The Peripandemic Mental Well-being of Selected Healthcare Workers in Chong Hua Hospital: Implications for Institutional Mental Health Program

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In the realm of mental health promotion and public mental health, a consistent acknowledgment has prevailed, recognizing the imperative to enhance mental well-being while concurrently preventing mental illnesses. Such recognition extends to the pivotal role that healthcare providers' overall health plays in their capacity to deliver comprehensive and quality patient care. This study embarked on a journey to illuminate the mental well-being landscape of healthcare workers within the ambit of Chong Hua Hospital, spanning the tumultuous peripandemic period and beyond. Employing a quantitative research design, the standardized Warwick-Edinburgh Mental Well-Being Scale (WEMWBS) was methodically administered to discern the intricate threads of mental well-being. The study's findings stand poised to serve as the cornerstone for the crafting of an institutional mental health program, meticulously tailored to the diverse needs of healthcare workers within the hospital. Results revealed that resident doctors and the PGIs while generally reporting a high level of mental well-being in the peripandemic period, a sizeable proportion of these medical healthcare workers still succumbed to manifesting poor mental well-being. The paper also proved that married and those who contracted the infection were a notable cohort who recorded a significantly poorer mental well-being. The need to prioritize well-being immediately and after the pandemic so that services are sustained cannot be overemphasized hence the myriad of recommendations for a comprehensive and sustainable institutional mental health program was proposed in this paper.

Key words: Mental health, mental well-being, healthcare workers, peripandemic

Introduction

Healthcare professionals have long been recognized for their resilience and unwavering commitment in the face of demanding work environments. However, the emergence of the COVID-19 pandemic has introduced new level of challenges that significantly impact their well-being. As caregivers, they find themselves navigating uncharted territories where the pressures of patient care are heightened due to the novel nature of the virus, characterized by human-to-human transmission and the absence of a specific life-saving treatment.[1] This dynamic situation has brought forth a heightened sense of danger, as healthcare workers are tasked with managing life and death situations while simultaneously exposing themselves to potential risks.

Amidst this backdrop, physicians and nurses are confronted with a range of stressors unique to the pandemic landscape. The demands of extended shifts coupled with a surge in patient volume and the severity of cases contribute to an unprecedented strain on their work lives.[2,3] The toll of such challenges goes beyond individual practitioners, as burnout and dissatisfaction within the healthcare workforce can have ripple effects, impacting overall service quality.[4] Recognizing the integral connection between healthcare providers' well-being and their ability to deliver optimal patient care, mental health promotion experts have long advocated for a focus on both enhancing mental well-being and preventing mental illnesses.[5]

Furthermore, the global scope of the COVID-19 pandemic has wrought unprecedented upheaval within health systems, particularly

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affecting the mental well-being of those at the forefront of pandemic response efforts. The pervasive threats to mental health extend to the larger community, encompassing countless individuals who have endured trauma due to widespread lockdowns. As societies grapple with the complex process of recovery, the psychological needs of healthcare workers and those on the pandemic's frontlines demand a heightened level of attention.

According to Willems & Bohlmeijer, et al. (2021), studies showed that healthcare workers are at heightened risk of emotional exhaustion and vicarious trauma, leading to reduced mental well-being, lower quality of care, absenteeism, and burnout.[6] Chew N et al. (2020) stated that the pandemic's waves and recovery efforts have created prolonged, demanding work conditions for healthcare workers. Their frontline role and exposure to challenging circumstances have made their mental health a significant concern since the onset of COVID-19.[7]

In addition, a study by Muller, et al. (2020), stated healthcare workers exhibited a tendency to seek social support over professional assistance, with exposure to COVID-19, female gender, and concerns about infection playing prominent roles in the manifestation of mental health issues. Anxiety, depression, sleep disturbances, and distress featured among the challenges faced by healthcare workers during the pandemic. A noteworthy observation is the misalignment between risk factors for adverse mental health outcomes and the focus of existing interventions, highlighting the need for tailored approaches.[8]

Finally, a paper by Søvold, et al. (2021) provided an evidence-based overview of the adverse mental health effects on healthcare workers during crises and challenging work conditions, emphasizing the urgency of safeguarding the mental well-being of this workforce. It acknowledged the unique stressors, burdens, and psychological requirements of healthcare professionals across various disciplines and called for renewed efforts to address these issues, particularly for those on the frontlines of public health emergencies like the COVID-19 pandemic.[9]

This study aimed to illuminate the mental health struggles of healthcare workers during the pandemic, uncovering insights to develop institutional mental health programs. While healthcare workers are known for their resilience, the COVID-19 pandemic introduced new stressors that disrupted their well-being. As future members of the healthcare community, students stand to gain valuable insights from this study, preparing them for the demands of their profession and emphasizing the importance of self-care and mental health awareness. The primary beneficiaries of this study are undoubtedly the healthcare workers themselves. The insights garnered from their experiences during the peripandemic period can lead to the implementation of tailored institutional mental health programs. The healthcare workers can access improved support systems, enhanced coping mechanisms, and a more nurturing work environment that acknowledges and prioritizes their mental well-being. This study serves as a testament to their dedication and resilience, emphasizing that their mental health matters as much as the care they provide. The findings of this study have the potential to contribute not only to immediate improvements in the lives of healthcare workers but also to the broader understanding of the intricate relationship between mental health, professional responsibilities, and effective patient care.

Within the context of Chong Hua Hospital, instances of burnout, heightened anxiety, and unprocessed emotional upheaval among employees have been reported, underscoring the toll of pandemic-related duties. The purpose of this study was to provide comprehensive institutional data that would serve as the foundation for the development of a targeted health program catering to the unique needs of these healthcare professionals. Thus, the study determined the level of mental well-being of the healthcare employees (post graduate interns and resident doctors) who served the pandemic operations. Specifically, it determined the perceived level of mental well-being of the respondents using the Warwick-Edinburgh Mental Well-Being Scale (WEMWBS) and the extent and significance of its relationship with the demographic profile of the healthcare respondents and their level of mental wellbeing. Primarily, the study results were utilized in generating an institutional health intervention program. Through the lens of holistic well-being, this paper could contribute to a deeper understanding of the peripandemic experiences of healthcare workers, thereby informing strategies to better support their overall welfare.

Methods

Study Design and Research Instrument

This study followed the rigors of single-center quantitative research. An institutional survey (paper-based) was appropriated adopting a standardized questionnaire on Warwick-Edinburgh Mental Well-being Scale (WEMWBS). Validation testing in a population of 348 respondents showed that construct validity was high at 0.55 to 0.77, internal consistency (reliability) of 0.89, test-retest reliability of 0.83 and a low response bias score of 0.13. The Warwick-Edinburgh Mental Well-being Scale (WEMWBS) comprised of 14 items that relate to an individual's state of mental well-being (thoughts and feelings) in the previous recent experiences. Items covered different aspects of eudaimonic and hedonic well-being. Responses were made on a 5-point scale ranging from 'none of the time' to 'all of the time'. Each item was worded positively and together they covered most, but not all, attributes of mental well-being including both hedonic and eudaimonic perspectives. Areas not covered include spirituality or purpose in life. These were deemed to extend beyond the general population's current understanding of mental well-being and their inclusion was thought likely to increase non-response. Each of the 14 item responses in WEMWBS were scored from 1 (none of the time) to 5 (all of the time) and a total scale score was calculated by summing the 14 individual item scores, with the minimum score of 14 and the maximum of 70. Total scores are interpreted as follows: >44 is indicative of low likelihood of depression, 41-44 is indicative of possible/ mild depression and <41 is indicative of probable clinical depression.

Study Setting and Population

The research was conducted at Chong Hua Hospital – Fuente located at Don Mariano Cui Street, Fuente Osmeña Circle, Cebu City. All healthcare workers (post graduate interns and resident doctors) who were actively on duty during the pandemic were included in the survey.

Parttime and or non-regular employees, post graduate interns and resident doctors who were diagnosed with mental illness/disorders and maintaining on antidepressant or antipsychotic medications and non-consenting employees were excluded from the survey.

With an estimated subpopulation sizes from the hospital, the following sample size computation was adhered to using Cochran's formula at 95% confidence level, 5% margin of error at 50% population proportion:

Table 1. The population and sample size.

Group	Subpopulation size	% share	Sample Size
PGI5	0	27.32	
Resident doctors	133	72.68	120
Total	183	100.00	

The study required 120 samples be chosen using a non-probability sampling technique called criterion sampling which takes only those respondents who fit the criteria and those who consent to the survey.

Statistical Treatment

For profiling, categorical variables were expressed as frequencies and simple percentages. Continuous variables were also expressed as means and standard deviations. Likewise, to test the association of the profiles of the employees and their mental well-being, a Chi-square test was performed for categorical variables while a Pearson rho correlation was tested for the continuous ones. All hypothesis testing considered a level of significance of 0.05, two-tailed testing.

Ethical Considerations

Prior to the start of the study, a signed informed consent and voluntary participation was secured from the participants by letting them sign a Consent Form. Confidentiality and anonymity were upheld in this study and data collected were not disclosed elsewhere. No funding was quested for this study and all expenses were shouldered by the primary investigator. This study guaranteed that this would benefit the participants, healthcare workers and future readers.

Results

After the survey was conducted to 120 eligible respondents, the data gathered were then tabulated and analyzed in this section. This discussion is composed of the profile of the respondents, their perception of their recent emotions and feelings at the onset of the survey, the level of their mental wellbeing and the test of associations between their profile and their mental wellbeing scores.

Table 1 shows the general profile of the respondents where it can be shown that the survey was composed of a majority of resident doctors (62.50%) with PGIs comprising 37.50%. The same table shows that 82.50% of the respondents were 26-45 years old, mostly female (70.00%), single (85.83) and 77.50% revealed that they contracted the deadly COVID-19 viral infection.

Table 1. The demographic characteristics of the respondents.

Profile	Category	f	%
Classification	PGI	45	37.50
	Resident	75	62.50
Age Bracket	18-25	21	17.50
	26-45	99	82.50
Sex	Male	36	30.00
	Female	84	70.00
Marital Status	Single	103	85.83
	Married	17	14.17
History of covid-19 infection	Yes	93	77.50
	No	27	22.50

Table 2 presents the different constructs of mental wellbeing as expressed by the recent feelings and emotions of the respondents when the survey was conducted. It can be verified from the table that the item on "I've been feeling loved" was the most highly rated by the healthcare workers with 3.98 (SD=1.06). Though the survey gathered mostly from single respondents, this only goes to show that majority of them often received forms of care and love from their families, friends and even colleagues during this pressing time. This was being followed by their ability to "make up their own mind about things" rated with 3.63. Then, being feeling optimistic about the future and feeling useful followed closely with 3.55 and 3.54 apiece.

The least however can be observed from "I've been feeling interested in other people" rated with 2.83 only. This low interest springs from the fact that social distancing was being strictly observed during these periods. Meanwhile, both statements on "I've been feeling relaxed" and "I've had energy to spare" were also rated low by the respondents.

Table 3 illustrates the results of the mental well-being of the respondents grouped into high, average and low well-being. It can be validated from the results that majority of the respondents (63.33%) had high levels of mental well-being, there were 22.50% of them who scored average or translated to a possible mild depression.

It can be underscored from this result that almost 15% of the respondents recorded low level of mental wellbeing which can be interpreted as having high probability of clinical depression dispersed in both PGI and the resident doctors.

Table 4 depicts the t-test for 2 sample independent groups to show if the profile of the respondents was an influencing factor of the variations of the mental well-being score. It can be shown that in terms of the classification, age bracket and sex, the 2 groups did not statistically differ from their mental well-being scores. However, married respondents had significantly lower mental well-being scores than their single counterparts. Likewise, those who revealed to have been infected with COVID-19 also recorded significantly lower mental well-being than those who did not contract the virus.

Table 2. The constructs of mental wellbeing of the respondents.

Items	Weighted Mean	SD	Description
I've been feeling optimistic about the future	3.55	0.94	Often
I've been feeling useful	3.54	0.89	Often
I've been feeling relaxed	2.92	0.88	Some of the times
I've been feeling interested in other people	2.83	0.86	Some of the times
I've had energy to spare	2.95	0.98	Some of the times
I've been dealing with problems well	3.28	0.78	Some of the times
I've been thinking clearly	3.33	0.84	Some of the times
I've been feeling good about myself	3.28	0.95	Some of the times
I've been feeling close to other people	3.27	0.90	Some of the times
I've been feeling confident	3.20	0.87	Some of the times
I've been able to make up my own mind about things	3.63	1.00	Often
I've been feeling loved	3.98	0.73	Often
I've been interested in new things	3.28	1.06	Some of the times
I've been feeling cheerful	3.27	0.89	Some of the times
Overall Factor Average	**3.31**	**0.90**	**Some of the times/Low Likelihood for Depression**

Legend: 4.20-5.00=All of the time, 3.40-4.19=Often, 2.60-3.39=Some of the times, 1.80-2.59=Rarely, 1.00-1.79=Not at all

Table 3. The Distribution of respondents according to their level of mental wellbeing.

Score Range	Description	Interpretation	PGI	Residents	Total	%
>44	High	Very Low Likelihood of Depression	28	48	76	63.33
41-44	Average	Possible/Mild Depression	10	17	27	22.50
<41	Poor	High Probability of Clinical Depression	7	10	17	14.17

Scoring Source: Warwick-Edinburgh Mental Well-Being Scale (WEMWBS)

Table 4. The association between the profile of respondents and their level of mental wellbeing.

Profile	Category	Mental Wellbeing score	p-value	Description	Interpretation
Classification	PGI	46.20	0.93	Do not Reject Null	No Significant Association
	Resident	46.32			
Age Bracket	18-25	44.86	0.42	Do not Reject Null	No Significant Association
	26-45	46.60			
Sex	Male	45.90	0.79	Do not Reject Null	No Significant Association
	Female	46.45			
Marital Status	Single	46.84	*0.02**	*Reject Null*	*Significant Association*
	Married	42.90			
History of covid-19 infection	Yes	45.80	*0.04**	*Reject Null*	*Significant Association*
	No	48.04			

**Association is Significant at p-value<0.05*

Discussion

The evidence in this study indicated that resident doctors and PGIs generally maintained a high level of mental well-being during the peri pandemic period. This was attributed to their sense of being valued and their determination to provide essential healthcare services during this challenging time. Conversely, a significant proportion of these healthcare workers still experienced poor mental well-being. The study specifically highlighted that married individuals and those who contracted the infection were particularly affected, showing notably poorer mental well-being.

The insights gained from the peri pandemic period can guide the creation of tailored institutional mental health programs. By addressing the specific challenges healthcare workers faced, these programs can provide improved support systems, enhanced coping mechanisms, and a more nurturing work environment that prioritizes their mental well-being. This study underscores their dedication and resilience, highlighting the importance of their mental health alongside the care they provide.

Healthcare workers are known for their stamina and emotional resilience in the workplace however COVID-19 comes with a new set of standards that disrupted most of all their well-being. The pandemic and post pandemic events were truly a pivotal and test points of the life of a healthcare professional.[10] Paying attention to the mental wellbeing of the healthcare providers becomes vital because studies have shown that volunteers in general are at risk of emotional exhaustion and vicarious trauma being significantly affected by the traumatic life experiences of others. Consequently, studies were also consistent that reduced mental well-being can also lead to lower quality of care and absenteeism.[11]

In this paper, it is well established that feeling loved and acknowledging personal resources, such as awareness of positive emotions and self-compassion become the dominant aspects of mental health. It also found a significant positive relationship between love and wellbeing with the significant moderate correlation ($r=0.58$, $p<0.01$). This means that people in love experienced positive emotions and healthy wellbeing.[12] An individual in love not only feels positive but spreads positivity around. They smile, be kind to other people, behave compassionately with everyone. If the person is happy then he/she is likely to be psychologically and emotionally healthy.[13]

The evidence was also statistically sufficient to indicate that married healthcare workers tend to have suffered with their mental health more than their single counterparts. This resonated well with two studies conducted after COVID-19 pandemic documented greater levels of anxiety among married hospital staff[14] yet a study contradicted the finding stating that in their paper, generalized anxiety was more dominant among those who were not married compared to the married ones (45.2% vs. 31.2%, $p < 0.001$). In fact, the odds of depression in health workers who were not married was 1.5 times that of those who were married. This opposing evidence-based conclusions warrant a closer look as to how marital status of healthcare workers significantly induce variations in their mental wellbeing.

It was also ascertained in these current findings that those who reported COVID-19 infection histories had significantly lower mental well-being scores than those who did not contract the virus. Anxiety

was reported by 16.6% of COVID-19 cases and depression by 20.3%, with a significant increase in the estimated risk where sleep was identified a significant factor in the relationship between occupational stress, or organizational justice, and anxiety.[15]

This study is limited only to the information disclosed by resident doctors and PGIs at Chong Hua Hospital – Fuente, Cebu who were actively on duty during the peripandemic period. The selection of respondents was based on the number of residents per department and the total number of PGIs using Cochran's formula. The study did not include other healthcare workers in the hospital. Additionally, this study did not identify specific programs that respondents desired to support their mental well – beings.

Conclusion and Recommendations

In conclusion, the evidences pointed out that the resident doctors and the PGIs generally had a high level of mental well-being in the peripandemic period. This springs from the feeling of being loved and their ability to make up their minds during this period of providing service to those who are in healthcare need. On the other end, a sizeable proportion of these medical healthcare workers still succumb to manifesting poor mental well-being. In fact, the paper proved that married and those who contracted the infection were a notable cohort who recorded a significantly poorer mental wellbeing. It is therefore necessary that wellness champions, e.g., medical education leaders in the facility recognize and respond to both the PGIs and residents' mental health needs. Considering what is known about the mental health effects of frontline healthcare work post infectious disease outbreaks, as well as the ongoing work-related stressors for PGIs and residents, medical education leaders should provide robust mental health supports for them now and in the future. The need to prioritize well-being immediately and after the pandemic so that services are sustained cannot be overemphasized.

Based on the salient findings, the following measures are recommended: 1) Well-being Recognition Program: Regularly acknowledge and appreciate healthcare workers through public recognition, awards, and expressions of gratitude.; 2)Emotional Support and Peer Mentorship: Pair experienced healthcare professionals with those experiencing lower mental well-being for emotional support and guidance.; 3) Mental Health Check-ins: Conduct routine mental health assessments, especially for those married or who contracted COVID-19, by trained professionals.; 4) Stress Reduction and Resilience Training: Offer workshops, mindfulness sessions, and stress management techniques to build coping skills and resilience.; 5) Employee Assistance Program (EAP): Provide confidential 24/7 counseling and support services through licensed counselors, including telemedicine.; 6) Mental Health Awareness Campaigns: Launch campaigns to reduce stigma, promote mental health awareness, and encourage seeking help.; 7) Long-Term Mental Health Sustainability: Develop ongoing resources and programs to support mental health beyond the pandemic.; 8) Leadership Training for Wellness Champions: Train wellness champions in active listening, empathetic communication, and crisis intervention.; 9) Mental Health Program Evaluation: Regularly assess and adapt mental health programs based on feedback and data analysis.; 10) Healthy Mindspaces: Create safe spaces for leisure and stress relief, such as lounges, massage chairs, Zumba, yoga programs, and music rooms.; 11) Multidisciplinary Approach: Collaborate with psychologists, social workers, and mental health professionals for holistic support, offering individual counseling and group therapy.

For future research, it is also recommended to include other healthcare workers not limited only to the resident doctors and PGIs after all fostering healthy mental well-being isn't just essential, it's the cornerstone of the ability to serve the community with unwavering resilience and boundless passion. Commitment to caring for others begins with caring for oneself, nurturing the strength and clarity of mind needed to navigate the challenges of healthcare with grace and determination. By prioritizing mental well-being, the ability to provide exceptional care is safeguarded, and others are inspired to embrace a culture of holistic wellness in pursuit of the shared mission: healing, compassion, and a brighter future for all.

Incorporating these recommendations into the institutional mental health program at Chong Hua Hospital will not only enhance the well-being of healthcare workers but also contribute to the long-term resilience and effectiveness of the healthcare workforce in the face of ongoing challenges, including pandemics and other stressful situations.

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