

The Dangers of Pregnancy Phobia (Tokophobia) on the Mother's Sychatric Health and Marital Relationship from the Point of View of Female Students of the Faculty of Educational Sciences at Jerash University

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Abstract

The study aimed to identify the risks of pregnancy phobia on the mother's psychological health and marital relationship from the point of view of female students of the Faculty of Educational Sciences at Jerash University. The study sample consisted of (178) female students, (92) female students in the undergraduate program, and (86) female students in the graduate studies program. They were chosen by simple random method, and the study relied on the descriptive survey method. The researcher developed a questionnaire consisting of (15) paragraphs. The results of the study concluded that the risks of pregnancy phobia on the mother's psychological health and marital relationship from the point of view of female students of the Faculty of Educational Sciences at Jerash University were high. The results of the study also showed statistically significant differences in the marital status variable, and the differences were in favor of single women, and there were no statistically significant differences in the variables of the academic program and place of residence. In light of the results, several recommendations were presented, including: including school curricula and university courses in study units on the virtues of pregnancy, motherhood and its psychological health.

Keywords: Pregnancy phobia, Mather mental health, Marital relationship, female students of the Faculty of Educational Sciences, Jerash University.

Introduction

Having children is an exciting time for a woman, full of joy and happiness, but on the other hand, this is not acceptable for some pregnant women because they are burdened with morbid fear and fear of pregnancy and the birth process. Although many of them overcome their anxiety with the help of their husbands, family or friends, fear and anxiety remain dominant, and can be described as a morbid fear of childbirth, or tokophobia.

General and evolutionary psychologists have recently begun to shift their interest from studying the basic emotions (happiness, sadness, anger, fear) towards studying complex or social emotions and feelings of guilt (Al-Sharaa, 2019).

The word "tocophobia" comes from the Greek root "tocos", which refers to "birth" and "phobos", which means fear. Tocophobia is an intense anxiety or fear of

pregnancy and childbirth, with some women avoiding pregnancy and childbirth altogether.

It is a phenomenon of anxiety and fear in women (Frodsham, 2019). Primary tocophobia may begin in adolescence, and affects women who give birth to children at spaced intervals, and some women whose pregnancy is delayed (Rabinerson, Stolovitch & Gabbay-Benziv, 2014).

Tocophobia is a multifaceted condition related to threats that may occur to the pregnant woman, such as pain or trauma, as well as feelings of helplessness, loss of control, insufficient emotional support, and the death of the woman's own child. Scandinavian countries are pioneers in the field of studies related to tocophobia, where there are multidisciplinary clinics that treat women with tocophobia (Donel, 2019).

When the fear of giving birth comes about for the first time, it leads women to avoid pregnancy for fear of death. Although they want to have children, many of them are never able to overcome this fear by using contraception accurately, and often use one or more methods at a time. Tocophobia may also be linked to a previous traumatic birth experience such as stillbirth, termination of pregnancy, or the birth of a deformed child (Calderani, Giardinelli, Scannerini, Arcabasso, Compagno, Petraglia, & Ricca, 2019).

Women's personal characteristics make them vulnerable to tocophobia. Women who fear childbirth have been shown to have higher levels of anxiety and depression. This may be linked to a perceived lack of social support and low self-esteem. Low self-esteem is linked to low self-efficacy; therefore, women with low self-efficacy are more likely to develop tocophobia (O'Connell, O'Neill, Dempsey, Khashan, 2019).

Winter (2018) pointed out that women with pregnancy phobia have characteristics, including: the mother's mental health reaching menopause, the mother's mental health exceeding the age of (40) years, her social and economic status being impaired, her education level being low, unemployment, smoking, anxiety, depression, and disorders before or during pregnancy, such as fear of gestational diabetes, birth defects in the child, or a sudden cesarean section.

Hofberg and Ward (2014) confirmed a set of risks of tocophobia on the mother's mental health, including insomnia, prenatal depression, emergency cesarean section, increased use of painkillers, increased risk of postpartum depression, post-traumatic stress disorder, decreased infant-mother attachment, low birth weight, and long-term emotional effects on the infant.

Many researchers have conducted studies on tocophobia, including O'Connell's study (2017), which showed that the prevalence of tocophobia among women is estimated at (14%).

O'Connell, Leahy-Warren, Khashan, & Kenny (2015) discussed the concept of pregnancy phobia in the context of maternal mental health practice and concluded that maternity care providers need to know the symptoms and characteristics that frighten women with pregnancy phobia so that plans can be made to help them.

While Sioma (2017) conducted a study that aimed to determine the degree of anxiety towards tokophobia, and the causes of this phenomenon among Polish pregnant women and analyze it. The results of the study showed that successive births have an effect on the degree of anxiety. It was noted that the level of anxiety among primiparous women is higher than among women who have given birth repeatedly. The anxiety was the result of the mother's fear for her psychological and physical health.

In O'Connell's study (2021), which showed that the effect of pharmacological interventions on women with severe fear of pregnancy and childbirth has no laboratory-confirmed role in reducing the risks of pregnancy phobia, or reducing fear of childbirth clinically, and there may be a slight difference in reducing the rate of depression, which should be future trials to qualify women to be satisfied with pregnancy and childbirth.

As for Otorepec (2022), his study showed that tocophobia is a condition that has acute and chronic effects on the psychological health of the mother and children, and can cause not only psychological symptoms, but also mental and physical symptoms, which requires a clear plan to care for the woman and alleviate her fears.

This study aims to identify the risks of pregnancy phobia on the mother's psychological health and marital relationship.

Study Problem and Questions

A woman is overwhelmed with happiness when she confirms her pregnancy, but it does not last long, as she begins to experience severe mood swings, including pregnancy phobia, and studies have confirmed this, including O'Connell, 2019; Habek, 2020; Najafi, et al, 2021; Kanellopoulos & Gourounti, 2022), Since the majority of students at the Faculty of Educational Sciences at Jerash University are female, and there is diversity in their academic degrees, scientific backgrounds, and cultural diversity of their social environments. And because the researcher was assigned by the Dean of the Faculty as a psychological advisor for female students, and in her capacity as a faculty member in educational psychology, and she also communicates with female students through lectures, She noticed many difficulties and psychological problems facing female students, especially mothers. Motherhood is difficult with the ambition to achieve an educational dream. Therefore, many awareness lectures were given, through which the researcher decided to conduct this study to identify the risks of pregnancy phobia in light of the variables of the study sample. Accordingly, this study comes in an attempt to answer the following two questions:

- 1- What are the risks of pregnancy phobia on the mother's psychological health and marital relationship from the point of view of female students of the Faculty of Educational Sciences at Jerash University?
- 2- Are there statistically significant differences at the significance level ($\alpha = 0.05$) between the mean scores of the assessment?

The study sample

Is attributed to the variables of the study program: Bachelor's, Postgraduate studies, Place of residence: City, countryside, Social status: Single, married, divorced?

Study objectives: This study came to achieve the following objectives:

- To identify the degree of appreciation of female students of the Faculty of Educational Sciences at Jerash University for the risks of pregnancy phobia on the mother's psychological health and marital relationship?
- To verify the differences between the appreciation of female students of the Faculty of Educational Sciences at Jerash University for the risks of pregnancy phobia on the

mother's psychological health and marital relationship, which are attributed to the variables of the study program: Bachelor's, postgraduate studies, place of residence: city, countryside, social status: single, married, divorced.

Importance of the study:

The study has two importance: theoretical and applied, which are:

Theoretical importance: This is represented by:

- This study is a response to the recommendations of many mental health conferences.
- Enriching the theoretical framework of educational psychology with the risks of pregnancy phobia on the mother's mental health and marital relationship
- The results of this study will be a starting point for other studies at other educational stages.

Practical Importance: It is represented by:

- This study provides a tool to measure the degree of appreciation of the students of the Faculty of Educational Sciences at Jerash University

of the risks of pregnancy phobia on the mother's mental health and marital relationship.

- Providing the students of the Faculty of Educational Sciences at Jerash University with an applied system for the risks of pregnancy phobia

on the mother's mental health and marital relationship.

- The results of this study help those in charge of preparing preventive educational programs for the risks of pregnancy phobia

on the mother's mental health and marital relationship.

- Providing feedback to supervisors of educational institutions and mental health centers on the diagnosis

of the students of the Faculty of Educational Sciences at Jerash University of the risks of pregnancy phobia on the mother's mental health and marital relationship.

Study terms and operational definitions:

Tocophobia is a "condition that has acute and chronic effects on the health of mothers and children, and can cause not only psychological but also physical illnesses and requires a clear plan for the care of the woman and her specific concerns" (Otošević, 2022, 9).

It is **operationally** defined as the emotional state that may lead a woman to avoid pregnancy and childbirth from the point of view of the students of the Faculty of Educational Sciences, and is measured by the total score obtained by the students of the Faculty of Educational Sciences on the scale used in the current study in the second semester of the academic year 2023/2024.

Study limits and limitations

Objective limit: The risks of pregnancy phobia on the mother's mental health and marital relationship

Human limit: Students of the College of Educational Sciences

Spatial limit: The study was conducted at the College of Educational Sciences at Jerash University

Time limit: The study was conducted in the second semester of the academic year 2023/2024.

As for the study determinants,

The generalization of the study results depends on each of the following:

- The study sample's response to the study tool according to what it was prepared for.
- The psychometric characteristics of the validity and reliability of the study tool.
- Proceeding with the study procedures according to the plan prepared for that.

Study Methodology:

The descriptive survey method was used, due to its suitability to the objectives and nature of the study.

Study Community:

The study community consisted of all female students of the Faculty of Educational Sciences at Jerash University, numbering (540) students, including (421) students in the bachelor's program, and (119) students in the graduate studies program according to the statistics of the University's Admissions and Registration Department for the academic year 2023-2024.

Study Sample:

The study tool was distributed to a sample of (181) female students from the Faculty of Educational Sciences at Jerash University, who were selected by simple random method, then retrieved, and after examining the retrieved questionnaires, it was found that there were (3) questionnaires with incomplete data, so they were dropped, leaving (178) questionnaires valid for analysis at a rate of approximately (33%) of the study community, and Table (1) shows the distribution of sample members according to the study variables.

Table (1). Frequencies and percentages according to study variables

The ratio	Repetition	Categories	variable
%48	86	Master	dy the stu program
%52	92	Bachelor	
%34	61	Urban	Address
%66	117	Rural	
%63	113	Single	marital status
%21	38	married	
%15	27	Divorced	
%100	178	Total	

Study tool: The study used the questionnaire as a tool to collect data related to the study objectives. The researcher developed the questionnaire by referring to educational literature and previous studies related to the study topic, such as the study

of (O'Connell, 2019; Habek, 2020; Kanellopoulos & Gourounti, 2022). The tool consisted of two parts:

The first included the personal information of the study sample, the study program, place of residence, and social status, and the second related to paragraphs on the risks of pregnancy phobia on the mother's psychological health and marital relationship from the point of view of female students of the Faculty of Educational Sciences at Jerash University. It included (15) paragraphs. The paragraphs related to the study were placed in the form of a five-point Likert scale, consisting of five degrees (1-5), which is a categorical scale that determines the degree of the respondent, from the point of view of the study sample members on each paragraph of the tool, and converted into quantitative data that can be measured statistically, and were given the relative weights shown as follows: with a very high degree (5), with a high degree (4), with a medium degree (3), with a low degree and (two degrees), with a very low degree and (one degree), and then converted into a three-point scale.

Validity of the tool:

To verify the validity of the study tool, two types of procedures were used: First: Content validity; where the tool was presented in its initial form, consisting of (17) paragraphs, to a number of arbitrators, numbering (8) arbitrators, with experience and specialization in educational psychology, sociology, general curricula and teaching, measurement and evaluation, and supervisors in maternity and family health centers, and they were asked to judge the clarity of the wording of the paragraphs, their suitability for what they will measure, and to provide any suggestions for developing the questionnaire. The arbitrators made many observations, represented by proposing some paragraphs, deleting some, merging some, and reformulating others. It took its final form consisting of (15) paragraphs for the second part. The researcher relied on the consensus of (80%) of the arbitrators who indicated the paragraphs to be modified, and they were modified, taking into account some of the distinguished individual suggestions.

Second: Construct validity; to extract the indications of the construct validity of the scale, the correlation coefficients of the paragraph with the total score of the scale were extracted in a survey sample from outside the study sample consisting of (20) female students, as the correlation coefficient here represents an indication of validity for each paragraph in the form of a correlation coefficient between each paragraph and the total score. It is worth noting that all the correlation coefficients had acceptable degrees and were statistically significant, and therefore none of them were deleted.

Analysis and discussion of results

Results related to the first study question: What are the risks of pregnancy phobia on the mother's psychological health and marital relationship

From the point of view of female students of the Faculty of Educational Sciences at Jerash University? To answer this question, the arithmetic means and standard deviations of the risks of pregnancy phobia on the mother's psychological health and marital relationship were extracted, and Table (1) shows that.

Table (1). Arithmetic means and standard deviations of the risks of pregnancy phobia on the mother's psychological health and marital relationship

Degree	Standard deviation	Mean	Paragraph	Number	Rank
High	0.785	4.52	I want to have a cesarean section to avoid the risks of a natural birth.	1	1
High	0.741	4.49	The severe pain during pregnancy and childbirth makes me postpone the idea of having children	4	2
High	0.684	4.44	For depression and anxiety during pregnancy and after childbirth	5	3
High	0.847	4.35	Fear of medical complications during pregnancy or childbirth	12	4
High	0.914	4.27	Staying away from marital relations for long periods	13	5
High	0.689	4.19	Severe stress and anxiety between spouses during pregnancy	14	6
High	0.778	4.11	Extra financial costs in pregnancy and childbirth expenses	7	7
High	0.935	4.01	Baby's aversion to breastfeeding	8	8
High	0.669	3.98	Diseases associated with artificial feeding	9	9
High	0.731	3.95	Nervousness and conflict between spouses during the period of separation in pregnancy and childbirth	15	10
High	0.823	3.91	Severe pain of unexpected miscarriage	10	11
High	0.916	3.88	Pregnancy and childbirth harassment of mothers working outside the home	2	12
High	0.763	3.84	Changes in the mother's appearance and body shape during pregnancy	3	13
High	0.624	3.78	For social isolation of the mother in participating in events during pregnancy	6	14
High	0.891	3.71	Forced neglect of pregnant women in doing housework	11	15
High	0.266	4.09	The tool as a whole		

Table (1) shows that the arithmetic mean of the tool as a whole was (4.09) with a high degree of appreciation. This may be attributed to the study sample's belief that the mother's pregnancy experience is full of challenges, due to some fears during pregnancy, and because she will be exposed to major changes in the body that she cannot fully control during pregnancy. In addition, the constant mood swings, fatigue, anxiety, exhaustion, depression and disorders affect her psychological state. These

fears may affect the pregnant woman's psyche and lead to the woman's reluctance to become pregnant and not wanting to have children. This result is consistent with the results of the study by Ford Sham (2019), whose results confirm that the phenomenon of pregnancy phobia is high among women in general, and with the study by Donel (2019, Donel) that Swedish and Estonian women suffer from pregnancy phobia to a high degree.

As for the paragraphs, they came between (3.71-4.52), where paragraph (1) came in first place, which states "I want a cesarean section to avoid the risks of natural birth" with an arithmetic mean of (4.52), and a high degree. The cesarean section may be attributed to the existence of reasons that prevent natural birth due to its risks, including: the position of the fetus and the location of its head, the health of the fetus, the health of the mother such as high or low blood pressure, blood sugar, the narrowing of the uterus on the fetus, and severe bleeding during natural birth, which may lead to hysterectomy, which may make the mother want a cesarean section.

Paragraph (4) came in second place, which states, "Severe pain during pregnancy and childbirth pushes me to postpone the idea of having children," with an arithmetic mean of (4.49), and a high degree. The fear of pregnancy risks may be attributed to the continuous and severe pain in the lower abdomen and lower back during pregnancy in the first months and until childbirth, as well as the high levels of hormones in the pregnant woman's body, which leads to intestinal disorders, nausea, blurred vision, and severe bleeding during and after childbirth.

In the penultimate place came paragraph (6), which states "the mother's social isolation in participating in events during pregnancy," with an arithmetic mean of (3.78), and a high degree. This may be attributed to the study sample's belief that social isolation tends to isolate the pregnant woman, hiding from people's eyes with her new body, avoiding their precise questions about her pregnancy and the date of birth. However, this paragraph came later than the rest of the previous paragraphs in the risks of pregnancy phobia, as the social presence of women is necessary in family social events.

While paragraph (11) and its text "forced neglect of the pregnant woman in doing housework" came in last place with an arithmetic mean of (3.71), and a high degree, this may be attributed to the increase in some conditions of pregnant women working in housework, such as the risk of complications during pregnancy, the risk of premature birth, or miscarriage. However, the study sample sees the importance of risks in pregnancy phobia, but it is the least dangerous paragraph in the tool, since the nature of women makes it impossible to prevent them from doing their housework, so it came in last place.

Displaying the results related to the second study question:

Are there statistically significant differences at the significance level ($\alpha = 0.05$) between the averages of the study sample's assessment score attributed to the variables of the academic program: Bachelor's, postgraduate studies, place of residence: city, rural, social status: single, married, divorced?

To answer this question, the arithmetic means and standard deviations of the degree of risks of pregnancy phobia on the mother's psychological health and marital relationship were extracted from the point of view of the students of the Faculty of Educational Sciences at Jerash University according to the variables of the study program, place of residence, and social status. To show the statistical differences between the arithmetic means, the "t" test was used for the effect of the study program

and place of residence, while the one-way analysis of variance was used for the effect of the social status, and the tables below illustrate this.

First: The study program

Table (2). Arithmetic means, standard deviations and “t” test for the effect of the study program on the degree of risks of pregnancy phobia on the mother’s psychological health and marital relationship from the point of view of female students of the Faculty of Educational Sciences at the University

Statistical significance	degrees of freedom	value of "t"	standard deviation	Mean	Number	the study T program
.119	88	1.576	.704	3.43	92	Bachelor
			1.043	3.12	86	High studies

Table (4) shows that there are no statistically significant differences ($\alpha=0.05$) attributed to the effect of the educational program. This may be attributed to the fact that the state of fear of pregnancy and childbirth is a single innate tendency in women, regardless of the difference in levels of the educational program to which they belong.

Second: Place of residence

Table (3). Arithmetic means, standard deviations and “t” test for the effect of place of residence on the degree of risks of pregnancy phobia on the mother’s mental health and marital relationship from the point of view of female students of the Faculty of Educational Sciences at Jerash University

Statistical significance	Freedom degree	T value	Stranded division	Mean	Numer	Address
.388	88	-.867	.892	3.19	61	Urban
			.951	3.35	117	Rural

Table (3) shows that there are no statistically significant differences ($\alpha=0.05$) attributed to the effect of place of residence. This may be attributed to the fact that academic mixing in one college leads to the harmony of social culture around a common topic that the study sample deals with with interest. Thus, there were no differences between the sample members.

Third: material status

Table (4). Arithmetic means and standard deviations of the degree of estimation of the students of the Faculty of Educational Sciences at Jerash University of the risks of pregnancy phobia on the mother’s psychological health and marital relationship according to social status

standerd division	Mean	Number	Materiel status
.904	3.51	113	Single
.979	3.16	38	Marred
.786	2.96	27	Divorced
.916	3.26	178	Total

Table (4) shows an apparent variation in the arithmetic means and standard deviations of the degree of estimation of the students of the Faculty of Educational Sciences at Jerash University of the risks of pregnancy phobia on the mother's psychological health and marital relationship due to the difference in the categories of the social status variable. To show the significance of the statistical differences between the arithmetic means, one-way analysis of variance was used according to Table (5).

Table (5). One-way analysis of variance for the effect of marital status on the assessment of female students of the Faculty of Educational Sciences at Jerash University of the risks of pregnancy phobia on the mother's psychological health and marital relationship

الدلالة الإحصائية	value f	Mean squares	degrees of freedom	sum of squares	Source
.050	3.111	2.493	2	4.986	Between groups
		.801	87	69.702	Within groups
			89	74.688	Total

Table (5) shows that there are statistically significant differences at the significance level ($\alpha=0.05$) attributed to the effect of the social status variable. To show the statistically significant marital differences between the arithmetic means, post-hoc comparisons were used using the Scheffe method, as shown in Table (6).

Table (6) Scheffe post-test comparisons of the effect of social status on the assessment of female students of the Faculty of Educational Sciences at Jerash University of the risks of pregnancy phobia on the mother's psychological health and marital relationship

More than 10 years	years 10-5	Less than 5 years	Mean	
			3.51	Single
		*.351	3.16	Marred
	.198	*.549	2.96	Divorced

* Significant at the significance level ($\alpha=0.05$).

Table (8) shows that there are statistically significant differences ($\alpha=0.05$) between single women on the one hand and married and divorced women on the other hand, and the differences were in favor of single women. This may be attributed to the fact that girls are more sensitive and fearful of the risks of pregnancy than married and divorced women, due to two reasons, the first of which is early marriage, as their lives are more exposed to domestic violence and the likelihood of them remaining stable with their husbands is less, whether during pregnancy or childbirth and beyond, and they are also less able to defend themselves and less able to get rid of abusive relationships.

Second: Spinsterhood: The later the age of marriage for a single girl, the more significant the indicator that she has grown older and the eggs grow with her, which leads to an increased likelihood of giving birth to Down syndrome children, especially

after the age of forty. Winter (2018) indicated that one of the characteristics of women with pregnancy phobia is the mother's advanced age, exceeding (40) years. Also, the girl's advanced age may lead to her contracting diseases, including high blood pressure during pregnancy, which is called preeclampsia, which poses a risk to both the mother and the fetus, and the weakness of her physical structure in nourishing the fetus during pregnancy. The results of this study agree with the results of the study by Sioma et al. (2017) that virgin girls have a higher level of anxiety towards pregnancy phobia than other women.

Recommendations

In light of the study results, the researcher recommends the following:

- Including in school curricula and university courses study units on the virtues of pregnancy, motherhood and their psychological health
- Raising awareness among women about the safety of balanced movement for pregnant women in performing their household chores due to its importance to their physical and psychological health.
- Preparing educational brochures provided by family care institutions to help women with pregnancy and motherhood health.

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