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Perceived Stress Using Pender's Health Promotion Model Among Student Nurse's With Chronic Disesases During Covid 19 Outbreak

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Abstract

Background: Corona virus with rapid and extensive epidemic has understandable forced devastating outcomes in a variety of portions of individual living. Accordingly, Undergraduates College students supposed negative psychological health forces during COVID. Innovative strategies for rallying student requires are essential. Undergraduate students reported more perceived stress.

Aim: to explore student nurse's with chronic diseases perceptions of stress using Pender's health promotion model during COVID 19 outbreak at Nursing Department, Applied Medical Sciences College at University of Bisha, Saudi Arabia.

Subject and methods: A cross-sectional study was carried out from 30 january 2022 to june 2022. Nursing Department, Applied Medical Sciences College at University of Bisha, Saudi Arabia responded to the self-administered online survey. one tool includes 2 main parts are used , namely sociodemographic characteristics of nurse's students and Chronic disease and stress management exam anxiety includes 39 items adapted from **Zamoush & Amar, 2014** which chronic diseases classifications includes 8 selected items and 31 items used to obtain the relevant extent of anxiety and stress during exam period were used. Statistical analysis such as frequency, percentage, were used for the descriptive analysis.

Results: There are a statistically significant relation between nursing student's anxiety level during exams and their academic year, the extent of anxiety they feel during exam period and thought of not entering the test because of exam and between nursing students' sociodemographic data and their chronic diseases mainly in the items related to student's age and their academic year.

Conclusion &recommendations: the anxiety levels of exams among nursing students suffered from chronic diseases at Nursing Department, Applied Medical Sciences College at University of Bisha, Saudi Arabia were moderate and there was a relationship between anxiety from exams among nursing students and their chronic diseases. Future research should propose and evaluate techniques for lowering anxiety in nursing students and being planned in the near future to see if the students' anxiety levels have changed, as well as their usage of various coping mechanisms to deal with the situation's problems.

Key Words: Stress, perception, Pender's health promotion model, Covid 19 Outbreak, Student nurse, chronic diseases

INTRODUCTION

Corona virus with rapid and extensive epidemic has understandable forced devastating outcomes in a variety of portions of individual living. Furthermore, the future model of COVID-19 self-care manners has an satisfactory vigor in the general population to change people's attitudes (Pouresmali et al.,2021).

Undergraduates College students seeming negative psychological health forces during COVID. Innovative attitudes for rallying student requires are essential. Undergraduate students stated extra supposed stress, more recurring negative believe, anxiety less positive feel and support from teachers than graduate students. Perceived stress, repetitive negative thinking, negative mood, increased among all students (Dial etal.,2021)

The extensive of corona virus and the lack of any best treatment and prevention have caused stress and anxiety in communities which anxiety resulting from corona virus disease is critical and they can lead to psychological disorders in public. The consequences of health-promoting manners and health beliefs are low corona virus anxiety. Therefore, there is an obvious need for implementing interferences focused on preventing nurses from developing corona virus anxiety. (Aziziaram & Basharpoor ., 2020).

Academic adjustment and health well-being among students with chronic diseases. So that the occurrence of chronic diseases upshots academic adjustment which, in conjunction with other variables, works as a predictor of health well-being and satisfaction of vital needs. (Shamionov et al., 2020)

Statistically, Approximately 30% of university students have chronic diseases and/or special care needs. Nevertheless, it is essential that their health related problems are identified and accurately controlled which students having chronic diseases remained significantly associated with poorer HRQoL (Gazibara et al .,2018)

The COVID-19 disease is causing a global epidemic with large numbers of deaths and infected individuals. The restrictions and quarantine live outs cause short- and long-term negative effects on cardiovascular health, anxiety and many health problems. During the pandemic, physical activity and nutritional routines change due to the limited break. (Uysalet al., 2021)

Pender's health promotion model (HPM) is considered as one of the extensively used models to map and change unhealthy behaviors and support health. Different studies have highlighted the efficiency of this model to control unhealthy behaviors. The HPM is a social cognitive theory based on cognitive-perceptual factors (perceived advantages, obstacles, and self-efficacy) influence meeting a health-promoting behavior. In addition to, adapting factors (demographic characteristics, interpersonal influences, and behavioral factors) are considered to interact with each other to influence cognitive perceptual processes. (Khodaveisi etal,2017) .

In the red to the high occurrence of depression among Chinese university students, educational institutions must take precautions such as providing essential psychological health education courses and improving the psychological direction accessible to students. (Tang etal.,2021) . So , health literacy has been concerned a key factor for determining the use of health information and promoting health which adolescent health literacy, health-promoting lifestyle profile, and health condition necessitate cautious concern .(Chu-Ko etal.,2021)

The corona virus disease (COVID-19) pandemic has affected the health-related manners. Thus, the factors predicting the health-promoting behaviors (HPBs) of hospitalized patients with non-communicable diseases (NCDs) during the second wave of COVID-19 should be looked to develop their capacity for high-quality and continuing self-care.(Posai et al.,2021) . Therefore, there is an obvious require for employing interfering focused on preventing nurses from developing corona virus anxiety. (Aziziaram & Basharpoor ., 2020).

Aim of study:

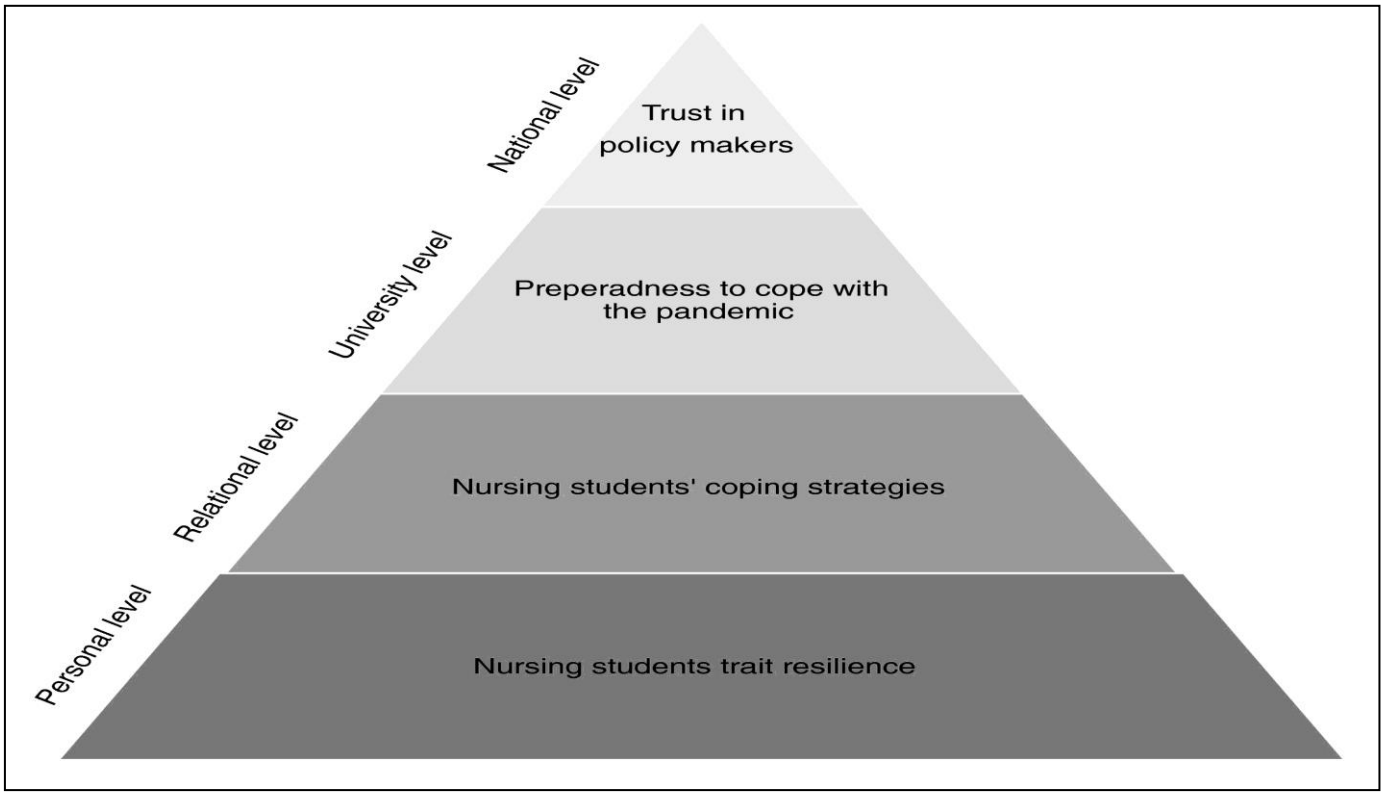
This study was carried out aims to explore student nurses with chronic diseases perception's of stress using Pender's health promotion model during COVID 19 outbreak at Nursing department, Applied Medical Sciences College, University of Bisha, Saudi Arabia

Research Questions

1. What are the anxiety levels of exams among nursing students suffered chronic diseases at Nursing Department, Applied Medical Sciences College at University of Bisha?
2. Is there a relationship between anxiety from exams among nursing students and their chronic diseases?

Conceptual framework

Drach-Zahavy et al ., 2021 highlighted on that the family member is considered as a part of diverse levels of elasticity in improving nursing students' well-being under the circumstances of COVID-19, above further than their stress levels: the individual level, resilience quality; the relationships , nursing students' coping strategies; the university level, the students' perceptions that their university was prepared to handle the virus outbreak and they are confined (Figure 1).



items used to obtain the relevant extent of anxiety and stress during exam period.

Scoring system of patient' satisfaction scale:

All questions in the tool were scored according to Likert Rating Scale of stress as (Ususally =3, sometimes =2, rarely =1) and the total score of the tool was classified levels for stress questions as when it was Low <50%, Moderate 50–<75%, High ≥75%

Content validity:

Validity was used for the modified tool to assure that it covers the objectives. The phase was developed by a Jury of five experts from Medical-surgical and Psychiatry & Mental Health nursing staff; three Assistant professors of Medical-Surgical nursing at Nursing department, Applied Medical Sciences College at University of Bisha and three Assistant Professors of psychiatry & mental health nursing at Nursing college, Qassim University. Reliability of the proposed tool was done using Cronbach's alpha test which revealed

Subjects and Methods

A descriptive cross-sectional design was utilized in this study at Nursing Department, Applied Medical Sciences College at University of Bisha, Saudi Arabia on convenience sampling of all available nursing students available during the data collection period. The inclusion criteria of participants entail their suffered from any type of chronic diseases and approval to participate in the study.

Tools:

One tool was used after revised literature divided into 2 main parts as follows:

Part (I): includes students Sociodemographic characteristics of nursing students as (age, sex, marital status, and level).

Part (II): Chronic disease and stress management exam anxiety includes 39 items adapted from **Zamoush & Amar, 2014** which chronic diseases classifications includes 8 selected items and 31

sociodemographic data. It revealed that nearly three quarters of studied students their ages were 22 and less than 22 years old, while the most of participated students were female. About half of participated students live with their parents. In relation to chronic diseases one quarter of them have had asthma whereas only five students suffer from cardiovascular diseases. Three quarters of them reported that they felt anxiety during exam largely. However, about one third of them reported that they thought not to enter the exam because of anxiety.

Table (2): shows the distribution of the studied nursing students according to anxiety scale of exams. This table illustrates that half of participated nursing students their anxiety level was moderate with Mean ± SD (68.20 ± 9.32) of total score.

Table (3): shows the relationship between chronic diseases of nursing students and anxiety scale for exams. It clarifies that there are a statistically significant relation between chronic diseases of nursing students and their anxiety level during exams.

Table (4) : demonstrates the relationship between sociodemographic data of nursing students and anxiety scale of exam. It clarifies that there are a statistically significant relation between nursing student's anxiety level during exams and their academic year, the extent of anxiety they feel throughout exam period and thought of not entering the test because of exam Ps= (0.001, .038 ,0.002) respectively.

Table (5) : illustrates the relationship between sociodemographic data of nursing students and their chronic diseases. It clarifies that there are a statistically significant relation between nursing students sociodemographic data and their chronic diseases mainly in the items related to student's age and their academic year .

high reliability (**.950)**.

A pilot study was done on 20 students to approximation the clarity of the tool then excluded them from the total sample number. The questionnaire sheet submitted online as a precautionary actions of corona virus (Covid 19) and prevent the transmission via papers and then contact the students via their whats-up media and explain the purpose of the study to them and invited them to participate in the study though an online link also the sheet contains a paragraph explain the study aim and assuring them that their participation was voluntary and they have the right to withdraw at any time.

Ethical Considerations:

Applied Medical Sciences College administrative authority in University of Bisha Additionally approved the study, the participants were informed of research purpose and their answers would be kept confidentially and the answers not affect or interfere with their evaluation.

Statistical analysis

Data were analyzed using the Statistical Package of Social Sciences (SPSS) Version 20(Armonk, NY: IBM Corp). Moreover, Qualitative data were described using number and percent. The Kolmogorov-Smirnov test was used to verify the normality of distribution. Quantitative data were described using range (minimum and maximum), mean, and standard deviation, median. Significance of the obtained results was judged at the 5% level . Chi-square test for categorical variables, to compare between different groups and Monte Carlo correction test was conducted to observe and quantify an association between different variables. Rectification for chi-square when more than 20% of the cells have expected count less than 5% level.

Results

Table (1): shows the distribution of the studied nursing students according to their

Table (1): Distribution of the studied nursing students according to their sociodemographic data (n = 200)

Q	sociodemographic data	No.	%
1	**Age**		
	≤ 22 years old	166	83.0
	More than 22 years old	34	17.0

	Sex		
2	Male	15	7.5
	Female	185	92.5
3	**academic year**		
	First	32	16.0
	Second	55	27.5
	Third	69	34.5
	Fourth	44	22.0
4	**With whom do you live?**		
	The parents	104	52.0
	The brothers	10	5.0
	Parents and siblings	75	37.5
	One of the parents	11	5.5
5	**Which chronic disease do you have?**		
	Diabetes	15	7.5
	Hypertension	26	13.0
	Rheumatoid	18	9.0
	Asthma	52	26.0
	Hematologic diseases	34	17.0
	Immunologic diseases	36	18.0
	Endocrine diseases	14	7.0
	Cardiovascular diseases	5	2.5
6	**To which extent do you feel anxiety during exam period?**		
	To agreat extent	150	75.0
	To a medium extent	44	22.0
	To a weak extent	6	3.0
	I don't feel exactly	0	0.0
7	**Have you ever thought not to enter the exam because of anxiety?**		
	Yes	76	38.0
	No	69	34.5
	May be	55	27.5

Table (2): Distribution of the studied nursing students according to anxiety scale of exams. (n = 200)

Anxiety scale of exams	**No.**	**%**
Low <50%	59	29.5
Moderate 50 – <75%	101	50.5
High ≥75%	40	20.0
Total Score		
Min. – Max.	45.0 – 93.0	
Mean ± SD.	68.20 ± 9.32	
Median	68.0	

% Score	
Min. – Max.	22.58 – 100.0
Mean ± SD.	59.99 ± 15.04
Median	59.68

Table (3): Relation between chronic diseases of nursing students and anxiety scale of exams (n = 200)

Chronic disease	Anxiety scale						χ^2	^{MC}p
	Low <50% (n = 59)		Moderate 50 – <75% (n = 101)		High ≥75% (n = 40)			
	No.	%	No.	%	No.	%		
Diabetes	7	11.9	8	7.9	0	0.0	25.982*	0.015*
Hypertension	9	15.3	12	11.9	5	12.5		
Rheumatoid	3	5.1	10	9.9	5	12.5		
Asthma	15	25.4	22	21.8	15	37.5		
Hematologic diseases	12	20.3	18	17.8	4	10.0		
Immunologic diseases	9	15.3	25	24.8	2	5.0		
Endocrine diseases	3	5.1	4	4.0	7	17.5		
Cardiovascular diseases	1	1.7	2	2.0	2	5.0		

χ^2: **Chi square test** MC: **Monte Carlo**
*: Statistically significant at $p \leq 0.05$

Table (4): Relation between sociodemographic data of nursing students and anxiety scale of exams (n = 200)

Q	sociodemographic data	Anxiety scale of exams						χ^2	p
		Low <50% (n = 59)		Moderate 50 – <75% (n = 101)		High ≥75% (n = 40)			
		No.	%	No.	%	No.	%		
1	**Age**								
	Less than 22 years old	47	79.7	89	88.1	30	75.0	4.156	0.125
	More than 22 years old	12	20.3	12	11.9	10	25.0		
2	**Sex**								
	Male	4	6.8	9	8.9	2	5.0	0.542	$^{MC}p=$ 0.826
	Female	55	93.2	92	91.1	38	95.0		
3	**academic year**								
	First	12	20.3	13	12.9	7	17.5	27.491*	<0.001*
	Second	15	25.4	37	36.6	3	7.5		
	Third	17	28.8	40	39.6	12	30.0		
	Fourth	15	25.4	11	10.9	18	45.0		

4	**With whom do you live?**								
	The parents	33	55.9	53	52.5	18	45.0	2.962	$^{MC}p=0.830$
	The brothers	3	5.1	6	5.9	1	2.5		
	Parents and siblings	19	32.2	37	36.6	19	47.5		
	One of the parents	4	6.8	5	5.0	2	5.0		
5	**To which extent do you feel anxiety during exam period?**								
	To agreat extent	51	86.4	74	73.3	25	62.5	9.204*	$^{MC}p=0.038^{*}$
	To a medium extent	8	13.6	24	23.8	12	30.0		
	To a weak extent	0	.0	3	3.0	3	7.5		
	I don't feel exactly	0	0.0	0	0.0	0	0.0		
6	**Have you ever thought not to enter the test because of anxiety?**								
	Yes	33	55.9	36	35.6	7	17.5	16.891*	0.002^{*}
	No	14	23.7	34	33.7	21	52.5		
	May be	12	20.3	31	30.7	12	30.0		

χ^2: **Chi square test** MC: **Monte Carlo**
*: Statistically significant at $p \leq 0.05$

Table (5): Relation between chronic diseases of nursing students and their sociodemographic data (n = 200)

sociodemographic data	Chronic disease																χ^2	^{MC}p
	Diabetes (n =15)		Hypertension (n =26)		Rheumatoid (n =18)		Asthma (n =52)		Hematologic diseases (n =34)		Immunoligic diseases (n =36)		Endocrin diseases (n =14)		Cardiovascular diseases (n =5)			
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%		
Age																		
Less than 22 years old	13	86.7	25	96.2	16	88.9	36	69.2	30	88.2	32	88.9	12	85.7	2	40.0	16.240*	0.012*
More than 22 years old	2	13.3	1	3.8	2	11.1	16	30.8	4	11.8	4	11.1	2	14.3	3	60.0		
Sex																		
Male	0	0.0	4	15.4	3	16.7	2	3.8	1	2.9	5	13.9	0	0.0	0	0.0	9.273	0.140
Female	15	100.0	22	84.6	15	83.3	50	96.2	33	97.1	31	86.1	14	100.0	5	100.0		
academic year																		
First	7	46.7	0	0.0	0	0.0	11	21.2	4	11.8	7	19.4	3	21.4	0	0.0	41.396*	0.002*
Second	3	20.0	8	30.8	5	27.8	11	21.2	6	17.6	15	41.7	6	42.9	1	20.0		
Third	3	20.0	14	53.8	8	44.4	13	25.0	18	52.9	8	22.2	4	28.6	1	20.0		
Fourth	2	13.3	4	15.4	5	27.8	17	32.7	6	17.6	6	16.7	1	7.1	3	60.0		
With whom do you live?																		
The parents	9	60.0	8	30.8	11	61.1	26	50.0	21	61.8	18	50.0	8	57.1	3	60.0	23.978	0.155
The brothers	0	0.0	3	11.5	0	0.0	1	1.9	2	5.9	1	2.8	3	21.4	0	0.0		
Parents and siblings	6	40.0	13	50.0	7	38.9	23	44.2	7	20.6	15	41.7	2	14.3	2	40.0		
One of the parents	0	0.0	2	7.7	0	0.0	2	3.8	4	11.8	2	5.6	1	7.1	0	0.0		
To which extent do you feel anxiety during exam period?																		
To agreat extent	11	73.3	19	73.1	17	94.4	37	71.2	22	64.7	29	80.6	11	78.6	4	80.0	17.750	0.112
To a medium extent	2	13.3	7	26.9	1	5.6	14	26.9	11	32.4	7	19.4	2	14.3	0	0.0		
To a weak extent	2	13.3	0	0.0	0	0.0	1	1.9	1	2.9	0	0.0	1	7.1	1	20.0		

I don't feel exactly	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0		
Have you ever thought not to enter the test because of anxiety?																		
Yes	10	66.7	10	38.5	6	33.3	19	36.5	12	35.3	14	38.9	2	14.3	3	60.0		
No	3	20.0	5	19.2	7	38.9	22	42.3	14	41.2	10	27.8	6	42.9	2	40.0	17.569	0.205
May be	2	13.3	11	42.3	5	27.8	11	21.2	8	23.5	12	33.3	6	42.9	0	0.0		

χ^2: **Chi square test** MC: **Monte Carlo**
*: Statistically significant at $p \leq 0.05$

Discussion

Nursing students have had exceptionally hard lives while pursuing their studies. Equal in normal circumstances, anxiety is common between nursing students. The Coronavirus (COVID-19) pandemic has been with us since the end of 2019 (World Health Organization, 2020), and it has changed our lives dramatically. These alterations appear to have resulted in an uptick in pandemic-related psychological discomfort, such as dread, anxiety, threat perception, and stress (Nikčević & Spada., 2020).

Regarding stress and exam anxiety, the current study revealed that three quarters of participated nursing students felt anxiety largely during exam. From the researcher point of view, this result may be due to students cannot enjoy their academic lifetime as a result of stress and the pressure to achieve fine on exams, and it becomes dull and stressful for them, resulting in anxiety. This finding goes in line with Kumari & Jain, 2014 who mentioned that exam anxiety among college students has been a major topic for some years. College students are under a lot of stress for a diversity of causes, including an absence of planning, their study style, and a lack of necessary information. When stress is seen negatively or becomes crushing, it causes anxiety before and throughout exams, affecting students' educational presentation. College students suffer from a lot of anxiety. Academic performance, pressure to achieve, and post-graduation plans are the top three worries among students (Beiter et al., 2015).

In addition, the results of this study showed that about one third of participated nursing students reported that they thought not to enter the exam because of anxiety. From the researcher point of view, exam anxiety has been linked to devastating cognitive consequences, such as difficulty remembering and recalling material. Also, exam stress and anxiety are frequently ascribed to a fear of failing, and can have long-term detrimental effects on a student's self-esteem. This result is supported by Basco & Olea., (2013) who stated that when stress and anxiety levels grow; this mapping might make it difficult to employ working memory, reducing the mind's capacity to use other processes. When students' stress and anxiety levels grow, they prefer to focus on themselves rather than the job at hand, which is the test. Over awareness, on the other hand, might create a viscous cycle in the tense testing environment, reducing the individual's capacity to focus or spend the energy required for the exam. An over awareness of a test-anxious student's progress in the test environment leads to worse test performance.

In this regard, Al-Shahrani, (2021) stated that the rapid emergence of the COVID-19 epidemic forced educational institutions throughout the world to close. The student community, which had challenges in transitioning to an online education style, felt anxious because of this unprecedented action. Moreover, Aloufi et al., 2021 stated that stress, anxiety, and depression are common between nursing students in their first year. This has the possible to disturb not only their personal health and educational accomplishment, but also their communication with patients through clinical engagement, plus the quality and safety of care they deliver.

Furthermore, the current study revealed that half of participated nursing students their anxiety level was moderate. From the researcher

point of view, it is very typical for nursing students to be nervous during tests, particularly high-stakes board exams. While a little level of worry might help nursing students to focus and concentrate well, too much anxiety can negatively affect exam results. In keeping with previous researches, equal in normal circumstances students experience anxiety. Surrounded by university and college students in Hong Kong, the prevalence of moderate anxiety was 12.2% and severe anxiety was 5.8% (Lun et al., 2018); in Portugal 15.6% suffered from moderate anxiety while 8.3% agonized from severe anxiety (Bártolo et al., 2017) and in Australia 17.5% grieved from moderate anxiety (Farrer et al., 2016). Amongst medical student's occurrence of moderate anxiety was 25% in UK, 20% in North America, 13.7% in New-Zealand and 23% in Lebanon (Quek et al., 2019).

Moreover, this result is in agreement with Khoshaim et al., 2020 who found that about 35% of the students had moderate to severe anxiety, and stated that COVID-19 is the greatest epidemic of the millennium, and it is known as the "public enemy No. 1." In the blink of an eye, this disaster has altered our way of life. Not only has it put our lives and health in jeopardy, but the harm it has caused might have an impact on our economic, social, and educational institutions. This result also goes in line with Dawood et al., 2016 who reported that 50% of studied nursing students suffer from test anxiety with a moderate degree. This result is congruent with Vaz et al., 2018 who mentioned that moderate anxiety is a motivating element that might help students do better on tests. High levels of worry, on the other hand, may impede and interfere with their academic achievement.

Concerning relation with chronic diseases for nursing students and anxiety scale of exams, the current study showed a statistically significant relation between chronic diseases of nursing students and their anxiety level during exams. From the researcher point of view, this may be due to that level of anxiety rises among students with chronic diseases as a result of their fear that the desired result will not be achieved due to their health condition or because educational institutions put pressure on students to achieve higher grades in order to boost their market worth. Parents are always under pressure to give their sons with a higher education so that they can compete in the global economy. As a result, students are under a lot of pressure in their classes. The exceedingly unusual personal contexts and surroundings during the ongoing covid-19 epidemic clarify the significant occurrence of anxiety. This result is reinforced by Aslam Khan et al., (2021) who found that levels of anxiety, depression and stress in patients with RA were significantly higher as equated to age- and sex-matched healthy controls.

As well, Larson et al., 2017 concluded that students' academic performance might be impaired by several chronic health issues. Many students with chronic health concerns, on the other hand, may nevertheless excel academically, especially if they have enough assistance at home, at school, and in their communities. Gazibara et al., 2018 observed that students who suffer from chronic diseases did not have lower grade point average compared with healthy students. Anxiety has a negative impact on the quality of students' lifetime, their education and clinical performance (Sanad, 2019) and may cause withdraw from the nursing program (Rafati et al., 2017).

Regarding relation between demographic data of nursing students and anxiety scale of exams, the current study showed that there is no relation between anxiety level of nursing students and their age, gender and with whom they live. This result consistent with Tian et al., 2019 who found that gender did not shown to be a statistically significant modulator of anxiety among medical students. In the context of a group of medical students, the stereotype that "girls are worriers while boys are carefree and worry-free" may not hold true. Both genders should get equal attention and instructional tools for dealing with anxiety. Moreover, the present study found that a statistically significant amongst anxiety of nursing students and their academic year which might be related to the saturation and complexity of higher-level curriculum. This result is in agreement with Khoshaim et al., 2020 who surprised when found an association amongst anxiety and the level of study; students in their fourth year were more anxious linked to students in their fifth or final year. While, this result does not correspond to Tian et al., 2019 who discovered that no statistically significant difference in anxiety prevalence between students in their pre-clinical and clinical years.

Furthermore، the current study revealed that a statistically significant relation was found between nursing student's anxiety level، the extent of anxiety they feel during exam period and thought of not entering the test because of exam. From researcher point of view, students might experience exam anxiety at some point during their higher education journey due to increased stress on maintaining an outstanding academic performance for future academic opportunities. These results are contradicted with Ahsan & Kumar., (2016) who highlighted a negative relationship between academic achievement and test anxiety; we can argue that a high degree of test anxiety combined with poor study habits will have a bad impact on academic achievement. In addition, Dawood et al., 2016 stated that in recent years, test anxiety and its various manifestations have become one of the most popular research topics. Even when their grades are strong throughout the semester, most nursing students report high levels of test anxiety during final exams as compared to other students.

As regard relation between chronic diseases of nursing students and their demographic data. There are a statistically significant relation between age of nursing students and their chronic diseases and between academic year of nursing students and their chronic diseases. From the researcher point of view this may be related to that chronic diseases occur after a lengthy period of exposure to an unhealthy lifestyle, many illnesses commonly manifest themselves around middle age. As regard Williamson et al ., 2020 concluded that age, gender , chronic illness, and fatness have emerged as major risk variables. Diabetes, hypertension, coronary heart disease, chronic kidney disease, respiratory disease, and cancer have all been linked to the hazard of negative COVID-19 outcomes, and diabetes, hypertension, coronary heart disease, chronic kidney disease, respiratory disease, and cancer have all been linked to the risk of contrary COVID-19 outcomes. However, while each of these characteristics has been thoroughly researched, their relationships are less well understood.

Finally, the corona pandemic ushered in a new era of ambiguity, lack of control, and unpredictability. For the wide-ranging public, and particularly for students, the sense of losing control is extremely distressing. The faculty plays a vital role in instilling a sense of control in students and providing a consistent educational system. Test anxiety is a problem for nursing students (Savitsky et al., 2020). Test anxiety in nursing students is caused by chronic stress, hefty academic workloads, and strict advancement criteria (Quinn & Peters., 2017). However, treatment approaches based on chronic illnesses are suggested, especially based on relaxation training, slow breathing, and cognitive behavioral therapy (Bussotti& Sommaruga, 2018). For college students with chronic illnesses, Bishop postulated that health-related quality of life is connected to positive adaptation to student life (Herts et al., 2014).

Conclusion &Recommendations:

The current study concluded that the anxiety levels of exams among nursing students suffered from chronic diseases at nursing department, applied medical science college in the University of Bisha were moderate and there was a relationship between anxiety from exams among nursing students and their chronic diseases.

According to the results of current study, researchers recommended that faculty must be innovative and employ research-based solutions. Providing consistent clinical placement, peer mentorship, counseling, teacher role modeling, and creating healthy student and staff interactions. The most important thing clinical instructors can do is recognize their students' concerns and anxieties. Role modeling is an effective technique for professors to help new nursing students. To improve learning and reduce anxiety in nursing students, faculty should use inviting teaching strategies.

Future research should propose and evaluate techniques for lowering anxiety in nursing students and being planned in the near future to see if the students' anxiety levels have changed, as well as their usage of various coping mechanisms to deal with the situation's problems.

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Conflicts of interest

There are no competing interests

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