents were dissatisfied with were the pay, fringe benefits, and operating procedures. Dissatisfaction may be attributed to the state of the healthcare workers during the pandemic. Nurses and doctors are underpaid, and hazard pay is lacking.^{9,10} Dissatisfaction with salary and fringe benefits is one of the reasons that have pushed them to seek employment abroad. 11 The Alliance of Healthcare Workers (AHW) called for an increase in the salaries of healthcare workers as it no longer met their everyday needs and the hiring of more healthcare workers to meet the demands of the rising number cases. 12 The aspects that the respondents were generally satisfied with were supervision, coworkers, nature of work, and communication. The positive results of these components may be considered protective factors despite the aspects that were dissatisfying to the doctors and nurses. Aspects that generally showed ambivalence included contingent rewards, promotion, and their overall JS scores. The results of the overall JS may be attributed to the facets that the respondents were satisfied with and those that they were dissatisfied which balanced each other out.

Job Satisfaction and CS, BO, STS

The results indicate that overall JS is positively correlated with CS, and negatively correlated with BO and STS, which is consistent with other studies.^{8,13-15} With that, improved JS levels may lead to a better ProQoL, which further positively influences the quality of patient care. Maroof and colleagues' research suggested that the correlations may vary between CS, BO, and STS and the components of job satisfaction rather than the overall JS.¹⁶

Compassion Satisfaction and Facets of Job Satisfaction

Among the facets of JS, pay, supervision, coworkers, nature of work, and communication

showed moderate positive correlation with CS. Good pay, proper supervision, contingent rewards, good relationships among coworkers, nature of work, and communication lead to a healthcare worker to have higher CS. Present findings on pay are in line with previous studies where nurses with higher monthly salaries had higher CS.^{8,16} The results on coworker and CS were similar to the findings of Balinbin that coworker relationships had a positive impact on CS among Filipino and Serbian nurses and trauma nurses.¹⁷⁻¹⁹ The findings on supervision are consistent with previous studies that good quality supervision was associated with CS.^{20,21}

In terms of the nature of work, the results were similar those of Köverová, who found that of the nine facets, it was the most strongly correlated with CS.8 They experienced satisfaction when their work created positive emotions such as pleasure, pride, joy, and a sense of meaning. One of the very definitions of CS by Stamm can explain this positive correlation, which is the belief that one's work can contribute to the betterment of society.6 Thus, it can be expected that when one does not find meaning in his/her work or like what he/she does, as what Spector meant by "nature of work," low CS may also be seen. ⁷ Communication also showed moderate positive correlation with CS. A narrative literature review supported that communication with supervisor and peers is moderately correlated with JS among nurses.²² One of the aspects that the professionals in Slovakia were most satisfied with was having clear and explained work assignments and organizational goals.8

Contingent rewards showed a low positive correlation with CS, a finding noted in Chinese nurses and critical care nurses. 23.24 Promotion had a low positive correlation with CS, unlike the findings of a significant and very strong relationship between promotion and employee satisfaction. Berinyuy and Forje concluded that promotion is a motivation that can strongly take part in the psychological well-being of their employees, enough to make their own goals merge with those of the organization's, resulting in their job satisfaction.²⁵ Operating Procedures had low positive correlation with CS. Wentzel noted that given increased workload or exposure to stressors, nurses are able to maintain the same level of care.²⁶ Fringe Benefits was the only component that showed a negative correlation with CS. A positive relationship, however, was seen in Köverová's study.8

Burnout and Facets of Job Satisfaction

Out of all the components of ProQoL and JS, burnout and pay showed the strongest correlation, with a negative relationship: the less satisfied the respondents are with their pay, the more the burnout is experienced. Several news reports from Philippine publications have reported low salary as one of the reasons of COVID-19 nurses who resign to pursue other career paths, or leave for abroad. 12,27,28 They were also reported to be burnt out. The results of this study concincided with those of Köverová.8 Dahmash also found that the odds of experiencing burnout decreased when there was satisfaction with salary.²⁹ However, the findings did not coincide with Balinbin's where higher monthly income was significantly associated with burnout.17 They proposed that higher pay meant having higher demands and expectations from their

Nature of work, supervision and communication were found to have moderate negative correlations with burnout, all of which were consistent with what was seen in Köverová's study.⁸ In his study, the nature of work had the strongest correlation among all components and was the best predictor of burnout. Rasmussen stated that when clinicians believe that their work has meaning, it serves to protect them from burnout.³⁰ Findings on supervision are consistent with previous studies on burnout.^{31,32} Communication within the organization was related to JS, as found in a study that the relational, informational/relational and informational dimensions of communication are associated with JS, and the latter is associated with burnout, to which findings of this study are similar.²²

Contingent rewards, coworkers, promotion, fringe benefits, and operating procedures showed a low negative correlation with burnout, consistent with Köverová's findings.8 Contingent rewards or verbal expression of appreciation from supervisors, coworkers, and patients, such as a "job well done," is seen as a reward that matters to clinicians.³³ According to Harris and Russell, decreased levels of burnout were associated with average amounts of contingent reward leadership behavior. However, as individuals are exposed to high work demands the effects of contingent rewards in reducing burnout and stress may diminish at a certain point. These demanding circumstances push workers to expend resource stores, thereby increasing stress and burnout leading to a lower job satisfaction.34

Coworker relationships contribute to the work environment. The results of this study are consistent with the findings on trauma nurses in the United States and Filipino nurses where those with greater burnout levels had poor relationships with their coworkers. ^{17,19} However, Kase found that in pediatric subspecialists during the early part of the COVID-19 pandemic, coworker relationships were not associated with high BO, unlike prior to the pandemic. ³⁵ They proposed that having different work modes (e.g., work from home) and changing procedures in the hospital may have changed the impact on stress from certain sources.

The findings of this study showed that promotion had negative correlation with BO as seen in Köverová's study.8 In another study among nurses, it was found that all the subscales of BO (i.e., emotional exhaustion, depersonalization, and personal accomplishment) were associated with satisfaction with promotion. However, the direction of association, whether positive or negative was not indicated in the study.³⁶ This study showed that promotion had an insignificant correlation with BO. Fringe benefits negatively correlated with BO, similar to what was found in Köverová's research.8 Rosales, after reporting that nurses from Philippine government hospitals in Samar were moderately unsatisfied with fringe benefits, explained that satisfaction with fringe benefits results in higher job satisfaction, and therefore the prevention of burnout.³⁷ However, Cragg showed that fringe benefits were a significant negative predictor of burnout.³⁸ Operating procedures had a negative correlation with BO which was consistent with previous studies. 8,39,40,41

Correlation Between Secondary Traumatic Stress and Facets of Job Satisfaction

Among all the components of JS, coworkers was the only component with moderate negative correlation with STS, while the rest of the components with statistically significant correlation showed low degrees of correlation which was consistent with studies on Filipino nurses and on Slovakian helping professionals, 8.17 Relationships with coworkers can be tied with relationships with supervisors in the context of work environment. Support from both groups can decrease stress and other negative emotions. 41,42 Bock found that those with STS had poor support from their colleagues and supervisors. 42 These findings explain the negative relationship of supervision and STS. There are few studies investigating the relationship between

pay and STS, especially in physicians and nurses. Though salary from work was not the only source of income of a person, it was found that monthly income is a predictor of STS.⁴³ In contrast, higher income was found to be a significant determinant of STS as it was associated with a heavier workload.¹⁷

Contingent rewards demonstrated a negative relationship with STS. Bock emphasized that appreciative and constructive feedback should be required in work as social support from superiors to encourage a conducive work atmosphere and protect from STS.⁴² The negative relationship between nature of work and STS is consistent with the findings of Passmore among child abuse pediatricians.⁴⁴ The findings are consistent with those of Köverová.8 Communication within the organization is negatively correlated with STS. A study on Filipino nurses recommended developing communication strategies to enhance nurse colleague relationships, which were found to be a determinant of CF, including STS.¹⁷ Fringe benefits negatively correlated with STS in this study, similar to what was seen by Köverová.8 However, there were no studies seen that associated or studied the influence or effects of fringe benefits and STS to explain the correlation.

Operating Procedures and STS showed a low negative correlation, as was observed by Bellicoso that dissatisfaction with operating procedures predicted higher STS. They hypothesized that this may be because some hospital policies increase the susceptibility of hospital workers to the negative emotional effects of their hospital duties.⁴⁰ The results were also similar to Blanco-Donoso's, who further suggested that workload, along with social pressure, and witnessing death and suffering, hospital workers had increased levels of physical and emotional stress in their work environment.⁴⁵ Promotion showed a low positive correlation with STS. However, the result of this study contrasted with the findings of Köverová which showed a negative correlation.⁸

Insignificance of Promotion, Fringe Benefits and Operating Procedures

Promotion was found to be not significantly correlated with ProQoL. This may be due to the state of the healthcare profession in the Philippines which was amplified by the COVID-19 pandemic. A study on the turnover intention among nurses in Samar showed that poor working conditions was

one of the main reasons for nurse turnover. 46 It was found that younger nurses had higher turnover rates when they were initially confronted with the realities of the profession in the Philippines, specifically the low pay and lack of advancement opportunities. 46 A study on Filipino nurse migration to the U.S. and Canada showed that many nursing students have a mindset to leave the country and work overseas after graduating since there is a belief that there is less opportunity for growth and proper compensation in the Philippines.⁴⁷ It is possible that the ambivalence towards promotion stems from the acceptance of the realities in the country. Additionally, the COVID-19 situation may have further shifted the focus away from career advancement to more immediate needs. A study on fear of COVID-19 and psychological distress on work satisfaction among Filipino frontline nurses showed that fear associated with coronavirus led to higher dissatisfaction with their job, and increased intention to leave the profession.48 Moreover, high stress and anxiety levels have led Filipino healthcare workers to repeatedly request for a "time-out" from the government.⁴⁹ A study on the lived experiences of Filipino nurses working in COVID-19 quarantine facilities showed that there is lack of support in terms of proper financial compensation, adequate PPE supplies, and proper administrative strategies.⁵⁰

Fringe benefits also showed insignificant correlation with all components of ProQoL. In February 2021, the Alliance of Health Workers (AHW) protested for a wage hike.¹² A salary increase would result in long-term compensation while allowances would only be given during the pandemic. This could explain why the findings of this study showed insignificant correlation between fringe benefits and the ProQoL components. Another protest held by AHW in September 2021 was for the release of government benefits for healthcare workers (HCW) serving during the pandemic, including the special risk allowance (SRA), meals, accommodation, and transportation (MAT) benefits.⁵¹ Another protest was held due to the proposal for a "singular allowance" among HCWs, in which monthly allocations will be categorized based on low, medium or high exposure to patients with COVID-19 infection.⁵² The Filipino Nurses United (FNU) claimed that the recent benefits coming from the SRA and MAT will be cut if consolidated into this "singular allowance."53 Physicians and nurses could have been less bothered or unaware of having additional benefits since there is

a continuous dissatisfaction on the proposed benefits offered by the government, and could have led to hopelessness. They may have tended to focus more on their job instead of demanding for more additional benefits.

The Philippine Health Insurance Corporation (PhilHealth) released the PhilHealth Circular No. 2020-0011 which ensures full financial risk protection for COVID-19 hospitalization among HCWs during the whole duration of this pandemic.⁵⁴ This could also explain the insignificance of findings in this study since HCWs may be less concerned with this benefit because they were entitled to full hospitalization coverage. It is also unknown whether the respondents belong to public or private hospitals as it was not asked in the present study; hence, the benefits and its source may differ.

Operating procedures. The increasing number of cases, exacerbated by the appearance of the delta variant has forced hospitals to modify their operations by converting non-COVID-19 areas into COVID-19 areas, and requiring telemedicine consultations prior to hospital visit. ^{55,56} The readjustments for surges in cases can cause distress in the working environment. Thus, the constant switching of procedures and handling of the cases may have contributed to the insignificance of this factor to the correlation between the operating procedures and CS, BO, and STS, as the HCWs will have keep on adjusting to new hospital protocols.

To conclude, the overall JS of physicians and nurses has a moderate positive correlation with compassion satisfaction, moderate negative correlation with burnout, and low negative correlation with secondary traumatic stress. Among the nine facets of JS, pay has the strongest correlation with ProQoL, and BO, a negative relationship.

Limitations

This study made use of convenience sampling. It did not determine the reasons behind the ProQoL and JS levels and the predictors of each variable and did not distinguish between private and public hospitals. Several confounding variables which may have affected the results include the training on caring for COVID-19 patients, having other sources of stress outside work, variation in hospital protocol, and/or working conditions, such as healthcare worker-patient ratio.

References

- 1. Shereen MA, Khan S, Kazmi A, Bashir N, Siddique R. COVID-19 infection: Origin, transmission, and characteristics of human coronaviruses. J Adv Res [internet]. 2020 Mar 16; 24: 91-8. doi: 10.1016/j. jare.2020.03.005
- 2. COVID-19 Tracker: Department of Health website [Internet]. COVID-19 Tracker Department of Health website [Internet]. [cited 2021 Nov 20]. Available from: https://doh.gov.ph/covid19tracker
- 3. Philippine College of Physicians. Medical Community appeals for return to enhanced community quarantine (ECQ) in Mega Manila from Aug. 1 to 15 to recalibrate strategies against COVID-19 [Internet]. Facebook. 2021 [cited 2021 Sep 26]. Available from: https://www.facebook.com/pcpofficialpage/photos/a.100971161548372/170945467884274
- 4. Morales NJ, Lema KL. Philippine medical workers under strain as COVID-19 cases jump [Internet]. Reuters. 2021 [cited 2021 Sep 26]. Available from: https://www.reuters.com/world/asia-pacific/philippines-extends-travel-ban-10-countries-over-delta-concerns-2021-08-13/
- Portugal A. Philippines health workers protest neglect as COVID-19 strains hospitals [Internet]. Reuters. 2021 [cited 2021 Sep 26]. Available from: https://www.reuters.com/ world/asia-pacific/philippines-health-workers-protestneglect-covid-19-strains-hospitals-2021-09-01/
- Stamm BH. The Concise ProQoL Manual. 2nd ed. Professional Quality of Life Measure. Pocatello, ID: The ProQoL.org [Internet]. 2010 [cited 2021 Sep 26]. Available from: https://proqol.org/uploads/ProQoLManual.pdf
- Job Satisfaction Survey [Internet]. Paul Spector. 2021 [cited 2021 Sep 26]. Available from: https://paulspector.com/ assessments/pauls-no-cost-assessments/job-satisfactionsurvey-jss/
- 8. Köverová M. Job satisfaction, compassion satisfaction, and compassion fatigue in helping professionals in Slovakia. 2019 Feb; 13.
- 9. Baclig C. PH health workers: A pandemic of big work, small pay. Inquirer.Net [Internet]. 2021 Jun 9; Available from: https://newsinfo.inquirer.net/1443920/ph-health-workers-a-pandemic-of-big-work-small-pay
- 10. Lalu J. Nurse who died of COVID-19 gets P7,000 hazard pay, not P30,000 daughter. Inquirer.Net [Internet]. 2020 Aug 14; Available from: https://newsinfo.inquirer.net/1321435/nurse-who-died-of-covid-19-gets-p7000-hazard-pay-not-p30000-daughter
- 11. International Labor Office. Migration of health workers: Country case study Philippines. Geneva, Switzerland: International Labor Office; 2005.
- 12. Lalu G. Health workers seeking pay hike say nothing has changed since pandemic started. Inquirer.Net [Internet]. 2021 Feb 16; Available from: https://newsinfo.inquirer.net/1396226/health-workers-seeking-salary-hike-claim-nothing-changed-since-pandemic-started
- 13. Mesárošová M. Psychometric Properties of a job satisfaction survey in Slovakia in helping professionals: Preliminary results. GJPR [internet]. 2017 Sep 13; 6(4): 195–201. doi: https://doi.org/10.18844/gjpr.v6i4.2419

- 14. Keshavarz ZT, Gorji MT, Houshyar ZT, Tamajani ZT, Martin JT. The professional quality of life among healthcare providers and its related factors. Social Health and Behavior [Internet]. 2019 [cited 2021 Nov 20].; 2(1): 32-8. Available from: https://doi.org/10.4103/shb.shb_43_18
- 15. Xie W, Wang J, Okoli CTC, et al. Prevalence and factors of compassion fatigue among Chinese psychiatric nurses. Medicine (Baltimore) [Internet]. 2020 Jul 17; 99(29): e21083. doi: 10.1097/MD.000000000021083
- 16. Maroof N, Sikandar MZ, Nawaz H, Ali Shah SI. Professional quality of life and its association with work experience and income among healthcare workers. J Aziz Fatm Med Den Clg 2019; 1(2): 55–9. doi: https://doi.org/10.55279/jafmdc.v1i2.50
- 17. Balinbin CBV, Balatbat KTR, Balayan ANB, et al. Occupational determinants of compassion satisfaction and compassion fatigue among Filipino registered nurses. J Clin Nurs [Internet]. 2020 Mar; 29(5–6): 955–63. Available from: https://doi.org/10.1111/jocn.15163
- 18. Jovic-Vranes A, Bjegovic-Mikanovic V, Boris V, Natasa M. Job satisfaction in Serbian health care workers who work with disabled patients. Cent Eur J Med [Internet]. 2008 Jun 1; 3: 221–4. doi: 10.2478/s11536-008-0003-4
- 19. Hinderer KA, VonRueden KT, Friedmann E, et al. Burnout, compassion fatigue, compassion satisfaction, and secondary traumatic stress in trauma nurses. J Trauma Nurs [Internet]. 2014 Aug; 21(4): 160–9. doi: 10.1097/JTN.0000000000000055
- Sodeke-Gregson EA, Holttum S, Billings J. Compassion satisfaction, burnout, and secondary traumatic stress in UK therapists who work with adult trauma clients. Eur J Psychotraumatol [Internet]. 2013; 4(1): 21869. doi: 10.3402/ejpt.v4i0.21869
- 21. Dehlin M, Lundh LG. Compassion fatigue and compassion satisfaction among psychologists: Can supervision and a reflective stance be of help? J Pers Oriented Res 2018 Dec 26; 4(2): 95-107. doi: 10.17505/jpor.2018.09
- 22. Vermeir P, Degroote S, Vandijck D, et al. Job satisfaction in relation to communication in health care among nurses: A narrative review and practical recommendations. SAGE Open [Internet]. 2017 Apr 1; 7(2): Available from: https://doi.org/10.1177/2158244017711486
- 23. Li WW, West C, Xie G. The reflective risk assessment model of professional quality of life in Chinese nurses. J Nurs Manag [Internet]. 2021 May; 29(4): 767-75. doi: 10.1111/jonm.13217
- 24. Kelly LA, Lefton C. Effect of meaningful recognition on critical care nurses' compassion fatigue. Am J Crit Care [Internet]. 2017; 26(6): 438–44. doi: https://doi.org/10.4037/ajcc2017471
- 25. Berinyuy B, Forje LC. The case of Shisong Hospital: Is promotion the reason for employee satisfaction, commitment or intention to quit? Int J Scient Adv [Internet]. 2021; 2(5): 748-53. Available from: https://www.ijscia.com/wp-content/uploads/2021/09/Volume2-Issue5-Sep-Oct-No.161-748-753.pdf

- 26. Wentzel DL, Brysiewicz P. A survey of compassion satisfaction, burnout and compassion fatigue in nurses practicing in three oncology departments in Durban, South Africa. Int J Afr Nurs Sci [Internet]. 2018; 8: 82–6. doi: 10.1016/j.ijans.2018.03.004
- 27. Cinco DZP Maricar. Meager pay, exhaustion trigger nurses' exit. INQUIRER.net [Internet]. 2021 [cited 2021 Sep 25]. Available from: https://newsinfo.inquirer.net/1474539/meager-pay-exhaustion-trigger-nurses-exit
- 28. Chia L, Tolentino A. Underpaid and overworked, Philippine nurses would rather walk away than work at home CNA. Channel News Asia [Internet]. 2021 [cited 2021 Sep 25]. Available from: https://www.channelnewsasia.com/cnainsider/underpaid-overworked-philippines-nurses-hospitals-shortage-covid-1882796
- 29. Bin Dahmash A, Alajmi M, Aldayel A, et al. Burnout and associated risk factors in pediatric residents. Ochsner J [Internet]. 2021 Jun 21; 21: 152–7. doi: 10.31486/toj.20.0037
- 30. Rasmussen V, Turnell A, Butow P, et al. Burnout among psychosocial oncologists: An application and extension of the effort–reward imbalance model. Psychooncology [Internet]. 2016 Feb; 25(2): 194–202. doi: 10.1002/pon.3902. Epub 2015 Aug 4.
- 31. Dyrbye LN, Major-Elechi B, Hays JT, Fraser CH, Buskirk SJ, West CP. Physicians' ratings of their supervisor's leadership behaviors and their subsequent burnout and satisfaction: A longitudinal study. Mayo Clin Proc [Internet]. 2021 Sep [cited 2021 Sep 25]; 96(10): 2598-605. Available from: http://dx.doi.org/10.1016/j.mayocp.2021.01.035
- 32. Shanafelt TD, Gradishar WJ, Kosty M, et al. Burnout and career satisfaction among US oncologists. J Clin Oncol [Internet]. 2014 Mar 1; 32(7): 678–86. doi: 10.1200/JCO.2013.51.8480. Epub 2014 Jan 27.
- 33. National Academies of Sciences Engineering, and Medicine, National Academy of Medicine, Committee on Systems Approaches to Improve Patient Care by Supporting Clinician Well-being. Factors contributing to clinician burnout and professional well-being. In: Taking action against clinician burnout: A systems approach to professional well-being [Internet]. 4th ed. Washington DC: National Academies Press (US); 2019 [cited 2021 Sep 26]. Available from: https://www.ncbi.nlm.nih.gov/books/NBK552615/
- 34. Harris KJ, Russell LM. An investigation of the curvilinear effects of contingent reward leadership on stress-related and attitudinal outcomes. IJBSS [Internet]. 2013 Aug [cited 2021 Oct 2]; 4(10). doi: 10.30845/ijbss
- 35. Kase SM, Gribben JL, Guttmann KF, Waldman ED, Weintraub AS. Compassion fatigue, burnout, and compassion satisfaction in pediatric subspecialists during the SARS-CoV-2 pandemic. Pediatr Res [Internet]. 2022 Jan; 91(1): 143-8. doi: 10.1038/s41390-021-01635-y. https://www.nature.com/articles/s41390-021-01635-y

- 36. Khamisa N, Oldenburg B, Peltzer K, Ilic D. Work related stress, burnout, job satisfaction and general health of nurses. Int J Environ Res Public Health [Internet]. 2015 Jan 12; 12(1): 652–66. doi: 10.3390/ijerph120100652
- 37. Rosales RA, Rosales GL, Labrague LJ. Nurses' job satisfaction and burnout: Is there a connection? Int J Adv Nurs [Internet]. 2013 Jan 6; 2(1): 1–10. doi: 10.14419/IJANS.V2I1.583
- 38. Cragg K. The Psychological health and wellbeing of Australian healthcare professionals [Internet] [thesis]. [Hobart]: UTas ePrints; 2018 [cited 2021 Oct 3]. p. 48. Available from: https://eprints.utas.edu.au/31057/1/Cragg_whole_thesis.pdf
- 39. Abdo SAM, El-Sallamy RM, El-Sherbiny AAM, Kabbash IA. Burnout among physicians and nursing staff working in the Emergency Hospital of Tanta University, Egypt. East Mediterr Health J [Internet]. 2016 Mar 15; 21(12): 906-15. doi: 10.26719/2015.21.12.906
- 40. Bellicoso D, Trudeau M, Fitch MI, Ralph MR. Chronobiological factors for compassion satisfaction and fatigue among ambulatory oncology caregivers. Chronobiol Int [Internet]. 2017; 34(6): 808–18. doi: 10.1080/07420528.2017.1314301
- 41. Pearlman LA, Ian PSM. Vicarious traumatization: An empirical study of the effects of trauma work on trauma therapists. Prof Psychol Res Pract [Internet]. 1995; 26(6): 558–65. doi:10.1037/0735-7028.26.6.558
- 42. Bock C, Heitland I, Zimmermann T, Winter L, Kahl KG. Secondary traumatic stress, mental state, and work ability in nurses—results of a psychological risk assessment at a university hospital. Front Psychiatr [Internet]. 2020 Apr 27; 11: 298. doi: 10.3389/fpsyt.2020.00298
- 43. Missouridou E. Secondary posttraumatic stress and nurses' emotional responses to patient's trauma. J Trauma Nurs 2017 Mar; 24(2): 110–5.
- 44. Passmore S, Hemming E, McIntosh HC, Hellman CM. The relationship between hope, meaning in work, secondary traumatic stress, and burnout among child abuse pediatric clinicians. Perm J [Internet]. 2019 Dec 6; 24: 19.087. doi: 10.7812/TPP/19.087
- 45. Blanco-Donoso LM, Moreno-Jiménez J, Amutio A, Gallego-Alberto L, Moreno-Jiménez B, Garrosa E. Stressors, job resources, fear of contagion, and secondary traumatic stress among nursing home workers in face of the COVID-19: The case of Spain. J Appl Gerontol [Internet]. 2020 Mar; 40(3): 244–56. doi: 10.1177/0733464820964153
- Labrague LJ, Gloe D, McEnroe DM, Konstantinos K, Colet P. Factors influencing turnover intention among registered nurses in Samar Philippines. Appl Nurs Res [Internet]. 2018 Feb; 39: 200–6. doi: 10.1016/j. apnr.2017.11.027

- 47. Cuevas PEG, Davidson PM, Mejilla JL, De Leon AS. The trajectory of Filipino nurse migrants in the United States and Canada [Internet]. Philadelphia: International Centre on Nurse Migration; 2021.
- 48. Labrague LJ, Santos JA. Fear of COVID-19, psychological distress, work satisfaction and turnover intention among frontline nurses. J Nurs Manag [Internet]. 2021 Apr; 29(3): 395–403. doi: 10.1111/jonm.13168. Epub 2020 Oct 11.
- 49. Biana HT, Joaquin JJ. COVID-19: The need to heed distress calls of healthcare workers. J Public Health [Internet]. 2020 Nov 23; 42(4): 853-4. doi: 10.1093/pubmed/fdaa145
- 50. Sadang JM. The lived experience of Filipino nurses' work in COVID-19 quarantine facilities: A descriptive phenomenological study. PRIJNR [Internet]. 2020 Dec 8 [cited 2021 Oct 3]; 25(1): 154-6. Available from: https://he02.tci-thaijo.org/index.php/PRIJNR/article/view/246371
- 51. Mendoza JE. Watch: Health workers stage protest in front of DOH Office [Internet]. INQUIRER.net [Internet]. 2021 [cited 2021 Oct 3]. Available from: https://newsinfo.inquirer.net/1481789/watch-health-workers-stage-protest-in-front-of-doh-office
- 52. Ramos-Araneta, Casas. Health workers nix singular stipend. Manila Standard [Internet]. 2021 [cited 2021 Oct 3]. Available from: https://manilastandard.net/mobile/article/366106?fbclid=IwAR0aKksag2PYkGQdfduLWn_KEukclaIGCfJrJkaF5bDc-3lJnkIMmnf9ywM
- 53. Peña KD. Health care workers' benefits: 'Singular' plan brings multiple issues. INQUIRER.net [Internet]. 2021 [cited 2021 Oct 3]. Available from: https://newsinfo.inquirer.net/1495271/health-care-workers-benefits-singular-plan-brings-multiple-issues
- 54. Healthcare workers with CoViD-19 fully covered by PhilHealth [Internet]. [cited 2021 Oct 3]. Available from: https://www.philhealth.gov.ph/news/2020/hc_workers.php
- 55. Ratcliffe R. Raging delta variant takes its toll as Philippines runs out of nurses. The Guardian [Internet]. 2021 Aug 21 [cited 2021 Oct 3]; Available from: https://www.theguardian.com/world/2021/aug/21/raging-delta-variant-takes-its-toll-as-philippines-runs-out-of-nurses
- 56. Madarang CS. Rundown: NCR hospitals in full capacity again as COVID-19 cases surge. Philstar [Internet]. 2021 Aug 10 [cited 2021 Oct 3]; Available from: https://interaksyon.philstar.com/politics-issues/2021/08/10/197864/rundown-ncr-hospitals-in-full-capacity-again-as-covid-19-cases-surge/