Psychological Responses of the Philippine Physician Licensure Exam Takers to the COVID-19 Pandemic

Elrey P. Inocian, MD,[1] and Jarungchai Anton S. Vatanagul, MD[1]

Abstract

Objective: This study aimed to determine the prevalence and severity of major depressive disorder, generalized anxiety disorder, and the level of perceived stress of the Physician Licensure Exam (PLE) takers during the COVID-19 pandemic.

Method: We conducted a cross-sectional descriptive survey among the Physician Licensure Exam takers using the Patient Health Questionnaire-9 (PHQ-9), Generalized Anxiety Disorder (GAD-7), and Perceived Stress Scale (PSS).

Results: Seven hundred thirty-two (732) Physician Licensure Exam takers participated in the survey, 423 (57.8%) were November takers and 309 (42.2%) were March takers who will be completing the exam on September 2020. The prevalence rates of major depression and generalized anxiety disorder among the PLE takers were 44.1% and 50.3%, respectively. November takers have a higher rate of depression (60.1%) and anxiety (52.7%) compared to the March takers (54.4% and 46.6%, respectively). The majority of the takers have moderate levels of depression (26.6%), anxiety (37.8%), and perceived stress (70.2%). There was a significant difference in the prevalence of major depression between the March and November takers (*p*-value <0.00001) but not with generalized anxiety disorder (*p*-value: 0.05155). There was also no significant difference in the severity of depression (*p*-value=0.527878), anxiety (p-value=0.883558), and levels of perceived stress (*p*-value=0.2476) between the March and November takers.

Conclusions: There was a high prevalence of major depression and generalized anxiety disorder among the PLE takers during the COVID19 pandemic. Majority of the PLE takers experienced moderate levels of depression, anxiety, and perceived stress.

Keywords: PLE takers, COVID-19 pandemic, psychological response

Introduction

In March 11, 2020, in the middle of the two-week schedule of the Philippine Physician Licensure Examination (PLE), the World Health Organization declared COVID-19 as a pandemic. As a result of this pronouncement, a decision was made by the Philippine Regulation Commission (PRC) to cancel the ongoing examination and postpone it later. The uncertainty brought about by COVID-19 pandemic may have an impact on the mental health and well-being of the physician licensure exam takers. Anxiety, pressure, stress, and mixed emotions already strained the mental capacity and coping of medical students while preparing for the licensure exam. With this pandemic, physician licensure exam takers may experience further psychological distress. While there may be natural and normal reactions to this changing and unprecedented situation, only then we will find out if we explore the psychological impact of the COVID-19 pandemic on the well-being of the medical students. Thus, the need to explore on the psychological impact of COVID-19 on their mental health so that interventions can be done if necessary.

The COVID-19 pandemic is a major health crisis affecting several nations, with over 720,000 cases and 33,000 confirmed deaths reported to date. Such widespread outbreaks are associated with adverse mental health consequences. In China, the overall prevalence of GAD, depressive symptoms, and sleep quality of the public were 35.1%, 20.1%, and 18.2%, respectively.[1] In another study, 53.8% of respondents rated the psychological impact of the outbreak as moderate or severe; 16.5% reported moderate to severe depressive symptoms; 28.8% reported moderate to severe anxiety symptoms; and 8.1% reported moderate to severe stress levels.[2]

The magnitude of mental health outcomes and associated factors was assessed among 1257 health care

[1] Perpetual Succour Hospital, Department of Internal Medicine, Gorordo Avenue, Cebu City, Philippines 6000
Corresponding Author: Elrey P. Inocian, MD; Email: inocian567@gmail.com
2nd Place- Descriptive Category
Moderated Poster Research Contest
25th PCP Midyear Convention
Subic Bay and Convention Center, Philippines

workers treating patients exposed to COVID-19 in China. A considerable proportion of participants reported symptoms of depression (634 [50.4%]), anxiety (560 [44.6%]), insomnia (427 [34.0%]), and distress (899 [71.5%]). In this survey of heath care workers in hospitals equipped with fever clinics or wards for patients with COVID-19 in Wuhan and other regions in China, participants reported experiencing psychological burden, especially nurses, women, those in Wuhan, and frontline health care workers directly engaged in the diagnosis, treatment, and care for patients with COVID-19.[3]

Meanwhile, medical students in Changzhi Medical College in China transitioning from pre-clinical to clinical years displayed the highest numbers in anxiety, attentional and depressive symptoms. The prevalence of mental health problems in Chinese medical students suggested a 21% prevalence of anxiety and it is well established that mental health issues are more prevalent within the medical field and medical schools. Meanwhile, 24.9% of the anxiety occurrence may have been exacerbations of pre-existing mental health issues rather than new onset problems.[4]

Healthcare workers and professionals' –who work under high stress environment – emotional and behavioral responses are naturally adaptive in the face of extreme (unpredictable and uncertain) stress, and thus counselling and psychotherapy based on the stress-adaptation model might act as early and prompt intervention. Addressing the mental health issues in medical workers is thus important for the better prevention and control of the pandemic.[5]

Providing psychological first aid is an essential care component for populations that have been victims of emergencies and disasters, before, during and after the event. With the aim of dealing better with the urgent psychological problems of people involved in the COVID-19 pandemic, a new psychological crisis intervention model is needed such as online mental health services.[6] Leveraging online technology will allow delivery of psychosocial supports while preserving physical distancing.[7] In addition, the use of digital technologies can bridge social distance, even while physical distancing measures are in place.[8]

A rapidly deployable Psychological Resilience Intervention founded on a peer support model (Battle Buddies) developed by the United States Army, which incorporates evidence-informed "stress inoculation" methods developed for managing psychological stress exposure in providers deployed to disasters. The multilevel, resource-efficient, and scalable approach places 2 key tools directly in the hands of providers: (1) a peer support Battle Buddy; and (2) a designated mental health consultant who can facilitate training in stress inoculation methods, provide additional support, or coordinate referral for external professional consultation.[9]

Despite all these information in the literature, no study has focused on the medical licensure takers who are also vulnerable during this crisis. Given the emotional and psychological toll brought by the board exam itself, the added stress and uncertainty of the COVID-19 pandemic may have an impact on their psychological well-being.

Research Question: What are the psychological responses in terms of the prevalence and severity of major depressive disorder, generalized anxiety disorder, and level of perceived stress of the March 2020 and November 2020 Physician Licensure Exam takers to the COVID-19 pandemic?

General Objectives: This study aimed to determine the psychological responses in terms of the prevalence and severity of major depressive disorder, generalized anxiety disorder, and level of perceived stress of the March 2020 and November 2020 Physician Licensure Exam takers to the COVID-19 pandemic.

Specific Objectives: Specifically, this study seeks to:

1. To determine the socio-demographic characteristics of the physician licensure takers in the March 2020 and November 2020 Philippine Physician Licensure Examination.
2. To determine the prevalence and severity of depression, anxiety, and perceived stress of the March 2020 and November 2020 Physician Licensure Exam takers to the COVID-19 pandemic.
3. To determine if there is a significant difference in the prevalence and severity of depression, anxiety, and perceived stress of the March 2020 and November 2020 Physician Licensure Exam takers to the COVID-19 pandemic.

Significance of the Study. Mental health is often overlooked as an important aspect of daily work struggle. However, in case of a pandemic when there is not enough time prepare oneself but to battle in full confidence geared with personal protective equipment, the need to give importance to this cannot be over-emphasized. This study aims to benefit the following groups or individuals in one way or another:

- *Department of Health*. As the staunch leader in health, the DOH will be able to grasp the situation of our future frontline healthcare workers and recommend policies and interventions that will improve the mental health of aspiring medical doctors.
- *Philippine Regulations Commission (PRC)*. Given the present shortage of healthcare workers to help fight in the pandemic, certain measures must be conducted in order to overcome the psychological impact of the COVID-19 pandemic or the country will be facing licensed but non-practicing medical doctors due to fear and other effects on their well-being.
- *Medical Schools*. As they give supervision to their medical graduates, they can devise means to improve the well-being of their students not only to

improve their passing rate but also to produce medical doctors with stable mental health and well-being.

- *Review Centers*. With the findings of this study, review centers can also incorporate coping strategies and interventions to help their reviewees. As anxiety, depression, and stress can significantly impact on the thought process of the medical exam takers during the examination proper, review centers can help prepare these individuals by helping them develop their own coping mechanisms.
- *Physician Licensure Exam takers*. Being the population involved in this study and a vulnerable group during this pandemic, the outcome of this study may serve to make interventions to improve their coping and address their psychological needs that may impact their performance in the upcoming board exam.
- *Researchers*. As the people mostly interested in conducting the study, the findings of this study may serve as means for them to influence other stakeholders to make a change and improve the general well-being of the medical licensure exam takes.
- *Future Researchers*. They will be able to utilize the results of this study for their future endeavor.

Definition of Terms

Anxiety refers to the feeling of worry, nervousness, or unease, felt by the medical licensure exam takers. This was measured in this study using the Generalzed Anxiety Disorder (GAD-7) questionnaire.

Corona Virus 19 Disease (COVID-19) refers to the novel coronavirus or SARS-CoV 2 virus that was declared by the World Health Organization as pandemic.

Depression or major depressive disorder refers to the DSM V criteria for major depressive disorder. In this study, it was measured using the Patient Health Questionnaire-9.

Philippine Physician Licensure Examination (PLE) also called Philippine Medical Boards, is the professional licensure examination for incoming physicians in the Philippines, exclusively administered twice a year by the Philippine Regulations Commission

Physician Licensure Exam Takers refers to the March 2020 PLE takers who will be completing the second half of the board exam by September 2020, and the November 2020 PLE takers who will be taking the entire set of exam.

Psychological responses refer to the prevalence and severity of depression, anxiety, and perceived stress of the Physician Licensure Exam takers.

Perceived Stress refers to the tension or pressure of the medical licensure exam takers in their preparation for their medical board exam during the COVID-19 pandemic. This was measured in this study through the Perceived Stress Scale.

Psychological Interventions refer to counseling or other forms of interventions that may aid the PLE takers in coping with their responses to the COVID19 pandemic.

Scope and Limitations of the Study. This study was conducted online, which limits interaction of the researcher and the respondents during administration of the questionnaire. The respondents might not be able to ask right away any clarifications while answering the survey. Nonetheless, instructions was provided accordingly and contact numbers will be included should clarifications be raised. Another limitation of the study is that there is no baseline prevalence of depression, anxiety, and perceived stress of the PLE takers. Thus, it is difficult to ascertain if their psychological responses were the result of the COVID19 pandemic or because of the PLE per se.

Methodology

Research Design. This study utilized a cross-sectional descriptive survey design to determine the psychological responses in terms of the prevalence and severity of major depressive disorder, generalized anxiety disorder, and level of perceived stress among the Philippine Physician Licensure Takers for both the March 2020 and November 2020 Physician Licensure Examinations to COVID-19 pandemic.

Respondents of the Study. The respondents of the study were the PLE takers of the March 2020 PLE who will be completing the examination on September 20-21, 2020 and the PLE takers for the November PLE chosen through snowball sampling.

Research Locale. This study was conducted in Perpetual Succour Hospital, Cebu City, Philippines, where the researchers are based.

Data Gathering Procedure. Ethical approval for the conduct of the study was secured from the Institutional Review Board of Perpetual Succour Hospital. The researchers looked for a point person who helped disseminate the link of the online survey. The questionnaire was made available online via Google forms. Before conducting the actual survey, a pilot study comprising 10 participants was carried out to ensure clarity of the questionnaire. A consent form was attached before our questionnaire giving us permission to use the collected data. Confidentiality and anonymity were thoroughly ensured and no names or email addresses were asked. The data were collected over a period of fifteen days from July 15-30, 2020. The completed questionnaires were then retrieved and collated.

Research Tools. This study utilized three sets of standardized questionnaires - the *Patient Health*

Questionnaire-9 (PHQ-9) to assess prevalence of Major Depressive Disorder and Severity, the *General Anxiety Disorder (GAD-7)* to assess prevalence and severity of anxiety disorders, and the *Perceived Stress Scale (PSS)* to assess the level of stress of the medical licensure exam takers.

The first part of the questionnaire was an 11-item question about the profile of the respondents. The second part of the questionnaire determined the psychological response of the Physician Licensure Takers to COVID-19. This include the first questionnaire, which is the 9-item Patient Health Questionnaire (PHQ-9). The PHQ-9 was initially developed as a subset of nine questions from the full PHQ, which had previously been derived and studied in a cohort of 6,000 patients in eight primary care clinics and seven obstetrics-gynecology clinics. An additional 10th question is added to determine "how difficult have those problems made it for you to do your work, take care of things at home, or get along with other people". PHQ-9 scores ≥10 were found to be 88% sensitive and 88% specific for detecting Major Depressive Disorder. Criterion validity was also assessed in a sample of 580 patients. PHQ-9 scores of 5, 10, 15, and 20 represents mild, moderate, moderately severe, and severe depression (*Table I*). Kindly refer to the Appendix for further instruction on the interpretation of the PHQ-9 scores.[10,11]

The second questionnaire was the Generalized Anxiety Disorder-7 (GAD-7), which is a seven-item instrument that is used to measure or assess the severity of generalized anxiety disorder (GAD). The 8th question relates to how difficult have those problems made it for you to do your work, take care of things at home, or get along with other people. Each item asks the individual to rate the severity of his or her symptoms over the past two weeks. The GAD-7 score is calculated by assigning scores of 0, 1, 2, and 3, to the response categories of "not at all," "several days," "more than half the days," and "nearly every day," respectively, and then adding together the scores for the seven questions. GAD-7 total score for the seven items ranges from 0 to 21. Scores of 5, 10, and 15 represent cut-points for mild, moderate, and severe anxiety, respectively (*Table I*).[12]

Response options include "not at all", "several days", "more than half the days" and "nearly every day". It is useful in primary care and mental health settings as a screening tool and symptom severity measure for the four most common anxiety disorders (Generalized Anxiety Disorder, Panic Disorder, Social Phobia and Post-Traumatic Stress Disorder). For all questions, answers involved choosing one of the following: Not at all = 0, Several days = +1, More than half the days = +2, Nearly every day = +3. It has a total score of 0-21, with 0-3 points for each of the seven questions. The last question of the GAD-7 is a good indicator of patient's global impairment, though not included in the final calculation of points. Initially validated in 2149 patients as a diagnostic tool for GAD (cutoff score 10-> sensitivity 89%, specificity 82%, test-retest reliability with ICC=0.83), the GAD-7 was later also found to have reasonable sensitivity and specificity as a screener for panic disorder, social phobia and PTSD (cutoff score 8- sensitivity 77%, specificity 82%; cutoff score 10 - sensitivity 68% and specificity 88% for any anxiety disorder).[12]

Table I. Severity of Depression, Anxiety and Perceived Stress Depending on the Scores Derived from the Questionnaires

Score (PHQ-9)	Depression severity
0-4	Minimal or none
5-9	Mild
10-14	Moderate
15-19	Moderately severe
20-27	Severe
Score (GAD-7)	**Anxiety severity**
0-5	Mild Anxiety
6-10	Moderate Anxiety
15-21	Severe Anxiety
Score (PSS)	**Perceived Stress Severity**
0-13	Low Stress
14-26	Moderate Stress
27-40	High Perceived Stress

Table II. Profile of the Respondents (n= 732)

	Result n (%)
PLE Takers	
November PLE Takers	423 (57.8%)
March PLE Takers	309 (42.2%)
First Time to take the PLE	586 (80.1%)
Age, Mean	28
Gender	
Male	540 (73.8%)
Female	192 (26.2%)
Marital Status	
Single	667 (91.1%)
Married	50 (6.8%)
Divorced	15 (2.0%)
Religion	
Roman Catholic	555 (75.8%)
Born Again	80 (10.9%)
Islam	26 (3.6%)
Seventh day Adventist	19 (2.6%)
Baptist	9 (1.2%)
Protestant	9 (1.2%)
Iglesia ni Cristo	8 (1.1%)
Others	26 (3.6%)
Without child/children	653 (89.2%)
Living with Family during this pandemic	530 (72.4%)
Exposure during Post-Graduate internship	
Government	380 (51.9%)
Private	352 (48.1%)
Year when Post-graduate Internship was finished	
2020	449 (61.3%)
2019	211 (28.8%)
2018	46 (6.3%)
Other year	26 (3.6%)

Table III. Prevalence and Severity of Depression (n= 732)

	March PLE Takers n=309 (%)	November PLE Takers n=423 (%)	Total Takers n=732 (%)
	60 (19.4%)	76 (18.0%)	136 (18.6%)
Mild Depression (5-9)	81 (26.2%)	92 (21.7%)	173 (23.6%)
Moderate Depression (10-14)	75 (24.3%)	120 (28.4%)	195 (26.6%)
Moderately severe Depression (15-19)	63 (20.4%)	88 (20.8%)	151 (20.6%)
Severe Depression (20-27)	30 (9.7%)	47 (11.1%)	77 (10.5%)
Overall Prevalence of Major Depression	68 (54.4%)	255 (60.1%)	323 (44.1%)

*Major Depression has a cut-off score of >10

Table IV. Prevalence and Severity of Generalized Anxiety Disorder (GAD) (n= 732)

	March PLE Takers n=309	November PLE Takers n=423	Total Takers n=732
Mild Anxiety (0-5)	86 (27.8%)	110 (26.0%)	196 (26.8%)
Moderate Anxiety (6-10)	97 (31.4%)	180 (42.6%)	277 (37.8%)
Severe Anxiety (15-21)	126 (40.8%)	133 (31.4%)	259 (35.4%)
*Overall Prevalence of GAD	144 (46.6%)	223 (52.7%)	368 (50.3%)

*Generalized Anxiety Disorder has a cut-off score of >10

Table V. Perceived Level of Stress (n= 732)

	March PLE Takers n=309	November PLE Takers n=423	Total Takers n=732
Low Stress (0-13)	28 (9.1%)	34 (8.0%)	62 (8.5%)
Moderate Stress (14-26)	216 (69.9%)	298 (70.4%)	514 (70.2%)
High Stress (27-40)	65 (21.0%)	91 (21.5%)	151 (20.6%)

Table VI. Significant difference in the prevalence of Major Depression and Generalized Anxiety Disorder between the March 2020 and November 2020 PLE takers (n=732)

Variables	Computed Z-value	p-value	Decision	Interpretation
Prevalence of Major Depression	-10.3011	<0.00001	Reject the Null Hypothesis	Significant
Prevalence of Generalized Anxiety Disorder	-1.6347	<0.05155	Accept the Null Hypothesis	Not Significant

The last questionnaire that we used was the Perceived Stress Scale (PSS). The Perceived Stress Scale (PSS) is the most widely used psychological instrument for measuring the perception of stress. It is a measure of the degree to which situations in one's life are appraised as stressful. Items were designed to tap how unpredictable, uncontrollable, and overloaded respondents find their lives. The scale also includes several direct queries about current levels of experienced stress. The PSS was designed for use in community samples with at least a junior high school education. The items are easy to understand, and the response alternatives are simple to grasp. Moreover, the questions are of a general nature and hence are relatively free of content specific to any subpopulation group. The questions in the PSS ask about feelings and thoughts during the last month. In each case, respondents are asked how often they felt a certain way. PSS scores are obtained by reversing the responses (e.g., 0 = 4, 1 = 3, 2 = 2, 3 = 1 & 4 = 0) to the four positively stated items (items 4, 5, 7, & 8) and then summing across all scale items. Individual scores on the PSS can range from 0 to 40 with higher scores indicating higher perceived stress (*Table I*).[13]

Statistical Analysis. Simple Frequency and percentage were used to determine the prevalence and levels of depression, anxiety, and perceived stress of the medical licensure exam takers. *Simple Mean* was used to compute the average age of the respondents. *Z-test* was used to determine the difference in the prevalence of major depression and generalized anxiety disorder of the PLE takers. *Chi-square* was used to determine the difference in the levels of perceived stress of the PLE takers

Results

A total of 732 takers completed the online survey (*Table II*). Four hundred twenty-three (57.8%) of the respondents will be taking the November PLE while 309 (42.2%) already took the board exam last March 2020 and will be completing the exam on September 2020.

More than 80% of the respondents are first-time takers of the PLE. Most of the respondents were female (73.8%), single (91.1%), Roman Catholic (75.8%), with no children (89.2%), and live with their respective families during this pandemic (72.4%). Almost equal percentages of the respondents came from the government (51.9%) and private hospitals (48.1%). Majority of them finished their post-graduate internship this year 2020.

The overall prevalence of depression among the PLE takers was 44.1% (n=323). November PLE takers have higher rate of depression (n=255, 60.1%) compared to the March 2020 PLE takers (n=68, 54.4%) (*Table III*). Majority of the PLE takers have moderate depression (n=195, 26.6%). Most of the November PLE takers have moderate levels of depression (n=81, 26.2%) while majority of the March PLE takers only have mild depression (n=81, 26.2%).

Meanwhile, the overall prevalence of Generalized Anxiety Disorder among the PLE takers is 50.3% (n=368) (*Table IV*). Majority of the PLE takers have moderate anxiety (n=277, 37.8%) but 259 (35.4%) have severe depression. Similar to the prevalence of depression, there is a higher proportion of November PLE takers that suffered from generalized anxiety disorder (n=223, 52.7%) compared to the proportion of GAD in the March PLE takers (n=144, 46.6%). Most of the November PLE takers have moderate anxiety (n=180, 42.6%) while a higher proportion of severe anxiety is experienced by the March PLE takers (n=126, 40.8%).

Overall, the PLE takers (n=514, 70.2%) experienced moderate levels of stress, with almost equal percentages for both the March (n=216, 69.9%) and November (298, 70.4%) PLE (*Table V*).

Moreover, there is a significant difference in the prevalence of major depression between the March and November takers ($p < 0.00001$) (*Table VI*). This means that the November PLE takers experienced higher rate of depression compared to the March PLE takers. However, there is no significant difference in the prevalence of generalized anxiety disorder for both batch of takers ($p = 0.05155$).

Furthermore, there is no significant difference in the severity of depression ($p = 0.527878$), severity of anxiety ($p = 0.883558$), and levels of perceived stress ($p = 0.2476$) between the March and November 2020 PLE takers (*Table VII*).

Lastly, 98 (13.4%) of the PLE takers for both March and November wished to undergo counseling (*Table VIII*). With the nearing schedule of the completion exam for the March takers, 65 (21.0%) of them wished to undergo the counseling compared to the November (7.85%) takers.

Discussion

The COVID19 pandemic indeed has significant psychological responses to the PLE takers. In fact, there is a higher overall prevalence of depression among PLE takers (44.1%) compared to the general population (21.0%)[1] but is slightly lower compared to the prevalence of depression among medical health workers (50.4%).[3] More PLE takers also experienced moderate to severe depression (20.6%) compared to that of the general population (16.5%).[2] Meanwhile, there was a significant difference in the prevalence of depression between the March and November PLE takers (p-value <0.0001). This is probably due to the fact that March PLE takers already gained experience in taking the first 6 subjects of the board exam and has more preparation time for the remaining 6 subjects. Meanwhile, there was no significant difference in terms of severity of depression between the March and November PLE takers (p-value 0.527878).

In terms of anxiety, the overall prevalence of Generalized Anxiety Disorder among the PLE takers (50.3%) is also higher compared to the general public during the COVID19 pandemic (35.1%)[1] and even higher among

Table VII. Severity of Major Depression, Generalized Anxiety Disorder, and Perceived Stress Among the March 2020 and November 2020 PLE takers (n=732)

Variables	Degrees of Freedom	X^2	p-value	Decision	Interpretation
Severity of Major Depression	4	3.1818	0.527878	Accept the Null Hypothesis	Not Significant
Severity of Generalized Anxiety Disorder	2	0.2476	0.883558	Accept the Null Hypothesis	Not Significant
Severity of Perceived Stress	2	0.883558	0.2476	Accept the Null Hypothesis	Not significant

*Alpha level of Significance: 0.05

Table VIII. Percentage of Takers Who Wish to Undergo Counseling

Schedule of PLE	Number (%)
March PLE Takers	65 (21.0%)
November PLE Takers	33 (7.85%)
Total	98 (13.4%)

medical workers (44.6%)[3] and medical graduates transitioning from their pre-clinical to clinical years (21.0%).[4] The severity of anxiety is also higher among PLE takers as compared to the general population. Similar to the prevalence of depression, there was a higher proportion of November PLE takers that suffered from generalized anxiety disorder (52.7%) compared to the proportion of GAD in the March PLE takers (46.6%). This is probably because the second part of the examinations will be done taken in less than two months. In addition, the changing schedule of the examination may have affected their level of anxiety. However, this was not statistically significant ($p = 0.05155$). The severity of anxiety among the March and November PLE takers was not also significant ($p = 0.883558$).

Moreover, a higher proportion of PLE takers experience moderate to severe level of stress (70.2%) as compared with the general population (8.1%).[2] This goes to show that the coming board exam and the COVID19 pandemic is causing significant stress among the PLE takers. However, the levels of perceived stress between the March and November 2020 PLE takers is not statistically significant ($p = 0.2476$).

With the psychological impact of the COVID19 pandemic, many of the PLE takers need psychological guidance in the form of counseling. More PLE takers from the March group (21.0%) need this psychological intervention but a little less compared to the prevalence of major depression in their group (54.4%). This may be because healthcare professionals who work under high stress environment are naturally adaptive in the face of extreme (unpredictable and uncertain) stress.[5] However, providing psychological first aid is still an essential care component for populations that have been victims of emergencies and disasters, before, during and after the event.[6] This psychological crisis intervention may use digital technology through an online mental health services, which allow delivery of psychosocial supports while preserving physical distancing.[6,7,8] Another way to help the PLE takers effectively respond and develop resilience during the COVID19 pandemic is incorporating peer support model, which uses a peer support Battle Buddy and a designated mental health consultant who can facilitate training in stress inoculation methods, provide additional support, or coordinate referral for external professional consultation.[9]

Conclusion

There was a high prevalence of major depression and generalized anxiety disorder among the PLE takers during the COVID-19 pandemic. Majority of the PLE takers experienced moderate level of depression, anxiety, and perceived stress. Psychological interventions are needed to help the PLE takers cope during the COVID19 pandemic.

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