

# Anxiety and Academic Achievement among Female Nursing Students

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## Abstract

Anxiety is prevalent problems in colleges across the country. It is estimated that by the year 2020, anxiety will be the second most common cause of disability worldwide. Environmental and social circumstances play a major role in the onset of stress-related diseases. Developing countries share the heavy burden of social and economic challenges. Aim of the study. The aims of this study were to examine of anxiety and academic achievement among a group of Nursing Students in Saudi Arabia. This study was conducted at College of Health Sciences, Yanbu Campus, Taibah University, and College of Nursing, King Faisal University, Saudi Arabia. The sample of this study will include all students in first and final level of education at both above mentioned settings, [n=440 students. Tools used for data collection a) an interview questionnaire to gather demographic data. The Mental Health Inventory's Anxiety Scale. In this study shows that students have late subject and satisfactory grades suffering from anxiety than the other students who obtained excellent grades. Students who were satisfied with their education had lower anxiety and stress scores than those who were not satisfied. The anxiety symptoms among university nursing students is alarming. This shows the need for primary and secondary prevention measures, with the development of adequate and appropriate support services for this group. The universities must apply the academic advisors service for the students to help them to face the educational and personal stressors.

**Keywords:** anxiety, academic achievement, satisfaction

## 1. Introduction

People face anxiety daily. The terms "stress" and "anxiety" are, many times, used interchangeably, but they are not synonymous. Stress, or a stress factor, is an external pressure exerted on the individual. Anxiety is the subjective response to this stress factor (Bastos, *et al* 2008). Anxiety is an emotional state inherent to the human psyche. A daily-life experience that may occur in any person, it can be beneficial as it stimulates actions intended to circumscribe danger. On the other hand, there are people who feel incapable of carrying out their routine tasks or even leaving their homes. (Bastos, *et al* 2008).

NWHRC Health Center published that "anxiety may have adverse biologic effects on the immune system, blood clotting, blood pressure, blood vessels and heart rhythms" (NWHRC 2009). Unfortunately, many people who suffer from anxiety do not seek help. They believe that nothing can help, or that they can simply pull themselves up by their bootstraps. Stress is defined as a constant state in which one is subject to physical or mental pressure, tension, or strain. In contrast, anxiety is an overwhelming state of apprehension and dread that can impede physical and mental functioning by causing uncertainty regarding a situation and one's ability to cope with it. Although several studies indicate that stress is problem among nursing students, there is a dearth of studies that explore anxiety among nursing students (Haack, 1988; Williams, *et al* 1995; and Prymachuk, 2007). The mental health of university students is an area of increasing concern worldwide. Nursing students are young women in whom many of the ambiguities of adolescence may still be dominant. As such, they are subject to many insecurities and anxieties as they attempt to bridge the developmental gap between late adolescence and early adulthood (Ezz, *et al* 1990). Students in any nursing education program react to difficulties in the education process. Taking on new knowledge, roles, concepts and attitudes eventually leads to periods of stress and discontent.

These students experience stress often manifesting itself as anger and hostility toward faculty and the nursing education program (Foley, 1988 & Fifer, 1996). In addition, the new courses and new experiences may heighten anxiety because of a number of reasons; the student may not know what to expect, negative rumors about the course may circulate among students, the clinical facility may not be familiar to them, the student may be in academic difficulty and afraid of failing the course (Melchier, , (1996). Multiple researches revealed that psychiatric problems such as anxiety, is the most common causes of failure of student to gain academic achievement. Therefore, evaluation of anxiety, and its characteristics in university students is an important health research topic (Rafati, 2004). In order to teach baccalaureate student nurses effectively, educators need to be oriented and knowledgeable about anxiety among nursing students. Therefore, there is a great need to study the

anxiety facing nursing students.

## 2. Methodology

This study was conducted at College of Health Sciences, Yanbu Campus, Taibah University, and College of Nursing, King Faisal University, Saudi Arabia. The sample of this study will include all students in first and final level of education at both above mentioned settings, [n=440 students]. Tools used for data collection a) an interview questionnaire to gather demographic data. Anxiety Scale (Reviewed by: Paul Goering, MD, executive medical director, Allina Mental Health; Steve Schneider, manager of mental health services, New Ulm Medical Center ; Susan Tabor, BSN, MBA, RN, executive director, Allina Mental Health). A permission to conduct the study was obtained from the directors of College of Health Sciences, Yanbu Campus, Taibah University, and College of Nursing, King Faisal University, Saudi Arabia.

The Mental Health Inventory's Anxiety Scale completed anonymously in the students' respective classrooms by 440 students. Statistical analysis After data were collected, they were coded and transferred into especially design formats to be suitable computer feeding. The statistical package of social science (SPSS) version 14.0 was utilized for data analysis and tabulation all entered data were verified for errors. A p-value of 0.001 and 0.05 levels was used as the cut off value for statistical significance. Correlation was used to test the significance of some related variables in this study.

**Table (1): Demographic data among female Nursing Students in Saudi Arabia and its correlation anxiety scores**

Demographic. Characteristics	No. (n=440)	%	Anxiety Test of Sign
<b>Age (years):</b>			
➤ < 20 y	391	88.9	0.183
➤ > 20+	49	11.1	
<b>Academic year</b>			0.547
➤ First Year	195	44.3	
➤ Second Year	159	36.1	
➤ Third Year	39	8.9	
➤ Fourth Year	47	10.7	
<b>Scholastic achievement</b>			0.000 **
➤ <u>Late Subjects</u>	12	2.7	
➤ <u>Sat</u>	52	11.8	
➤ Good	142	32.3	
➤ Very Good	128	29.1	
➤ Excellent	106	24.1	

Table 1 illustrates the demographic data among female Nursing Students in Saudi Arabia. It is observed that the majority of the students 88.9% were <20 years of age. While less than half (44.3%) were in their first academic year. As regards student's scholastic achievement, it is observed that 14.5% of the students had late subject and sat. A statistical significance was found between the students' scholastic achievement and anxiety score. Moreover, the majority of the students (91.6%) lived in home.

**Cont'd Table (1): Demographic data among female Nursing Students in Saudi Arabia and its correlation anxiety scores**

Demographic. Characteristics	No. (n=440)	%	Anxiety Test of Sign
<b>Residency During Study</b>			
➤ Home	403	91.6	
➤ Dorm	37	8.4	
<b>Fathers' education</b>			0.649
➤ Illiterate	30	6.8	
➤ Read & Write	159	36.1	
➤ Literate	251	57.1	
<b>Mothers' education</b>			0.665
➤ <u>Illiterate</u>	221	23.0	
➤ Read & Write	203	16.8	
➤ Literate	16	60.2	
<b>Number of siblings</b>			0.043 *
➤ <= 3	221	50.2	
➤ 4-7	203	46.1	
➤ > 8	16	3.7	

It is also clear that 42.9% of the sample fathers could just Illiterate, read and write compared to 39.8%

of the sample mothers who were at the same level of education. The table also illustrates that 3.7% of students had more 8 siblings. A statistical significance was found between the students' Number of siblings and anxiety score.

**Cont'd Table (1): Demographic data among female Nursing Students in Saudi Arabia and its correlation anxiety scores**

Demographic. Characteristics	No. (n=440)	%	Anxiety Test of Sign
<b>Student Sorting in her siblings</b>			
➤ The smaller	211	47.9	0.003 **
➤ <b>Middle</b>	147	33.4	
➤ The big	82	18.7	
<b>Family income/month (RS)</b>			
➤ Satisfied	377	85.7	0.324
➤ Not satisfied	63	14.3	

Table 1 also shows that 33.4% of Students Sorting in their siblings had middle. A statistical significance was found between the Student Sorting in her siblings and anxiety scores. Moreover the majority 85.7% of the families had satisfied income.

**Correlation is Significant at the 0.05 level**

**\*\* Correlation is Significant at the 0.001 level**

**Table (2): Percent Distribution of female Nursing Students in Saudi Arabia in Relation to Anxiety Scores**

Scores	Low		Moderate		High	
	N	%	N	%	N	%
Anxiety	312	70.9	85	19.3	43	9.8

Table (2) shows the percent distribution of female nursing students in Saudi Arabia in relation to anxiety score. 19.3%,9.8% of female nursing students in Saudi Arabia have moderate , high anxiety scores respectively

**Table (3) Correlation between Female Nursing Students' Scholastic achievement in Relation to Anxiety Scores**

Scholastic achievement	Late Subjects		Sat		Good		Very Good		Excellent		Test of sig.
	N	%	N	%	N	%	N	%	N	%	
Anxiety	12*	9.4	43*	33.6	41	32.0	21	16.4	11	8.6	0.012

**\* Correlation is Significant at the 0.05 level**

Table (3) presents the relationship between Female Nursing Students' Scholastic achievement and the Anxiety Scores. 9.4 % of students have late subject and satisfactory grades suffering from anxiety respectively. Statistically significant was found between students' scholastic achievement and the anxiety score. On the other hand, only 8.6% each of the students have excellent suffering from anxiety. While only 9.9% each of the students have excellent suffering from anxiety.

**Figure (1) Percent Distribution of female Nursing Students in Saudi Arabia in Relation to their Study Satisfaction**

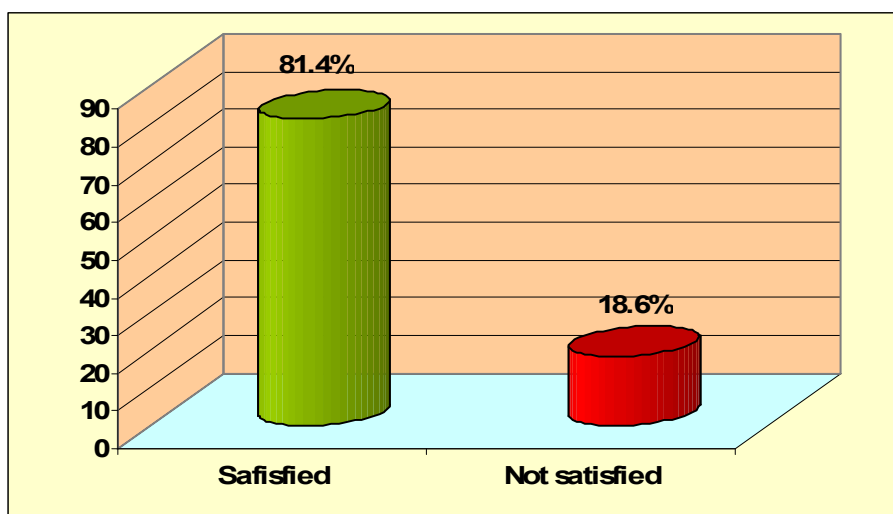


Figure 1 shows the percent distribution of female Nursing Students in Saudi Arabia in Relation to their

Study Satisfaction The majority of the students (81.4%) mentioned that they were satisfied with their education.

**Table (4)** Correlation between female Nursing Students in Saudi Arabia satisfaction and anxiety scores

Student Satisfaction	Satisfied		Not Satisfied	
	N	%	N	%
Anxiety (Moderate & High)	54	15.1	33	40.3

It is clear from table that slightly less than half 40.3% of not satisfied female Nursing Students in Saudi Arabia were suffering from Anxiety (Moderate & High) while only 15.1 of satisfied female Nursing Students in Saudi Arabia were suffering from Anxiety (Moderate & High).

### Discussion

In Arab countries, epidemiological data about psychological morbidity among nursing students are scarce. Results of the present study revealed that 19.3% , and 9.8 % of female nursing students in Saudi Arabia have moderate , high anxiety scores respectively. In fact the observed prevalence of anxiety may be related to the simultaneous increase in the prevalence of anxiety among general population (Katherine, 2002).

Anxious youngsters have increased rates of behavioral and mood problems; somatic complaints; school difficulties; poorer self-esteem; and greater risks for suicide, substance use, and depression compared with the general population (Puskar, 2009). However, this should have come as no surprise because undergraduates are in the socio-demographic age span in which rates of psychological distress and disorders are elevated (Berger, 1995 & Adlaf, et al 2001). In another study (Kluszcz, et al 2004), the survey was a closing part of the course on psychology carried out under the postgraduate education program. They found that the increased level of anxiety in the youngest group of nurses. Undiagnosed and untreated anxiety in adolescents is often associated with greater rates of mood and behavior problems, somatic complaints, and risk for future psychiatric disorders. Puskar, et al 2003 state that Anxiety symptoms were strongly correlated with both physical complaints and depression. Females had higher scores for total anxiety and the anxiety subtypes of generalized anxiety disorder, separation anxiety disorder, panic disorder, social phobia, and school phobia. The clinical setting is a significant learning environment for undergraduate nursing students. However, the learning that occurs in this environment presents challenges that may cause students to experience stress, anxiety. High levels of anxiety can affect students' clinical performance, presenting a clear threat to success in a clinical rotation (Burns 1994) and (Sinatz1996). The present study shows that students have late subject and satisfactory grades suffering from anxiety than the other students who obtained excellent grades. This may be due to deficiency in students' knowledge and lack of skills in performing nursing procedures.

On the other hand, the exposure to a lot of clinical stressors may affect adversely the students' educational growth and progress. Statistically significant was found between students' scholastic achievement and the anxiety score. It is clear from this study that slightly less than half 40.3% of not satisfied female Nursing Students in Saudi Arabia were suffering from Anxiety (Moderate & High) while only 15.1 of satisfied female Nursing Students in Saudi Arabia were suffering from Anxiety (Moderate & High). Similar results were reported and supporting this study by Bayram and Bilgel 2008. They mentioned that Students who were satisfied with their education had lower anxiety and stress scores than those who were not satisfied.

According to Whitman (1986) positive teacher-student relationship inside and outside the classroom can help reduce students' stress and prepare them to cope with it more efficiently. Student-teacher relationship will facilitate students' learning process (Knox, 1985). Nursing students often work with vulnerable clients who are in need of strong support persons to advocate for and assist them to manage with their own health, and these students must be prepared and ready to assume this role with confidence and competence.

### Conclusion

Anxiety symptoms among university nursing students are alarming. This shows the need for primary and secondary prevention measures, with the development of adequate and appropriate support services for this group.

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