



Evaluation of Nulliparous Women Childbirth Anxiety in Baghdad Maternity Hospitals

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	ABSTRACT
<p>CORRESPONDING AUTHOR: Fatima Fadel Benyian, Maternal and Neonate Nursing Department, College of Nursing, University of Baghdad, Iraq. Email: fatmaf@conursing.uobaghdad.edu.iq</p>	<p>Background: It is important to be concerned about anxiety during pregnancy since it will influence the fetus's growth. Extreme levels of stress, sadness, or anxiety during pregnancy increase the risk of an adverse pregnancy outcome.</p> <p>Objectives: To Evaluate the Nulliparous pregnant women childbirth anxiety. To find out the association between pregnant women's anxiety with some demographical and gestational age .</p> <p>Methodology: A descriptive design used a non-probability (purposive sample) of (200) nulliparous pregnant women to collect the data through a self-reported questionnaire. The questionnaire comprised of (14) items of pregnancy related anxiety. The study was conducted from February to July 2023.</p> <p>Results: Regarding age about half (50%) of pregnant women at age (20-29) years (27%) are graduated from preparatory school. More than two-thirds (67%) in the second trimester. The majority of them have planned pregnancy (81.5%). Most of them have mild anxiety (57%), and the leftover (43%) have severe anxiety. There are no significant association between pregnant women's childbirth anxiety with age, education, or gestational age.</p> <p>Conclusion: This study concluded that more than half of pregnant women have mild anxiety, and more than two thirds have severe anxiety.</p> <p>Recommendations: Pregnant women need prenatal education and support regarding childbirth anxiety during routine prenatal visits.</p>

Keywords: Nulliparous, Childbirth, Anxiety, Pregnancy.

INTRODUCTION

Pregnancy is one of the most crucial times in a woman's life since it brings about many changes, not just physically, but also socially and mentally. Anxiety is typically caused by fear of the unknown, tension, rootless feelings, and daily challenges associated with physical and hormonal changes. Anxiety is a

typical human response to fear or danger, but it can become a mental health problem if the response is overdone, lasts longer than three weeks, and interferes with everyday living (1).

Pregnancy anxiety is defined as "a negative emotional state that is associated with worries about

the health and well-being of one's baby, the impending childbirth, hospital and health-care experience (including one's own health and survival in pregnancy) during birth, and parenting or maternal role" (2).

Anxiety during pregnancy might be centered on fetal health, mother's health, social and/or financial assistance, or mortality. If these concerns remain for an extended length of time, they can contribute to functional impairment in a variety of aspects of the mother's life (3).

Anxiety during pregnancy is distinct from general anxiety. It is a separate condition triggered by pregnancy-related anxiety and concerns. Anxious women suffer both mental and physical symptoms, including concern, muscular soreness, palpitation, sleeplessness, and gastrointestinal discomfort. High levels of pregnancy-related anxiety have been linked to preterm birth, postpartum depression, and caesarean section. Furthermore, it may have an impact on fetal, newborn, and child development (4, 5, 6, and 7).

Premature birth, low birth weight, fetal development restriction, and postnatal problems are among some of the difficulties that depression during pregnancy has been related to. Prenatal stress may be linked to attention deficit hyperactivity disorder (ADHD) and autism spectrum disorder (ASD). Additionally, since the framework for psychological wellbeing is inadequate in developing countries, the negative effects of the abovementioned situations would likely be greater (8).

Therefore, this study aims to evaluate a nulliparous pregnant women childbirth anxiety attending maternity hospitals in Baghdad city to provide data that would be potentially useful in generating previously unavailable data on childbirth anxiety during pregnancy among Iraqi women, which may be used as a baseline for future studies or public health interventions of appropriate planning to improve maternal and fetal wellbeing.

AIMS OF THE STUDY

The study aims to evaluate the nulliparous pregnant women childbirth anxiety and to find out the association between pregnant women's anxiety with some demographical and gestational age.

METHODOLOGY

Descriptive cross-sectional study design was used to evaluate a nulliparous pregnant woman's childbirth anxiety at outpatient of maternity hospitals in Baghdad city. The study was conducted from February 2023 to July 2023. Non probability (purposive sample) was used to collect the data from (200) pregnant women. Inclusion criteria (nulliparous pregnant, singleton pregnancy, and no medical or obstetrical complications). The questionnaire consisted of part one demographical variable, part two reproductive variable, and part three childbirth anxiety, which consisted of (14) questions for childbirth anxiety. The rating for childbirth anxiety items with categorical responses of (never, sometime, always) was applied with an item score of (3, 2, 1) respectively. A pilot study was conducted in order to

determine the reliability of the questionnaire in a sample of (20) women ($r= 0.83$). The data was collected after obtaining the consent of the women to participate in this study. Data are analyzed using

SPSS version 26. Descriptive and inferential statistics were used.

RESULTS

Table (1): Distribution of Study Sample According to Socio-demographic Characteristics

Demographic Characteristics	F	%
Age / years		
< 20	74	37
20-29	100	50
30-39	23	11.5
≥ 40	3	1.5
Total	200	100
Mean=23.2 SD=5.5		
Educational level		
Read & write	20	10.0
Primary School	49	24.5
Preparatory School	54	27.0
Secondary School	21	10.5
Institute graduate	14	7.0
College graduate	37	18.5
Master and higher	5	2.5
Total	200	100
Occupational Status		
Student	24	12.0
Employee	25	12.5
Housewife	151	75.5
Total	200	100

This table shows that (50%) of women's age are (20-29) years, with mean (SD) 23.2 (5.5). Regarding educational level the higher percentage of them (27%) are graduated from preparatory school. Regarding occupation most of them (75.5%) are housewives.

Table (2): Distribution of Study Sample According to Reproductive Characteristics

Variables	F	%
Planned pregnancy		
Yes	163	81.5
No	37	18.5
Total	200	100
Gestational Age/ weeks		
1-13	22	11.0
14-27	44	22.0
28-38	134	67.0

Total	200	100
Mean (SD) 26.14 (8.2)		
Total	200	100

This table shows that the majority pregnant women (81.5%) have planned pregnancy. About two-thirds of them (67%) are in the third trimester of gestation.

Table (3): Childbirth Anxiety among Nulliparous Pregnant Women

No.	Items	Always		Sometime		Never	
		F.	%	F.	%	F.	%
1.	I am worried about my baby's health	116	58	81	40.5	3	1.5
2.	I am worried about the pain of childbirth	103	51	95	47.5	3	1.5
3.	I am worried that I won't get my looks back after my baby is born	51	25.5	81	40.5	68	34.0
4.	I am worried that my parents and my husband will not be with me when I give birth	76	38.0	85	42.5	39	19.5
5.	I am worried about losing control during labor	109	54.5	82	41.0	9	4.5
6.	I am worried that my baby will become deformed or ill	106	53.0	66	33.0	28	14.0
7.	I am worried that doctors and midwives will not take good care of me	92	46.0	100	50.0	8	4.0
8.	I am worried that my husband will not find me attractive after giving birth	44	22.0	91	45.5	65	32.5
9.	I am worried because I do not have enough support from my family and relatives	24	12.0	128	64.0	48	24.0
10.	I am worried that my husband will not support me in the birth	48	24.0	116	58.0	36	18.0
11.	I am worried about the physical changes that occur in my body after childbirth	43	21.5	93	46.5	64	32.0
12.	I am worried about feeling helpless during labor	113	56.5	76	38	11	5.5

This table reveals that the higher percentage of nulliparous pregnant women stated that they always have anxiety (58%,51%,54.5%,53%, and 56,5%) regarding items (1,2,5,6, and 12). While only (34%, 32.5%, and 32%) of them are stated that they never have anxiety regarding items (3,8, and 11).

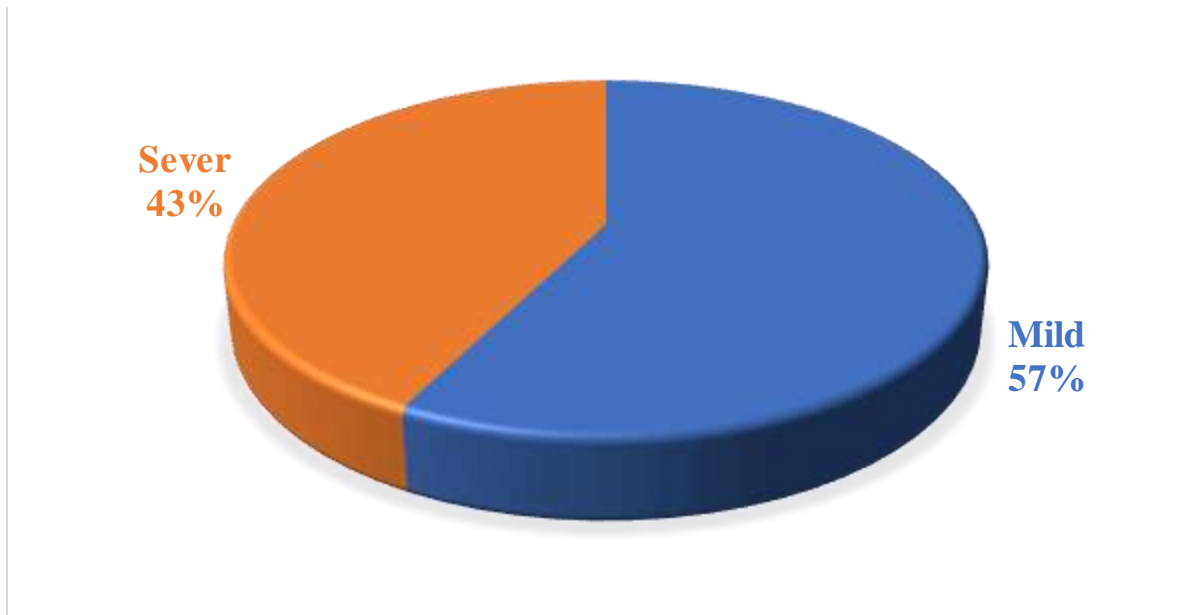


Figure (1): Childbirth anxiety among nulliparous pregnant women

Table (4): Association between Childbirth Anxiety among Nulliparous Pregnant Women with some demographical and reproductive variables

Items	Childbirth Anxiety		Chi square statistics		
	Value	df	P-value	Sig.	
Age	1.177	3	.758	NS	
Educational level	4.103	6	.663	NS	
Gestational age	.785	2	.675	NS	

(df) degree of freedom, (Sig) significant Probability value ($P < 0.05$), (S) Significant.

Table (4) results shows that there are no statistically significant differences between women's childbirth anxiety with age, educational level or gestational age.

DISCUSSION:

The findings of the present study show that half of study participant at age group (20-29), regarding educational level the highest percentage of them (27%) are graduated from Preparatory school. Regarding occupation the majority of them (75.5%) are housewives, these results are consistent with Silva et al., who conducted a study among (209) pregnant women participated in their study, they found that the higher percentage (64.4%) of the study sample age ranged from (20-30) years, most of them (41%) had secondary education⁽¹⁰⁾. Also, Nath et al., conducted a study among (380) pregnant women at

India to identify the prevalence and determinants of pregnancy-related anxiety, they found that the majority of the study sample (70%) at age group (> 20) years, the majority of them (92%) were housewives, more than two-thirds (38%) had High school graduation⁽²⁾. However, it was in consistent with Kadim et al., who stated that out of (209) pregnant women, most of them (63.2%) were within the age group (17-26), (74.4%) had Diploma & above degrees graduation⁽¹¹⁾.

The reported prevalence rates using differing scales from other countries seem to be much lower 23.6% in Saudi Arabia using the State Anxiety scale⁽²⁾. A few studies have provided information on the

frequency and prevalence of anxiety among pregnant women in Iraq, despite the significance of the condition reported. Small samples, clinical populations, or retrospective designs have been the foundation for the majority of investigations. Since anxiety levels may vary during pregnancy, longitudinal studies are necessary to comprehend the signs and intensity of anxiety as well as how it changes over the course of the pregnancy⁽⁹⁾.

Related to this study participant more than two-thirds (67%) of them at third trimester of pregnancy. This result agrees with Akinsulore et al., who conducted a cross-sectional survey to identify the symptoms of pregnancy-related anxiety and the associated factors among (230) pregnant women in Nigeria. There are several studies related to prenatal anxiety from European and Asian countries have found that the prevalence rates were (6.8% – 54%). a study conducted in India among pregnant women that the prevalence of prenatal anxiety was (22.6%). From above, prenatal anxiety is a common problem among pregnant women. Furthermore, the prevalence varies according to the trimester of pregnancy, the higher levels of anxiety reported in the first and third trimesters^(12, 13, and 14).

Hadfield et al., performed a Systematic Reviews and Meta-Analysis to identify measurement of pregnancy-related anxiety worldwide, based on the inclusion and exclusion criteria, (269) studies were reviewed. These 269 papers utilized a total of (39) measures of pregnancy-related anxiety, with (18) being used in two or more investigations. Only (44) out of the listed studies, or less than (20%) of the total, described research done in low- and middle-income nations. All of the pregnancy-related anxiety measures that were employed in several studies—with one exception—were created in high-income country contexts. Only (13.8%) of the measures were validated for use with people in low- or middle-income countries. These findings imply that many countries assess the pregnant women anxiety related pregnancy⁽¹⁵⁾.

The current study evaluates the anxiety during pregnancy; most of them have mild anxiety (57%), and the leftover (43%) have severe anxiety. These results are consistent with Rachita et al., who conducted a prospective study among (215) pregnant women in the third trimester of pregnancy to evaluate the prevalence and risk factors of depression and anxiety they found the prevalence of anxiety symptoms in pregnant women was high (88.37%)⁽¹⁶⁾. This finding also consistent with previous studies that have reported high prevalence rates of anxiety in pregnant women worldwide. For example, Fawcett et al conducted a study in Canada⁽¹⁷⁾ and Nielsen-Scott et al., in the United Kingdom⁽¹⁸⁾ have also reported high prevalence rates of anxiety in pregnant women. It should be noted that differences in prevalence rates may be due to various factors, including the assessment tools and cutoff points we used, as well as cultural differences in the perception of mental health.

Regarding cause of anxiety among this study sample, the majority of them stated that always “I am worried about my baby’s health” and “I am worried about the pain of childbirth”. This result agreed with Deklava et al., who conducted a study to identify the causes of anxiety during pregnancy among (150) pregnant women, they found (72,1%) of their study sample had moderate form of trait anxiety, and (23,1%) had severe form of trait anxiety. Similarly (67,3%) had Moderate form of state anxiety, and (29,8%) had severe form of state anxiety. The pregnant woman felt anxious firstly about neonatal factors such as, “possible neonatal development disorder”, “possible birth trauma to newborn” and “newborn's ability to effectively initiate breathing”. Followed by maternal factors⁽¹⁾.

In this study there are no statistically significant differences between anxiety during pregnancy with demographic or representative variable. This result is consistent with Rachita et al.,⁽¹⁶⁾ Also, Nath et al., who performed a study in India among (380) pregnant women to identify the prevalence and determinants of

pregnancy-related anxiety, they reported that (55.7%) of their study sample had pregnancy-related anxiety and there are no statistically significant differences between pregnancy-related anxiety with demographical or reproductive variables (2). While it is inconsistent with Silva et al., who revealed that there is a significant association between anxiety during pregnancy and gestational age (2).

The condition of anxiety during pregnancy is very common, and some research have indicated that pregnant women are more likely to have anxiety than the general population. A study reported that (39%) of pregnant women met the criteria for a diagnosis of anxiety disorder in comparison to (16.3%) of non-pregnant women (19).

CONCLUSIONS:

This study concluded that more than half of pregnant women (57%) have mild anxiety, and more than two thirds (43%) have severe anxiety There are no significant association between pregnant women's anxiety with demographical or reproductive variables.

RECOMMENDATIONS:

Pregnant women need education and support from health care provider regarding anxiety during pregnancy through prenatal visits.

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Conflict of interest: None declared.

Ethical approval: was taken from committee in College of Nursing/ University of Baghdad.

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