

TURKISH REPUBLIC OF NORTH CYPRUS NEAR EAST UNIVERSITY INSTITUTE OF GRADUATE STUDIES

DETERMINATION OF ANXIETY LEVEL AND PSYCHOLOGICAL WELL-BEING OF UNDERGRADUATE NURSING STUDENTS DURING COVID-19 PANDEMIC

IGHO OLUKU

MASTER DEGREE IN DEPARTMENT OF NURSING

SUPERVISOR

Assist. Prof. AYŞEGÜL SAVAŞAN

NICOSIA

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THESIS APPROVAL CERTIFICATE

The thesis study of Nursing Department graduate student Igho Oluku with student number 20195931 titled "DETERMINATION OF ANXIETY LEVEL AND PSYCHOLOGICAL WELL-BEING OF UNDERGRADUATE NURSING STUDENTS DURING COVID-19 PANDEMIC" has been approved with unanimity / majority of votes by the jury and has been accepted as a Master of Nursing Thesis.

Thesis Defense Date: 24/06/2021

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Title of Dissertation: Determination Of Anxiety Level And Psychological Well-

Being Of Undergraduate Nursing Students During Covid-19 Pandemic

Supervisor: Assist. Prof. Ayşegül SAVAŞAN

Year: 2021

I hereby declare that all information in this document has been obtained and presented in accordance with the academic rules and ethical conduct. I also declare that, as required by the thesis rules and conduct, I have fully cited and referred all materials and result that are not original to my work.

Date: 24.06.2021

Signature:

ACKNOWLEDGMENT

Throughout the writing of this dissertation I have gotten a lot of support and assistance.

I would first like to thank my supervisor, Assist. Prof. Ayşegül Savaşan, whose expertise was invaluable in parparing the research questions and methodology, Your insightful respond pushed me to sharpen my thinking and brought my work to a higher level and also your valuable guidance throughout my studies.

Finally, I would like to thank my mother Omoyowwvin Eseoghene for her wise counsel and sympathetic ear, You are always there for me.

DEDICATION

I dedicate this project to all healthcare provider who have been standing on the fornt line in the fight in this time of the pandemic and to does who lost their love ones in this trying time.

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ABBREVIATIONS

CAS: The Coronavirus Anxiety Scale

WHO-5: The World Health Organization-Five Well-being Index

CDC: Centers for Disease Control and Prevention

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TÜRKÇE ÖZET

Igho Oluku

Yrd. Doç. Dr. Ayşegül SAVAŞAN

Hemşirelik

Hemşirelik Öğrencilerinin Covid-19 Pandemisinde Anksiyete Düzeylerinin ve Psikolojik İyilik Durumlarının Belirlenmesi

Amaç: Bu çalışmanın amacı hemşirelik öğrencilerinin Covid-19 pandemisi sırasındaki anksiyete düzeylerini ve psikolojik iyilik durumlarını incelemektir.

Materyal Method: Bu kesitsel ve tanımlayıcı çalışma Yakın Doğu Üniversitesi uluslararası hemşirelik programındaki öğrencilerle Mayıs 2021'de yapılmıştır. Çalışmaya toplam 206 hemşirelik lisans öğrencisi katılmıştır. Verilerin toplanmasında kişisel bilgi formu, Coronavirüs Anksiyete Ölçeği ve DSÖ-5 İyilik Hali İndeksi kullanılmıştır. Anketler, lisans hemşirelik öğrencilerine çevrimiçi anket kullanılarak uygulanmıştır.

Bulgular: Öğrencilerin çoğunluğunu kadın (%53,4), 23-25 yaş grubunda (%48,1), bekar (%91,7), ikinci sınıf (%31,6) ve Nijeryalı (%52,4) öğrenciler oluşturmaktadır. Öğrencilerin Coronavirüs anksiyete puan ortalaması 3,21±3,09'dur. Öğrencilerin DSÖ-5 iyilik hali puan ortalaması 11.49±4.51'dir.

Sonuç: Hemşirelik öğrencilerinin işlevsel olmayan koronavirüs anksiyetesi yoktur. Öğrencilerin psikolojik iyilik durumlarının optimalin altında olması nedeniyle hemşirelik öğrencileri depresyon riski taşıyan bireylerdir. Hemşirelik öğrencilerinin anksiyete düzeyleri ile psikolojik iyi oluşları arasında orta düzeyde ve negatif yönde bir ilişki bulunmuştur. Anahtar Kelimeler: KOVİD-19, anksiyete, pandemi, hemşirelik öğrencileri, iyilik hali

ABSTRACT

Igho Oluku

Assist. Prof. Ayşegül SAVAŞAN

Nursing

Determination of Anxiety Level and Psychological Well-being of Undergraduate

Nursing Students During Covid-19 Pandemic

Aim: The aim of this study is to investigate nursing students' anxiety level and

psychological well-being during Covid-19 pandemic.

Material and Method: This cross-sectional and descriptive study was conducted

with students in the international nursing program of Near East University in May

2021. A total of 206 undergraduate nursing students participated in this study. For

collecting data, the personal information form, Coronavirus Anxiety Scale and

WHO-5 Well-being Index were used. The questionnaires were administered to the

undergraduate nursing students using online survey.

Findings: The majority of students were female (53.4%), at age group of 23-25

(48.1%), single (91.7%), second year students (31.6%) and Nigerian (52.4%). The

Coronavirus anxiety mean score of the students was 3.21±3.09. The WHO-5

wellbeing mean score of the students was 11.49 ± 4.51 .

Result: Nursing students have no dysfunctional coronavirus anxiety. Due to the

suboptimal psychological well-being of the students, nursing students are individuals

at risk for depression. A moderate and negative correlation was found between

anxiety level and physchological wellbeing of nursing students.

Keywords: Covid-19, pandemic, anxiety, nursing students, psychological wellbeing

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1. INTRODUCTION

Most often, biological ailments are giving prominent attention with less emphasis on the psychological health of the population. Psychological distresses such as depression, suicide or suicide ideation, sleeplessness, anxiety, panic attacks are few leading examples of mental health adverse conditions prevalent in society (Wang et al., 2017; Donovan et al., 2017; Domènech-Abella et al., 2017). However, the COVID-19 pandemic has brought further attention to the needfulness of psychological wellness in the human population which is an essential domain in our general wellbeing. This reiterates the World Health Organization (WHO) definition of health as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity" (WHO, 2018). The health definition by the WHO emphasized that mental health is essential and a predictor of our total wholeness.

The COVID-19 engendered by the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) was first reported in Wuhan province in China in December 2019 (Sanche et al., 2020; Huo et al., 2021; Li et al., 2020). A disease once considered an epidemic in China was able to spread to Europe and then to other continents in the world and soon become a global pandemic as announced by the WHO in March 2020.

As a result of the rapid spread of this COVID-19 infection from nation to nation, several catastrophic disruptions were reported globally and its effect has been linked to many psychosocial distresses affecting our health (Shi et al., 2021; Loades et al., 2020; Sher, 2020). Rapid death cases, local and international border closures, traveling restrictions, business shutdowns, and school closures were pronounced impacts of this pandemic. The Governments of different nations in a bid to control and mitigate the spread of this disease enact several public health preventive measures such as lockdown, quarantine, social distancing, and mask-wearing (von Tigerstrom and Wilson, 2020; Shah et al., 2020; Rawson et al., 2020). These mechanisms undoubtedly limit human physical interactions, social meetups, and other external engagements that foster

physical contact and togetherness. Confusion, post-traumatic distress, and anger have been linked to some type of disadvantaged effects of quarantine among adults (Bu et al., 2020; Elmer et al., 2020; Yeasmin et al., 2020). Similarly, shortness of essential supplies, boredom, loneliness, anxiety about getting infected, limited information, length of quarantine, and fear of financial security are connected to negative mental health outcomes (Brooks et al., 2020).

Over one billion students residing in about 129 nations globally have been reported to have their studies disrupted as a result of the Covid-19 pandemic according to the United Nations Educational, Scientific, and Cultural Organization (UNESCO) report (UNESCO, 2020). In response to the modalities instituted by different governments, many higher education institutions globally shut down schools and move classes online. University campuses which are a beehive of activities and social interactions came to an abrupt halt. Just like other nations, campuses of Universities in Northern Cyprus are not exempted from this disruptive experience. University students in the Republic of Northern Cyprus (TRNC) who came from different countries in the world are unable to travel to their home countries due to the travel restriction in place. Hence, many of these students were holed in their different residential sites. The inability of students to be with their loved ones at this critical moment to receive social/filial supports and the distress engendered as a result of the lockdown make these students more vulnerable and further provide sufficient ground to amplify physiological distress that is often associated with being students in higher education institutions.

The objective of this study is geared towards understanding the effects of the COVID-19 pandemic on the psychological wellbeing and anxiety level of undergraduate nursing students in Near East University, North Cyprus.

1.1. Aims of The Study

This study aims at determination of anxiety level and psychological well-being of undergraduate nursing students during Covid-19 pandemic in Near East University, North Cyprus.

1.2. Research Questions

- 1. What is the anxiety level of nursing students during Covid-19 pandemic?
- 2. What is the psychological well-being of nursing students during Covid-19 pandemic?
- 3. Is there any correlation between socio-demographic characteristics and the anxiety level of nursing students?
- 4. Is there any correlation between socio-demographic characteristics and the psychological well-being of nursing students?
- 5. Is there any correlation between the anxiety level and the psychological well-being of nursing students?

1.3. Significance of The Study

This study will help university governing councils to develop policies that contribute to students' wellness and that assist health providers, social workers, nurses to create preventive and treatment resources that would help students with psychological distresses and that assist governments to make inclusive regulations and guidelines that are also welfare-centred in times of public health emergencies.

2. GENERAL INFORMATION

University students have been identified as a susceptible population prone to higher levels of anxiety, depression, substance abuse, and eating disorder when compared to the general population. Given the rigours of educational experience, sudden changes such as movement restriction or total lockdown owing to the measures used in curbing Covid-19, increases significantly the burden on the mental health of the student population. This can raise their anxiety level and affect their psychological well-being negatively. This essay has the objectives of evaluating the impact of the Covid-19 pandemic on the anxiety level and psychological well-being of university students; and analysing the risk factors that make students experience increased stress levels.

2.1 Overview of Corona Virus Disease (Covid-19)

The Coronavirus Disease 2019 (COVID-19) caused by a novel coronavirus (SARS-CoV-2) surfaced in the Chinese city of Wuhan in 2019 in a seafood and poultry market. The outbreak was identified as a pandemic by The World Health Organization on March 11, 2020, owing to the number of cases recorded in most countries worldwide (WHO, 2020). By October 30, 2020, the Johns Hopkins University recorded about 45 608 024 laboratory-confirmed coronavirus cases, including 1 189 139 deaths worldwide. The COVID-19 pandemic reported as the second deadliest in the history of pandemics so far (Goodman and Schulkin, 2020) has been identified as a non-discriminatory health crisis with great impact on people irrespective of continent, race, country, tribe and socioeconomic classes (Faisal et al., 2021). A lot of activities globally came to a halt as a result of the pandemic, both in business and education. As confirmed by the United Nations Educational, Scientific, and Cultural Organization (UNESCO) (John et al., 2020), the learning of over a billion students in 129 countries around the world were interrupted (Mekonen et al., 2021).

The battle against COVID-19 worldwide even in 2021 is still on going and far from being over as various cases initially identified as 'pneumonia' in 2019 in Wuhan China has gone global and changed way of living and businesses (Di Gennaro et al., 2020). The SARS-CoV-2 was named COVID-19 by the Director-General of World Health Organization (WHO) in February 2019. COVID19 is a description of the RNA (ribonucleic acid) virus (Di Gennaro et al., 2020; Lu et al., 2020) having four manifestations identified as: α -coronavirus (alphaCoV); β -coronavirus (betaCoV); δ -coronavirus (deltaCoV), and γ -coronavirus (gammaCoV) and a likely representation of avian species (Di Gennaro et al., 2020).

2.2. Preventions and Intervention Measures

With the onset of the COVID19 pandemic, a lot of attention was diverted to the challenge of combatting with the pandemic at the risk of ignoring minor challenges such as the mental health of the panicked population and the resulting impact of the isolation and those under house-arrest. Not surprising is the emotional impact brought about by the sudden change in lifestyle. Ho et al. (2020) opined that the absence of social activities coupled with the long stretch of staying home contributed to boredom and frustration of so many youths, resulting in sudden emotional pressure. This qualifies as a distressing situation which should not be neglected in battling the pandemic and improving healthy emotion. It is probably the rationale behind the suggestion of the CDC (2020) that the identity of people who recovered from COVID 19 virus be kept away from the media to ensure their privacy and proper re-integration into society. It is also suggested that people experiencing coronavirus anxiety discuss with others, as a means to alleviating their anxiety and trust and providing encouragement (Kecmanovic, 2020).

2.3. General Impact of COVID-19

Recent happenings such as the restrictions on activities have shown that significant adjustments have been made to lives in response to the pandemic. The actions and reactions to the pandemic is adequately summed up by the Charles Darwin theory of

survival of the fittest, which proposes that change is the only constant phenomenon (Benton et al., 2020). The implication of this is that the COVID-19 pandemic has altered major aspects of people's lives, previously taken for granted. Thus, the impact has been significantly felt by government, schools, society, individuals and every fragment of life (Parsons and Joha, 2020).

A significant impact as explained by Di Gennaro, et al. (2020) is the closure of schools. According to the UNESCO (2020) the school closure resulting from the emergence of the COVID-19 has increased the existing differences already being experienced in the educational system between rich and the poor, with the poor suffering the most impact. The closure of schools has consequences such as stress to both students and teachers alike, confusion, interrupted learning, poor nutrition, sudden adaptation to home schooling among others. Morgül et al. (2020) examined how COVID-19 lockdown impacted psychologically on primary school children and their families in the UK. The findings from the study indicated that the emotion and behavior of children underwent a lot of changes during the lockdown. They were reported to have also experienced loneliness, irritability, boredom, anxiety, frustration, worry etc.

2.4. COVID- 19 and Psychological Well-Being of University Students

The spread of the COVID -19 around the world has brought about a common and natural reaction to the unpredictable situation and caused serious impacts on the health and well-being of people, physically and mentally; and students are not an exemption. A disease such as COVID-19, which is contagious in nature, tends to cause inevitable fear, stress and anxiety (WHO, 2020). In summary, the COVID-19 pandemic is a global health emergency threatening psychological resilience (Wang et al., 2020). Thus the effects on students can be imagined, as their overall wellbeing is negatively affected, as they are vulnerable to COVID-19's psychological impact owing to the fact that in the transition stages of their academic and professional lives and as such tend to experience high levels of stress, anxiety, and depression (Faisal, et al., 2021). Further impacts of the COVID-19 pandemic on University students therefor had to adjust in several ways, discussed below:

2.4.1 COVID-19 and students' living arrangement

With the rising cases of COVID-19 cases, lockdown orders were given as part of curbing the spread leading to closure of educational institutions and disruption in living arrangements, thus causing students to lose their sense of stability and the stimulation derived from an academic community (WHO, 2020). A lot of students had to vacate the school rented accommodation or dormitories and return to their homes or seek alternative living arrangement. This implied that well laid plans were put in disarray and new arrangements made, and in most cases cramped up living spaces. The lack of personal space at home further increased their frustration and the interruption of normal activities led to further boredom. Salman et al. (2020) reported that within a short period, students' lives were dramatically changed as leaving the campus meant adjusting to new living circumstances, and adapting to online learning platforms. This disruption of normal daily operations was found to cause tension and anxiety to the students (Ansari and Yousefabad, 2020) (Faisal et al., 2021).

2.4.2 COVID-19 and social life

The implementation of lockdown on all activities and resulting restriction on movement meant absence of physical social life with friends. Students also had lesser opportunities of being with their friends which meant lesser social support vital to their mental health (WHO, 2020).

2.4.3 COVID-19 and psychological well-being

Anxiety disorders have been reported to be a constant psychiatric condition in humans and a significant cause for the loss of quality of life. This is probable because anxiety disorders signify inconvenience in relation to their social impact and their economic cost. Anxiety disorder can be described as a kind of mental disorder, and thus a source of worry that can distress and affect future life (Çalık, 2020). Among university students, stress is considered a serious public health issue, as higher chronic stress is associated more with university students than the general population. Humans naturally

respond to anxiety by exhibiting fear thus manifesting physically as quicker pulse rate and tremor. The period of youth is a developmental stage in which individuals experience multiple stressors such as adapting to an academic environment, meeting expectations and attaining specific aims (Stewart-Brown et al., 2000). To this effect, the period of the COVID 19 lockdown brought about confusion and fear resulting in university students experiencing anxiety and situational stress about the future (Hanan et al., 2021). The rationale behind this is that the closure of universities due to the COVID-19 outbreak was an unexpected interruption for university students in their educational life which probably had a negative effect on them and caused them to suffer from anxiety symptoms during the COVID-19 outbreak.

Studies on the effect of outbreaks, of infectious diseases, such as SARS outbreak, showed an adverse effect on students' mental health (Akan et al., 2010). Similar impacts have also been found between the COVID-19 and SARS outbreak which implies that they are similar significant associations. A study conducted in China found that the COVID-19 had led to 24.9% of university students experiencing anxiety (Cao et al., 2020). Similarly, a study carried out among college students in Bangladeshi college found a high prevalence of mild to severe depressive symptoms, peculiar to mostly students living with their families or in urban areas (Islam et al., 2020). From the study's findings almost 88% of students were found to have experienced mild to severe anxiety symptoms. In yet another cross-sectional study among university students during COVID-19 lockdown, 47% of students were revealed to have experienced mild to extremely severe depression levels, while 69.3% reported mild to severe levels of psychological impact as a result of the raging pandemic (Khan et al., 2020). Salman, Asif and Mustafa (2020) examined the prevalence of depression, anxiety, and stress among university students in Pakistan and found that the prevalence was 34% and 82.4% for depression and 45% and 87.7% for anxiety respectively. The implication of the above studies, despite an obvious limitation in demography, is that university students experienced significant level of mental health impacts as a result of COVID-19.

2.4.4 COVID- 19 and academic activities

The pandemic led to interruption in teaching and assessment of learners, which meant that graduating students had to be put on hold as they could not graduate and proceed with their next academic plan and pursuit of career (Mekonen et al., 2021). The cancellation and postponement of university activities as a result of the pandemic has caused a shift from the physical to the virtual and changed the norm of things. Despite the attempt to make virtual the new normal in the order and execution of activities, there were still grounds left uncovered. The initial interruption of academic related activities as a result of enforced lockdowns, and social distancing led to suspension of semester end examinations, postponement of classes, and unavailability of books; resulting in frustration and boredom. With the passage in time and continuous spread of the disease, it became apparent that a more permanent arrangement was required for learning to be continues, which led to the adoption of virtual schooling in place of physical classes. Also the interruption in classroom learning meant that a lot of strain was put on student's computers as every activity had to be made virtual.

2.5. Factors Influencing the Prevalence of Psychological and Mental Stress

The occurrence/ threat of depression: WHO reported that developing countries are more likely to be affected by the virus, such as Africa, tended to experience depression and frustration because of the associated fear of the virus. However, with more information and discoveries that the COVID 19 is still active and deadly, there is a decline in the level of fear. Mekonen et al. (2021) found that there was a lower prevalence of stress among students when compared with the initial stages of COVID 19 pandemic. This was attributed to the increased knowledge about the virus, as students had more access to a variety of information regarding the virus than what was obtainable at the onset of the pandemic. Also, the reduced prevalence in anxiety levels and psychological stressors could be attributed to the formulation and distribution of vaccines globally, the resumption of academic activities which meant returning to the university and part resumption of social life, the increasing number of recoveries made over newly diagnosed cases, might all contribute to the decreased mental stress.

Another factor significantly associated with stress is residence and preventive measure. The practice of COVID-19 preventive measures, contact history with cases, performance of physical activity was significantly linked to stress. Also the constant media exposure and obtaining of daily information regarding the pandemic is a factor for stress. It was found that students who lived alone were less likely to become stressed when compares to those residing with their families, probably because they had more fear and worry about infecting their families, especially where there were more vulnerable family members like older adults with existing health problems, and pregnant mothers. They could also worry about family members whose occupation increased exposed them to the risk of the virus, i.e health care workers.

Lack of physical activity or exercises was found to place students at a higher risk of developing stress; engaging in regular physical activity is protective factor against diseases, improved self-esteem, decreased tension, among other things. It also enhances the psychological and physical health.

Furthermore, an epidemic such as COVID-19 tends to exert tremendous psychological pressure on people worldwide. Psychological stressors could stem from being tested positive for the disease and being stigmatized even after recovery. Those who were quarantined were found to experience psychological stressors such as fear of infection, financial loss, lack of communication, frustration, longer quarantine duration, stigma and infection fears which results in post-traumatic stress symptoms.

COVID-19 occurrence has been an unfortunate and dreadful experience which suddenly altered the normal way of life as we know it. Pandemics create undesirable consequences on every aspect of the human life, politically, educationally, economically, socially and financially making it imperative to develop any means to successfully combat it, the world over.

3. METHODOLOGY

In this chapter of this research work, the research method used would be discussed. Discussions on the type of study design, setting of the study, sampling of the study, instrument utilized in data collection and ethical information.

3.1 Study Design

The cross-sectional and relational research design was utilized in this study. Data was collected in May 2021.

3.2. Study Setting

The study setting for this study is the Near East University located in the Turkish Republic of North Cyprus. This is an Island nation in the Mediterranean Sea and fast becoming a hub of international studying destination. The study primarily focuses on undergraduate students in the Faculty of Nursing which consist of International and Turkish language instruction program. The international arm of the nursing program comprises of N=337 international students originating from various nations.

3.3. Sample Selection

The international Nursing program which has English language as the language of instruction was the population for the study. The English program of the Nursing department consists of N=337 international students. A sampling selection method was utilized in order to derive the minimum number of respondents required for the study. Slovin's Formula will be used to determine the sample size. It's a random sampling technique formula to estimate sampling size. The minimum sample size (183) was determined using Slovin's formula (Stephanie, 2003) which is expressed as;

$$n = \frac{N}{1 + N(e)^2}$$

Where:

n is sample size

N is population size = 337

e is margin of error =0.05

$$n = \frac{337}{1 + 337(0.05)^2}$$

$$n = \frac{337}{1.8425}$$

$$n = 183$$

n=206 nursing students who were willing to participate in the study made up the study sample.

Inclusion Criteria

For students eligible to participate in this study, the following is required:

- Reading and able to write in the English language.
- Being an online user.

Exclusion Criteria

Having COVID-19 during study

3.4. Data Collection

The survey instrument used for data collection was done using the Google survey in May 2021. The questionnaires were generated and the link was shared to students during their online class session as well as the nursing departmental social media groups consisting of nursing students. Also, the form was also emailed to the listed students emails. When filled, the responses are automatically saved and accessed by the researcher on the Google survey website.

3.5. Study Tools

Data Collection Form

An electronic formatted personal information form was utilized to collect information from the study respondents. The form was divided into two major sections. The form began with an introductory note informing the participants about what the study about and seeking their voluntary participation. The first section contains 7 questions seeking to obtain the socio-demographic attributes of the participants such as gender, age, level of education and so on. The second section of the form consists of 11 questions evaluating participant historical and behavioral traits. It also contains the two scales namely the Coronavirus Anxiety Scale (CAS) and the WHO-Five Well-being Index instrument.

The Coronavirus Anxiety Scale (CAS): CAS was developed by to measure the state of mental health relative to the COVID-19 pandemic. It is a five-item scale which is meant to evaluate unique physiological response of anxiety engendered by COVID-19. The scale consisting of 5 structured questions is now widely used in assesing anxiety attributable to the Covid-19 pandemic. The 5 likert scale consists of question items in which repondents must select from the ranks of "Not at all", "Rare, less than a day or two," "several days", "More than 7 days", "Nearly every day over the last 2 week". Cronbach Alpha score was 0.92 (Lee, 2020a). In this study, the Cronbach Alpha was found 0.75.

The WHO-Five Well-being Index (WHO-5): WHO-5 is one of the commonest tool to assess psychological well-being. It was first published in 1998 and since then have been translated into over 30 languages and many studies have utilized this scale. The 6 likert scale consists of question items in which repondents must select from the ranks of "All the time", "Most of all the time," "More than half of the time", "Less than half of the time", "Some of the time", "At no time". This short instrument consists of five items which are non-invasive in nature with strong validity deplored to assess depression

outcomes among other clinical objectives in different studies. Cronbach Alpha score was 0.82 (Topp et al., 2015). In this study, the Cronbach Alpha was found 0.65.

3.6. Analysis of Data

The data was extracted from the Google Form website and transformed for onward analysis. The statistical analysis was done using the IBM statistical packages for social sciences (SPSS) Version 20 software. Categorical measurements were indicated by numbers and percentages. Descriptive statistics presented include means, standard deviations and median. Correlation analysis was used to determine the relationship between the scores obtained from the Coronavirus Anxiety Scale and WHO-Five Well-Being Index. Mann Whitney-U and Kruskal Wallis tests were used in comparison sociodemographic characteristics of students and anxiety and well-being scores. Statistical significance was taken 0.05 in all tests.

3.7. Ethical Aspect

Ethical approval was obtained from the Near East University Scientific Researches and Ethics Committee (YDU/2021/90-1329). The scales used were listed under the creative common license which entails that they are available for public and research usage without prior authorization.

The autonomy of the respondent to either participate or not in the research was respected and all information (data) retrieved from the respondent were treated with confidentiality.

3.8. Study Limitations

Because the survey was done online due to the pandemic restrictions, some students not having internet access might not be able to participate in the study. The results of this study rely on participants' self-reports. Self-reports may bring limitations due to biases such as social desirability and short-term recall. Furthermore, the study only focuses on undergraduate nursing students in the international program of nursing in the University.

4. FINDINGS

In this section of this research, the results of the data analysis are presented in line with the research aim of the study.

4.1. Descriptive Analysis Results

According to the Table 1, 46.6% of the participants are male and 53.4% are female. Individuals who are single are 91.7%, married participants are 6.8% while separated are 1.5%. Participants that are 17 years and below 2.9%, those between 18-22 years are 34.0%, those between 23-25 years are 48.1%, those between 26-29 years 12.1% while those aged 30 years and above are 2.9%.

First year students make up 20.4% of the study participants. Second year students comprise 31.6%, third year students comprise 19.9% while fourth year students constitute 28.2% of the participants. Students from Nigeria formed the major bloc of the participants with 52.4%, and Zimbabwean students constitute 19.4% while the remaining students which mostly come from other African nations make up 28.2% of the total participants. In terms of long term residence, more than half of the participants (60.7%) reside in urban areas while 39.3% live in rural settings. 9.2% of the participants live with their parents, 65.5% live in flats with friends, 20.9% live alone and 4.4% live in the dormitory (Table 1).

Relative to historical mental illness in the family, 3.4% indicated to have family history of mental challenge while 96.6% do not have such problem. 1.5% of the participants indicated that they have previous consultation with a Psychologist or Psychiatrist but 98.5% stated contrary (Table 2).

Table 1. Socio-demographics of nursing students (n=206)

Variables		n	%
Gender	Male	96	46.6
	Female	110	53.4
Marital Status	Single	189	91.7
	Married	14	6.8
	Separated	3	1.5
Age (yrs)	17 yrs &below	6	2.9
	18 - 22 yrs	70	34.0
	23 – 25 yrs	99	48.1
	26 – 29 yrs	25	12.1
	30 & above yrs	6	2.9
Academic year	First year	42	20.4
	Second year	65	31.6
	Third year	41	19.9
	Fourth year	58	28.2
Nationality	Nigeria	108	52.4
	Zimbabwe	40	19.4
	Others*	58	28.2
Long-term	Urban	125	60.7
residence	Rural	81	39.3
Accommodation	Live with parents	19	9.2
	Live in flats with friends	135	65.5
	Live in flat alone	43	20.9
	Live in dormitory	9	4.4

^{*}Ghana, Malawi, Congo, Kenya, Malawi

10.7% indicated to have a long term ill health condition and 89.3% indicated not to have such a long term ill health condition. Concerning stability in income during the Covid-19 pandemic, 36.9% indicated they have stable income but 63.1% stated that they do not have stable source of income. Pertaining to media monitoring of Covid-19 news, 21.4% stated that the listen, watch or read news about the pandemic, 73.8% they do this some of the time, 2.9% indicated that the seldom do this while 1.9% do not do any of this at all (Table 2).

Table 2. Descriptive characteristics of the nursing students (n=206)

Variables		n	%
Family history of Psychological/	Yes	7	3.4
Psychiatrist treatment	No	199	96.6
Previous consultation with	Yes	3	1.5
a Psychologist/Psychiatrist	No	203	98.5
Chronic illness	Yes	22	10.7
	No	184	89.3
Stable source of income	Yes	76	36.9
	No	130	63.1
Media monitoring of	Most of the time	44	21.4
Covid-19 news	Some of the time	152	73.8
	Seldom	6	2.9
	Never	4	1.9
Having social interaction	Yes	87	42.2
	No	119	57.8
Physical exercise	Yes	80	38.8
	No	126	61.2
Academic performance	Excellent	17	8.3
	Good	92	44.7
	Fair	90	43.7
	Poor	7	3.4
Contracted the Covid-19	Yes	12	5.8
	No	194	94.2
Relatives been diagnosed	Yes	12	5.8
with COVID-19	No	194	94.2
Who relatives been diagnosed	Father	3	25.0
with COVID-19*	Siblings	4	33.3
	Aunty/Uncle	4	33.3
	Friends	1	8.33
Where mostly lived	My Country	24	11.7
in the COVID-19 pandemic	North Cyprus	159	77.2
	Both	23	11.2

^{*}n=12

Pertaining to having social interaction especially when worried, 42.2% stated they have someone they always communicate with but 57.8% indicated they do not have someone they always talk to when worried. Concerning physical exercise engagement during the pandemic lockdown, 38.8% reported they engage themselves in this practice but 61.2% stated otherwise. Relative to academic performance as stated in Table 8 above, 8.3% rated their academic performance excellent, 44.7% consider it to be good, 43.7% see it as fair but 3.4% consider it to be poor (Table 2).

According to Table 2, 5.8% indicated they have once tested positive for the Covid-19 virus while 94.2% have not tested positive for the virus. Relative to having relations that have contracted the Covid-19 virus, 5.8% affirmed that they have relations that had the virus while 94.2% do not have relations that contracted the disease. According to Table 11 above, among those who had relations that contracted the Covid-19 virus, 25.0% indicated the relation is father, 33.3% indicated the contracted relations are siblings, 33.3% stated they are Aunties and Uncles, while 8.33% stated is a friend. In the Table 12 above, 11.7% posited that they mostly live in their country during the Covid-19 pandemic, 77.2% stated that they live in North Cyprus while 11.3% indicated that they live in both (Table 2).

4.2. Distribution of Scales Averages of Nursing Students

Table 3. Distribution of scale averages of nursing students

Scales	M	SD	Median	Min - Max
Corona Anxiety Scale	3.21	3.09	2.00	0.00-12.00
WHO-5 Wellbeing	11.49	4.51	10.5	3.00-25.00

The Corona anxiety mean score of the students was 3.21 ± 3.09 , the mean score of the WHO-wellbeing scale was 11.49 ± 4.51 .

4.3. Correlation Analysis

The Pearson correlation analysis is used to measure the association between numerical variables. Thus, the correlation analysis is used to explore the relationship between the Coronavirus anxiety scale and the WHO-wellbeing scale. The table for this relationship is presented below:

Table 4. Correlation Analysis between Coronavirus anxiety scale and WHO-wellbeing scale

		Well-being
Pearson Correlation	Anxiety	- 0.321
р		0.000

Correlation is significant at the 0.01 level (2-tailed)

The result of the correlational analysis indicates that there is an association between Coronavirus Anxiety Scale and the WHO-wellbeing scale. This relationship is a negative relationship and it is statistically significant (r = -0.321, p < 0.05) (Table 4).

Regression Analysis Results

A simple linear regression method was applied to examine the relationship between students' Coronavirus Anxiety and the WHO-5 psychological wellbeing measure.

Table 5. Regression analysis of psychological well-being

Independent Variable	Dependent Variable	В	S.E.	β	t	p	R	\mathbb{R}^2	F	p
Anxiety	Well-being	12.991	0.431	-0.321	30.13	0.00	0.321	0.103	23.44	0.00

p<0.001

The model explained 10.3% variation of the Coronavirus anxiety on students' psychological wellbeing. It is shown that the p-value of Coronavirus anxiety on psychological wellbeing variable is less than 0.05. This entails that Coronavirus anxiety influence psychological wellbeing. Thus, a unit increase in Corona anxiety leads to a 0.321 decrease psychological wellbeing (Table 5). Therefore, it can be concluded that a rise in Coronavirus anxiety decreases the psychological wellbeing of individuals.

4.4. Comparison of Students' Scores by Socio-Demographics and Other Descriptive Characteristics

The corona anxiety score of the nursing students who were females was 2.82 ± 3.01 and the for male nursing students was 3.67 ± 3.14 . The difference between the corona anxiety score across gender is statistically significant (p<0.05). However, there is no statistically significant difference between psychological wellbeing score relative to gender category (p>0.05) (Table 6).

The corona anxiety score relative to marital status is not statistically significant (p>0.05). Similarly, there is no statistically significant difference between psychological wellbeing score relative to marital status (p>0.05) (Table 6).

There is a statistical significance difference in the corona anxiety score relative to the age categories of the participants (p<0.05). A Post-hoc analysis was conducted and it was found that those within the age 18-22 have the highest anxiety score (4.43 \pm 4.47), closely followed by those between age 23-25 years (3.71 \pm 2.99) while those individuals who are 30 years and above have the least coronavirus anxiety score (1.17 \pm 2.86). Nevertheless, there is no statistically significant difference between psychological wellbeing score relative to age (p>0.05) (Table 6).

There is a statistical significance difference in the coronavirus anxiety score relative to education level (p<0.05). A Post-hoc analysis was conducted and it was found that students in the second year level have the highest anxiety score (3.88 \pm 3.06), closely followed by those in the fourth year (3.28 \pm 3.12) while those individuals in the first year level have the least corona anxiety score (2.31 \pm 3.17). Nevertheless, there is no statistically significant difference between psychological wellbeing score relative to education level (p>0.05) (Table 6).

Table 6. Comparison of Students' Scales Scores by Socio-Demographics (n=206)

	Coronavi	rus Anxiety	Psychologic	cal Wellbeing		
	Mean±SD	M (min-max)	Mean±SD	M (min-max)		
Gender						
Male (n=96)	3.67±3.14	3 (0 -12)	11.97±4.91	11 (3 - 25)		
Female (n=110)	2.82±3.01	2 (0-12)	11.06±4.11	10 (3 - 25)		
U/p*	4368.	00 / 0.03	4738.	5 / 0.202		
Marital Status(n=203)						
Single (n=189)	3.08±2.96	2 (0 - 12)	11.43±4.54	10 (3 - 25)		
Married (n=14)	4.43±4.47	2.5 (0 -11)	12.00±4.76	10 (7 - 25)		
U/ p*	1176.0	00 / 0.483	1225.0	00 / 0.642		
Age						
17yrs & above (n=6)	3.08±2.96	2 (0 - 12)	11.43±4.54	10 (3 - 25)		
18-22 yrs (n=70)	4.43±4.47	2.5 (0 -11)	12.00±4.76	10 (7 - 25)		
23-25 yrs (n=99)	3.71±2.99	3 (0 -11)	10.86±4.28	10 (3 -25)		
26-29 yrs (n=25)	3.16±3.18	3 (0 - 10)	11.56±4.13	11 (8 - 25)		
30 yrs & above (n=6)	1.17±2.86	0 (0 - 7)	14.33±5.98)	12.5 (9 - 25)		
X ² / p**	12.377 / 0.015		7.440	0 / 0.114		
Education level						
First year (n=42)	2.31±3.17	1 (0-12)	12.26±5.21	10.5 (7-25)		
Second year (n=65)	3.88±3.06	4 (0-12)	12.18±4.86	12.18 (3-25)		
Third year (n=41)	3.00 ± 2.87	3 (0-11)	11.02±3.93	10 (5-21)		
Fourth year (n=58)	3.28±3.12	2 (0-11)	10.47±3.76	10 (3-25)		
X^2/p^{**}	10.448 / 0.015		4.726	5 / 0.193		
Nationality						
Nigeria (n=108)	3.09±3.24	2 (0-12)	11.22±4.61	10 (3-25)		
Zimbabwe (n=40)	4.30±3.12	4 (0-11)	11.10±3.791	11 (3-25)		
Others*** (n=58)	2.69±2.63	2 (0-9)	12.24±4.76	11 (6-25)		
X ² / p**		5 / 0.021		0 / 0.341		
Long-term residence						
Urban (n=125)	3.10±3.26	2 (0-12)	11.90±4.71	11 (5-25)		
Rural (n=81)	3.38±2.82	3 (0-11)	10.84±4.15	10 (3-25)		
U/ p*		50 / 0.190		00 / 0.281		
Accomodation	10_10					
Live with parents (n=19)	0.53±0.84	0 (0-2)	10.53±3.29	20 (8-25)		
Live in flats with friends (n=135)	3.56±3.27	3 (0-12)	11.86±4.61	10 (3-21)		
Live in flats alone (n=43)	3.26±2.46	3 (0-10)	10.00±2.24	11 (4-25)		
` ′		\ /		10 (7-13)		
Live in flats alone (n=43) Dormitory (n=9) X ² / p**	3.26±2.46 3.56±3.50 21.40	3 (0-10) 5 (0-8) 8 / 0.001	10.00±2.24 10.53±3.29 21.22	· · · · · · · · · · · · · · · · · · ·		

^{*}Mann-Whitney-U, **Kruska -Wallis Test, *** Ghana, Malawi, Congo, Kenya, Malawi

There is a statistical significance difference in the corona anxiety score relative to nationality (p<0.05). A Post-hoc analysis was conducted and it was deduced that students from Zimbabwe have the highest anxiety score (4.30 \pm 3.12), followed by Nigeria nationals (3.09 \pm 3.24). And those individuals classified as others have the least corona anxiety score (2.69 \pm 2.63). But there is no statistically significant difference between psychological wellbeing score relative to nationality (p>0.05) (Table 6).

There is no statistical significance difference in the corona anxiety score relative to long term residence (p>0.05). Also, there is no statistically significant difference between psychological wellbeing score relative to place of long residence (p>0.05) (Table 6).

There is a statistical significance difference in the corona anxiety score relative to place of accommodation (p<0.05). A Post-hoc analysis was conducted and it was deduced that students living with their parents have the least anxiety score (0.53±0.84), while those who live in dormitory (3.56±3.50) and those who live in flats with friends (3.56±3.27) have higher corona anxiety. Likewise, there is a statistically significant difference between psychological wellbeing score relative to place of accommodation (p<0.05). A Post–hoc analysis was conducted and it was deduced that students living with their parents have the highest psychological wellbeing (18.16±6.64) while those who live in dormitory (10.00±2.24) have the least psychological wellbeing (Table 6).

There is no statistical significance difference in the corona anxiety score relative to family history of psychology/psychiatrist treatment (p>0.05). Also, there is no statistically significant difference between psychological wellbeing score relative to family history of psychology/psychiatrist treatment (p>0.05) (Table 7).

There is no statistical significance difference in the corona anxiety score relative to long term ill health condition (p>0.05). Also, there is no statistically significant difference between psychological wellbeing score relative to long term ill health condition (p>0.05) (Table 7).

Table 7. Comparison of Students' Scales Scores by Other Descriptive Characteristics (n=206)

	Coronavi	rus Anxiety	Psychological Wellbeing			
	Mean±SD	M (min-max)	Mean±SD	M (min-max)		
Family History of Psychiatr	ic Treatment					
Yes (n=7)	3.86±3.63	3 (0-9)	12.86±4.67			
No (n=199)	3.19±3.08	2 (0-12)	11.44±4.51	10 (3-25)		
U/ p*	623.50	0 / 0.633	554.00	0 / 0.356		
Previous consultation with a	Psychologist/P	sychiatrist				
Yes (n=3)	1.33±1.33	0 (0-4)	12.33±0.88	12 (11-14)		
No (n=203)	3.24±0.21	2 (0-12)	11.47±0.31	10 (3-25)		
U/p*	185.:	5 / 0.24	199.0	/ 0.301		
Chronic illness						
Yes (n=22)	3.73±3.11	2.5 (0-12)	11.90±5.24	10.5 (6-25)		
No (n=184)	3.09±2.98	2 (0-11)	11.43±4.43	10.5 (3-25)		
U/p*		0 / 0.749		0 / 0.900		
Stable Source of Income						
Yes (n=76)	3.42±3.11	2.5 (0-11)	11.03±3.73	10 (6-25)		
No (n=130)	3.09±3.08	2.0 (0-11)	11.75±4.90	11 (3-25)		
U/p*		00 /0.404		0 / 0.398		
Media Monitoring of Covid				<u> </u>		
Most of the time (n=44)	3.27±3.32	2 (0-12)	11.88±5.47	10 (4-25)		
Some of the time (n=152)	3.28±2.99	3 (0-12)	11.20±3.92	10.5 (3-25)		
Seldom (n=6)	3.00±4.56	0.5 (0-11)	11.33±7.34	19.5 (3-25)		
Never (n=4)	0.50±1.00	0 (0-2)	18.00±6.06	17.5 (12 -25)		
X ² / p**		7 (0.679)	0.106 / 0.948			
Having Social Interaction	· ·					
Yes (n=87)	2.89±3.56	1 (0 -12)	11.91±4.79	10 (3 - 25)		
No (n=119)	3.45±2.96	3 (0 - 11)	11.18±4.29	11 (4 - 25)		
U/p*		0 / 0.007		0 / 0.354		
Physical Activity						
Yes (n=80)	3.09±3.31	2 (0 - 12)	12.28±5.21	11 (5 - 25)		
No (n=126)	3.29±2.96	2.5 (0 - 11)	10.98±3.95	10 (3 - 25)		
U/p*		0 / 0.324		0 / 0.360		
Academic Performance	II.		l .			
Excellent (n=17)	3.71±2.99	5 (0 - 9)	14.00±5.19	13 (8 - 25)		
Good (n=92)	2.90±2.93	2 (0 - 11)	11.34±3.98	10.5 (3 - 25)		
Fair (n=90)	3.49±3.32	2 (0 - 12)	11.11±4.81	10 (3 - 25)		
Poor (n=7)	2.57±2.51	3 (0 - 5)	12.14±4.41	10 (9 - 21)		
X^{2}/p^{**}		7 / 0.530		/ 0.061		
Contracted the Covid-19						
Yes (n=12)	2.67±2.67	1.5 (0 - 8)	11.25±2.86	11 (7 - 16)		
No (n=194)	3.25±3.12	2 (0 -12)	11.50± 4.60	10.5 (3 - 25)		
U/p*		1074.50 / 0.651				
Contracted the Covid-19 (R						
Yes (n=12)	3.17±3.86	1.5 (0 - 10)	11.08±3.55	10 (8 - 21)		
No (n=194)	3.22±3.05	2.5 (0 -12)	11.51±4.57	11 (3 - 25)		
U/p*		0 / 0.647		0 / 0.900		
-· r	1075.5	- · · · · · · · · · · · · · · · · · · ·	1137.0	<u> </u>		

Where mostly lived in the COVID-19 pandemic							
My country (n=24)	0.96 ± 2.24	0 (0 -10)	15.33±6.74	13.5 (7 - 25)			
North Cyprus (n=159)	3.53±2.88	3 (0 -12)	10.74±3.67	10 (3 - 25)			
Both (n=23)	3.39±4.24	2 (0 - 12)	12.61±4.92	12 (3 - 25)			
X^{2}/p^{**}	23.613 / 0.001		11.829 / 0.003				

^{*}Mann-Whitney-U, **Kruska -Wallis Test

There is no statistical significance difference in the corona anxiety score relative to stability in income during the Covid-19 pandemic lockdown (p>0.05). Also, there is no statistically significant difference between psychological wellbeing score relative to stability in income during the Covid-19 pandemic lockdown (p>0.05) (Table 7).

There is no statistical significance difference in the corona anxiety score relative to getting acquainted with media news on Covid-19 (p>0.05). Also, there is no statistically significant difference between psychological wellbeing score relative to getting acquainted with media news on Covid-19 (p>0.05) (Table 7).

There is statistical significance difference in the corona anxiety score relative to engaging in conversation with some when troubled Covid-19 (p>0.05). Those who have someone they talk to when troubled have lower corona anxiety (2.89 ± 3.56) compared to those who don't have someone they talked with when troubled (3.45 ± 2.96) . However, there is no statistically significant difference between psychological wellbeing score relative to engaging in conversation with some when troubled (p>0.05) (Table 7).

There is no statistical significance difference in the coronavirus anxiety score relative to engaging in physical activity during Covid-19 pandemic (p>0.05). Also, there is no statistically significant difference between psychological wellbeing score relative to engaging in physical activity during Covid-19 pandemic (p>0.05) (Table 7).

There is no statistical significance difference in the corona anxiety score relative to academic performance (p>0.05). Also, there is no statistically significant difference between psychological wellbeing score relative to engaging in physical activity during Covid-19 pandemic (p>0.05) (Table 7).

There is no statistical significance difference in the corona anxiety score relative to having Covid-19 virus (p>0.05). Also, there is no statistically significant difference

between psychological wellbeing score relative to having Covid-19 virus (p>0.05) (Table 7).

There is no statistical significance difference in the corona anxiety score relative to having a relative having Covid-19 virus (p>0.05). Also, there is no statistically significant difference between psychological wellbeing score relative to having a relative infected with Covid-19 virus (p>0.05) (Table 7).

There is statistical significance difference in the coronavirus anxiety score relative to place of residence during Covid-19 (p<0.05). Following a Post-hoc analysis, those who live in North Cyprus has the highest Corona anxiety score (3.53 ± 2.88) while those who live in their country have the lowest Corona anxiety score have the lowest corona anxiety (0.96 ± 2.24) . Similarly, there is a statistically significant difference between psychological wellbeing score relative to place of residence during Covid-19 (p<0.05). By doing a Post-hoc analysis, those who live in North Cyprus has the lowest wellbeing score (10.74 ± 3.67) while those who live in their country have the highest psychological wellbeing score (15.33 ± 6.74) (Table 7).

5. DISCUSSION AND RESULT

5.1. Descriptive Results

The majority of students were female (53.4%), at age group of 23-25 (48.1%), single (91.7%), second year students (31.6%) and Nigerian (52.4%) (Table 1). The majority of students indicated that they resided in urban areas (60.7%), they have lived in flats with friends (65.5%) (Table 1), they (98.5%) and their family (96.6%) did not have history of psychological treatment (Table 2).

In this study, 63.1% of students stated that they did not have stable source of income. 89.3% indicated not to have chronic illness. 73.8% of students stated that they monitored some of the time the news about the COVID-19 pandemic. 57.8% stated they did not have someone they always communicate with when they were worried. The majority of students indicated that they did not do physical exercise (61.2%) during the covid 19 pandemic. 44.7% rated their academic performance good. The majority of students indicated that they and their relatives (94.2%) did not have been diagnosed with COVID-19 and they lived in North Cyprus (77.2%) in the pandemic (Table 2).

5.2.Discussion of Distribution of Scale Averages of Nursing Students

The Coronavirus anxiety mean score of the students was 3.21 ± 3.09 (Table 3). It is indicated that the original cut score of CAS was of ≥ 9 and had to be lowered to ≥ 5 in order for the CAS to have a reasonable sensitivity rate. Because the original CAS investigation was exclusively composed of people with anxiety about the coronavirus (Lee, 2020b). The sample used in this study included students with and without anxiety because this study did not have an anxiety prerequisite. The CAS distinguishes those with dysfunctional anxiety and non-anxiety. It can be said that students in this study had no dysfunctional coronavirus anxiety. The fact that students do not have dysfunctional anxiety can be evaluated as the effect of nursing education and can show that they

manage the process well. Mekonen et al. (2021) found that there was a lower prevalence of stress among students when compared with the initial stages of COVID 19 pandemic. This was attributed to the increased knowledge about the virus, as students had more access to a variety of information regarding the virus than what was obtainable at the onset of the pandemic. Similarly, Arslan et al. (2021) found that CAS mean score was 2.51±3.85 in their study which conducted with college students. The reduced prevalence in anxiety levels and psychological stressors could be attributed to the formulation and distribution of vaccines globally, the resumption of academic activities which meant returning to the university and part resumption of social life.

The WHO-5 wellbeing mean score of the students was 11.49±4.51 (Table 3). The WHO-5 has been used as a screening tool for individuals at risk for depression. It is indicated that scores on the WHO-5 ranged from 0 to 25, and higher scores indicated greater well-being. A cut score of 12 or lower indicates poor well-being and that further testing for depression should be done (Topp et al., 2015). Due to the suboptimal psychological well-being of the students, it can be said that nursing students were individuals at risk for depression in this study. In a study by Chow et al. (2018) with nursing students before the pandemic, it was found that students reported a medium level of perceived well-being (15.3±3.9). Hasson et al. (2021) found that the wellbeing scores of UK and Chinese nursing students were 15.43±4.38 and 14.93±4.00 respectively, which were considered as moderate level.

5.3.Discussion of Correlation Analysis between the Coronavirus Anxiety Scale and the WHO-5 Well-being Scale

The study found an association between anxiety level and physchological wellbeing. A moderate and negative correlation was found between CAS and the WHO-5 wellbeing scale (r = -0.321; p = 0.000) (Table 4). It was found that increase in anxiety depreciate the pyschological wellbeing. It can be concluded that a rise in coronavirus anxiety decreases the psychological wellbeing of students.

In accordance to a study conducted by Wang et al. (2020) to investigate the pyschological responses associated to the early inception of the Covid-19 pandemic, it was found that increased anxiety were perpetaing problems consider as stressors to pyschological wellbeing in the study. This is conclusion is also similar to the sudy condcuted by Javed et al. (2020) which linked increase level of pyschological distress to Covid-19 pandemic among the children, adults and healthcare workers. Evans et al. (2021) found that changes in depression scores correlated strongly with changes in anxiety symptoms and wellbeing.

5.4.Discussion of Comparison of Students' Scores by Socio-Demographics and Other Descriptive Characteristics

The study found that male participants have higher anxiety level in comparison to the female (Table 6). However in a similar study conducted in Iran, females propensity to higher stress level was reported (Khademian et al., 2021). Wang et al. (2020) indicated that females suffered a greater psychological impact of the pandemic as well as higher levels of anxiety and depression.

However, this present study did not find any significance difference in the Coronavirus anxiety and pyschological well being in contrasts to marital status, long term residential type (rural or urban) (Table 6), family history of pyschological treatment, chronic illness, income stability, news on Covid-19 monitoring, physcial activity, academic performance and Covid-19 infection status (Table 7). Khademian et al. (2021) however posited in their study that individuals in rural communities as well as individual who lost their income exhibited more anxiety level in contrast to urban dwellers and those with stable income generation.

In respect to age, it was found that individuals between the age 18-22 years have a higher measure of Coronavirus anxiety in contrast to individuals below or above that age category (Table 6). According to a study on the effect of Covid-19 on students in India,

the study correlated high anxiety among younger students than in the adult population (Hariprasad, 2021).

In this research, it was found that students in the first year had a lower anxiety in comaprisons to those in the second, third and fourth year. It was found that students in the second year level have the highest anxiety score, closely followed by those in the fourth year (Table 6). Ma et al. (2020) found that senior year was significantly associated with anxiety or/and depressive symptoms and indicated that senior students were more likely to have anxiety symptoms.

Among the two major nationals seen in the study, the Zimbabweans nationals have an increased Corona anxiety than the Nigerians (Table 6).

The study also concluded that people who live with their parents have the less corona anxiety than all other living arrangements considered in the study. This could be as a result of a more filial connection in this period of uncertainty that gives them boost assurance and decimate worries connected to a far away living conditions away from their loved ones. Similary, it was found that individuals living with their parents have the highest pyschological wellbeingness than those with other type of arrangements (Table 6).

In this present research, it was deduced that individuals who have people they often interect or confide in when troubled have a lower anxiety in contrast to people who do not have such people (Table 7). This further buttresses the importance of social intereaction in dealing with pyschological wellbeing ecpecially in period or situations plague with worries and crisis. Elmer and Stadtfeld (2020) in their study posited social communication as one of the important mechanism to negate pyschological distress. Ma et al. (2020) found that individuals with low perceived social support were more likely than individuals with high perceived social support to have anxiety and depressive symptoms.

This study found that those who reside in their home countries have a lower Coronavirus anxiety and higher pyschological wellbeing than those who stay in North Cyprus or who simulatenously reside in both (Table 7). This findings could be linked to the fact that they feel more safer around their loved ones without getting too worried than when far away.

5.5. Results

- Nursing students have no dysfunctional coronavirus anxiety.
- Due to the suboptimal psychological well-being of the students, nursing students are individuals at risk for depression.
- A moderate and negative correlation was found between anxiety level and physchological wellbeing of nursing students.
- There were significant differences between students' anxiety scores by their gender, age groups, education level, nationality, accommadation, interaction, where mostly live.
- There were significant differences between students' psychological well-being scores by accommadation and where mostly live.

5.6. Recommendations

- Although nursing students do not have dysfunctional coronavirus anxiety, their anxiety levels can be monitored at regular intervals.
- Due to the suboptimal psychological well-being of the students, psychosocial support and mental health services should be provided to those students at risk for depression. Concerned authorities should administer mental health programs including multidimensional psychological interventions such as Cognitive Behavioral Therapy (CBT), psychoeducation, self-monitoring via online.
- The international student affairs in all universities in the country should liaise
 with foreign student bodies in the provisions of welfare and relief packages for
 international students in the schools.

- House owners and community leaders where international students are residing should be encouraged to check on their student tenants periodically and make a report to the government if students are displaying adverse health conditions.
- Hospitals and clinics in the country should endeavor to have a specialized advisory and mental health assessment for international students as preventive and coping strategies to help students maintain health wellness.
- Professors and lecturers in the University should be sensitized on likely behavioral and attitudinal changes that could be display by students as a result of the pandemic and lockdown effect on students. Thus, the teaching styles and curriculum to be deployed should accommodate these changes.
- In order to broaden the scope of research knowledge, it is suggested that
 prospective studies should incorporate other departments from other faculties in
 the university. Similarly, such study should also be replicated in other
 universities in North Cyprus.

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PERSONAL IDENTIFICATION FORM

Dear Participant,

I am a master's Student in Faculty of Nursing at the Near East University. The objective of this study is geared towards understanding the effects of the COVID-19 pandemic on the psychological wellbeing and anxiety level of university students in North Cyprus.

Please note that your participation is totally voluntary, and if you choose to take part in this study, you will be answering questions via this questionnaire. The questionnaire consists of questions relating to some background information about you, your experience during the COVID-19 lockdown and some short assessment form. All information received will remain strictly confidential, and no one will have access to them outside of the individuals involved. Your answers will remain anonymous and your name or student number is not required from you. By submitting your answers, you are consenting for your data to be used in my project, but you will not be individually identified, and your response will be used for statistical purpose only. Thank you for your time and participation.

Yours Faithfully,

IGHO OLUKU Masters Student in Public Health Nursing

Assist. Prof. Ayşegül SAVAŞAN NEU Nursing Faculty

SECTION A

DEMOGRA 1. Gender () Male		ATION QUESTI	ONNAIRE
2. Age: () 17 and bo () 18 – 23 () 24 – 29 () 30 and al	ellow		
3. Marital sta	tus		
() Single	() Married	() Divorce	() Separated

4. Academic year () 1st year () 2nd year () 3rd year () 4th year
5. Nationality:
6. Place of Longest Residence() Urban (city capitals or centre)() Rural(district\town\village)
7. Specify the accommodation facility you live in () I live with my parents () I live in a flat or house alone () I live in flat or house with my friends () I stay in the dormitory
SECTION B
8. A family story of psychiatric/ psychological treatment? () Yes () No
9. Have you ever applied to a psychiatrist or psychologist? () Yes () No
10. Do you have any long term ill health condition?() Yes () No
11. Do you have stable source of allowance (money) during the COVID-19 pandemic lockdown?() Yes () No
12. Do you listen, read or watch the news about the COVID-19 pandemic? () Most of the time () Some of the time () Seldom () Never
13. Do you have someone you always talk with especially when you are worried/troubled? () Yes () No
14. Do you engage in any form of physical excercise especially during the COVID-19 lockdown?() Yes () No
15. How would you rate your academic performance during especially during this COVID-19 era? () Excellent () Good () Fair () Poor

16. Have you had COVID-19 in pandemic?	
() Yes () No	
17. Have any of your relatives been diagnosed	with COVID-19?
() Yes (specify who) ()	No
18. Where did you mostly live in the COVID-1	9 pandemic?
() My country () North Cyprus () Both of my country and North Cyprus

CORONAVIRUS ANXIETY SCALE

Instruction: Please tick the option that most appropriately represent your experience. There is no wrong or right answer.

How often have you experienced the following activities over the last 2 weeks?

		Not at all	Rare, less than a day or two	Several days	More than 7 days	Nearly every day over the last 2 weeks
1	I felt dizzy, lightheaded, or faint, when I read or listened to news about the coronavirus.	0	1	2	3	4
2	I had trouble falling or staying asleep because I was thinking about the coronavirus.	0	1	2	3	4
3	I felt paralyzed or frozen when I thought about or was exposed to information about the coronavirus.	0	1	2	3	4
4	I lost interest in eating when I thought about or was exposed to information about the coronavirus.	0	1	2	3	4
5	I felt nauseous or had stomach problems when I thought about or was exposed to information about the coronavirus.	0	1	2	3	4

WHO (FIVE) WELL-BEING QUESTIONNAIRE

Please put a circle on each of the five statements which is closest to how you have been feeling over the last two weeks. There is no wrong or right answer

	Over the last two weeks	All the time	Most of the time	More than half of the time	Less than half of the time	Some of the time	At no time
1	I feel cheerful and in good spirits	5	4	3	2	1	0
2	I feel calm and relaxed	5	4	3	2	1	0
3	I feel active and vigorous	5	4	3	2	1	0
4	I wake up feeling fresh and rested	5	4	3	2	1	0
5	My daily life is filled with things that interest me	5	4	3	2	1	0



ARAŞTIRMA PROJESİ DEĞERLENDİRME RAPORU

Toplanti Tarihi : 29.04.2021 Toplanti No : 2021/90 Proje No :1329

Yakın Doğu Üniversitesi Hemşirelik Fakültesi öğretim üyelerinden Yrd. Doç. Dr. Ayşegül Savaşan'ın sorumlu araştırmacısı olduğu, YDU/2021/90-1329 proje mimaralı ve "Determination of Anxiety Level and Psychological Well-being of Undergraduate Nursing Students during Covid-19 Pandemic" başlıklı proje önerisi kurulumuzca online toplantıda değerlendirilmiş olup, etik olarak uygun bulunmuştur.

Prof. Dr. Rüştü Omur

Yakın Doğu Üniversitesi

Bilimsel Araştırmalar Etik Kurulu Başkanı

