WORLD JOURNAL OF PHARMACEUTICAL RESEARCH
SJIF Impact Factor 5.045
Volume 4, Issue 1, 1586-1594. Research Article ISSN 2277– 7105

ANXIETY BEFORE AND AFTER CESAREAN SECTION IN WOMEN AT RAZI HOSPITAL, AHVAZ CITY

Masoomeh Alboghobeish[1], Leila Maleki[2], Abdolkazem Neisi[3], Ali Ghomeishi[4,5] Sara Adarvishi[6]*, and Mahin Najafian[7]

[1]Lecturer, HOD of Nursing Anesthesia Department, Ahvaz Jundishapur University of Medical Sciences, Ahvaz, Iran.
[2]MSc student of Nursing, Nursing and Midwifery School, Urmia University of Medical Sciences, Urmia, Iran.
[3]Assistant Professor, School of Public Health, Ahvaz Jundishapur University of Medical Sciences, Ahvaz, Iran.
[4]Pain Research Center, Ahvaz Jundishapur University of Medical Sciences, Ahvaz, Iran
[5]Department of Anesthesiology, Ahvaz Jundishapur University of Medical Sciences, Ahvaz, Iran.
[6]MSc student of Nursing education, Nursing and Midwifery School, Student Research Committee, Ahvaz Jundishapur University of Medical Sciences, Ahvaz. Iran.
[7]Department of Obstetrics and Gynecology, Ahvaz Jundishapur University of Medical Sciences, Ahvaz, Iran.

Article Received on
12 Nov 2014,

Revised on 05 Dec 2014,
Accepted on 29 Dec 2014

***Correspondence for Author**
Sara Adarvishi
MSc student of Nursing education, Nursing and Midwifery School, Student Research Committee, Ahvaz Jundishapur University of Medical Sciences, Ahvaz. Iran.

ABSTRACT

The **purpose** of this study was to identify anxiety of patients undergoing cesarean section before and after surgery. **Methodology:** This was a cross-sectional study on 142 patients undergoing cesarean section that was performed randomly at Razi Hospital in Ahvaz. The data were used the standard Hamilton questionnaire for anxiety and Demographic questionnaire for collecting them. Results were analyzed by using the Wilcoxon Sign Rank test. Significance level of $P < 0.05$ was considered significant. **Result:** The population that studied was 142 members that 98.6% were employees and 1.4% was housewives. In terms of education, 22.5% were illiterate, 46.6% elementary and the rest of the patients had high school education or higher. The mean age of patients was 5.3±26.8. All variables were examined the anxiety in pre operation and post operation in women who were candidate for cesarean section. There was a significant difference $P < 0.05$, the median of all before and after variables. **Conclusion:** Anxiety in cesarean section due to psychological reasons - mental and fear of going under the knife surgery have brought to the border crisis, Risk and

jeopardize the health of mother and child and symptoms of maternal health But in general, the amount of anxiety the critical variable will reduce in post operation and it has the remarkable and statistically significantly.

KEYWORDS: Anxiety, Cesarean section, Women, Ahvaz.

INTRODUCTION

Pre operation anxiety is a public phenomenon in all patients. Due to this fact that surgery has a potential danger and endanger the patient's health, Can infuse patients ' anxiety. Any kind of surgery is (large or small, selective or (Emergency, as the experience of anxiety is seen as a threat to the integrity of the body, sometimes to Life.[1] The incidence of preoperative anxiety in patients has been not only commonplace, but also very common[2] so that it's stated has rated more than 60 %[3] Anxiety had started from the patient's awareness need for surgery and reached its maximum at the time of hospitalization. Operation day, the patient may be the most dangerous and life threatening image for them. And sometimes surgery due to excessive anxiety of patients was postponed by the surgeon. High levels of anxiety will increases 3 times the risk of death. Anxiety in pregnancy and childbirth , lead to adverse effects ; because of anxiety , autonomic nervous system are stimulate and cause to increasing smooth muscle contraction as the arterial system And this also leads to reduce oxygen supply to the uterus and an increase in abnormal fetal heart rate patterns and preterm birth[4] Comprehensive state of anxiety is uncomfortable ,ambiguity and autonomic nervous system of arousal (Headache, sweating, palpitations) and spasm of the muscles of the chest, gastrointestinal discomfort and restless. Anxious person, who is restless, cannot sit or stand for long period. Aside from the effects of anxiety and visceral, is also affected thinking, perception and learning.[1] At least four of below symptoms can appear suddenly and reaches a peak in 10 minutes.

1. Palpitations, 2. Sweating, 3. Shake, 4. Dyspnea, 5. Feeling of suffocation, 6. Pain or discomfort in the chest, 7. Pain or discomfort in the abdomen. 8. A sense of imbalance and dizziness, lightheadedness and weakness, 9 - Derealization and depersonalization, 10. Fear of losing control or going mad, 11. The fear of dying, 12 - Lividness (a feeling of fatigue), 13 – Chills.[2] Historically anxiety in the patient has been attributed to the patient's expectation of pain.

During the past century, pain control has been one of progress in reducing anxiety. Anxiety can be adaptive in nature and when the discomfort associated with that person to the new

ways lead lives of great struggle. More recently, another hypothesis for the mechanism of the effect of lactic acid in the disorder is of particular importance anxiety based on an approach that leads to attacks. it is related to high ventilation or extreme respiratory, this means that high ventilation may activate the automatic nervous system and thus lead to common physical aspects of anxiety attack.[3] All patients in the pre operation period should be quiet and without anxiety that easily Anesthesia and wake up and cooperate fully. Anesthetic management of patients with mental preparation starts to reduce anxiety before surgery and prescription drug or selective drugs to create a particular response. Mental preparation will be provided to meet the anesthesiologist before surgery and interviews with patients and family members.[4] The pre-operation anxiety due to the increasing of statistics in practice is being important when a catastrophic failure occurs in the fetal position, usually cesarean birth is in early embryos indication, and purposefully delaying any time is illogical.[5]

The number of caesarean section in the whole world increases and this is due to the mother's fear of the pain of natural childbirth, late marriage, decrease parents tend to repeating pregnancy, Rapid and alarming increase in world population and is the Fear of losing the baby during natural delivery… Every year, ten millions of patients of worldwide are undergoing surgery. Surgery is creating stress inducing physiological responses (endocrine) and anxiety (anxiety and fear).[4] Patients who entered the hospital with mild, moderate or severe, can have anxiety Which can be used to identify and determine the level of anxiety can scheduled performance of medical care and nursing.[6] However, due to the increasing caesarean sections and the need to prevent anxiety and its symptoms anxiety levels were assessed in women who delivered by cesarean section.

2. MATERIALS AND METHODS

2.1-Study Design and Population

This is a descriptive cross -sectional study which had done on 142 patients undergoing cesarean section who randomly selected at Razi Hospital in Ahvaz during 2013.

2.2-Inclusion Criteria

Inclusion criteria for candidates of cesarean section were their Willingness to participate in the study. Candidates should not have any mental illness.

2.3- Exclusion Criteria

The exclusion criteria is lack of willingness for continue their participation in the study.

2.4- Ethical Considerations

Participants' informed consent was gained; voluntary participation and confidentiality were guaranteed. We had not any missing data. The study was approved by the Ethics Committee of Ahvaz jundi Shapour University of Medical Sciences).

2.5- *Procedure*

The sample selection was based on availability every other person, one night before operation have been selected after admission in the unit from the attending. Pregnant women undergoing cesarean section and the nurse had received the necessary training about how to complete the questionnaire and demographic Hamilton .that Questionnaire after the entrance of patient to operating room and after their surgery became complete and was collected to use for statistical analysis.

2.6- Data Collection

The study was done on142 pregnant women by the Ethics Committee of Ahvaz jundi Shapour University of Medical Sciences. The sample selection was based on availability every other person, one night before operation have been selected after admission. For collecting data were used from the Hamilton anxiety scale and demographic. After entrance to surgery room and after surgery with the agreement and consent of the patient and an explanation on how to complete the questionnaire, Questionnaires were completed by patients and researchers and were collected analyzing.

2.7- Data Analysis

Finally the data obtained from this study by SPSS 19 were analyzed by using the Wilcoxon Sign Rank test. $P<0.05$ was considered statistically significant.

RESULTS

Demographic studies were analyzed as follows that the population that studied was 142 members that 98.6% were employees and 1.4% was housewives. In terms of education, 22.5% were illiterate, 46.6% elementary and the rest of the patients had high school education or higher. Mean age of women who were participating in the study was over 15 years and the mean age was 26.8 ± 5.3. (Table 1)

Prevalence of anxiety in cesarean candidates before and after the operation had shown that there was a significant difference $P <0.05$, the median of all before and after variables. (Table 2) Changing of Frequency of variable were recorded before and after of candidates of

Cesarean section. The results showed that the variables of physical and muscular changes and symptoms of nervous system were severe or very severe intensity changes after the surgery were less than before surgery and also changes in other variables, moderate, severe and very severe were more than before surgery. In the studied variables the amount of severity of changes, changeless and a little changes after surgery were reported more than before surgery. (Table 3)

Table 1. Demographic characteristics of women undergoing cesarean section.

Variable		Frequency	%	Mean	SD
Career	**employee**	140	98.6	1.01	0.11
	housewife	2	1.4		
Educational background	**Illiterate**	32	22.5	1.54	1.43
	Elementary	66	46.5		
	Middle school	10	7		
	High school	6	4.2		
	Diploma	26	18.3		
	A.A\A.S	2	1.4		
Age groups	**15-19**	8	7	26.8	5.3
	20-24	40	28		
	25-29	50	35.2		
	30-34	28	16.8		
	35 and more	14	9.8		

Table2: Anxiety before and after caesarian section.

Variable		Median	SD	P-value
Mood changes	Before surgery	2	0.95	0.001
	After surgery	1	0.87	
Stress change	Before surgery	2	1.05	0.002
	After surgery	1	0.76	
Fear changes	Before surgery	2	0.94	0.001
	After surgery	1	0.80	
Change in sleep habits	Before surgery	2	1.04	0.001
	After surgery	1	0.83	
Cognitive mental change	Before surgery	2	1.01	0.003
	After surgery	1	0.76	
Depressed mood	Before surgery	2	1.07	0.003
	After surgery	1	0.89	
Physical and muscular changes	Before surgery	2	1.15	0.001
	After surgery	1	0.89	
Physical and sensory changes	Before surgery	2	1.05	0.004
	After surgery	1	0.72	
Changes in cardiovascular symptoms	Before surgery	2	1.07	0.001
	After surgery	1	0.92	
Changes in respiratory	Before surgery	2	1.09	0.002

symptoms	After surgery	1	0.94	
Changes in gastrointestinal symptoms	Before surgery	2	0.93	0.003
	After surgery	1	0.74	
Changes in urinary tract symptoms	Before surgery	2	1.03	0.002
	After surgery	1	0.72	
Changes in nervous system symptoms	Before surgery	2	1.17	0.004
	After surgery	1	0.93	
Behavior changes during interview	Before surgery	2	1.19	0.004
	After surgery	1	0.87	

Table3: Frequency of changes in the variables before and after caesarian section in women.

Variables		Before surgery		After Surgery	
		No.	%	No.	%
Mood changes	No change	6	8.6	18	25.7
	Slight	15	21.4	30	42.9
	Moderate	31	44.3	19	27.1
	Sever	16	22.9	2	2.9
	Very sever	2	2.9	1	1.4
Stress changes	No change	4	5.8	14	20
	Slight	22	31.9	34	48.6
	Moderate	20	29	20	28.6
	Sever	18	26.1	2	1.9
	Very sever	5	7.2	1	1.1
Fear changes	No change	7	10.1	15	21.4
	Slight	21	30.4	36	51.4
	Moderate	29	42	15	21.4
	Sever	10	14.5	4	5.7
	Very sever	2	2.9	0	0
Change in sleep habits	No change	6	8.7	15	21.4
	Slight	14	20.3	31	44.3
	Moderate	28	40.6	20	28.6
	Sever	16	23.2	4	5.7
	Very sever	5	7.2	0	0
Cognitive mental change	No change	7	10	19	27.1
	Slight	20	28.6	29	41.4
	Moderate	26	37.1	22	31.4
	Sever	14	20	0	0
	Very sever	3	4.3	0	0
Depressed mood	No change	9	13	22	31.4
	Slight	14	20.3	19	27.1
	Moderate	30	43.5	27	38.6
	Sever	11	15.9	2	2.9
	Very sever	5	7.2	0	0
Physical and muscular changes	No change	10	14.3	21	30.4
	Slight	12	17.1	22	31.9
	Moderate	20	28.6	23	33.3

	Sever	24	34.3	3	4.3
	Very sever	4	5.7	0	0
Physical and sensory changes	No change	9	12.9	13	19.1
	Slight	16	22.9	35	51.5
	Moderate	27	38.6	19	27.9
	Sever	5	21.4	1	1.5
	Very sever	3	4.3	0	0
Changes in cardiovascular symptoms	No change	5	7.2	18	25.7
	Slight	17	24.6	30	42.9
	Moderate	20	29	15	21.4
	Sever	22	31	7	10
	Very sever	5	7.2	0	0
Changes in respiratory symptoms	No change	5	7.2	21	30.4
	Slight	15	21.7	25	36.2
	Moderate	22	31.9	17	24.6
	Sever	20	29	6	8.7
	Very sever	7	10	0	0
Changes in gastrointestinal symptoms	No change	3	4.4	14	20
	Slight	25	36.8	37	52.9
	Moderate	27	39.7	17	24.3
	Sever	9	13.2	2	2.9
	Very sever	4	5.9	0	0
Changes in urinary tract symptoms	No change	7	10.1	16	22.9
	Slight	22	31.9	37	52.9
	Moderate	23	33.3	16	22.9
	Sever	14	20.3	1	1.4
	Very sever	3	4.3	0	0
Changes in nervous system symptoms	No change	8	11.4	20	28.6
	Slight	16	22.9	23	32.9
	Moderate	19	27.1	22	31.4
	Sever	20	28.6	5	7.1
	Very sever	7	10	0	0
Behavior changes during interview	No change	12	17.1	17	24.3
	Slight	12	17.1	31	44.3
	Moderate	25	35.7	17	24.3
	Sever	15	21.4	5	7.1
	Very sever	6	8.6	0	0

DISCUSSION

Anxiety among patients of surgery were common And can cause problems during and after surgery.[7] 10_9.2% of patients in the present study, had extreme severe anxiety and 14.5 - 34.3 of them had severe anxiety. According to the results of different studies, the anxiety level of patient will reach to its peak 24 hours before surgery.[8] And sometimes leads to changes in behavior after surgery.[9] In the study, 35 % of patients had moderate anxiety in the morning of surgery,[10] In the present study, changes in mood, Changes in tension, fear,

Sleep changes and all the variables that were included in Table (2) they have shown that the amounts of before surgery were more than surgery and these differences are statistically significant in the other words for example the amount of fear before surgery was more than after surgery. Egger was reported in a study that the respiratory symptoms and gastrointestinal of patients of cesarean patients before surgery were 30% more than after surgery.[11] In another study it was shown Changes in symptoms of nervous system in patients undergoing cesarean section Before surgery is more common than after surgery.[12] Changes in urogenital and genital symptoms before cesarean section were more than after operation due anxiety and fear in hormone secretion.[13] Changes in cardiovascular symptoms for women who had the first experience of going for surgery before surgery was more than after surgery due to the amount of fear and anxiety.[14] The results showed that the variables of physical changes and changes in muscles nervous system symptoms, Severe and very severe post operation intensity was lower than before surgery and also the change in other variables moderate , severe and very severe in post operation were lower than before the operation which The present study investigated the same line. In Kesselring research it had shown that the amount of changes and tension will exist till 3 days after operation.[15]

CONCLUSIONS

Anxiety in cesarean section due to psychological reasons - mental and fear of going under the knife surgery have brought to the border crisis, Risk and jeopardize the health of mother and child and symptoms of maternal health But in general, the amount of anxiety the critical variable will reduce in post operation and it has the remarkable and statistically significantly. Finally, due to the reasons that cause anxiety and how to reduce it, it can be considered as a strategy for better and more effective control of anxiety.

REFERENCES

1. Wu CL, Raja SN. Treatment of acute postoperative pain. Lancet, Jun 2011; 377(9784): 2215-25.
2. Degirmen N, Ozerdogan N, Sayiner D, Kosgeroglu N, Ayranci U. Effectiveness of foot and hand massage in postcesarean pain control in a group of Turkish pregnant women. Applied Nursing Research, 2010; 23(3): 153-8.
3. Kim WS, Byeon GJ, Song BJ, Lee HJ. Availability of preoperative anxiety scales as a predictive factore for hemodynamic changes during induction of anesthesia. Korean J Anesthesiol, 2010; 58(4): 328-33.

4. Jafar MF, Khan FA. Frequency of preoperative anxiety in Pakistani surgical patients. J Pak Med Assoc, 2009; 59(6): 359-63.
5. Tiran D. Reflexology in pregnancy and childbirth. Edinburgh:Churchil Livingstone, 2010: 20-2.
6. Spezzaferri R, Modica M, Racca V, Ripamonti V, Tavanelli M, Brambilla G, Ferratini M. Psychological disorders after coronary artery by-pass surgery: a oneyear prospective study. Monaldi Arch Chest Dis, 2009; 4(72): 200-5.
7. Lee D, Raja R. The effect of acupressure on patients anxiety and vital sign before abdominal surgeries. Ann GenPsychiatry, 2011; 29(6): 17.
8. Cox A, Allen G. Improving the quality of pre-operative nursing care in the operating room through participatory action research at hospital. J Clin Nurs, 2011; 32(1): 32-276.
9. Brockbank S, Ulmer T, Ernst F. Effects of the impact of therapeutic relationship on preoperative and postoperative patient anxiety. Aust J Adv Nurs, 2012; 24(3): 76-89.
10. Clare S, Feleke R. Factors affecting preoprative anxiety. J Pak Med Assoc, 2013; 67(2): 54-87.
11. Egger A, Mur F, Chen G. Pain perception of patients predisposed to anxiety and depressive disorders in emergency department. Pain Manag Nurs, 2012; 54(8): 150-3.
12. Spichiger S, Muller R. Effects of patterns and frequency of anxiety in women undergoing gynaecological surgery. J Clin Nurs, 2011; 65(9): 43-87.
13. Hart S, Tsay D, Lin T. Effect of assessment of anxiety level of employed formal nurses in hospitals. Pain Manag Nurs, 2012; 15(7): 65-98.
14. Power H, Tsay D, Santos R. Effects of health education program on preoperative anxiety among abdominal surgical patients. Aust J Adv Nurs, 2013; 76(8): 32-44.
15. Kesselring M, Dougans F. Effect of patient education about pain control on patient's anxiety prior to abdominal surgery. Ann Gen Psychiatry, 2011; 54(8): 43-87.