

# **Assessment of anxiety level among nurses at teaching hospitals in Hawler city**

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# ABSTRACT

## **Background and objectives:**

Anxiety reflects the psychological and physical states required to deal with an emergency. It is also a normal way of reacting to a number of demanding situations. Anxiety disorder: refers to a group of conditions the affected person experiences persistent anxiety that they cannot dismiss and it interferes with their daily activities the aim of this study was to assess the prevalence of anxiety among nurses at teaching hospitals in Erbil city and determine the association between socio-demographic characteristics and anxiety.

**Methods:** A descriptive study was conducted between (26<sup>th</sup> June -25<sup>th</sup> August 2011) in (4) teaching hospitals in Erbil city. A sample of (160 nurses) were selected to participate in the study, a questionnaire was applied which was composed of two parts (socio-demographic information and Zung anxiety scale).

Zung self-rating anxiety scale used which includes 20 questions and each question has 4 responses that are ranked from 0 to 4 and the client selects one response that is more suitable with his emotional state. The final score was classified according to Zung score key as; 20-44 normal range, 45-59 mild to moderate anxiety level, 60-74 marked to severe anxiety level and 75-80 extreme anxiety level.

SPSS (version 19) was used to analyze the data.

**Result:** the study result revealed that (1 8.1%) of nurses had anxiety, among them 15% had mild to moderate anxiety, 3.1% had severe anxiety. There is no statistically significant relationship between anxiety among nurses and Socio-demographic data of the study sample; we also find that anxiety is more in Maternity Hospital nurses and more common in female nurses.

**Conclusion:** There were high levels of anxiety among nurses in teaching hospitals, which necessitate attention to their work environment, especially those who work in maternity hospitals.

**Keywords:** Anxiety, nurses, hospital, Zung rating scale.

# Introduction

## **Normal anxiety:**

The challenges people face in their workplace really shape their anxiety level and manifestations. Generally, where a nurse works can influence his or her state of mind, worldview, reaction to stress and daily living, personality, perception, communication, productivity, etc, either positively or negatively. The various units in a hospital setting have their varying challenges, demands and prospects which invariably reduce or increase the level of the nurses' anxiety. Since anxiety no matter the type or level, involves tension and discomfort, and can affect normal functioning of any individual, the nurses are not immune<sup>(1)</sup>.

Daily human beings face anxiety. instability of human society, stressful work environment, desire to keep pace with our fast moving technological age, fear of the future, job demands, economic recession and weak relationships etc, constantly generate anxiety in us. Anxiety is an unpleasant emotion or state of mind characterized by worry, apprehension, dread and fear. It is a common place experience that everyone has from time to time. Sometimes it is categorized as an emotion or affect depending on whether it is being described by the person having it (emotion) or by an outside observer (affect) <sup>(2, 3, 4)</sup>.

Standardized screening clinical questionnaires such as Zung Self-Rating Anxiety Scale can be used to detect anxiety symptoms, and suggest the need for a formal diagnostic assessment of anxiety disorder<sup>(5)</sup>.

The study investigated the causes and effects of nursing stress in the hospital environment. It was hypothesized that the sources and frequency of stress experienced by nursing staff were functions of the type of unit in which they worked, levels of training, trait anxiety, and socio-demographic characteristics. It was also hypothesized that high levels of stress would result in decreased job satisfaction and increased turnover among the nursing staff. Three major sources of stress were identified as a fundamental cause for nurse anxiety: work load, feeling inadequately prepared to meet the emotional demands of patients and their families, death and dying situations. <sup>(6)</sup>

**Epidemiology of anxiety:** In the United States the lifetime prevalence of anxiety disorders was about 29%. <sup>(7)</sup>

Australian nurses 11.2% had generalized anxiety disorder. <sup>(8)</sup>, the prevalence rate of anxiety disorder in Jordanian population was 5.7 %.<sup>(9)</sup>.

**Objectives of the study:** 1. Assess the prevalence of anxiety among nurses attending at 4 teaching hospitals in Hawler city.

2. Assess the demographical characteristics of the nurses.

## Methods

Design of the study: descriptive study

Administrative arrangement: official permission was obtained from Hawler Medical University, College of nursing and Hawler teaching hospital, Rizgary, Raparin and Maternity hospitals / Erbil / Iraq for conducting the present study.

Study Sample: the samples consisted of (160) nurses who were staffs in the 4 Teaching Hospitals and in different wards. The study started on June, 26th, 2011 and finished on August, 25<sup>th</sup>, 2011.

Instrument Construction:

A. Data was collected through use of a self-report questionnaire including demographic data of the nurses after taking their formal consent to participate in the study.

B. Measuring anxiety level by using zung self-rating anxiety scale which includes 20 questions and each question has 4 responses that are ranked from 0 to 4 and the client selects one response that is more suitable with his emotional state. The original inventory questionnaire was in English language. The instrument used observes anxiety level as the following:

- 20-44 normal range.
- 45-59 mild to moderate anxiety level.
- 60-74 marked to severe anxiety level.
- 75-80 extreme anxiety level. (Zung WW.1971).<sup>(5)</sup>

C. the questionnaire was translated to Kurdish language.

D- Statistical Analysis: in the present study, data was entered into the computer by using the statistical package for services science (SPSS version 19). The following statistical procedures were applied:

1. Frequency and Percentage.
2. Chi-square

## Results

Throughout this chapter, the finding is analyzed and presented systematically in tables that correspond the objectives of the study as follows: Nurses Background Information.

Table 1: Socio-demographic Data of the Study Sample (N=160)

	Variables		No.	%
1	Hospital	Hawler teaching Hospital Rizgary Raprin Maternaty	40 40 40 40	25 25 25 25
2	Nurses age (Years)	20 – 29 30 – 39 40 – 49 50 – 60	53 62 33 12	31.1 38.8 20.6 7.5
3	Sex	Male Female	66 94	41.3 58.8
4	Educational level	secondary School graduate Institute graduate College graduate	63 83 14	39.4 51.9 8.8
5	Marital Status	Married Single Divorced	113 41 6	70.6 25.6 3.6
6	Economic Status	Sufficient Somehow Sufficient Insufficient	43 73 44	26.9 45.6 27.5
7	House Holding	Owned Rented	94 66	58.8 41.3
8	Residency	Urban Rural	138 22	86.3 13.8

Table (1) shows that the highest percentage (38.8%) of the samples has been ranged between (30–39) years old and most of them (58.8%) were female.

The same table indicates that the highest percentage (51.9%) were Institute graduated. high percentage (70.6%) of study sample were married, majority (45.6%) of them had barely somehow economic status. Also this table showed the majority (58.8%) of nurses who were included in the study had their own house and most of the samples live in urban areas.

**Table 2: Variables Related to Nursing Profession (N=160)**

	Variables		No.	%
1	Is your place of working congruence with your skills certification?	Agree Not agree	112 48	70 30
2	Do you have another job after your formal duty?	Yes No	53 107	33.1 66.9
3	Is your salary congruence with your work?	Agree not agree	64 96	40 60
4	Are you satisfied with your relationship to other nurses?	Good Bad	157 3	98.1 1.9
5	Are you satisfied with your relationship with supervisors?	Good Bad	142 18	88.8 11.3
6	Are you satisfied with your relationship with physicians?	Good Bad	145 15	90.6 9.4

Table (2) shows that the highest percentage (70%) of the study samples are agree about place of working that is congruent with their skills and certification. (66.9%) of nurses do not work after their formal duty.

The table also shows the highest percentage (60%) of studied samples is unsatisfied with their salary. (98.1%) of samples had good relationship with other nurses.

The highest percentage (88.8%) of samples revealed good relationship with her/his supervisor. (90.6%) of samples had good relationship with physician in the place of work.

**Table (3) Levels of Anxiety Among the Study Sample**

Anxiety Levels	Frequency	Percent
normal- No Anxiety	131	81.9
mild to moderate Anxiety	24	15.0
Severe Anxiety	5	3.1
Total	160	100.0

Table (3) shows that 81.9% of the studied samples were normal and not experiencing anxiety, while 15% were complaining from mild to moderate anxiety and 3.1% were complaining from severe anxiety disorder.

**Table (4) Relationship between work place and Anxiety Levels.**

Hospital	Anxiety Level			Total
	Normal-Anxiety	Mild to Moderate Anxiety	Severe Anxiety	
Hawler Teaching Hospital	39	1	0	40
Rizgary Teaching Hospital	39	1	0	40
Raparin Teaching Hospital	34	6	0	40
Maternity Teaching Hospital	19	16	5	40
Total	131	24	5	160

Table (4) shows that Hawler and Rizgary teaching hospitals Nurses have only one nurse who has moderate anxiety. Other nursing staff were normal, while among Raparin hospital nurses there were 6 nurses had moderate anxiety level, others were normal, but among Maternity hospital nurses were 16 nurses who had moderate anxiety level and 5 nurses had severe anxiety level.

**Table (5) Relationship between Gender and Anxiety Level**

Gender	Anxiety level			Total	percentage
	Normal Anxiety	Mild to moderate Anxiety	Sever Anxiety		
Male	58	7	1	66	41.25
female	73	17	4	94	58.75
Total	131	24	5	160	100

**Table (5)** shows that the anxiety of female nurses was more than male nurses.

## Discussion

Throughout this chapter, interpretation and discussion of the study finding was presented with supportive evidence available in the literature, such presentation was organized in concordance with the study objectives as the follows:

The study found that anxiety disorder in the female nurses were more than male nurses (table 4) because most of Maternity and Raparin Teaching Hospitals nurses were female nurses, and generally females are more susceptible to anxiety, these finding results coincide with the findings of which was done in Jordanian nurses<sup>(10)</sup>

The study found that anxiety level among nursing staff were 15%.The were suffering from mild to moderate anxiety and 3.1% were complained from severe anxiety disorder (table 3),while these finding comparable with the finding of the similar study which were conducted in Dubai, UAE.In the present study we found that anxiety level of nurse's staff in Hawler city was higher than staff in Dubai city may be related to probably the difference in socio-economical state of the population and health system, in addition to the difference in the screening tools used.

The results also showed that most of the samples were graduated from medical institute, because the School of Nursing was closed in Kurdistan region many years ago and College of Nursing is new development(table 1). This may follow the system of the study in our region.

The present study also showed there were differences about anxiety levels between Hospitals (Hawler T.H mild anxiety=1 Rizgary the same result, but Raparin T.H.=6 ,Maternity T.H=16 and severe anxiety level=5) (table5)That findings probably mean that nursing staffs of maternity Hospital are more anxious than other Hospitals which may be due to that some nurses had unsatisfied relationship with her/his supervisor and doctors, some of them had problems related to residency status because living away from hospitals (rural area) and limited number of nursing staffs, with high work pressure. also we should pay attention to pediatric hospitals were revealed also high level of anxiety in comparison to other hospitals probably due to similar cases as that of gynecological wards.

## Conclusion

1-There is no statistically significant relationship between anxiety among nurses and Socio-demographic data of the study sample.

2-The study finding showed high percentage of anxiety level in Maternity Teaching Hospital Nurses.

3-Most of the nurses had normal anxiety level, then moderate anxiety level with minimum number suffer from severe anxiety disorder.

4-The study found most of the nurses not satisfied about their salary that was received.

Finally we should take the above conclusion in consideration to improve the environment of work for better products and enhance patient management.

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