Psychological Status of Selected Hospital Frontliners in Cabanatuan City

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Abstract. The outbreak of the COVID-19 in the Philippines affected the country's economy and public health of the Filipinos. As the number of COVID-19 positive increases, government hospitals reached out to private hospitals to form sustainable public-private partnerships to combat the spread of the Virus. The role of frontliners become significant, hence they exerted more efforts in their work and some of them suffered symptoms of both physical and mental fatigue, depression and anxiety. This study utilized descriptive research design; snowballing technique was used to identify the 40 frontlinerrespondents who met the criteria of the research. The Depression Anxiety Stress Scale - 21 (DASS-21) developed by Lovibond and Lovibond (1995) was utilized as instrument. Results revealed that: majority of the frontliners' stress and depression levels was in the normal to moderate levels; while their level of anxiety was dominant in the severe to extremely severe levels; nonetheless, around 35 percent of the frontliners experienced severe to extremely severe level of depression. A higher number of frontliners in public hospitals experienced higher levels of stress, anxiety and depression compared to the frontliners in private hospitals. Significant difference was established between the anxiety levels of frontliners in public and private hospitals; while no significant difference was established between their stress and depression levels. Findings of the study should be utilized by the hospital administrations to counteract the psychological status of the frontliners, the identified individuals with severe to extremely severe levels of psychological status are the most vulnerable and needs immediate intervention.

Keywords: Covid-19; DASS-2; frontliners; hospital; pandemic; psychological status

1. Introduction

The outbreak of the COVID-19 in the Philippines affected the country's economy and public health of the Filipinos. President Rodrigo R. Duterte declared a state of calamity and ordered a nationwide quarantine as a countermeasure to the increasing number of COVID-19 pandemic cases on March 16, 2020. As the number of COVID-19 positive intensifies, government hospitals reached out to private hospitals to form sustainable, public-private partnerships against the Virus. Hospitals increased their workforce while other institutions are forced to close and retrench or lay off their workers. The role of frontliners become significant, hence they exerted more efforts in their work and some of them suffered symptoms of both physical and mental fatigue, depression and anxiety.

In the academe, researchers started to investigate the effects of the virus in all aspects of individual's life. In the Middle East, Li, et al (2020) established the high prevalence of depression, anxiety and post-traumatic stress disorder (PTSD) among healthcare workers. In Canada, Mrklas, et al., (2020) revealed that the symptoms of moderate to high stress anxiety and depression were present among workers and healthcare workers. In terms of the difference between the level of anxiety between male and female, Hassnia, et al. (2020) established that females experienced higher level of anxiety than male individuals. Higher level of anxiety and depression was also established among Doctors and Nurses compared to other workers during pandemic (Wilson, et al., 2020). Another study regarding the levels of anxiety, stress and depression among Physicians during the Covid-19 pandemic was conducted by Elbay, et al., (2020). Their results revealed that Physicians suffered from stress, anxiety and depression. Factors such as increased weekly working hours, increased number of COVID-19 patients cared for, lower level of support from peers and supervisors, lower logistic support, and lower feelings of competence during Covid-19 related tasks significantly affects the Physicians' level of anxiety, stress and depression. In Nepal, a study among healthcare workers revealed that health workers experienced psychiatric morbidity (Gupta, et al., 2020); hence hospital workers in charge of admitting and caring for COVID-19 patients have been exposed to a variety of personal and organizational challenges that have had a negative impact on their health and job satisfaction (Salari, et al., 2020). The prevailing effects of the Covid-19 pandemic in other countries as mentioned in the literatures lead the researchers to investigate the psychological status in terms of the levels of Depression, Anxiety and Stress of selected hospital frontliners in Cabanatuan City. The research aimed at providing necessary help to frontliners who experienced severe to extremely severe levels of Depression, Anxiety and Stress during the duration of the pandemic.

The specific objectives of the study were to describe the psychological state of selected hospital frontliners during the Covid-19 pandemic in terms of their levels of stress, anxiety and depression; to describe the frontliners' psychological state during the Covid-19 pandemic according to their type of hospital employment; and to establish the significant difference in the

psychological state (stress, anxiety and depression) of the selected frontliners during Covid-19 pandemic when group according to their type of hospital employment.

2. Methodology

Descriptive research design was utilized in this study. The design was applicable in providing a comprehensive summarization of the specific events experienced by a group or individuals (Lambert, et al., 2012). Descriptive approach also involved a straight forward description of a phenomenon. This design describes the status of a phenomena or relationships among phenomena at a fixed point in time (Splendor and Chikeme, 2020).

Prior to the administration of the questionnaire, the purpose of the study was explained to the frontliners; and their consent to participate in the study was solicited. All necessary health protocols were observed during the data gathering period because of the pervasiveness of the virus infections. A total of 40 respondents participated in the study. Twenty respondents were from government hospitals and the other twenty respondents were from private hospitals. All the respondents met the criteria that they all worked as frontliners in hospitals in the duration of the Covid-19 pandemic. The data gathering period was conducted in the fourth quarter of school year 2020-2021 and early months of 2022.

In obtaining the desired data, the researchers used the Depression Anxiety Stress Scale – 21 (DASS-21) developed by Lovibond and Lovibond (1995). The DASS-21 consisted of twenty-one (21) item-statements designed to measure three related negative emotional states which are depression, anxiety and stress. The scoring instructions and interpretation of the developed instrument (DASS-21) was followed as well as the proper administration of the instrument was observed. One of the researchers is a Licensed Psychometrician and a Registered Guidance Counselor, thus proper handling of the instrument administration and interpretation was observed. The rating scale of the DASS-21 is as follows: 0 – did not apply to me at all; 1 - Applied to me to some degree, or some of the time; 2 - Applied to me to a considerable degree, or a good part of time; and 3 - Applied to me very much, or most of the time.

2.1. Sampling Procedure

In selecting the respondents, snowballing technique was used. Snowball sampling also known as the chain referral sampling involved the process wherein initial participants recruit other potential respondents (Glen, 2021). One of the researchers worked as Clinical Instructor in one of the respondent hospitals and has established initial contact with some of the respondents. Afterwhich, the respondents referred their colleagues who are available to answer the DASS-21 questionnaire. Several visits to the hospital were made to administer the DASS-21 questionnaire to the respondents.

2.2. Respondents

A total of 40 respondents participated in the study. Twenty respondents were from government hospitals and the other twenty respondents were from private hospitals. All the respondents met the criteria that they all worked as hospital frontliners during the Covid-19 pandemic. The respondents were informed of the purpose of the research, and they were assured of the confidentiality of the results of their test. Assignments of the 40 respondents were from various departments of the hospitals, such as the emergency room, laboratories, pharmacy, OB Ward, etc.

2.2.1 Research Site

The research site was Cabanatuan City. All the six hospitals were strategically located in the City. Two of the six hospitals were government hospitals, and four are private hospitals. The selected frontliner-respondents were identified from the six (6) government and private hospitals based on the criteria that all of them must have worked as frontliners in the duration of the pandemic.



Figure 1. Google Map showing the location of the Six Hospitals

3. Results and Discussion

3.1.1 Psychological Status of the Frontliners in terms of Level of Stress during the Covid-19 Pandemic

Table 1. Psychological Status of the Frontliners in terms of Levels of Stress

Stress	Frequency	Percent
Extremely Severe	2	5.0
Severe	8	20.0
Moderate	12	30.0
Mild	6	15.0
Normal	12	30.0
Total	40	100.0

There are 2 (5%) respondents with extremely severe level of stress during the Covid-19 pandemic; 8 (20%) respondents experienced severe level of stress; 12 (30%) respondents suffered from moderate level of stress; 6 (15%) respondents experienced mild level of stress; and 12 (30%) respondents have normal level of stress.

It was shown that 30 percent of the frontliners experienced moderate to normal level of stress during the Covid-19 pandemic. With normal level of stress, the frontliners still manage to handle stressful situations in the performance of their task. Furthermore, at least 25 percent of the frontliners experienced severe to extremely severe level of stress which is quite alarming. In the random interviews, they mentioned that every day they encountered sad news about the increasing number of Covid-19 positive patients who are admitted in their hospitals, which caused their extreme stress.

3.1.2 Psychological Status of the Frontliners in terms of Level of Anxiety during the Covid-19 Pandemic

Table 2. Psychological Status of the Frontliners in terms of Levels of Anxiety

Anxiety	Frequency	Percent
Extremely Severe	26	65.0
Severe	6	15.0
Moderate	4	10.0
Mild	2	5.0
Normal	2	5.0
Total	40	100.0

In terms of Anxiety, there are 26 (65%) respondents with extremely severe level of anxiety during pandemic; 6 (15%) suffered from severe anxiety during pandemic; 4 (10%) experienced moderate level of anxiety; and 2 respondents each experienced mild to normal level of anxiety.

Majority (65%) of the frontliners experienced extremely severe level of anxiety during the performance of their task inside the hospitals. Their extremely severe level of anxiety was attributed to the increasing number of Covid-19 casualties that they witnessed every day in their work.

3.1.3 Psychological Status of the Frontliners in terms of Levels of Depression during the Covid-19 Pandemic

Table 3. Psychological Status of the Frontliners in terms of Depression

Depression	Frequency	Percent
Extremely Severe	10	25.0
Severe	4	10.0
Moderate	18	45.0
Mild	2	5.0
Normal	6	15.0
Total	40	100.0

There are 10 (25%) frontliners who experienced extremely severe level of depression; 4 (10%) experienced severe level of depression; 18 (45%) of them experienced moderate level of depression; 2 (5%) experienced mild level; and 6 (15%) experienced normal level of depression.

This finding manifested that at least 35 percent of the respondents suffered severe to extremely severe level of depression as frontliners during the Covid-19 pandemic. The remaining 65 percent of the frontliners experienced normal to moderate levels of depression while performing their tasks inside the hospitals.

The frontliners' level of stress, anxiety and depression conforms to the results of other studies conducted in other countries during pandemic, such as the study of Elbay, et al (2020), Gupta, et al (2020), Li, et al (2020); Mrklas, et al (2020) and Wilson, et al. 2020). All the mentioned researchers established the occurrence of stress, anxiety and depression among health workers during the Covid-19 pandemic.

3.2 Psychological Status of the Frontliners during Covid-19 Pandemic according to Type of Hospital Employment

Table 4. Frontliners' Level of Stress and Type of Hospital Employment

Type of H	ospital * Stress	Extremely Severe	Severe	Moderate	Mild	Normal	Total
Type of	Private	0	6	2	2	10	20
Hospital	Public	2	2	10	4	2	20
	Total	2	8	12	6	12	40

There are six (6) private hospital frontliners with severe level of stress; while fourteen (14) respondents experienced normal to moderate level of stress. For the respondents who worked in public hospitals, two (2) respondents each experienced extreme and severe levels of stress; ten (10) respondents experienced moderate level of stress; four (4) respondents experienced mild stress; and two (2) respondents have normal level of stress.

The comparison showed that public hospital frontliners encountered more stressful experiences, hence, four (4) out of twenty (20) respondents experienced severe to extremely severe level of stress; while none of the respondents in the private hospitals experienced extremely severe level of stress.

Table 5. Frontliners' Level of Anxiety and Type of Hospital Employment

Type of	Hospital * Anxiety	Extremely Severe	Severe	Moderate	Mild	Normal	Total
Type of	Private	10	4	2	2	2	20
Hospital	Public	16	2	2	0	0	20
	Total	26	6	4	2	2	2

In terms of the private hospital frontliners' level of anxiety, fourteen (14) respondents experienced severe to extremely severe levels of anxiety; six (6) respondents experienced normal to moderate level of anxiety. There are eighteen (18) public hospital frontliners suffering from severe to extremely severe levels of anxiety; and two (2) frontliners experienced moderate levels of anxiety while they worked as public hospital frontliners.

The comparison showed that private and public hospital frontliners experienced severe to extremely severe level of anxiety while performing their task during pandemic.

Table 6. Frontliners' Level of Depression and Type of Hospital Employment

Type of Depr	Hospital * ession	Extremely Severe	Severe	Moderate	Mild	Normal	Total
Type of	Private	4	2	8	0	6	20
Hospital	Public	6	2	10	2	0	20
Te	otal	10	4	18	2	6	40

There are six (6) private hospital frontliners who suffered from severe to extremely severe level of depression during the Covid-19 pandemic; while fourteen (14) of them experienced normal to moderate levels of depression. There are eight (8) public hospital frontliners who suffered from severe to extremely severe level of depression; while twelve (12) respondents experienced normal to moderate levels of depression during the Covid-19 pandemic.

The comparison revealed that the number of frontliners who suffered from severe to extremely severe levels of depression is higher in public hospitals than in private hospitals.

3.3 Significant Difference in the Psychological Status of the Private and Public Hospital Frontliners during Covid-19 Pandemic

Table 7. T-Test for the Significant Difference in the Level of Psychological Status of the Private and Public Hospital Frontliners

Psychological Status	Type of Hospital	Mean	F	Sig.	Interpretation	
Stress	Private	17.00	2 1 2 0	004	Not Cianificant	
	Public	22.80	3.128	.094	Not Significant	
Anxiety	Private	19.20	4.000	.044	C: : £:	
	Public	21.80	4.688		Significant	
Depression	Private	14.80	277	.605	277 605	Nat Cianifiaant
	Public	23.20	.277		Not Significant	

The computed F-value of 4.688 for anxiety as a psychological status of the frontliners signifies significant difference when grouped according to the type of hospital where they are employed. The sig value of .044 is lower that than the .05 level of significance. The result implied that the level of anxiety experienced by the public hospital frontliners was significantly higher compared to the level of anxiety experienced by private hospital frontliners. On the other hand, no significant difference was established for the stress and depression as psychological status of the frontliners during the Covid-19 pandemic. This was manifested in the computed F-values and sig levels which are higher than the .05 level.

The mean of the anxiety scores obtained by the public hospital frontliners was 21.80, which was higher compared to the mean obtained by the private hospital frontliners which was 19.20. In the cross tabulation table above it was shown that the 18 public hospital frontliners suffered from severe to extremely severe level of anxiety; while 2 frontliners experienced moderate level of anxiety. No public hospital frontliners experienced normal to mild level of anxiety. In the private hospitals, 14 frontliners suffered from severe to extremely severe level of anxiety, and 6 respondents experienced normal to moderate level of anxiety, which was lower compared to those in the public hospitals. Thus, working as public hospital frontliners during the Covid-19 pandemic can cause extreme level of anxiety, compared to working as private hospital frontliner s; hence more Covid-19 patients are accepted in public hospitals than in private hospitals.

4. Conclusions

The public and private hospital frontliners in Cabanatuan City experienced normal to moderate level of stress during pandemic; while they experienced severe to extremely severe level of anxiety. At least 35 percent of the frontliners experienced severe to extremely severe level of depression. The number of frontliners who experienced higher level of stress, anxiety and depression was concentrated in public hospitals; though significant difference was established only for anxiety level of the public and private hospital. The result may be utilized as basis by the hospital administration and mental health practitioners to come up with mental health programs for the public and private hospital frontliners.

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