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Preoperative Anxiety Level among Patients Undergoing Elective General Surgery in District Head Quarter Hospital (DHQ) Timergara

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ABSTRACT: Anxiety is an emotive state considered by anxiety and fear subsequent from the expectation of a threatening occurrence. The occurrence of preoperative anxiety levels from 11% to 80% in mature patients and also differs among various surgical categories. The purpose of current study was to investigate the preoperative anxiety level among patients undergoing elective general surgery in district Head Quarter Hospital (DHQ) Timergara. In the present study total of 103 patients were selected, among these 56(54.4%) were arranged between 20 -35 years of age, while 47 (45.6%) were arranged 36–50 years of age. Sex wise distribution was 50(48.5%) in male, while 53(51.5%) in female respectively. On the basis of marital status total of 68(66.0%) patients were married, while 35(34.0%) were unmarried. Preoperative anxiety may cause to numerous complications such as autonomic variations, late jaw relaxation and coughing during entrance of anesthesia.

Keywords: Preoperative Anxiety, Patients Undergoing Elective General Surgery, Head Quarter Hospital (DHQ) Timergara

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INTRODUCTION

Anxiety is an emotive state considered by anxiety and fear subsequent from the expectation of a threatening occurrence. The occurrence of preoperative anxiety levels from 11% to 80% in mature patients and also differs among various surgical categories (Maranets and Kain, 1999).

Preoperative anxiety may cause to numerous complications such as problematic venous contact due to peripheral vasoconstriction, autonomic variations, late jaw relaxation and coughing during entrance of anesthesia, and enlarged anesthetic condition. Moreover, it also has been connected with bigger pain, nausea and vomiting in the postoperative time, lengthy recovery and bigger the danger of infection (Caumo and Ferreira, 2003; Pokharel *et al*., 2011). Anxiety is a personal reaction. Numerous features affecting anxiety in a patient strategic for surgery comprise age, gender, degree and type of surgery, earlier hospital practices, vulnerability to and capability to manage with worrying practices and preoperative evidence (Boker *et al*., 2002).

Patients may recognize the time of surgery as the main and the most risky time in their life. The mark to which each patient establishes anxiety correlated to coming practices depends on numerous features like gender, age and past surgical practices (Badner *et al*., 1990). Some mark of anxiety is a normal reaction to the changeable and possiblyrisky conditionsdistinctive of the preoperative time, particularly for the patient's first insufficient surgical practices. Results have revealed that great preoperative anxiety stages can cause to enlarged postoperative pain killing condition, lengthy hospital stay, importantinfluence to opposing perioperative consequence and poor patient fulfillment (Hobson *et al*., 2006). An extensiveseries of replies may be led by anxiety. Physiological repliescomprise tachycardia, hypertension, high temperature, sweating, vomiting and a sensitive to touch, smell and hearing. Physiological replies comprise alters in behavior like enlarged tension, apprehension, anxiety and anger (Pritchard, 2009). The purpose of current study was to investigate the preoperative anxiety level among patients undergoing elective general surgery in district head quarter hospital Timergara.

MATERIALS AND METHOD

A. Study site description

The current study was conducted in Timergara is the district headquarters of lower Dir. It is situated is on the east bank of the Panjkora river. It lies at an altitude of 823 metres (2,700 foot) and lies diagonally in between the 34.8278° North latitude and 71.8423° East longitudes. The total area of district is 1582 km^2 (611 sq mi). The summer period is warm and dry while the winter is cold and damp. Rainfall typically happens in the months of July, August, December, January and February. The lowest temperature was documented in January month is −8 °C. Timergara is uniformly affected by global warming and climatic variations.

B. Ethical approval

The current study was allowed by the ethical committee of health services academy. Informed consent (written/verbal) has been taken. Confidentiality of all informations of subjects has been maintained and questionnaires would be kept in lock and key.

C. Methodology and questionnaire ascertainment

In this study the subjects belonging to Timergara and consenting to available whole informations were recruited. Each recruited subjects were interviewed and bodily examined carefully putted in questionnaire. The questionnaire containing parameters such as gender, age, qualification, marital status and distribution like surgery, anxious mood, behavior, tension, intellectual, fear, cardiovascular and respiratory.The questionnaire has also contained two age groups were 20-35 years, 36-50 years, for assessed the preoperative anxiety of patients about anesthesia effectively in clinical side.

D. Statistical analysis

The collected data was analyzed by SPSS version 22 frequencies and percentages were calculated for categorical variables like gender, anxiety. Mean were calculated form continuous variable age and qualification, marital status, surgery chi square test was applied in which p value <o.o5 was considered as significant value.

RESULTS

In the current study total of 103 patients were selected, among these 56(54.4%) were arranged between 20-35 years of age, while 47 (45.6%) were arranged 36–50 years of age. Sex wise distribution was 50(48.5%) in male, while 53(51.5%) in female respectively. On the basis of marital status total of 68(66.0%) patients were married, while 35(34.0%) were unmarried. But the anxious mood of the patients were present (7) frequency (6.8%) cumulative percent (6.8) mild (17) frequency (16.5%) cumulative percent (23.3) moderate (18) frequency (17.5%) cumulative percent (40.8) and sever frequency 61(59.2) cumulative 100.0 respectively (Table1& 2).

Table 1: Age and sex wise distribution of patients.

Age (years)	**F**	**P**	**VP**	**CP**	**Sex**	**F**	**P**	**VP**	**CP**
20-35	56	54.4	54.4	54.4	Male	50	48.5	48.5	48.5
36-50	47	45.6	45.6	--------	Female	53	51.5	51.5	--------
Total	103	100	100	100	----------	103	100	100	100
F: Frequency; P: Percent; VP: Valid percent; CP: Cumulative percent.									

Table 2: Anxious mood and marital status distribution of patients.

Anxious mood	**F**	**P**	**VP**	**CP**	**MS**	**F**	**P**	**VP**	**CP**
Not present	07	6.8	6.8	06.8	Married	68	66.0	66.0	66.0
Mild	17	16.5	16.5	23.3	Single	35	34.0	34.0	------
Moderate	18	17.5	17.5	40.8	------	-----	------	-----	------
Severe	61	59.2	59.2	100	------	------	------	------	------
Total	103	100	100	------	--------	103	100	100	100
F: Frequency; P: Percent; VP: Valid percent; CP: Cumulative percent; MS: Marital status.									

Table 3: Behavior and intellectual distribution of patients.

Behavior	**F**	**P**	**VP**	**CP**	**Intellectual**	**F**	**P**	**VP**	**CP**
Not present	26	25.2	25.2	25.2	Not present	84	81.6	81.6	81.6
Mild	37	35.9	35.9	61.2	Mild	10	09.7	09.7	91.3
Moderate	31	30.1	30.1	91.3	Moderate	06	05.8	05.8	97.1
Severe	09	08.7	08.7	100	Severe	03	02.9	02.9	100
Total	103	100	100	-----	----------	103	100	100	-----
F: Frequency; P: Percent; VP: Valid percent; CP: Cumulative percent.									

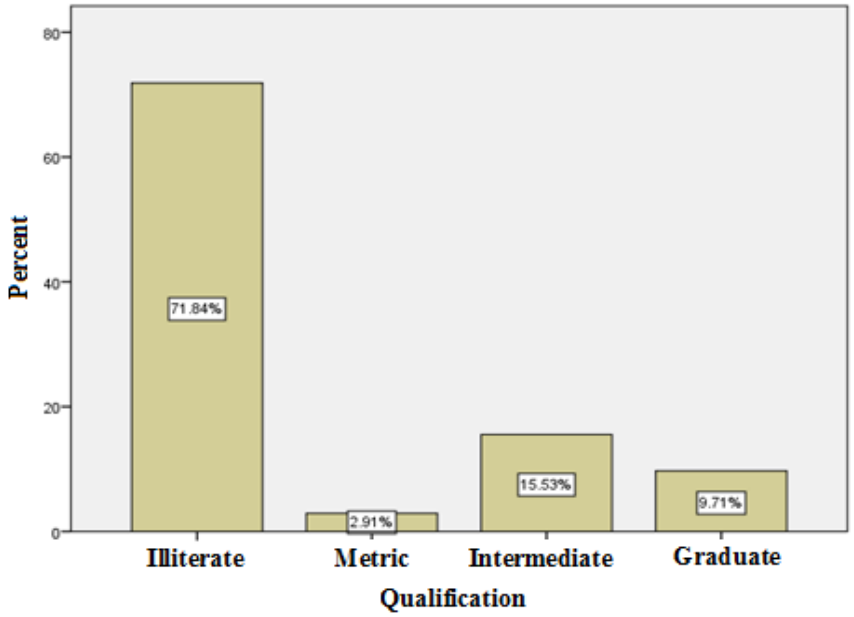

Fig. 1. Qualification distribution of patients.

Among the behavior interview the not present (26) frequency (25.2%), Mild (37) frequency (35.9%), moderate (31) frequency (30.1%) and severe (9) frequency (8.7%) respectively. The intellectual was recorded with not present (84) frequency (81.6%), Mild (10) frequency (9.7%) cumulative (91.3), moderate (6) frequency (5.8%) and severe (3) frequency (2.9%) (Table 3).

The educational status of the patients were divided in to 04 categories such as illiterate 74(71.8%) metric 3(2.9%) intermediate 16(15.5%) and graduate 10(9.7%). The preoperative patients were appendix 28(27.2%), laparotomy 25(24.3%), total abdominal hysterectomy (TAH)12(11.7%), cholecystectomy 5 (4.9%) hernia 7(6.8%) and other 26(25.2%) (Fig. 1 & 2).

The patients fear contained not present (1) frequency (1.0%) cumulative (1.0), mild (17) frequency (16.5%) cumulative (17.5), moderate (38) frequency (36.9%) cumulative (54.4) and severe (47) frequency (45.6%) cumulative (100.0) (Fig. 3).

The patients obtained cardiovascular symptoms, not present (4) frequency (3.9%) cumulative (3.9), mild (10) frequency (9.7%) cumulative (13.6), moderate (31) frequency (30.1%) cumulative (43.7) and severe (58) frequency (56.3%) cumulative (100.0) (Fig. 4).

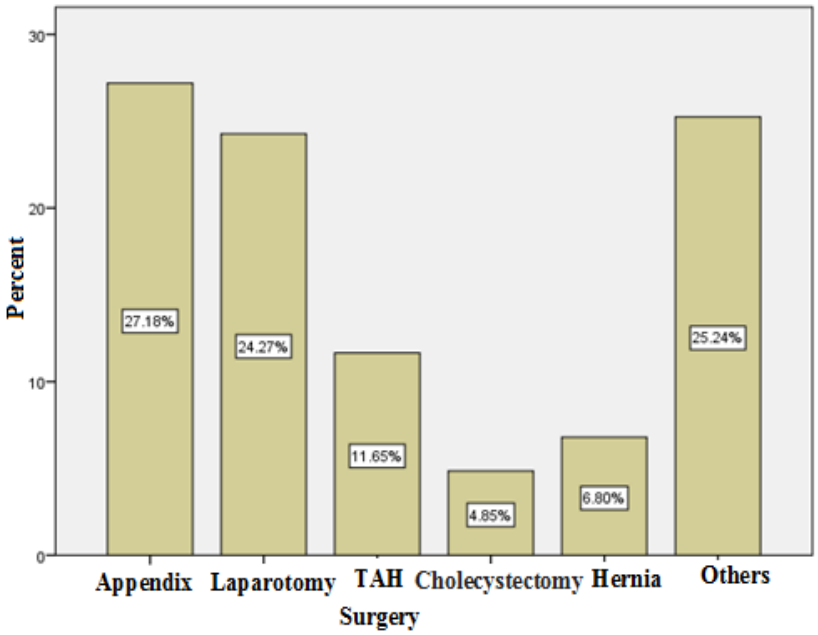

Fig. 2. Surgery distribution of patients.

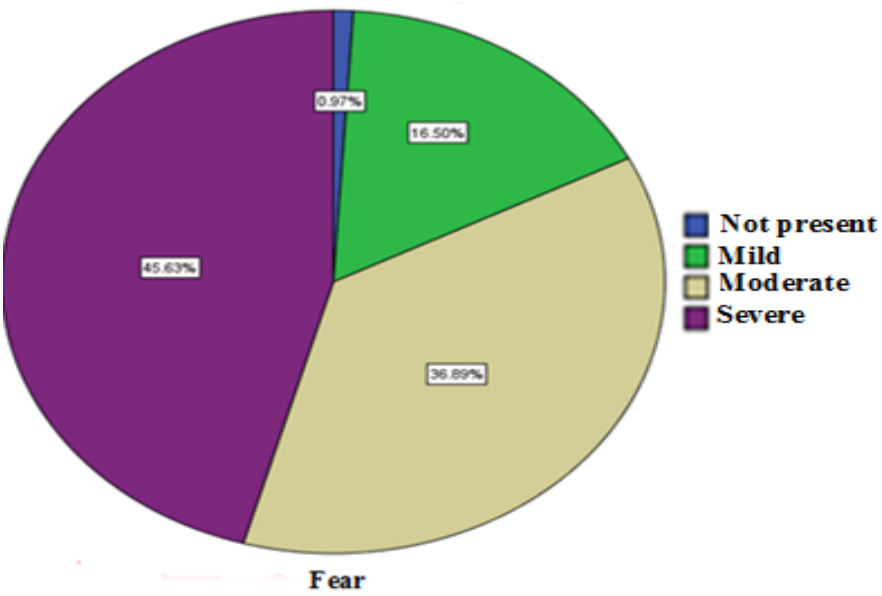

Fig. 3. Fear mood distribution of patients.

The respiratory symptoms of patients were not present (64) frequency (62.1%) cumulative (62.1), mild (20) frequency (19.4%) cumulative (81.6), moderate (8) frequency (7.8%) cumulative (89.3) and severe (11) frequency (10.7%) cumulative (100.0) (Fig. 5).

The patients gastrointestinal symptoms were not present (8) frequency (7.8%) cumulative (7.8), mild (29) frequency (28.2%) cumulative (35.9), moderate (25) frequency (24.3%) cumulative (60.2) and severe (41) frequency (39.8%) cumulative (100.0) (Fig. 6).

The patients genitourinary symptoms were not present (51) frequency (49.5%), mild (34) frequency (33.0%), moderate (11) frequency (10.7%) and severe (7) frequency (6.8%) (Fig. 7).

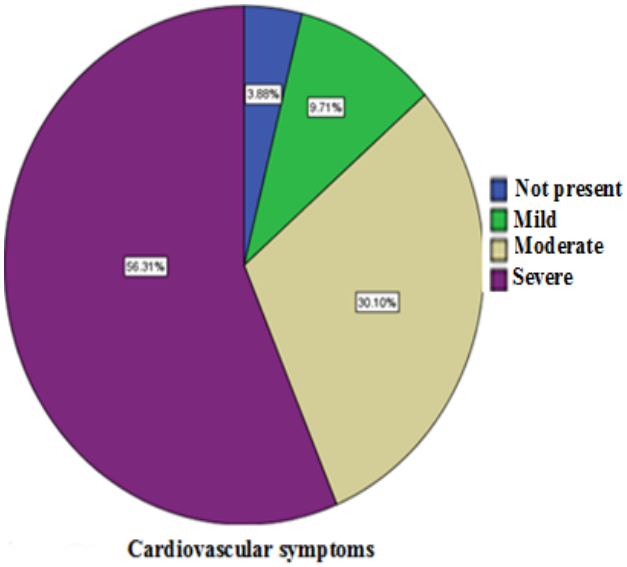

Fig. 4. Cardiovascular symptoms of patients.

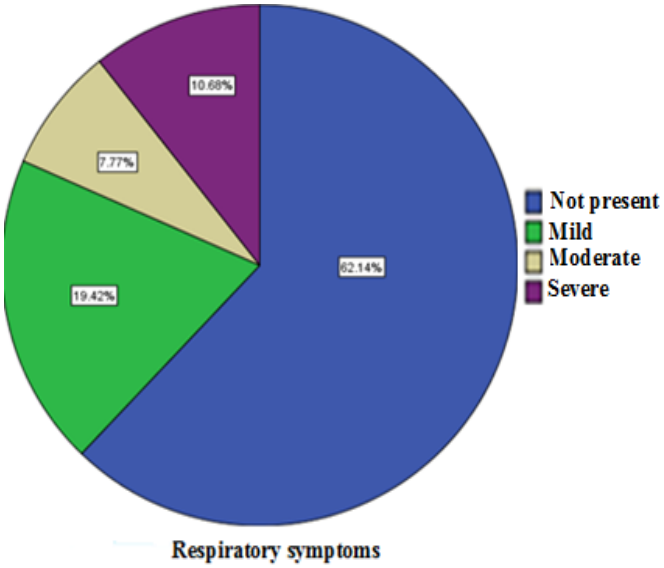

Fig. 5. Respiratory symptoms of patients.

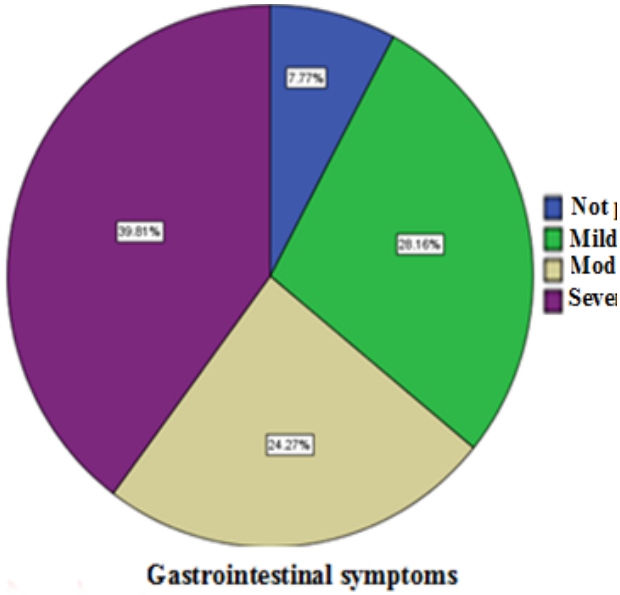

Fig. 6. Gastrointestinal symptoms of patients.

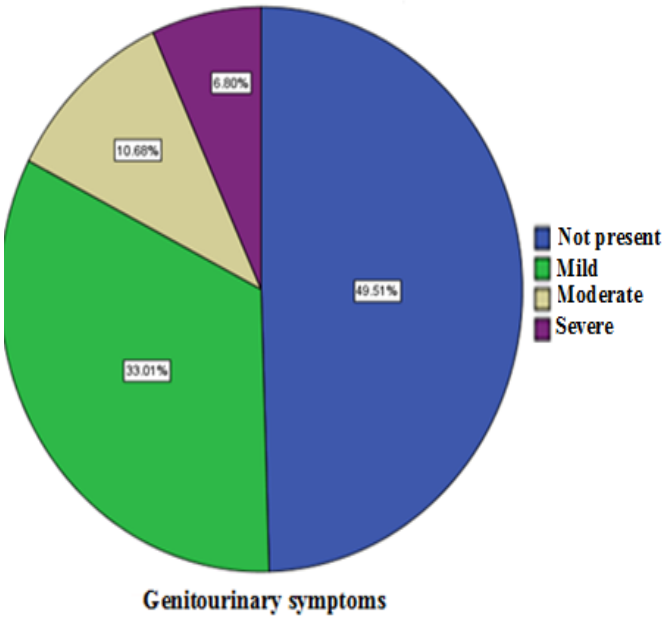

Fig. 7. Genitourinary symptoms of patients.

The patients in tension were not present (14) frequency (13.6%) cumulative (13.6), mild (32) frequency (31.1%) cumulative (44.7), moderate (12) frequency (11.7%) cumulative (56.3) and severe (45) frequency (43.7%) cumulative (100.0) (Fig. 8).

The patients age 20-35 (14) patients indicate mild severity, (18) number of patients mild to moderate severity, (24) patients moderate to severe. Age 36-50 patients (5) indicate mild severity, (7) mild to moderate severity, (35) moderate to severe (Table 4).

The patients 50 male and 53 female among the male patients were (15) number of patients indicate mild severity, (19) number of patients mild to moderate severity, (6) number of patients moderate to severe anxiety. Among the female patients were (4) indicate mild severity, (6) patients mild to moderate severity, (43) patients moderate to severe anxiety (Table 5).

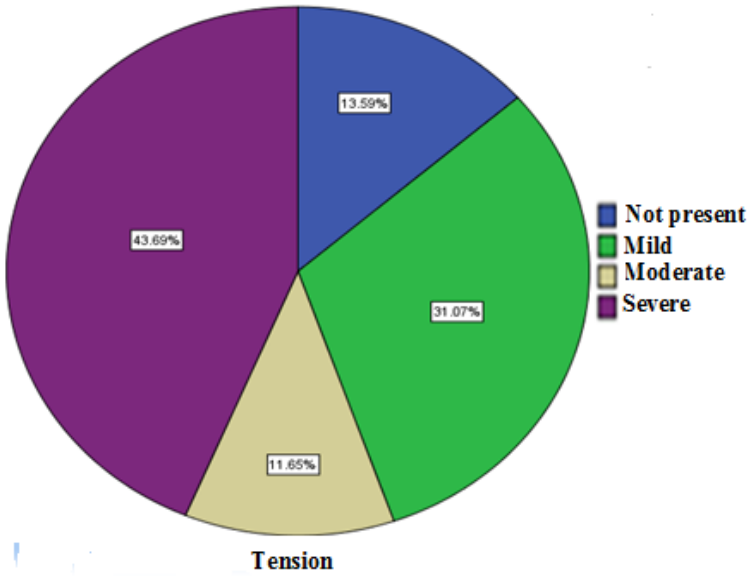

Fig. 8. Tension mood distribution of patients.

Table 4: Anxiety level of individual age as per guide line cross tabulation.

Age	1-9 indicate mild severity	10-13 mild to moderate severity	>14 moderate to severe	Total
20-35	14	18	24	56
36-50	05	07	35	47
Total	19	25	59	103

Chi square test			
	Value	df	Sump. Sig. (2-sided)
Pearson Chi-Square	10.447[a]	02	.005
Likelihood ratio	10.724	02	.005
Linear by linear association	8.819	01	.003
No of Valid Cases	103		

0 cells (.0%) have expected count less than 5. The minimum expected count is 8.67.

Table 5: Anxiety level of individual sex wise as per guide line cross tabulation.

Gender	1-9 indicate mild severity	10-13 mild to moderate severity	>14 moderate to severe	Total
Male	15	19	16	50
Female	04	06	43	53
Total	19	25	59	103

Chi square test			
	Value	Df	Sump. Sig. (2-sided)
Pearson Chi-Square	25.419[a]	02	.000
Likelihood ratio	26.627	02	.000
Linear by linear association	21.528	01	.000
No of Valid Cases	103		

0 cells (.0%) have expected count less than 5. The minimum expected count is 9.22

The patients (74) illiterate among (10) patients indicate mild severity, (17) patients mild tote severity, (47) patients moderate to severe. (3) Matric among (1) patient Indicate mild severity, (2) patients moderate to severe anxiety. (16) Intermediate among (8) indicates mild severity (Table 6).

Table 6: Anxiety levels of individual qualification wise as per guide line cross tabulation.

Qualification	1-9 indicate mild severity	10-13 mild to moderate severity	>14 moderate to severe	Total
Illiterate	10	17	47	74
Matric	01	00	02	03
Intermediate	08	03	05	16
Graduation	00	05	05	10
Total	19	25	59	103

Chi square test			
	Value	Df	Sump. Sig. (2-sided)
Pearson Chi-Square	18.058[a]	06	.006
Likelihood ratio	17.618	06	.007
Linear by linear association	3.271	01	.071
No of Valid Cases	103		

7 cells (58.3%) have expected count less than 5. The minimum expected count is .55

The patients were contained (28) appendix (4) patients indicate mild severity, (6) patients mild to moderate severity, (18) patients moderate to severe anxiety. (25) Laparotomy (3) patients Indicate mild severity, (7) patients mild to moderate severity, (15) patients moderate to severe anxiety. (12)TAH (4) patients mild to moderate severity (8) patients moderate to severe. (5) Cholecystectomy (1) patient mild to moderate severity (4) patients moderate to severe.

Table 7: Anxiety levels of individual surgery wise as per guide line cross tabulation.

Surgery	**1-9 indicate mild severity**	**10-13 mild to moderate severity**	**>14 moderate to severe**	**Total**
Appendix	04	06	18	28
Laparotomy	03	07	15	25
TAH	00	04	08	12
Cholecystectomy	00	01	04	05
Hernia	04	01	02	07
Other	08	06	12	26
Total	19	25	59	103

Chi square test			
	Value	Df	Sump. Sig. (2-sided)
Pearson Chi-Square	15.244[a]	10	.123
Likelihood ratio	16.275	10	.092
Linear by linear association	4.760	01	.029
No of Valid Cases	103		

10 cells (55.6%) have expected count less than 5. The minimum expected count is .92

Table 8: Anxiety level of individual marital status as per guide line cross tabulation.

Marital status	1-9 indicate mild severity	10-13 mild to moderate severity	>14 moderate to severe	Total
Married	09	16	43	68
Single	10	09	16	35
Total	19	25	59	103

Chi square test			
	Value	Df	Sump. Sig. (2-sided)
Pearson Chi-Square	4.230[a]	02	.121
Likelihood ratio	4.106	02	.128
Linear by linear association	4.073	01	.044
No of Valid Cases	103		

0 cells (.0%) have expected count less than 5. The minimum expected count is 6.46

(7) Hernia (4) patients indicate mild severity, (1) patient mild to moderate severity (2) patients moderate to severe. (26) Others (8) patients Indicate mild severity, (6) mild to moderate severity, (12) patients moderate to severe anxiety (Table 7).

The patients (68) married among (9) patients Indicate mild severity, (16) patients mild to moderate severity, (43) patients moderate to severe anxiety. (35) Single among (10) patients indicate mild severity (9) patients mild to moderate severity (16) patients moderate to severe anxiety (Table 8).

DISCUSSION

In the present study total of 103 patients were selected, among these 56(54.4%) were arranged between 20-35 years of age, while 47 (45.6%) were arranged 36 – 50 years of age. Sex wise distribution was 50(48.5%) in male, while 53(51.5%) in female respectively. On the basis of marital status total of 68(66.0%) patients were married, while 35(34.0%) were unmarried.

A study was conducted by the(Jawaid *et al*., 2007)and total of 193 patients were studied, among these 109 male and 84 female were interviewed. There was a statistically important great level of preoperative anxiety in female as linked to male (p<0.01). The maximum joint features donating to anxiety were concern about family in 173 (89.6%) patients, fear of problems in 168 (87%), results of operation in 159 (82.4%) and postoperative pain in 152 (78.8%) respectively. 56% of patients assumed that their anxiety would be reduced by a complete explanation about the operation and anesthesia. Mean anxiety mark for surgery and anesthesia were recorded 57.65±25.1 and 38.14±26.05 respectively. For numerous patients operation is a life occasion of dramatic consequence, which disturbs their personal, proficient and financial survives, moreover having bodily effects. The patient arrives the surgery room with anxiety and fear. The results of this study indicated that maximum of the patients pending elective operation practiced great levels of preoperative anxiety. Patients feared operation expressively greater than anesthesia (Kindler*et al.*, 2000). A study from Saudi Arabia revealed that 38% of patients were not attentive of all the operating particulars (Uddin*et al*., 2002). A study was arranged in UK, 82% of patients who suffered operation had articulated their desire to recognize more about the process previous to operation and the maximum wanted evidence was the assessed length of hospital stay (Bunker, 1983). A study was also revealed in the United States that the anxiety in the preoperative time was condensed by evidence about processes (Bondy *et al*., 1999). In a Danish study, patients requested additional near pain, anesthesia period and danger of damage of daily events (Bugge *et al*., 1998).

A fresh study of Lebanese patients failed to sustenance the result that evidence condensed preoperative anxiety. It decided that patient education should not be started earlier evaluating the patients social and common experience (Deyirmenjian *et al.*, 2006). A study of the maximum conjoint preoperative fears nearby operation in patients preoperatively and after their surgery about the same fears if they essential another surgery indicated interesting results. Postoperative pain such as 65% and 50% before and after operation not remaining asleep during the process (54%, 28%), a lengthy wait for the surgery (53%, 41%), illness and nausea (48%, 43%), appearing foolish (36%, 28%), not awakening from anesthesia (34%, 21%), and fear of inoculations (34%, 27%) were the maximum joint concerns. The determinedly great percentage of the patients who still had the same fears after they had been through operation, proposes that their practice could have been enhanced (McCleane and Cooper, 1990).

CONCLUSION

The current study was concluded to investigate the preoperative anxiety level among patients undergoing elective general surgery in district Head Quarter Hospital (DHQ) Timergara. Total of 103 patients were selected, among these 56(54.4%) were arranged between 20 -35 years of age, while 47 (45.6%) were arranged 36 – 50 years of age.Sex wise distribution was 50(48.5%) in male, while 53(51.5%) in female respectively.

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CONFLICT OF INTEREST

All the authors declares that they have no conflict of interest.

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