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RESEARCH ARTICLE

Anxiety of Childbirth for Pregnant Women Undergoing Normal Vaginal Delivery and Cesarean Section: Comparative Study

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ABSTRACT
Anxiety disorders during pregnancy, particularly those in the first trimester. Surprisingly, some women with pre-natal anxiety disorders see a reduction in symptoms throughout the first trimester. It been protective by some anxiety. Psychological anxiety and excess nervousness during pregnancy means that the stress hormone reaches the fetus, which affects its growth, and its weight is often less than normal at birth. ***Aim of The study****: To measure level of anxiety of childbirth and compare between pregnant women undergo normal vaginal delivery and cesarean section. comparative study was conducted on non-probability sample (convenience sampling) of (100) pregnant women who undergoing normal vaginal delivery and cesarean section in Al-Habobi teaching hospitals and Bint Al-Huda Teaching Hospital. The study was conducted during the period January 23rd 2022 to March 20th 2022. A questionnaire was used as tool of data collection to fulfill with objective of study. A pilot study was carried out to test the reliability of questionnaire and content validity was carried out through (13) experts. Descriptive and inferential statistical analysis were used to analyze data.* ***Results****:* ***There*** *is statistically significance differences level of anxiety of childbirth and compare between pregnant women undergo normal vaginal delivery and cesarean section of Study sample at P < 0.05.* ***Conclusion****: There is a relationship between the level of anxiety and the type of delivery for pregnant women undergo normal vaginal delivery and cesarean section.* ***Recommendation****: Providing women with full knowledge about childbirth, whether it is a normal vaginal or caesarean section, through conducting educational sessions in order to relieve anxiety that accompanies them during pregnancy.*

Keywords: Anxiety, Childbirth, Normal Vaginal Delivery, Cesarean Section.

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INTRODUCTION

Anxiety is a key symptom of a disturbed mental state in several diseases. Anxiety disorders during pregnancy, particularly those in the first trimester, were first medically documented by Marcie in the 18th century and contain substantial symptoms of turbulence. Surprisingly, some women with pre-natal anxiety disorders see a reduction in symptoms throughout the first trimester. It been protective by some anxiety, and Holmberg (2003) suggested an image of the viviparous woman most likely to how pleasurable have birth experience as nervous and realistically scared, yet competent in her knowledge of labor and delivery. Apprehension beforehand characterized for fear of childbirth, during, or after delivery. According to certain research, as the pregnancy progresses, there is a greater inclination for worry and anxiety. Anxiety, nightmares, and bodily symptoms are the most common manifestations of fear. Furthermore, general worry, a lack of social support, and unemployment are all common risk factors. for pregnancy anxiety and fear of childbirth. Sociocultural concerns, financial, healthcare, psychological, and physical problems emerging from pregnancy, parenting challenges, mother and fetal well-being, and dread of birth, particularly vaginal delivery, have all been studied as reasons of anxiety in pregnancy. Psychological anxiety and excess nervousness during pregnancy means that the stress hormone reaches the fetus, which affects its growth, and its weight is often less than normal at birth. The majority of women regard CS as a routine operation, and they may be overlooking the psychological adverse effects and discomfort it may cause. Preoperative worry is linked to lower satisfaction and a slower recovery after CS, according to limited data (Hepp et al.,2016). In other areas of medicine, such as cataract surgery, research has shown that prior experience with a given operation or anesthesia approach reduces anxiety levels when the process is repeated, implying that previous familiarity with the issue has a calming influence on anxiety levels (Schaal et al,. 2019). When it comes to objective markers of anxiety, cortisol levels are frequently mentioned. It has a well-known relationship with the stimulation of the hypothalamus-pituitary-adrenal axis (HPAA). Although it can be acquired from a variety of materials such as blood, urine, or hair, saliva collection is the most popular method in anxiety research since it indicates the activation of the HPAA within the previous half hour(Hepp et al.,2016). Expectant moms gather knowledge about delivery from a variety of sources, including family members, friends, and the area in which they live, and their experiences, advice, and social authorization may influence the process. Anxiety, birth fear, prior C-section, previous negative birth experiences, maternal age, changing perceptions of surgical risks, phobia of labor pain, negative attitude toward vaginal delivery, concerns about the baby's well-being, prevention of urogenital lacerations, and changes in sexual relations are all linked to CS preferences (Eliz et al., 2016).

Many researchers have subsequently studied the causes and consequences of maternal anxiety and fear. Fear of pain is often reported as the reason for fearing delivery (Hofberg & Ward,2003).

METHOD

Study Design and Population: Descriptive study use comparative design. Population are women undergoing normal vaginal delivery and cesarean section in maternal hospital in AL Nasiriya city. Sampling and Sample Size comparative study was conducted on non-probability sample (convenience sampling) of (100) pregnant women who undergoing normal vaginal delivery and cesarean section in Al-Habobi teaching hospitals and Bint Al-Huda Teaching Hospital. Inclusion criteria are pregnant women undergoing normal vaginal delivery and cesarean section in Al Nasiriya city. And exclusion criteria are Pregnant women. Data Collection and Setting: The data were collected during 23rd of January to 20th of March, 2022. The researcher collected data from pregnant women who undergoing normal vaginal delivery and cesarean section for the current study by using a questionnaire as data collection tool. Before distributing the questionnaire, the researcher conducted an interview with the pregnant women to provide an introduction and describe the study's purpose in a simple manner. The questionnaire takes 5-10 minutes to complete, The research was conducted in Thiqar, In two hospitals. It was carried out in hospitals in AL Nasiriya center.

Instrumentations: A questionnaire has been adopted to accomplish the objective of the study, The questionnaire is divided into two axes: first axes demographic and reproductive information for pregnant women, and second axes scale that are designed to be used to assess levels of anxiety. A questionnaire is adopted after thorough review of the related literature, and well experienced professors, The questionnaire was translated by an expert translation professor (1), This questionnaire is used as an instrument of data gathering which includes the following axes:

Axis l: This part contains demographic and reproductive information of pregnant women took part in the research. Which consists of (7) items of demographic information including: Age, addresses of residence, profession for woman, women's educational level, economic

statues (monthly income), family type, number of family members. And (6) items of reproductive information including: The number of pregnancy, the number of abortions, number of live births, birth period, birth type and the number of cesarean deliveries, if any (Appendix-C).

Axis ll: Scale that are designed to be used to assess levels of anxiety, This scale is classified into (3) sub-axes (cognitive anxiety axis, physical anxiety axis, and behavioral anxiety axis), and each axis in turn includes a set of questions. This scale used score of the third categories scales, Such that (Always, Sometimes, Never). As well as evaluation for observed responding through using differentiated intervals: [(1-1.66) = Low (L) ;(1.67-2.33) = Moderate(M); and (2.34-3.00) = High(H) evaluation].

Data Analysis: A questionnaire was used as tool of data collection to fulfill with objective of study. A pilot study was carried out to test the reliability of questionnaire and content validity was carried out through (13) experts. Descriptive and inferential statistical analysis were used to analyze data.

RESULTS

This table (1) show the distribution of level of evaluation of anxiety scale in pregnant women two weeks before delivery perianal anxiety screening scale (PASS) of study sample (Cognitive anxiety axis) which revealed the information of study sample were presented low level at item (12), while presented moderate level at items (2,3,7,13,15,16, 18 and 19),and the other remaining items presented as high level of anxiety.

Table (2) shows the distribution of level of evaluation of anxiety scale in pregnant women two weeks before delivery perianal anxiety screening scale (PASS) of study sample (Physical Anxiety axis) which revealed the information of study sample were presented moderate level at items (1and 4),and the other remaining items presented as high level of anxiety.

Table (3) shows the distribution of level of anxiety scale in pregnant women two weeks before delivery perianal anxiety screening scale (PASS) of study sample (Behavioral anxiety axis) which revealed the information of study sample were presented low level at item (1), while presented moderate level at items (4 and 5),and the other remaining items presented as high level of anxiety.

Table (4) shows there is statistically significance differences level of anxiety of childbirth and compare between pregnant women undergo normal vaginal delivery and cesarean section of Study sample at $P < 0.05$.

This table (5) show their no statistically significances differences between demographics variables (Addresses of Residence, women's educational level and profession for women),while there is statistically significances differences between demographics variables (age of women, birth type and diseases that accompanied pregnancy) and anxiety of childbirth, when analyzed by ANOVA.

This table (6) show their no statistically significances differences between anxiety level and mother obstetrics information of Study Sample (The number of pregnancy, Number of live births and birth period),while there is statistically significances differences anxiety level and mother obstetrics information of Study Sample (The number of abortions and The number of cesarean deliveries, if any) and anxiety of childbirth, when analyzed by ANOVA.

Table1: Anxiety and Childbirth Women with Normal Vaginal Delivery and Cesarean Section of Study Sample

Variables	Df	F	P.value	Sig.
Anxiety	**Childbirth Women with Normal Vaginal Delivery 89 Childbirth Women with Cesarean Section 89**	**0.553**	**0.045**	**S**

Table 3: Distribution and Association between level of anxiety of childbirth Socio Demographical Data of Study Sample of Study Sample

Demographic Variables	Anxiety level Statistics S.O.V	Sum of Squares	df	Mean Square	F	P. value	Sig
Age of Women	Between Groups	6.317	27	0.234	0.600	0.027	S
	Within Groups	24.172	62	0.390			
	Total	30.489	89				
Addresses of Residence	Between Groups	6.206	27	0.230	0.988	0.497	N.S
	Within Groups	14.417	62	0.233			
	Total	20.622	89				
Profession for women	Between Groups	6.533	27	0.242	0.652	0.889	N.S
	Within Groups	23.022	62	0.371			
	Total	29.556	89				
Women's educational level	Between Groups	58.694	27	2.174	0.533	0.043	S
	Within Groups	252.906	62	4.079			
	Total	311.600	89				
Birth Type	Between Groups	6.544	27	0.242	0.942	0.006	S
	Within Groups	15.956	62	0.257			
	Total	22.500	89				
Disease that Accompanied pregnancy	Between Groups	.233	6	0.039	0.542	0.046	S
	Within Groups	5.932	83	0.071			
	Total	6.165	89				

Table3 Distribution and Association between levels of anxiety of Childbirth and Mother Obstetrics History of Study Sample.

No	Mother Obstetrics Information / Anxiety level	Statistics S.O.V	Sum of Squares	df	Mean Square	F	P. value	Sig
1	The number of pregnancy	Between Groups	33.528	27	1.242	0.911	0.594	N.S
		Within Groups	84.472	62	1.362			
		Total	118.000	89				
2	The number of abortions	Between Groups	43.083	27	1.596	1.594	0.040	S
		Within Groups	62.072	62	1.001			
		Total	105.156	89				

3	Number of live births	Between Groups	72.483	27	2.685	0.910	0.596	N.S
		Within Groups	182.906	62	2.950			
		Total	255.389	89				
4	Birth period	Between Groups	4.828	27	0.179	0.712	0.834	N.S
		Within Groups	15.572	62	0.251			
		Total	20.400	89				
5	The number of cesarean deliveries, if any	Between Groups	35.450	27	1.313	1.331	0.017	S
		Within Groups	61.172	62	0.987			
		Total	96.622	89				

DISCUSSION

Table (1) the researcher shows there is statistically significance differences level of anxiety of childbirth and compare between pregnant women undergo normal vaginal delivery and cesarean section of Study sample at P < 0.05. The researcher found that half of the women prefer natural childbirth, because it is less expensive, quick recovery within a short period, fewer complications, and the possibility of having many children. And other half of women prefer caesarean section because they have had previous deliveries, or because of the advice of gynecologists, or they have some gynecological diseases that prevent them from having a natural birth. The study supported by (Liu et al., 2013) in their study "Preferences for mode of delivery in nulliparous Argentinean women: a qualitative study". Stated that due to cultural, personal, and social factors, the majority of the women favored vaginal delivery (VD). VD was regarded as a natural rite of passage from women to motherhood, as well as being normal and healthy. Pain linked with vaginal delivery was thought to be beneficial. Women, on the other hand, considered CS as a medical issue and frequently delegated judgments to medical experts when medical indications were present. This study similar for study by (Alipour et al., 2011) in their study "The association between antenatal anxiety and fear of childbirth in nulliparous women: a prospective study". Indicated that A positive and statistically significant relationship between fear of childbirth scores and state and trait anxiety was found using the Pearson correlation test (p 0.05). According to a logistic regression study, state and trait anxiety at the 28th week of pregnancy enhanced the probability of fear of childbirth (odds ratio [OR] 2.7, 95 percent confidence interval [CI] 1.69-4.35, p = 0.03 and p = 0.02), respectively ([OR] 2.8, 95 percent [CI] 1.17-6.80). It also showed that both state and trait anxiety were on the rise. Fear of childbirth at week 38 of pregnancy ([OR] 2.7, 95 percent [CI] 1.03-6.80) and ([OR] 5.4, 95 percent [CI] 1.03-6.80, 1.75-16.76, p = 0.04 and p = 0.003, and 1.75-16.76, p = 0.04,p = 0.003), respectively. Another study supported by (Körükcü et al., 2010) in their study "Relationship between fear of childbirth and anxiety among Turkish pregnant women". Stated that Fear of labor and anxiety were found to have a significant connection (r= 0.42, p0.01).

This table (2) show their no statistically significances differences between demographics variables (Addresses of Residence, women's educational level and profession for women),while there is statistically significances differences between demographics variables (age of women, birth type and diseases that accompanied pregnancy) and anxiety of childbirth, when analyzed by ANOVA. This reflects that the level of anxiety is affected by the age of women, the type of childbirth, and the diseases associated with pregnancy. According to the researcher's opinion, women participants with young ages are more anxious about childbirth than older women, as well as women undergoing natural childbirth are more worried about cesarean section, and also women who have chronic diseases such as hypotension and diabetes during pregnancy are more anxious than those who do not have.

This table (3) show their no statistically significances differences between anxiety level and mother obstetrics information of Study Sample (The number of pregnancy, Number of live births and birth period),while there is statistically significances differences anxiety level and mother obstetrics information of Study Sample (The number of abortions and The number of cesarean deliveries, if any) and anxiety of childbirth, when analyzed by ANOVA.

This indicates that previous abortions and cesarean sections affect the level of anxiety. This study agree with study of Schaal et al.(2020) in their study "Comparing the course of anxiety in women receiving their first or repeated caesarean section: A prospective cohort study". Reported that women who had their first caesarean section had much higher anxiety levels than women who had had a previous caesarean surgery.

CONCLUSIONS

According to the discussions of this study, there is a relationship between the level of anxiety and the type of delivery for pregnant women undergo normal vaginal delivery and cesarean section. Thus the level of anxiety affects the choice of birth.

ETHICAL CONSIDERATIONS COMPLIANCE WITH ETHICAL GUIDELINES

This is a valuable section in the study, and it was concerned with the ethical consideration for ethical committee of college of nursing in initiation of sample collection process. Particular meeting had been adjusted with each hospital manager and department officials, for the sake of explaining the study and for getting permission. Names of women were not obtained. All pregnant women who undergoing normal vaginal delivery and cesarean section had been got full information about their mission in this study. All study participants have been informed that the results of study will be only for the purpose of this study. Notify all participants that everyone here is having the right to refuse participation.

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AUTHOR'S CONTRIBUTIONS

Study concept, Writing, Reviewing the final edition by all authors.

DISCLOSURE STATEMENT:

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