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Original Research

Gender Differences In Covid-19 Anxiety Syndrome Among Filipino Nursing Students

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Background: *The global COVID-19 outbreak has affected all sectors of society. Nursing students were not exempted. This study examined COVID-19 anxiety syndrome among Filipino nursing students and whether significant differences existed according to gender.*

Methods: *This cross-sectional study used the COVID-19 Anxiety Syndrome Scale (C-19ASS) as the primary tool for data collection. Significant gender differences were tested using the Mann-Whitney U test.*

Results: *Results showed that the composite score in the C-19ASS was 3.92 (SD=.69) indicating a moderate to a high level of anxiety syndrome features associated with COVID-19 among nursing students. The mean scores in the preservation and avoidance factors were 3.94 (SD=.76) and 3.88 (SD=.91), respectively. Female nursing students had a significantly higher (p=.004) COVID-19 anxiety syndrome compared to male nursing students.*

Conclusion: *The global outbreak of COVID-19 brought about extraordinary anxiety syndrome and stressful situations among nursing students. Nursing students, particularly female students, may benefit from additional support and guidance during the COVID-19 pandemic.*

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INTRODUCTION

COVID-19 is a very infectious and potentially lethal disease with an estimated global case fatality rate of 3.7% (Tee et al., 2020a). The disease outbreak has resulted in overwhelming changes in the lives of many (Nikčević & Spada, 2020). It has affected all sectors of society and the education sector was not exempted (Moralista & Oducado, 2020; Rabacal et al., 2020). It has caused not only a health catastrophe but social, economic, and educational crisis as well (Sugiyanto et al., 2020).

The COVID-19 outbreak was declared the sixth Public Health Emergency of International Concern under International Health Regulations that affected several countries around the world (Aylie et al., 2020; Levkovich & Shinan-Altman, 2021; Rabacal et al., 2020). As of 17 January 2021, there are already 93,194,922 recorded cases of COVID-19 worldwide (World Health Organization, 2021) and the number of confirmed COVID-19 cases in the Philippines has reached over half a million

(Philippine Department of Health, 2021). Unfortunately, the cases and deaths of COVID-19 are still increasing.

The profound and dramatic changes brought by the COVID-19 pandemic pose threat to mental health and well-being and eventually led to the rise of pandemic-related psychological distress that may last beyond the course of the pandemic (Nikčević & Spada, 2020; Tee et al., 2020a). The uncertain prognoses, shortage of resources, looming financial losses, conflicting messages from authorities, likewise restrictions and lockdown measures to contain virus transmission and minimize the spread of COVID-19 may result in a range of psychological reactions, feelings of social isolation, emotional distress, and abnormally increased anxiety (Brooks et al., 2020; Pfefferbaum & North, 2020; Serafini et al., 2020). Recent studies have reported the negative impact of the COVID-19 pandemic on psychological, emotional, and mental health. For example, the mental health of more than one-fifth of teenagers of a study conducted in China was reportedly affected (Zhang et al., 2020). A study in Ethiopia among university students reported 21.2%, 27.7%, and 32.5% had depression, anxiety, and stress, respectively (Aylie et al., 2020).

Anxiety, depression, and stress were also prevalent among adolescents in India (Nepal et al., 2020). In the Philippines, a study during the early phase of the pandemic reported 16.9%, 28.8%, and 13.4% experienced moderate to severe depressive symptoms, anxiety levels, and stress levels, respectively (Tee et al., 2020b). Moreover, the study disclosed that the pandemic had a greater psychological impact among students (Tee et al., 2020b). Among nursing students, the COVID-19 pandemic sparked a period of novel and demanding challenges (Savitsky et al., 2020a). However, while there has been a surge in research on the psychological impact of the pandemic, there are still limited academic works on COVID-19 anxiety syndrome conducted among nursing students.

Moreover, given the novelty of the COVID-19, not all aspects of the disease are known. It may be necessary to determine the combined avoidance, checking, worrying, and threat monitoring related to COVID-19 (Nikčević & Spada, 2020) among nursing students in the Philippines, hence, this present study. Assessing the COVID-19 anxiety syndrome among nursing students is necessary in order to identify the any possible impact of COVID-19 on the mental health of nursing students. The purpose of this study was to assess the COVID-19 anxiety syndrome among Filipino nursing students and whether there are significant differences in the COVID-19 anxiety syndrome experienced by male and female nursing students.

MATERIALS AND METHOD

A cross-sectional research design was utilized in this study. A convenience sample of 175 nursing students was recruited for this study and completed the online survey in November 2020. Nursing students enrolled in the first semester of academic school year 2020-2021 were included in the study. Participants were reminded at the beginning of the survey that proceeding and completing the survey indicates voluntary consent to participate in the study. Anonymity and confidentiality were maintained throughout the study.

The COVID-19 Anxiety Syndrome Scale (C-19ASS) by Nikčević & Spada (2020) was the primary measure used in this study. The C-19ASS is a 9-item self-report measure loading on two factors: preservation (C-19ASS-P) and avoidance (C-19ASS-A). Participants were asked to indicate their level of agreement on each item using a 5-

point Likert-type scale with answers ranging from "1-Not at all" to "5-Nearly every day". Both the C-19ASS-P (6 items; α = .86) and the C-19ASS-A (3 items; α = .77) demonstrated acceptable levels of reliability (Nikčević & Spada, 2020). The C-19ASS had a reliability of α = .83 among Filipino graduate students (Oducado, Parreño-Lachica, et al., 2021).

For this study, the overall C-19ASS had a reliability of α = .80 while the C-19ASS-P had α = .79 and the C-19ASS-A had α = .72. Higher scores indicate a higher level of anxiety syndrome. Data were analyzed using SPSS version 23. Test of normality revealed a p-value of .000. The Mann-Whitney U test was used to test for differences according to gender. A p-value of less than .05 was considered significant.

RESULTS

Table 1 shows that the average age of the participants was 19.55 (SD=1.02). The majority were females (80.6%). The Level 1 or first-year participants were comprised of 37.7%, the Level 2 or second-year participants were 36%, and the Level 3 or third-year participants were 26.3%.

Table 1. Profile of participants

Profile	M	SD	f	%
Age	19.55	1.02		
Gender				
Male			34	19.4
Female			141	80.6
Year Level				
Level 1			66	37.7
Level 2			63	36.0
Level 3			46	26.3

Table 2 shows the composite score in the C-19ASS was 3.92 (SD=.69). The mean scores in the preservation and avoidance factors were 3.94 (SD=.76) and 3.88 (SD=.91), respectively.

Table 2. COVID-19 anxiety syndrome

Items	M	SD
Checked self for symptoms	3.88	1.19
Concerned about not adhering strictly to social distancing guidelines	4.02	1.03
Read about news	3.91	.98
Checked family members and loved ones for signs	3.98	1.10
Paid close attention to others displaying possible symptoms	3.87	1.09
Imagined what could happen to family members	3.98	1.11
Preservation subscale score	3.94	.76
Avoided using public transport	3.52	1.32
Avoided going out to public places	3.78	1.15
Avoided touching things in public spaces	4.34	.91
Avoidance subscale score	3.88	.91
Anxiety Syndrome composite score	3.92	.69

Table 3 shows that there were significant differences in the general COVID-19 anxiety syndrome of nursing students based on gender (p=.004). In addition, there were significant differences in the preservation subscale (p=.006), however, no significant differences in the avoidance domain (p=.083) according to gender.

Table 3. Difference COVID-19 Anxiety Syndrome

Variables	Preservation		Avoidance		Anxiety Syndrome	
	Mean Rank	p-value	Mean Rank	p-value	Mean Rank	p-value
Gender		.006		.083		.004
Male	66.63		74.57		65.47	
Female	93.15		91.24		93.43	

DISCUSSION

This study investigated COVID-19 anxiety syndrome among nursing students. It was demonstrated that nursing students experienced moderate to high levels of COVID-19 anxiety syndrome as indicated by the above midpoint score obtained in the C-19ASS. Findings of other studies similarly reported prevalence of moderate to high levels of COVID-19 anxiety, stress, fear, extremely negative emotions, and other psychological distress among nursing students. It was found that moderate and severe anxiety was 42.8% and 13.1% respectively among nursing students in Israel (Savitsky et al., 2020b) while 22.9% and 18.1% respectively among nursing students in Nepal (Dangal & Bajracharya, 2020). Likewise, nursing students in Spain reported that stress increased substantially during lockdown (Gallego-Gómez et al., 2020).

It was also found that Australian nursing students reported significantly higher levels of anxiety, difficulty sleeping, concentrating, and eating (Kochuvilayil et al., 2021). A moderate to a high level of fear was also noted among nursing students in the Philippines (Oducado, Tuppal et al., 2021). Recent studies also found that nursing students practiced avoidant behaviors to prevent COVID-19 transmission. For instance, among nursing students in Saudi Arabia (Begum, 2020) and Nigeria (Kanikwu & Nwazuruoke, 2020), the majority practiced COVID-19 prevention protocols, followed social distancing to avoid contact with infected persons, and avoided going to crowded places. The findings suggest that nursing students may experience mental health concerns related to the pandemic and that the COVID-19 crisis has resulted in unparalleled stressful situations among nursing students (Savitsky et al., 2020a).

While it seems noteworthy that nursing students tend to follow health protocols that prevent virus transmission and students take appropriate preventive and control to break the chain of COVID-19 spread (Purnamasari & Raharyani, 2020), caution is warranted that this will not lead to obsessional thinking and become overly excessive resulting in psychological distress. This study also demonstrated that female nursing students reported a higher level of COVID-19 anxiety syndrome compared to male nursing students. This result of this study indicates that women compared to men tend to be more avoidant and careful at the same time constantly monitor and worry more about COVID-19. This result is relatively consistent with other prior studies that found females tend to report higher levels of emotional reactions and preventive behaviors to COVID-19 than males. Women showed more severe anxiety and fear than men in a study conducted in China among nurses and nursing students (Huang et al., 2020).

The anxiety level of female students was higher than males among nursing students in Israel (Savitsky et al., 2020b). It was also noted that the level of stress by females was higher than that of males in a study among nursing students in Turkey (Aslan & Pekince, 2020). Correspondingly, females were more prone to anxiety as compared to males among nursing students in Nepal (Dangal & Bajracharya, 2020). Likewise, female nursing students had higher fear and perceived COVID-19 impact than male nursing students in a study conducted in the Philippines (Guillasper et al., 2021; Oducado, Tuppal et al., 2021). Gender was also a factor that affected Chinese nursing students' COVID-19 prevention behavior (Yuan et al., 2020).

A study in Israel furthermore revealed that women exhibited higher levels of precautionary behavior and emotional responses than men (Levkovich & Shinan-Altman, 2021). The result of this study may be attributed to biological and hormonal changes, sociocultural factors, emotional regulation, and gender trait differences among men and women (Aslan & Pekince, 2020; Huang et al., 2020; Oducado, Tuppal et al., 2021; Oducado, Rabacal et al., 2021; Sugiyanto et al., 2020). Additionally, women may believe that being more careful and concerned can help reduce their risk of being severely affected by COVID-19 (Galasso et al., 2020). The finding suggests that female nursing students may require more support and guidance (Oducado et al., 2017) during a crisis like this COVID-19 pandemic.

This study is limited to the self-report of a convenient sample of nursing students in the Philippines. The results cannot be generalized to all nursing students in the country and abroad. Also, whether anxiety changes over time cannot be answered by the cross-sectional research design of this study. The researcher warrants caution in the use and interpretation of the findings of the current study.

CONCLUSION

This study highlighted that the global COVID-19 outbreak has resulted in extraordinary anxiety syndrome causing constant worrying, checking, monitoring of threat, fear, and avoidance among nursing students. The findings of this study suggest that the mental health of nursing students especially females requires focal attention during the pandemic and in times of crisis. Neglecting to look into the negative psychological impact of the COVID-19 crisis among students may result in unfavourable concerns. Nursing students may benefit from additional support and guidance during this pandemic. It may be necessary for academic nursing institutions to develop interventions that foster positive coping and to generate strategies that promote mental health to help allay the anxiety and stress of nursing students during the worldwide health crisis.

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