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Stress, Anxiety and Mental well-being among Nursing students: A Descriptive-Correlational study

KATHYRINE A. CALONG CALONG, RN, MAN
https://orcid.org/0000-0002-8471-6166

JUDALYN S. COMENDADOR, RN, MAN
https://orcid.org/0000-0001-5543-1420

College of Nursing, San Beda University, Manila, Philippines

Corresponding author's email: ***kcalongcalong@sanbeda.edu.ph***

Abstract

Background: The COVID-19 pandemic has affected everyone's health and well-being and has resulted in the shift of conventional face-to-face classes to online instruction. This has had major negative effects on students who are facing the difficulty of online classes in terms of their physical and mental health.

Objectives: The study determined the relationship between stress and anxiety on emotional social and psychological well-being among nursing students.

Methods: The study utilized descriptive cross-sectional research and a purposive sample of 210 nursing students was included in the study. The data were collected from November 2020 to December 2020. The Perceived Stress Scale (PSS-10), General Anxiety Disorders Scale (GAD-7), and Mental Health Continuum-Short Form (MHC-SF) (which measures emotional, psychological, and social well-being) were used to collect the necessary data. Frequency, percentage, mean, standard deviation, and Pearson's r correlation were utilized to analyze the gathered data.

Results: The participants were shown to have a moderate level of stress (M=19.53; SD=±3.29), moderate level of anxiety (M=14.43; SD=±7.62), and moderate mental health. Further, stress was shown to have a significant negative correlation with emotional well-being (r= -0.218; p=0.000), social well-being (r= -0.175; p=0.000), psychological well-being (r= -0.219; 0.000), and the over-all mental well-being (r= -0.222, p=0.000). Also, it was noted that anxiety has a significant negative relationship with emotional well-being (r= -0.418; p=0.000), social well-being (r= -0.280; p=0.000), psychological well-being (r= -0.331; p=0.000) and over-all mental well-being (r= -0.362; p=0.000).

Conclusion: In light of mental health concerns among nursing students, faculty and administrators have a professional responsibility to address foreseeable psychological stressors and promote the mental well-being of students in their institution. The protection and development of mental well-being will allow students to maintain academic excellence and facilitate future success.

Keywords: Anxiety, COVID-19, stress, mental well-being

Introduction

In 2015, the United Nations Member States adopted the Sustainable Development Goals (SDGs), also called Global Goals is established to aid humanity in grasping the optimum state of the forthcoming years. It is designed to secure effective approaches and ensure the betterment of the global challenges before us, as well as the challenges that await us. Ensuring healthy lives and promoting well-being at all ages is one of the Sustainable Development Goals (SDGs) announced by the United Nations (UN) in 2015. This has highlighted the importance of well-being as a global academic and policy priority (United Nations, 2015). However, the current global situation is under a constant siege against the phenomenal crisis brought by the COVID-19 pandemic which caused a disturbance in the regularity of life in the sense of health, economy, and society.

Before the pandemic, tremendous progress was acknowledged in the improvement of health in global settings. Increased life expectancy, as well as reduced child and maternal mortality rates, were accomplished, however, the world must intensify its efforts to address several global issues specifically the emerging health issues ahead of us. Therefore, adequate funding, enhancement of health systems, improved sanitation, and reinforcement of healthcare professionals, are deemed to be the blueprint for pursuing the sustainable development goal of promoting the health and well-being of individuals (United Nations, 2020). The term "well-being" is agreed to be an individual's state of physical, mental, and social health. It concerns one's frame of mind, sanity, and sense of life. Additionally, It can also be specified as the ideal judgment and perception of life (CDC, 2018).

Currently, the COVID-19 pandemic is significantly influencing the health and well-being of all individuals as it adds complexity to the healthcare systems. Healthcare professionals are distressed due to excessive workload and increased susceptibility to the virus whilst the patients are suffering from the physical and mental consequences of COVID-19. Likewise, since there is inadequate access to healthcare facilities, people are experiencing inequality and are receiving inadequate standards of care. Study shows that socio-economic characteristics such as income, social class, occupation, and educational background can affect one's health outcome. In all likelihood, the health and well-being of healthcare professionals and the public will not be fully addressed and may yield medium and long-term consequences (Otu et al., 2020).

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Physical classes had been suspended in the Philippines to prevent the emergence of COVID-19 cases. In the wake of this unprecedented global phenomenon, students have shown remarkable resilience in coping with the concept of taking courses online, establishing a "new normal." The students took advantage of this alternative mode of instruction to remain on track and alleviate concerns over falling behind. However, despite the convenience of online education, distance learning has several detrimental effects on students' physical and mental health (Halupa, 2016). Researchers have raised concerns about the impact of COVID-19 on public health globally. Several studies have shown that students are more likely to suffer from stress, anxiety, and depression, most notably under prolonged home confinement. In addition, uncertainties, infection-related anxiety, bereavement, financial hardship, and poor mental well-being, in general, can adversely affect academic performance and are likely to undermine the success of online learning (Banerjee, 2020; Deo et al., 2020; Galea et al., 2020; Kaup et al., 2020).

Higher education's universal and increasingly competitive nature has exacerbated common academic stressors that lead to mental health problems among university students (Beiter et al., 2015; Fawzy & Hamed, 2017). Research has found that stressors such as meeting institutional and socio-cultural demands, coursework management, and financial commitments are sources of depression, anxiety, and stress in university students (Elias et al., 2011). According to recent meta-analyses, Asian university students studying nursing and medicine have a high prevalence of depression 43% (Tung et al., 2018) and 11% (Cuttilan et al., 2016) in each group, respectively.

The onset of an outbreak and its implications for psychological distress can adversely affect student academic success and overall mental well-being. Changing circumstances surrounding the pandemic disrupted the learning process and created a stressful work environment where anxiety and depression became a concern (Fawaz & Samaha, 2021). Lovric et al. (2020) found that nursing students demonstrated poor motivation, inattention, and performance deficits following the pandemic. Meanwhile, Alici et al. (2021) observed that fear of contracting COVID 19 is associated with elevated anxiety, consequently affecting academic performance. According to other research (Son et al., 2020; Majrashi et al., 2021; Thapa et al., 2021; Park & Seo, 2022), technical issues, course quality, online learning complexities, connectivity issues, and inability to actively practice clinical skills are significant factors contributing to stress and anxiety. As stress and anxiety intensify in times of an outbreak detrimental to academic performance, the study aims to determine nursing students' stress and anxiety levels and their relationship with emotional, social, and psychological well-being.

Methodology

Research design and Sampling Technique

Descriptive-cross sectional research was utilized as the design of the study and a purposive sampling technique was used to determine the relationship between stress and anxiety on mental

well-being (which includes emotional mental, and psychological well-being) among nursing students. The data were collected from November 2020 to December 2020.

Measurement and Instrumentation

The study utilized a three-part questionnaire to gather the data needed. These include the Perceived Stress Scale (PSS-10), General Anxiety Disorders Scale (GAD-7), and the Mental Health Continuum-Short Form (MHC-SF).

Perceived Stress Scale (PSS-10). It was developed by Cohen et al. (1983) consisting of 10 items with five responses ranging from 0 = Never to 4 = Very often. A high score signifies a high level of stress (0-13= low stress; 14-26= moderate stress; 27-40= high stress). The scale has a Cronbach's alpha coefficient of 0.88.

General Anxiety Disorders Scale (GAD-7). The instrument was developed by Spitzer et al. (2006) consisting of seven items with a 4-point Likert scale ranging from 0 = Not at all to 4 = Nearly every day. The score can be interpreted as mild (5 to 9), moderate (14 to 15), and severe (>15). It has a Cronbach's alpha coefficient of 0.90.

Mental Health Continuum-Short Form (MHC-SF). This was developed by Keyes et al. (2008) and consists of 14 items which are divided into the three subscales 'emotional well-being' (Happiness, Interest, and Life Satisfaction), 'social well-being' (Social Contribution, Social Integration, Social Actualization, Social Acceptance, and Social Coherence), and 'psychological well-being' (Self-acceptance, Mastery, Positive Relations, Personal Growth, Autonomy, and Purpose in Life). In addition, the scores on all 14 items can be averaged into a total well-being score. Items are answered on a 6-point scale ranging from 0 (never) to 5 (almost always or always).

Procedures and Participants

Before the conduct of the study, permission was secured from the respective Deans of selected Colleges of Nursing in Manila and Pasay City where the study was conducted. After getting the approval, ethical clearance was secured from the San Beda University- Research Ethics Board (SBU-ERB) with Protocol No. 2020-022. Online-based surveys were distributed to the students who volunteered for the study.

A total of 210 nursing students were included in the study. The average age of the participants was 20.58 (SD=3.51). There were 163 (77.62%) females and 47 (22.38%) males. The undergraduate students included 73 (34.76%) Level 1 students, 50 (23.8%) Level 2 students, and 87 (41.44%) students. A total of 122 (58.1%) students were from a private university while 89 (41.9%) were from a public university.

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Data Analysis

The quantitative data gathered via Google forms was exported in Microsoft Excel format. The data were analyzed using frequency, percentage, mean, standard deviation, and Pearson's r correlation.

Results

The mean stress level of the participants was 19.53 (SD=3.29) while the mean anxiety level of the participants was 14.43 (SD=7.62). In terms of mental well-being, the mean average rating for emotional well-being was 9.15 (3.67), the mean score for social well-being was 11.13 (6.15) and the average rating for psychological well-being was 17.12 (7.39). The overall mental well-being means the score was 37.40 (15.74).

Table 1. Level of stress, anxiety, and mental well-being among the participants (n=210)

	Mean	SD
Stress	19.53	
Anxiety	14.43	±7.62
Emotional well-being	9.15	±3.67
Social well-being	11.13	±6.15
Psychological well-being	17.12	±7.39
Over-all Mental well-being	37.40	±15.74

To determine the relationship between stress and anxiety on emotional, social, and psychological well-being among nursing students, a Pearson's r was computed. Results revealed that there was a significant negative correlation between stress and emotional well-being having an r coefficient of -0.218 (p=0.000). Same findings can be noted between stress and social well-being and stress and psychological well-being having an r coefficient of -0.175 (p=0.000) and -0.219 (0.000) respectively. Further, a significant negative correlation was noted between stress and mental well-being (r= -0.222, p=0.000).

Also, the relationship of anxiety to emotional well-being, social well-being, psychological well-being, and overall mental well-being was determined. Findings revealed a significant negative correlation between anxiety and all the measures of mental well-being which includes emotional well-being (r= -0.418; p=0.000), social well-being (r= -0.280; p=0.000), psychological well-being (r= -0.331; p=0.000) and over-all mental well-being (r= -0.362; p=0.000).

Table 2. Correlation of measured variables

	Stress	Anxiety
Emotional well-being	-0.218 (0.000)*	-0.418 (0.000)*
Social well-being	-0.175 (0.000)*	-0.280 (0.000)*
Psychological well-being	-0.219 (0.000)*	-0.331(0.000)*
Mental well-being	-0.222 (0.000)*	-0.362 (0.000)*

*p value is significant at 0.01 level

Discussion

Stress is a continuously occurring phenomenon in nursing and is thought to be one of the major causes of burnout. Among the most common causes of stress, academics are often cited as the main contributors to which subject-related concerns, excessive workloads, and other general difficulties associated with studying are often experienced (Pulido-Martos et al., 2012). Nursing students are now subjected to additional stressors amid the pandemic. Every aspect of their daily lives and functioning has dramatically changed concerning their environment, routine, and social life. Oducado and Soriano (2021) found that nursing students held ambivalent and negative attitudes towards online learning. Their study indicated that the new format of education was less likely to have interactive experiences because of e-learning's perceived impersonality and lack of connection to human experiences.

Majrashi et al. (2021) substantiate this claim, in which they report that nursing students have a perception of lacking competence, interpersonal skills, and the capability to cope under pressure. In their view, nursing should include real-world demonstrations and simulations in their educational programs, particularly given the current learning environment may not impart quality skills. While online learning can be considered to be the only viable option to date, its cost could be a substantial financial challenge since the pandemic has left innumerable people financially strained as a result of job losses and business closures (Burns et al., 2020; Rasdi et al., 2021). Aslan and Pekince (2021) noted that these factors do contribute to students having higher stress levels as they cope with new working conditions amidst seemingly unavoidable long-term stressors.

In today's unpredictable events, stress can be intensified, causing anxiety. Under long-term stressful conditions, anxiety often occurs. In the wake of the pandemic, nurses were confronted with multiple strains, leading to anxiety. Among them are social isolation, apprehensions about the future, and infection concerns. This could be because nursing students are more likely than the general population to experience psychological distress because of their familiarity with health issues (Isralowitz et al., 2021). At the same time, having concerns about their future as registered nurses could be closely linked to their moderate levels of anxiety (Dewart et al., 2020). Several factors may be involved, such as being exposed to death over a long time, dread of the unknown, or uneasiness with how they would perform their roles as registered nurses. Khoshaim et al. (2020) shared this view

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regarding future concerns but added that academic pressure, such as managing stressful tasks and assignments and pursuing better academic performance, may significantly influence anxiety levels (Khoshaim et al., 2020). The reality is that, despite its perceived ease in the face of the pandemic, this method of learning may be ineffective in the long term, particularly for courses that require skills and firsthand experience, such as nursing.

To a certain extent, the results are consistent with other studies. As reported by Quiao et al. (2011), the psychological well-being of nurses from China was negatively correlated with several nursing stressors (Quiao et al., 2011). A similar finding was made by Gautam et al. (2020), where it was also discovered that the psychological well-being of nursing students from India was linked with their perceived stress, suggesting a negative correlation (Gautam et al., 2020). Research has been limited on the role of stress and anxiety in nursing students' well-being, but this study contributes to this dearth. The results revealed that Filipino nursing students have a moderate level of anxiety (M=14.43; SD=7.62) and a moderate level of stress (M=19.53; SD=3.29). A significant negative correlation was observed between stress and anxiety and well-being, which encompasses their emotional, psychological, and social wellness. To date, the threat of being placed in unusual circumstances has invoked detrimental outcomes (Savistky et al., 2020). Researchers have found that nursing students who experience a higher degree of stress and anxiety tend to have a weaker sense of well-being. Hence, support from faculty members should be provided to reduce the severity of their stress and anxiety, ultimately reduce the risk of mental health issues and promote academic success (Fitzgerald et al., 2021). By creating a nurturing environment, nursing students are more inclined to excel academically and develop into well-rounded professionals with the competence to provide patients with quality care (Ratanasiripong et al., 2021).

Conclusion

The study has contributed to the limited studies on mental well-being in the Philippines and contributed to the understanding of the role of stress and anxiety on the mental well-being of university students. With the increasing number of mental health problems among university students worldwide, administrators and faculty members are in the best position to implement measures that will reduce mental health problems and enhance the mental well-being of students on their campuses. University students can become leaders in the future. Hence, improving and maintaining their psychological well-being will aid in their academic performance in school and do better in their future careers.

Conflict of Interest

The authors have no conflict of interest to disclose.

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About the Author

Kathyrine A. Calong Calong, MA, RN, is a graduate of Bachelor of Science in Nursing from the
Metropolitan Medical Center-College of Arts, Science and Technology and received her Master of
Arts in Nursing Degree Major in Leadership and Management from Centro Escolar University. She
has worked as a staff nurse in several institutions including Metropolitan Medical Center and Manila
Medical Center. Currently, she is the Level 1 Coordinator of San Beda University-College of Nursing.
Her master's research is focused on the caring behaviors among nurses working in Level
3 hospitals. She is pursuing her Doctor of Philosophy in Nursing Education at St. Paul University of
the Philippines Manila. She is a member of the Philippines Nurses Association and Philippine
Nursing Research Society.

Judalyn S. Comendador, MA, RN, is an experienced nurse clinician in emergency nursing
and major disaster response locally and abroad. She is also a nurse educator and had
taught in top universities in the Philippines. She is one of the pioneer leaders in nursing
education and staff development in military hospitals abroad. With skillful knowledge in
competency-based assessment and experience in multicultural nursing leadership and
management. She is currently working in San Beda University as Skills Laboratory Manager,
Lecturer, and Clinical Instructor.