Effect of Personality Traits of Pregnant Women on their Ways of Coping with Fear of Childbirth

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1.ABSTRACT

Background: Fear of childbirth may be influenced by a pregnant woman's personality traits and coping mechanisms. Aim: The study aimed to assess effect of personality traits of pregnant women on their ways of coping with fear of childbirth. **Design:** A descriptive study was utilized. **Subjects**: A purposive sample of 197 pregnant women. **Setting:** The study was conducted at Antenatal clinic in the Obstetrics and Gynecology Center in Zaafaran Village, affiliated to Hamul Health Sector at Kafr Al Shiekh Governorate, Egypt. **Tools**: Structured Interview Questionnaire, Big Five Factors of personality Scale, Inventory for Coping with Stress Attitudes and Childbirth Attitudes Questionnaire. **Results:** Agreeableness was the most common personality trait among pregnant women followed by openness to experience. More than two thirds of them had moderate fear of childbirth. All pregnant women were always look for a stronger connection with Allah, engage in religious activities and were never use medications to cope with fear of childbirth. Also, nearly four fifth of them talk to someone to find out more about the situation. **Conclusion**: The present study results concluded that there was a highly statistically significant negative correlation found between personality traits and ways of coping with childbirth fear among pregnant women. **Recommendations:** Undertaking information, education and communication programs to increase awareness of the women about personality traits and its effect on fear of childbirth as well as coping ways with that fear.

Keywords: Childbirth, Coping, Fear, Personality traits.

2.Introduction:

The period of a woman's life during her pregnancy is incredibly significant and meaningful. The changes occurring during pregnancy journey concerns not only the fetal growth but also primarily the woman's body's adjustment to parenting (**Baran et. al., 2022**). The perinatal experiences can be positive and hopeful for many women, but it can also be unsettling and terrifying for others. Anxiety-related illnesses are among the variety of mental health difficulties a woman may encounter throughout the perinatal period (**Slade et. al., 2021**). Pregnancy and childbirth are very memorable experiences for a woman (**Meiranny & Wulandari, 2022**).

The pregnancy process should be evaluated biologically, physiologically, and socially. The development of delivery anxiety may be influenced by biological, psychological, and social factors. While labor pain is among biological causes, the personality characteristics of the pregnant woman, previous traumatic events, and social causes are among the psychological causes **Elif et. al., (2022).** Negative prior birth experiences are the root of secondary childbirth fear. Negative thoughts, due to the fear of birth, an unpleasant birth experiences might result from pregnancy Sak et. al. (2022) & Ringqvist et. al. (2022).

Labor pain is an experience that is part of a natural process, occurs in a limited time, is perceived and experienced differently by every woman. The health of the mother and fetus is negatively impacted by labor pain, despite being a physiological and natural procedure when the pain is not adequately managed (Akbaş et. al., 2022). Most women consider giving birth to be a major event in their lives. The process of giving birth is unpredictable, out of our control, generally regarded as traumatic (Žigić Antić et. al., 2019).

One of the main issues throughout pregnancy and the postpartum period is fear of giving birth that affects women's health (Mousavi et. al., 2022). Fear of childbirth (FoC) affects as many as 20% of pregnant people, they are linked to premature birth, labor that lasts a long time, and a higher risk of both emergency and elective caesarean delivery, poor maternal mental health and poor maternal-infant bonding. The childbirthrelated fears of pregnant women are not adequately measured by the current assessments of birthing phobia (Fairbrother et. al., 2022).

Bio-psycho-social-cultural-variables

combine to form an individual's personality. Personality is an important variable that affects the quality of life and well-being of an individual. Each person's personality qualities are distinctive and set them apart from other people. Individuals respond to the events they experience based on their personality traits, and determine the methods of coping with these events. Additionally, personality traits have been linked to a pregnant woman's psychological well-being (**Baştarcan & Oskay, 2022**).

Coping is another factor that contributes to major depressive disorder. Coping methods may also affect the continuation of psychotic symptoms and potential emergence of clinical psychotic illnesses. Individuals who used dysfunctional coping strategies more often were also at a higher risk of being diagnosed with major depressive disorder. Because personality traits and coping mechanisms are so closely related, it is crucial to take them into account during the diagnostic process (Ho et. al., 2022).

It is generally recognized that personal traits may influence a person's susceptibility to and use of non-adaptive coping mechanisms when dealing with a variety of diseases, including pain problems (Galvez-Sánchez & Montoro Aguilar, 2022). Several women expressed worry about their ability to handle childbirth and worries about their baby being harmed during the delivery process. Several parental courses have been shown to be effective, including the 'Circle of Security', a training technique designed to help mothers deal with motherhood and adapt to their kids better (Johnsen et. al., 2022).

Active coping, planning, acceptance, positive reframing, and seeking emotional support are a few examples of coping techniques. When under stress, pregnant women may prefer an effective coping mechanism. Dysfunctional coping mechanisms, such as self-blame and behavioral disengagement, might be a key sign that someone needs psychological counseling to enhance their quality of life (Micińska et. al., 2022).

2.1Significance of the study

Fear of childbirth is a widespread issue that negatively affects the experience of giving birth. Fear of childbirth affects between 20% and 80% of pregnant women in varying degrees, and it's prevalence has grown over time. Around 25% of pregnant women experience severe levels of fear of childbirth (Erdemoğlu, Altıparmak, & Özşahin, 2019). Also, between 18 and 31% of pregnant women report having moderate childbirth fear, and between 2 and 11% report having severe childbirth fear (Mortazavi & Agah, 2018).

To enhance pregnant women's level of fear of childbirth and it's detrimental effects on maternal-fetal health, it is crucial to identify their unfavorable personality traits and inadequate coping skills ((Erdemoğlu, Altıparmak, & Özşahin, 2019)

Therefore, by determining pregnant women's negative personality traits and their poor coping abilities are important to decrease their level of FoC, and it's negative consequences on maternal-fetal health. There were limited studies conducted about this topic in Egypt so, the researcher decided to carry out this study.

2.2Study Aim

The current study aimed to assess effect of personality traits of pregnant women on their ways of coping with fear of childbirth.

2.3Research questions

- What are personality traits of pregnant women?
- What is the level of childbirth fear among pregnant women?
- What are the ways of coping of pregnant women with fear of childbirth?
- Are personality traits of pregnant women affecting their ways of coping with fear of childbirth?

3.Method

3.1Study Design

A descriptive crossectional study design was utilized to achieve the aim of this study. It is an observational study in which the condition and potentially related factors are measured at a specific point of time for a defined population.

3.2Study Setting

The study was conducted at Antenatal clinic in the Obstetrics and Gynecology Center in Zaafaran Village, affiliated to Hamul Health Sector. It is located at the first floor and it consists of 2 waiting hall with approximately 30 chairs, laboratory and 12 rooms. One of them for 4D ultrasound. The antenatal clinic is opening daily from Saturday to Wednesday from 9 am to 2 pm. There are between 25-35 follow up women weekly and from 5-10 new cases every week.

3.3Sample type:

A purposive sample was used.

3.4Study sample:

The study sample included197 pregnant women who participated in the study sample for 6 month's period from beginning of October 2020 to end of March 2021 of data gathering who were planning a normal delivery throughout the third trimester of pregnancy, did not have history of cesarean section. or pregnancy related complications and free from psychological disorders and did not have psychological medications.

3.5Sample size calculation:

The current study included197 pregnant women based on data from literature. The sample size was estimated using the following formula, using a threshold of significance of 5% and a power of study of 80%, using data from the literature:

 $[(Z1-\alpha/2)2.SD2]/d2=$ sample size. Where, $Z1-\alpha/2 =$ is the standard normal variation, at 5% type 1 error (p<0.05) it is 1.96. SD = standard deviation of variable. d = absolute error or precision. So, Sample size = [(1.96)2. (23.6) 2]/(3.3)2 = 196.5. The sample size required for the study is 197, based on the above formula.

3.6Tools of data collection:

Four tools were used for data collection:

Tool I: A Structured Interview Questionnaire: It was designed by the researcher after reviewing the related literatures and consisted of two parts:

Part (1): Socio- demographic data of pregnant women such as age, level of education, occupation, residence, income....etc.

Part (2): Obstetric data of pregnant women such as gestational age, gravidity, parity, etc.

Tool II: Big Five Factors of personality Scale (BFFPS): It was adopted from Costa & McCrae (1992) this scale included (56) sentences It was used to measure five personality traits, including neuroticism had (12) sentences as (anxiety, anger& hostility...etc), Extraversion included(11)sentences as (warmth, gregariousness & assertiveness...etc), Openness to experience included (11)sentences as (fantasy, aesthetics & feelings...etc), Agreeableness included(11)sentences as (trust, straightforwardness & altruism...etc) & Conscientiousness included (11) sentences as (competence & dutifulness...etc). The scale had five point likert scale (1= never apply, 2 =little apply, 3 = sometimes apply, 4 = frequently apply, 5 = always apply) for positive sentences, while the reversed scores were calculated for the negative

ones.

III: Childbirth Attitudes Tool **Ouestionnaire (CAO)**: It was adopted from Lowe (2000) to assess level of childbirth fear. It consisted of 16 items such as (afraid of giving birth) (fear of painful labor contractions....etc). Sum scores ranged from 16 to 64, with higher scores reflecting a greater degree of fear of childbirth. Every item was answered with a 4-point scale (1 = no fear, 2 =mild fear, 3 = moderate fear, 4 = high fear) was used to rate each item. Low fear was defined as a score of 32 or less, moderate fear was defined as a score of 33 to 48, and high fear was defined as a score of 48 or more.

Tool VI: Inventory for Coping with Stress Attitudes (ICSA): It was adopted from Ozbay (1993) and had six sub-dimensions. These were incline towards religion as (look for a stronger connection with Allah. Engage in religious activities.....etc). On a 5-point Likert scale from 0 to 4) (Never = 0, Rarely = 1, Sometimes = 2, Frequently = 3 & Always = 4. Total score ranged from 6 to 24; higher score indicated higher use. The total coping score was bad if 12, moderate if 13-24 and good if 24.

3.7Validity of the tools

Content validity of data collection tools were tested and juried for their validity by five specialists as Prof / Mohammad Kamal Senna professor of Rheumatology and Rehabilitation faculty of medicine and in the field of woman's health and midwifery nursing by Assist Prof / Samia Ibrahim, Assist Prof / Amal Yousif Ahmed, Assist Prof / Eman A.Fadel and Assist Prof / Ahlam Mohammed Goda and the recommended modifications were done, such as the deleting of the phrase (using alcohol to cope with fear of childbirth) & the rephrasing of some sentences.

3.8Reliability of tools

Internal consistency and a reliability coefficient (Cronbach's alpha) of the components of the questionnaire tested by SPSS software. Cronbach's alpha for Big Five Factors of personality Scale was (0.860), for Inventory for Coping with Stress Attitudes was (0.917) and for childbirth attitude Questionnaire was (0.878). So, the tools were reliable.

3.9Pilot Study

A pilot study was conducted on 20 pregnant women (10 % from the sample size). The pilot study was used to test the study tools for clarity and applicability, as well as their feasibility, objectivity, and consistency, as well as to identify ambiguity in the study tools and check that the questions had the intended meaning.

3.10Fieldwork

- After obtaining the informed consent of the director of Zaafaran Unit affiliated to Hamul Health Sector, data collection lasted 6 months (from October 2020 to the end of March 2021).
- The researcher visited the health unit three days a week. (Saturday, Sunday & Tuesday) from 9 a.m. to 2 p.m. There were about 30 women per day at the clinic.
- The researcher introduced herself and described the study's objectives. Each woman was interviewed separately by the researcher. for about 30-45minutes to collect data as (socio-demographic, obstetric history, personality traits, fear of childbirth and ways of coping) by previously mentioned tools among 197pregnant women.
- Every participant was given the option to voluntarily leave the event, as well as the right to privacy and confidentiality.
- The researcher assessed their personality traits effect on their ways of coping with fear of childbirth as mentioned before in tool II by asking pregnant woman and recording her answers in the data collection sheet.
- At the end of data collection, the total number of pregnant women was 197.

3.11Data analysis:

The outcomes of the data analysis were displayed as descriptive outcomes in the forms of frequency and percentage, as well as mean and standard deviation. The Chi-square test (x2) was employed to look at how category variables related to one another. The correlations were statistically significant at p value ≥ 0.05 , and it was highly statistically significant at p value 0.001.

3.12Ethical Considerations

Pregnant women were asked for written agreement after receiving approval in writing from the Faculty of Nursing at Mansoura University's Research Ethics Committee and receiving an official letter from the head of Antenatal Clinic in the Obstetrics and Gynecology Center in Zaafaran Village affiliated to Hamul Health Sector Kafr Al Shiekh Governorate, Egypt, after defining the study's purpose. Each participant was given the option to leave the study at any time, and their confidentiality and privacy were guaranteed. The results of the study will be made public and everyone will gain from them.

4.Results:

Table (1): Shows that (66.5%) of the pregnant women aged from 20-29 yrs. with mean (25.5 \pm 4.9). Also, (66%) of them have high school education, (80.2%) of pregnant women are housewives. (87.8%) of pregnant women have enough income. (33.5%) of them are from urban area.

Table (2): Shows that (51.3%, 68.5% &70.6% respectively) of pregnant women never feel inferior compared to others, feel tired and listless if things get worse and feel hopeless and helpless. (48.7%, 49.7%, 58.9% & 62.9%, respectively) of pregnant women sometimes be considered very tense and nervous persons, feel like nerves have collapsed, under tremendous pressure, treatment of others provokes the feel of worthless & get angry at the way of treatment. Also, (61.4%, 65.5%, 66.0%, 68.5% & 70.1%, respectively) of them frequently feel ashamed prevents participation in many activities, hardly feel sluggish or depressed, not an anxious person, rarely upset, sad and concerned and hardly ever feel afraid.

Table (3): Shows that (55.3% and 87.8%, respectively) of pregnant women never be considered an annoying person and never pessimism prevails in life. Also, (41.6%, 48.2% & 76.6% respectively) of them sometimes easy to smile and respond to a joke, be described as a cheerful, and energetic person and overcome vitality and activity in movements, conversations, and performance of work. (48.7%, 49.7%, 58.4% & 63.5% respectively) frequently feel pleasure when others share their talk, be surrounded by others, achieve better without supervision of others and complete work on their own and without assistance.

Table (4): Shows that (71.6%, 76.6% & 85.8%, respectively) of pregnant women never rely on ready-made judgments to judge things, spend most of time in reading and in studying and find pleasure in meditating and in delving into philosophical issues. (44.2%, 47.7% & 66.0%, respectively) of them sometimes see beauty in things that others can't see, think that arguing and opinions are a waste of truth and time and resorting to imagination and meditation is a waste of time. Also, (42.1% & 65.0%, respectively) of them

frequently not be affected by the poetry and not taste it's meanings and mood rarely changes with the change of weather.

Table (5): Shows that (61.4% & 72.6%), respectively) of pregnant women never be described by others as cold and never use any means to get what is wanted. (50.3%) of pregnant women sometimes keen to clarify point of view on many topics. (61.4%, 67.5% & 72.6%), respectively) of pregnant women frequently tend to cooperate with others rather than clash with them, avoid hurting the feelings of others and honestly try to be friendly.

Table (6): Shows that (76.6%, 83.8%, 84.8% & 88.8%, respectively) of pregnant women never not a disciplined person, never strive to complete their duties diligently and conscientiously, not care much for arranging and for organizing what is around and not be depended on or trusted. (54.3%) of pregnant women sometimes keen to achieve goals and ambitions according to prior plans. (65.5%, 76.6%, 77.7% & 79.7%, respectively) of pregnant women frequently do not leave started job until finish, strive to have things tidy, clean and in their place, strive with all energies to achieve goals, keen to complete work with perfection, accuracy and efficiency and are pushed to do work diligently and on time.

Table (7): Shows that all pregnant women (100.0%) always look for a stronger connection with Allah, engage in religious activities and never use medications to cope. (52.3% &78.7%, respectively) of pregnant women always try to get emotional support from friends & talk to someone to find out more about the situation. (32.5%, 33.5% & 48.7%, respectively) of them frequently turn to work or other substitute activities to take mind off things, try to feel better & try to see things from the other person's point of view. Also, (41.1%, 43.1% & 45.2%, respectively) of pregnant women sometimes learn to live with it, make a plan of action and follow it & accept the reality of the fact that it happened.

Table (8): Shows that there was a highly statistically significant negative correlation found between personality traits and both ways of coping and fear of childbirth among pregnant women.

Figure (1): Shows that (66.0%) of pregnant women have moderate fear, (19.3%) of them have high fear, while (14.7%) have low fear.

5.Discussion

The present study was conducted to assess effect of personality traits of pregnant women on their ways of coping with fear of childbirth. The study research questions were answered by the study findings.

Regarding personality traits of pregnant women, in terms of (Neuroticism), the current study results found that less than two thirds of pregnant women were never feel inferior compared to others, this may be due to they wanted to build their own lives supported by their husbands as well as their families.

These study findings were supported by **Conrad & Trachtenberg (2021)** who studied personality traits, childbirth expectations, and childbirth experiences in USA that shows more than two thirds of pregnant women hardly feel sluggish or depressed, not an anxious person, rarely upset.

While the present study results were in disagreement with **Okten et. al. (2022)** in their study about the role of personality traits on mode of delivery conducted in Turkey and reported that more than three quarters of pregnant women, were hardly feel sluggish or depressed, not an anxious person, rarely upset.

Regarding personality traits of pregnant women, in terms of extroversion, The current study's findings revealed that more than half of pregnant women were never be considered an annoying person, this may be attributed to their increased expectation of positive events.

The present study results were in agreement with **Khooban et. al. (2021)** who conducted a study comparing the personality traits and childbirth-related beliefs of two groups of women undergoing vaginal delivery and cesarean section in Iran and reported that more than two fifth of pregnant women were sometimes easy to smile and respond to a joke. The researcher interpreted this to the presence of great emotional support from relatives and friends.

While, contradictory results reported by Uludağ et al. (2022) about gender roles and personality traits as predictive factors for fear of childbirth conducted in Turkey that more than four fifth of pregnant women were never be considered an annoying person and more than two thirds of them were never pessimism prevails in life. This may be due to the presence of great emotional support from friends and relatives.

Regarding personality traits of pregnant women, in terms of openness to experience, findings of the present study revealed that more than two fifth of pregnant women were frequently not be affected by the poetry and not taste its meanings this is because they may have a more realistic view of their lives.

These results were in agreement with the study conducted by **Gupta (2017)** who stated in their study birth order and personality conducted in India and stated that more than two fifth of pregnant women were frequently not be affected by the poetry and not tasting its meanings. This may be due to their attention to work that takes most of their time.

While, contradictory results reported by **Conrad & Stricker (2018)** in their study personality and labor: a retrospective study of the relationship between personality traits and birthing experiences conducted in USA that more than four fifth of pregnant women were frequently not be affected by the poetry and not tasting its meanings. This may be due to different traditions and habits of American people.

Regarding personality traits of pregnant women, in terms of agreeableness, findings of the present study revealed that more than half of pregnant women were sometimes keen to clarify point of view on many topics, the researcher interpreted this as agreeable persons had tendency to altruism, confidence, obedience, modesty and mercifulness.

The current study's findings were consistent with the study conducted by **Uludağ et. al. (2022)** and reported that more than half of pregnant women were sometimes keen to clarify point of view on many topics. This may be related to their conviction with their point of view.

While, contradictory results reported by **Nakić et. al.(2022)** in their study the role of personality traits and delivery experience in fear of childbirth conducted in Croatia and reported that more than four fifth of pregnant women were never be described by others as cold, this may be due to that this item is mainly focused on desirability and social conformity.

Regarding personality traits of pregnant women, in terms of conscientiousness, findings of the present study reported that more than three quarters of pregnant women were never not a disciplined person. This may be due to their tendency for perfection.

Such concordance between the results of the present study and the research of **Nakić et. al.(2022)** who stated that more than three quarters of pregnant women were never not a disciplined person. This is probably affected by daily living issues.

In addition to, findings were inconsistent with **Conrad & Stricker (2018)** who revealed that only half of pregnant women strive to complete their duties diligently and conscientiously, not care much for arranging and organizing what is around, the researcher interpreted that they struggle to earn their livings.

Regarding total fear level of childbirth among pregnant women a moderate fear in more than two thirds, the researcher explained that pregnant women typically experience a little bit more anxiety due to the uncertainty of birth. Also, a high fear in nearly two fifth of pregnant women, It may be due to lack of knowledge available, these study findings were supported by **Khwepeya et. al.(2018)** who conducted a study in Malawi about childbirth fear and related factors among pregnant and postpartum women and revealed that one fifth of pregnant women had high fear. This may be due to their fear from the labor itself.

In contrast **Osman et al. (2021)** who stated in their study conducted in Egypt about primigravida women's fear of childbirth and its effect on their decision regarding mode of delivery that nearly half of pregnant women had moderate level of anxiety. This may be due to the support they received by family, husbands and gynecological staff.

Concerning pregnant women's ways of coping with fear of childbirth, the present study findings revealed that all the pregnant women were always look for a stronger connection with Allah and engage in religious activities. This may be related to their faith in Allah.

A similar study of **Lebni et al.(2021)** about causes and grounds of childbirth fear and coping strategies used by Kurdish adolescent pregnant women in Iran and reported that the women tried to get closer to Allah through religious activities and this way made them more relaxed. They also thought that women who die during childbirth were martyrs and went to heaven. This can be interpreted as many people have faith.

Inversely, the study of **Bryanton et al.** (2021) conducted in Canada about when fear surrounding childbirth leads women to request a planned cesarean birth mentioned that all women voiced that gaining control and developing a plan for their birth helped them cope with their fear, by requesting a planned cesarean birth. This may be due to prevalence of science rather than religious affairs in such countries.

Also, more than one third of pregnant women frequently turned to work or other

substitute activities to take mind off things. They may believe that work might keep them busy. Such similarity was found in a study of **Gönenç et al.** (2020) about the effect of the personality traits of pregnant women on the fear of childbirth conducted in Turkey who reported that About 25% of the women with primary infertility adopted coping mechanisms like turning to work as distractions. This may be due to their belief that getting busy is the solution.

Inversely, the present study findings were dissimilar with that of **Karabulut et al.(2018)** who opposed the current study in their study about development and assessment of a coping scale for infertile women in Turkey and reported that managing emotions is simply reflective of maintaining internal peace without engaging in any activities. The researcher explained that to the application of new normal medicine such as yoga.

Regarding correlation between ways of coping, fear of childbirth and personality traits. The current study showed that there was a highly statistically significant positive correlation found between ways of coping and fear of childbirth, while there was a highly statistically significant negative correlation found between personality traits and both ways of coping and fear of childbirth. This may be due to the more positive personality traits &coping tactics were, the less fear of childbirth was.

These study findings were in agreement with **Erdemoğlu et al.(2019)** in their study the effect of personality traits of pregnants and their ways of coping with stress on the fear of childbirth conducted in Turkey and reported that there was a highly significant correlation found between fear of childbirth & personality traits as agreeableness (kindness) and fear of childbirth. This may be related to positive personality traits.

Contrariety, **Dursun et al. (2021)** in their study the relationship between personality characteristics and fear of childbirth conducted in Turkey and reported that higher degrees of neuroticism were strongly connected with higher levels of fear of childbirth. This may be due to pressure of daily life concerns.

Also, the present study findings were dissimilar with that of **Voogand et al. (2020)** in their study the relationship between fear of childbirth and sense of coherence in women expecting their first child conducted in Sweden who reported that consistent outcome expectancies for childbirth were unrelated to childbirth fears. This may be due to that mothers hoped to have another chance with the new childbirth.

6.Conclusion

Based on the study findings, the most common personality trait of pregnant women was agreeableness followed by openness to experience. All pregnant women were always look for a stronger connection with Allah, engage in religious activities and were never use medications to cope with fear of childbirth. There was a highly statistically significant negative correlation found between personality traits and both ways of coping and fear of childbirth.

7. Recommendations:

Undertaking information, education and communication programs to increase awareness of the women about personality traits and its effect on fear of childbirth as well as coping ways with that fear

Further studies are recommended to:

- Understanding effect of personality traits of women on psychological condition during pregnancy.
- Qualitative study is required to Understand the effect of personality traits of pregnant women on their ways of coping with fear of childbirth..

8.Acknowledgement:

In order to finish this work, the researcher sincerely thanks and appreciates all pregnant women who took part in it.

9.Conflicts of Interest Disclosure

Nothing the writers wish to declare.

10.References

- Akbaş P, Özkan Şat S, Yaman Sözbir Ş. (2022).The Effect of Holistic Birth Support Strategies on Coping With Labor Pain, Birth Satisfaction, and Fear of Childbirth: A Randomized, Triple-Blind, Controlled Trial. Clinical Nursing Research.;31(7):1352-1361.
- Baran J, Pop T, Sieńko J, Leszczak J, Ozimek M, Waraksa E. (2022). Effect of physical activity on low back pain in pregnant women. Journal of Kinesiology and Exercise Sciences.;32(97):35-44.
- BaŞTarcan Ç, Oskay Ü. (2019). The Relationship of Personality Traits on the Levels of Anxiety and Depression During Pregnancy. Black Sea Journal of Health Science. 5(2), 180-187.

- Bryanton, J., Beck, C. T., & Morrison, S. (2022). When fear surrounding childbirth leads women to request a planned cesarean birth. Western Journal of Nursing Research, 44(7), 643-652.
- **Conrad, M., & Stricker, S. (2018).** Personality and labor: A retrospective study of the relationship between personality traits and birthing experiences. Journal of Reproductive and Infant Psychology, 36(1), 67-80.
- Conrad, M. S., & Trachtenberg, E. (2021). Personality traits, childbirth expectations, and childbirth experiences: a prospective study. Journal of Reproductive and Infant Psychology, 3(2),1-14.
- **Costa PT, McCrae RR. (1992).**The Five-Factor Model of Personality and Its Relevance to Personality Disorders. Journal of Personality Disorders.; 6(4), 343-395.
- **Dursun, E., Kızılırmak, A., & Mucuk, S. (2021).** The relationship between personality characteristics and fear of childbirth: A descriptive study. Archives of Psychiatric Nursing, 35(3), 296-302.
- Elif Uludağ, Esin Cerit & Yasemin Karatepe (2022). Gender roles and personality traits as predictive factors for fear of childbirth, Women & Health, 62(4), 315-324.
- Elshamaly N. (2015). Five Personality Factors Among Patient with Depression Attending Gaza Community Mental Health Center. Master Thesis, Islamic University – Gaza, Department of Psychology and Psychological Counseling. <u>https://library.iugaza.edu.ps/thesis/115163</u> .pdf accessed at 5/6/2021 12:00am.
- Erdemoğlu, Ç., Altıparmak, S., & Özşahin, Z. (2019). The effect of personality traits of pregnants and their ways of coping with stress on the fear of childbirth. The Journal of Turkish Family Physician, 10(3)118 – 161.
- Fairbrother N, Collardeau F, Albert A, Stoll K. (2022).Screening for Perinatal Anxiety Using the Childbirth Fear Questionnaire: A New Measure of Fear of Childbirth. Int J Environ Res Public Health.; 19(4), 1-23.
- Galvez-Sánchez CM, Montoro Aguilar CI.(2022).Migraine and Neuroticism: A Scoping Review. Behav Sci (Basel).;12(2):1-30.

- Gönenç, İ. M., Aker, M. N., Güven, H., & Moraloğlu Tekin, Ö. (2020). The effect of the personality traits of pregnant women on the fear of childbirth. Perspectives in psychiatric care, 56(2), 347-354.
- Gupta, T. (2017). Birth order and personality. Inter. J. Indian Psychol, 5(1), 119-125.

Ho CSH, Chua J, Tay GWN.(2022). The diagnostic and predictive potential of personality traits and coping styles in major depressive disorder. BMC Psychiatry.; 22(1), 1-12.

- Johnsen H, Juhl M, Møller BK, de Lichtenberg V. (2022).Adult Daughters of Alcoholic Parents-A Qualitative Study of These Women's Pregnancy Experiences and the Potential Implications for Antenatal Care Provision. Int J Environ Res Public Health.; 19(6), 1-16.
- Karabulut, Ö., Coşkuner Potur, D., Doğan Merih, Y., Cebeci Mutlu, S., & Karaca, A., Ünsal, G., Asik, E., Keser, I., Ankarali, H., & Merih, Y. D. (2018).Development and assessment of a coping scale for infertile women in Turkey. African Journal of Reproductive Health, 22(3), 13-23.
- Khooban, H., & Asadi Yoonesi, M. R. (2021). Comparing the Personality Traits and Childbirth-related Beliefs of Two Groups of Women undergoing Vaginal Delivery and Cesarean Section. Journal of Midwifery and Reproductive Health, 9(1), 2613-2620.
- Khwepeya, M., Lee, G. T., Chen, S. R., & Kuo, S. Y. (2018). Childbirth fear and related factors among pregnant and postpartum women in Malawi. BMC pregnancy and childbirth, 18(1), 1-10.
- Lebni, J. Y., Farahani, F. K., Solhi, M., & Azar, F. E. F. (2021). Causes and grounds of childbirth fear and coping strategies used by Kurdish adolescent pregnant women in Iran: a qualitative study. Journal of Reproduction & Infertility, 22(1), 47–56.
- Lowe NK. (2000).Self-efficacy for labor and childbirth fears in nulliparous pregnant women. Journal of Psychosomatic Obstetrics & amp; Gynecology.; 21(4), 219-224.
- Meiranny A, Wulandari RCL.(2022).Optimization Normal Delivery

through Birth Preparation Center with Enhancement Physical Readiness of Pregnant Women in Purwosari Village, Sayung District, Demak Regency. ABDIMAS: Jurnal Pengabdian Masyarakat.;5(1): 1714-1720.

- Micińska A, Milska-Musa K, Lipska-Ziętkiewicz
 B, Blażek M. (2022). The role of social support and stress coping strategies in genetic screening for cancer predisposition BRCA testing as an example. Center for Open Science, 7(2):59-69.
- Mortazavi F, Agah J. (2018). Childbirth Fear and Associated Factors in a Sample of Pregnant Iranian Women. Oman Med J.;33(6):497-505.
- Mousavi SF, Jafari E, Kharaghani R, Zenoozian S. (2022). Investigating the Effects of Midwife-Oriented Education and Counseling on the Type and Consequences of Childbirth in First-Time Pregnant Women with Fear of Childbirth. Preventive Care in Nursing & Midwifery Journal.;12(2):50-61.
- Nakić Radoš, S., Žigić Antić, L., & Jokić-Begić, N. (2022). The Role of Personality Traits and Delivery Experience in Fear of Childbirth: A Prospective Study. Journal of Clinical Psychology in Medical Settings, 9(4), 750-759.
- Okten, S. B., Gunduz, A., Sencelikel, T., Desteli, G., Usta Gunduz, E. B., & Bildaci, T. B. (2022). The role of personality traits on mode of delivery. Journal of Psychosomatic Obstetrics & Gynecology, 43(3), 292-297.
- Osman, B. A. M., El-Adham, A. F. M., & Elrefaey, A. M. (2021). Primigravida Women's Fear of Childbirth and Its Effect on Their Decision Regarding Mode of

Delivery. Tanta Scientific Nursing Journal, 22(3), 76-100.

- Ozbay, Y. (1993). An investigation of the relationship between adaptational coping process and self-perceived negative feelings on international students (Doctoral dissertation, Texas Tech University).1-111. available at https://ttu-ir.tdl.org/handle/2346/11602 accessed at 31 October 2022 11:05 p.m.
- Ringqvist, A. K., Bergqvist, L., Brezicka, T., & Lundgren, I. (2022). Time-out in prolonged labour: development of a care model to prevent secondary fear of childbirth. BMJ Open Quality, 11(4), 1-5 e001853
- Sak S, Yildirim Bas F, Gurdal O. (2022). Evaluation of Pregnancy Information Classes Trainings on Birth Fear and Birth Method Selection. Journal of Education and Research in Nursing.; 19(1), 93-97.
- Slade P, Balling K, Houghton G, Sheen K. (2021). A new scale for fear of childbirth: the Fear of Childbirth Questionnaire (FCQ). Journal of Reproductive and Infant Psychology, 40(6), 602-612.
- Uludağ, E., Cerit, E., & Karatepe, Y. (2022). Gender roles and personality traits as predictive factors for fear of childbirth. Women & Health, 62(4), 315-324.
- Voogand, M., Alehagen, S., & Salomonsson, B. (2020). The relationship between fear of childbirth and sense of coherence in women expecting their first child. Sexual & Reproductive Healthcare, 26, (1)1-9.
- Žigić Antić L, Nakić Radoš S, Jokić-Begić N. (2018). Are non-pregnant women afraid of childbirth? Prevalence and predictors of fear of childbirth in students. Journal of Psychosomatic Obstetrics & amp; Gynecology.;40(3):226-231.

Items	n =197	%
Age per years		
< 20	26	13.2
20 - 29	131	66.5
30-37	40	20.3
Mean \pm SD (25.5 \pm 4.9)		
Education		
Basic education	48	24.2
High school education	130	66.0
College and above	19	9.6
Occupational status		
Housewife	158	80.2
Working	39	19.8
Economic status (n=197)		
> 4000	24	12.2
4000 - 6000	173	87.8
Residence		
Urban	66	33.5
Rural	131	66.5

Table(1). Distribution of the pregnant women according to their socio-demographic characteristics

Table (2). Distribution of pregnant women according to their neuroticism of personality traits (n=197)

Neuroticism	Ne	ever	Α	A little		Sometimes		Frequently		ways
i (cui offensiii		%	n	%	n	%	Ν	%	n	%
Not an anxious person.	19	9.6	10	5.1	22	11.2	130	66.0	16	8.1
Feel inferior compared to others.	101	51.3	42	21.3	42	21.3	10	5.1	2	1.0
Feel like nerves have collapsed, under tremendous		8.1	54	27.4	98	49.7	17	8.6	12	6.1
pressure.										
Hardly feel sluggish or depressed.		2.0	24	12.2	40	20.3	129	65.5	0	0.0
Considered very tense and nervous person.		9.1	44	22.3	96	48.7	25	12.7	14	7.1
Treatment of others provokes the feel of worthless.		8.1	36	18.3	116	58.9	21	10.7	8	4.1
Hardly ever feel afraid.		3.0	8	4.1	45	22.8	138	70.1	0	0.0
Get angry at the way of treatment.		2.0	28	14.2	124	62.9	31	15.7	10	5.1
Feel tired and listless if things get worse.		68.5	42	21.3	8	4.1	10	5.1	2	1.0
Rarely upset and sad and concerned.		3.0	2	1.0	52	26.4	135	68.5	2	1.0
Feel hopeless and helpless.		70.6	40	20.3	8	4.1	10	5.1	0	0.0
Feel ashamed prevents participation in many activities.		9.1	6	3.0	20	10.2	121	61.4	32	16.2

	Table (3). Distribution of pregnant wom	en according to their extroversion	of personality traits (n=197)
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Extroversion	Ne	ever	Al	A little		Sometimes		Frequently		vays
Extroversion	n	%	n	%	n	%	n	%	n	%
Surrounded by others.	4	2.0	17	8.6	44	22.3	98	49.7	34	17.3
It is easy to smile and respond to a joke.	2	1.0	13	6.6	82	41.6	76	38.6	24	12.2
Considered an annoying person.		55.3	60	30.5	20	10.2	4	2.0	4	2.0
Feel pleasure when others share their talk.		3.0	13	6.6	48	24.4	96	48.7	34	17.3
Attracted by Shopping centers with their colors, lights and crowds.		12.7	49	24.9	33	16.8	68	34.5	22	11.2
Make sure to complete work on one's own without assistance.	2	1.0	0	0.0	4	2.0	125	63.5	66	33.5
Overcome vitality and activity in movements, conversations, and performance of work.	0	0.0	14	7.1	151	76.6	20	10.2	12	6.1
Described as a cheerful, and energetic person.		0.0	50	25.4	95	48.2	38	19.3	14	7.1
Pessimism prevails in life.		87.8	12	6.1	6	3.0	6	3.0	0	0.0
Feel that life goes by so fast		15.2	107	54.3	52	26.4	8	4.1	0	0.0
Achievement is better without supervision of others.	4	2.0	4	2.0	0	0.0	115	58.4	74	37.6

Table (4) Distribution of pregnant women according to their openness to experience of personality traits (n=197)

0	Neve	Never		A little		Sometimes		Frequently		ys
Openness to experience	n	%	n	%	Ν	%	n	%	n	%
Resort to imagination and meditation is a waste of time.		8.1	12	6.1	130	66.0	23	11.7	16	8.1
See beauty in things that others cannot see.	0	0.0	4	2.0	87	44.2	76	38.6	30	15.2
Think that arguing and opinions are a waste of truth and time.		10.2	32	16.2	94	47.7	25	12.7	26	13.2
Not affected by the poetry and not tasting its meanings.	14	7.1	14	7.1	66	33.5	83	42.1	20	10.2
Like to travel abroad and visit new places.	50	25.4	81	41.1	44	22.3	12	6.1	10	5.1
Mood rarely changes with the change of weather.	10	5.1	14	7.1	31	15.7	128	65.0	14	7.1
Rely on ready-made judgments to judge things.	141	71.6	20	10.2	30	15.2	4	2.0	2	1.0
Tend to read literary books.	73	37.1	78	39.6	32	16.2	4	2.0	10	5.1
Tend not to meditate and think.		20.3	42	21.3	67	34.0	44	22.3	4	2.0
Spend most of time reading and studying.	151	76.6	28	14.2	16	8.1	0	0.0	2	1.0
Find pleasure in meditating and delving into philosophical issues.	169	85.8	12	6.1	12	6.1	0	0.0	4	2.0

Table (5). Distribution of pregnant women according to their Agreeableness of personality traits (n=197)

Agreeableness		Never		A little		Sometimes		Frequently		vays
-	n	%	n	%	n	%	n	%	n	%
Honestly try to be friendly	2	1.0	4	2.0	8	4.1	143	72.6	40	20.3
Keen to clarify point of view on many topics.	8	4.1	28	14.2	99	50.3	26	13.2	36	18.3
Seen by other people as arrogant.	64	32.5	53	26.9	56	28.4	12	6.1	12	6.1
Tend to cooperate with others rather than clash with them.		0.0	2	1.0	40	20.3	121	61.4	34	17.3
Tend to be suspicious when dealing with others.	50	25.4	40	20.3	71	36.0	28	14.2	8	4.1
If neglected, would be vulnerable to the exploitation of others.	6	3.0	9	4.6	54	27.4	90	45.7	38	19.3
Social relationships are very wide.	26	13.2	59	29.9	64	32.5	34	17.3	14	7.1
May be described by others as cold.	121	61.4	46	23.4	18	9.1	10	5.1	2	1.0
See it difficult to be convinced by other than what is convinced of.	54	27.4	57	28.9	56	28.4	18	9.1	12	6.1
Avoid hurting the feelings of others.	4	2.0	2	1.0	8	4.1	133	67.5	50	25.4
Have no qualms about using any means to get what is wanted.	143	72.6	16	8.1	20	10.2	10	5.1	8	4.1

Table (6). Distribution of pregnant women according to their Conscientiousness of personality traits (n=197)

Conscientiousness		r	A li	ttle	Sometimes		Frequently		Always	
	n	%	n	%	Ν	%	n	%	n	%
Strive to have things tidy, clean and in their place.	2	1.0	0	0.0	6	3.0	151	76.6	38	19.3
Pushed to do work diligently and on time.	0	0.0	0	0.0	6	3.0	157	79.7	34	17.3
Not a disciplined person.	151	76.6	24	12.2	22	11.2	0	0.0	0	0.0
Strive to complete duties diligently and conscientiously.		83.8	18	9.1	8	4.1	4	2.0	2	1.0
Keen to achieve goals and ambitions according to prior plans.		5.1	12	6.1	107	54.3	56	28.4	12	6.1
Strive with all energies to achieve goals.		0.0	0	0.0	4	2.0	151	76.6	42	21.3
Do not leave started job, until finish.		0.0	0	0.0	2	1.0	129	65.5	66	33.5
Does not depend on or trusted		88.8	14	7.1	2	1.0	6	3.0	0	0.0
Keen to complete work with perfection, accuracy and efficiency.		1.0	2	1.0	18	9.1	153	77.7	22	11.2
Don't care much for arranging and organizing what is around.		84.8	24	12.2	6	3.0	0	0.0	0	0.0
Strive for perfection in the performance of duties and responsibilities	0	0.0	4	2.0	34	17.3	135	68.5	24	12.2

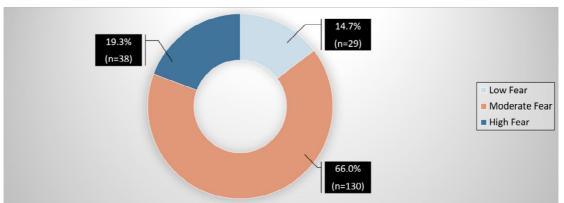


Figure 1. Total Fear level of Childbirth among Pregnant Women

Table (7).	Distribution	of Pregnant wome	n according to thei	r ways of coping v	with fear of childbirth $n=(197)$

Items		Never		rely	Som	etimes	Freq	uently	Alw	vays
	n	%	n	%	n	%	n	%	n	%
Take religion as a shelter Look for a stronger connection with Allah. Engage in religious activities.		0.0 0.0	0 0	0.0 0.0	0 0	0.0 0.0	0 0	0.0 0.0	197 197	100 100
Active planning Make a plan of action and followed it. Try to see things from the other person's point of view.		1.0 0.0	10 8	5.1 4.1	85 39	43.1 19.8	60 96	30.5 48.7	40 54	203 27.4
Avoiding abstraction(emotional - operational) Try to feel better. Turn to work or other substitute activities to take mind off things.	0 2	0.0 1.0	14 28	7.1 14.2	77 61	39.1 31.0	66 64	33.5 32.5	40 42	20.3 21.3
Seeking for external help Talk to someone to find out more about the situation. Try to get emotional support from friends or relatives.	0 6	0.0 3.0	4 14	2.0 7.1	20 41	10.2 20.8	18 33	9.1 16.8	155 103	78.7 52.3
Acceptance – cognitive constructing Learn to live with it. Accept the reality of the fact that it happened.	0 0	0.0 0.0	8 12	4.1 6.1	81 89	41.1 45.2	74 70	37.6 35.5	34 26	17.3 13.2
Avoiding abstraction(biochemical) Use medications to cope.	197	100.0	0	0.0	0	0.0	*	0.0	0	0.0

 Table (8). Pearson Correlation between fear of childbirth, personality traits and ways of coping among pregnant women(n=197).

Table 9. Correlation between coping, personality traits and fear scores											
	Coping		Fear		Traits						
	r	р	r	р	r	р					
Coping			0.443	<0.001**	- 0.303	<0.001**					
Fear	0.443	<0.001**			- 0.274	<0.001**					
Traits	- 0.303	<0.001**	- 0.274	<0.001**							