

**Depression and Sexual Dysfunction Among Pregnant
Women in Bangladesh**



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University of Dhaka**

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DECLARATION

This work has not previously been accepted in substance for any degree and isn't concurrently submitted in candidature for any degree. This dissertation is being submitted in partial fulfillment of the requirements for the degree of B.Sc. in Physiotherapy.

I confirm that if anything identified in my work that I have done plagiarism or any form of cheating that will directly awarded me fail and I am subject to disciplinary actions of authority. I confirm that the electronic copy is identical to the bound copy of the Thesis.

In case of dissemination the finding of this project for future publication, research supervisor will highly concern, it will be duly acknowledged as graduate thesis and consent will consent taken from the physiotherapy department of Saic College of Medical Science and Technology (SCMST).

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CONTENTS

Acknowledgement	i
Acronyms	ii
List of Tables	iii
List of Figures	iv
Abstract	v
CHAPTER-I: INTRODUCTION	1-08
1.1 Background	1-3
1.2 Rationale	4-5
1.3 Research Question	6
1.4 Objectives of the study	7
1.5 Conceptual frame work	8
1.6 Operational Definition	9
CHAPTER-II: LITERATURE REVIEW	10-16
CHAPTER-III: METHODOLOGY	17-19
3.1 Study design	17
3.2 Study place	17
3.3 Study period	17
3.4 Study population	17
3.5 Sample size	17
3.6 Sampling technique	18
3.7 Eligibility criteria	18
3.7.1 Inclusion criteria	18
3.7.2 Exclusion Criteria	18
3.8 Method of data collection	18
3.9 Instruments and tools of data collection	18
3.10 Data analysis	19
3.11 Data Presentation	19
3.12 Ethical consideration	19

CHAPTER-IV: RESULT	20-49
CHAPTER-V: DISCUSSION	50-54
CHAPTER-VI: LIMITATION	55
CHAPTER-VII: CONCLUSION AND RECOMMENDATION	56-57
7.1 Conclusion	56-57
7.2 Recommendation	58
CHAPTER – VIII: REFERENCE	59-63
Appendix – A-E	64-77

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Acronyms

SAIC:	Student Admission Information Center
SCMST:	SAIC College of Medical Science and Technology
DASS:	Depression Anxiety and Stress Scale
POM:	Proportional Odds Model
EPDS:	Edinburgh Postnatal Depression Scale
OGSB:	Obstetrical and Gynecological Society of Bangladesh
FSFI:	Female Sexual Function Index.
BMI:	Body Mass Index.
SPSS:	Statistical Package for Social Science.
ERB:	Ethical Review Board.
BMRC:	Bangladesh Medical Research Council
WHO:	World Health Organization
SD:	Standard Deviation

List of Tables

Table No.	Description	Page No.
01	Age of the participants	19
02	Living area of the participants	20
03	Educational qualifications of the participants	21
04	Occupation of the participants	22
05	Family income of the participants	23
06	Religion of the participants	25
07	BMI of the participants	26
08	General health problems of the participants	29
09	Proportion of depression of the participants	30
10	Laugh and see the funny side of things	31
11	Blamed unnecessarily when things went wrong	33
12	Anxious or worried for no good reason	34
13	panicky for no very good reason	35
14	Things have been getting.	36
15	Felt sad or miserable of the participants	38
16	Unhappy and crying of the participants	39
17	Harming occurred of the participants	40
18	Sexual desire of the participants	41
19	Confident level of sexual aroused	44
20	Bleeding during intercourse	46
21	Association between age and Depression	47
22	Association between age and Sexual interest	48

List of Figures

Figure No.	Description	Page No.
1	Family type of the participants	24
2	Sleeping problem of the participants	27
3	Feeling vulnerable of the participants	28
4	Enjoyment of the participants	32
5	Difficulty sleeping of the participants	37
6	Level of sexual desire of the participants	42
7	Difficulty of Intercourse of the participants	43
8	Pain during intercourse of the participants	45

Abstract

Purpose: The purpose of this study to the proportion of depression and symptoms of sexual dysfunction among pregnant women in Bangladesh.

Objectives: To determine the proportion of depression and sexual dysfunction among pregnant women in Dhaka city. To determine the level of depression by using Edinburgh Postnatal Depression Scale (EPDS). To calculate the proportion of pregnant women having depression and symptoms of sexual dysfunction. To describe determine the sociodemographic information.

Methodology: It was a cross sectional type of descriptive study. Total 86 samples were collected from selected Hospital by purposive sampling from Dhaka city. Data was collected by self-administered question and using Edinburgh Postnatal Depression Scale (EPDS) Questionnaire. Descriptive statistics using SPSS software version-25 were used for data analysis and the result were showed in pie chart, bar chart and table.

Result: In this result displayed that, total 86 pregnant women were participants. Out of total respondents had no depressed was 80.2%(n=69), 19.8%(n=17) were suffering from depression. Sexual interest 65.1% (n=56) were sometimes and 34% (n=30) were never of all participants. 2.3%(n=2) were high level of sexual desire,52.3%(n=45) were moderate level and 45.3%(n=39) were very low. 23.3 %(n=20) had no sexual activity,36.0%(n=31) had activity difficult activity and 40.7%(n=35) had not difficult sexual activity. 24.4 %(n=21) were no sexual activity, 34.9%(n=30) were moderate pain and 40.7%(n=35) were very low pain. 24.4%(n=21) were no sexual activity,5.8%(n=5) had bleeding and 69.8%(n=60) had no bleeding during intercourse.

conclusion: In summary, the present study revealed considerable depressive symptoms and sexual dysfunction in pregnant women. That was discovered that a cutoff value of 13 or higher results in the EPDS's combined sensitivity. Since certain demographic characteristics and the EPDS were found to affect pregnancy related depression, it appears that pregnancy-related depression is indirectly related to sexual dysfunction.

Key words: *Depression, sexual dysfunction, pregnant women.*

1.1 Background

Pregnancy is typically seen as a happy experience, but it also intensifies a woman's emotional and psychological state. Worldwide, some women experience mental illnesses, particularly in impoverished countries. (Adhikari, et al., 2020). There is proof that sadness, anxiety, and stress during pregnancy are very common in Nigeria. In order to determine the extent and contributing variables of depression, anxiety, and stress among pregnant women in Port Harcourt, Nigeria Between September and October 2022. The statistical significance was determined at $p < 0.05$ and the proportional odds model (POM) was applied. The study included a total of 413 participants, of whom 9.5%, 26.6%, and 17.3%, respectively, experienced at least significant depression, anxiety, and stress. (Wegbom, et al., 2023).

In the perinatal period, depression, anxiety, significant life stress, and intense and dysfunctional concern have been shown to negatively impact mother, family, and child health and well-being both in the short and long term. Although less researched than postpartum depression and anxiety, anxiety and stress related to pregnancy have been linked to preterm delivery, whereas sadness, significant life stress, and chronic stress during pregnancy raise the chance of lower birth weight babies. Decreases in cognitive function in adolescence, worse mental health as a child, teenager, and adult have all been related to depression, anxiety, and severe life stress during pregnancy (Signal. et al., 2017).

The restricted idea of "postnatal depression" as a mental health condition related to delivery has given way to a consideration of the spectrum of mental health concerns that can develop during the perinatal period, one of which is anxiety. Up to 54% of pregnant women have anxiety symptoms at some time in their pregnancies, making them a typical occurrence. (Staneva, et al., 2015).

Clinically significant levels of anxiety can have negative impacts on the mother and the baby, including preterm delivery, postpartum depression, and cognitive, behavioral, and emotional issues in the offspring. Evaluation of anxiety symptoms may improve identification, enabling appropriate referrals for assistance or medical therapies. In general clinical settings, it is impossible to employ semi-structured diagnostic clinical

interviews, which are regarded reference standards for the diagnosis of anxiety disorders, for screening reasons (Adhikari, et al., 2020).

Preterm delivery is one of the undesirable birth outcomes that can result from psychological discomfort such depression, anxiety, and/or perceived stress during pregnancy. Understanding the relationship between exposure and result may help to clarify the risk factors for preterm and direct future clinical and research procedures (Staneva, et al., 2015). Chronic mental illness during pregnancy worsens the consequences for both the mother and the unborn child. Finding pregnant women who exhibit persistent depression or anxious symptoms might open doors for easing their suffering and enhancing pregnancy outcomes. This study used a longitudinal pregnant cohort in Alberta, Canada, to identify risk variables for persistent prenatal depression and anxiety symptoms (Bayrampour, et al., 2015).

Due to the physical and psychological changes that occur during pregnancy, sexual interactions alter. Pregnancy-related physical, emotional, and financial worries frequently disrupt the couple's marital connection and their sexual reactions to one another, which can negatively impact their entire relationship and the mental health of the family. (Staneva, et al., 2015). In this comparative study, the wealth index and pregnancy-related worry in each stage of pregnancy were compared to see how they affected sexual dysfunction. As with any other life crisis, pregnancy causes significant changes in both physical and mental health, so improving mothers' health depends on understanding these changes and how they interact, which can lead to different clinical taboos in different people. Additionally, despite improvements in the treatment of physical pregnancy problems, mental health issues continue to be a significant problem for pregnant women's health (Alidost, et al., 2021).

Therefore, the purpose of the current study was to assess, in pregnant Turkish women, the changes in sexual function throughout pregnancy using a validated questionnaire. Additionally, as some of these have been linked to changes in sexual activity during pregnancy, we also sought to determine if certain demographic factors, preconceptional sexual functions, and women's worries about sexual activity were significant (Faruk, et al., 2016). For mothers, depression in pregnancy has been associated with reduced self-care which may lead to poor nutrition, drug and alcohol abuse and failure to attend antenatal care (Leigh and Milgrom., 2008). This in turn, may

result in a decline in a mother's physical and mental health and compromise the growth and development of the foetus. Women who experience depression in pregnancy are also at much higher risk of developing post-natal depression (Milgrom et al., 2008).

Currently in New Zealand, suicide is the leading single cause of maternal death with rates seven times higher than those seen in the United Kingdom (Perinatal and Maternal Mortality Review Committee., 2015). While nationwide surveys conducted in the last decade have not been designed to provide data specifically on perinatal mental health, results show that having a diagnosed mental illness is 1.7 times more likely for women than men (Ministry of Health, 2013). Furthermore, the rates of psychological distress (as measured by the Kessler Psychological Distress Scale) are 1.7 times higher in Māori compared with non-Māori/non Pacific and 2.5 times higher for those living in more socioeconomically deprived areas compared with less deprived areas (Ministry of Health., 2013).

Factors which may thought to affect sexuality during pregnancy were reported as maternal age, parity, educational level, employment status, gestational age and duration of marriage. Additionally, sexual functions of women before pregnancy were also important to predict sexual changes during pregnancy (Yenieli, et al., 2012). In addition, it is essential to know the main changes resulting from pregnancy in order to apply measures to minimize the impact of sexual dysfunction on the relationship of the couple. The search for more epidemiological data evaluating the prevalence of sexuality dysfunctions before and during pregnancy and their associated factors is important to measure the magnitude of this problem. (Milgrom et al., 2008).

Therefore, the present study aims to identify sexual disorders during the pregnancy period. According to the importance of this problem, not enough research and controversy about this subject, this study is aimed to evaluate sexual problems during pregnancy. We hope the result of this study can increase the knowledge of people, health care providers, psychologists and counselor and improve family stability. (Salehy, et al., 2002).

1.2 Rationale

Now a day's the depression and sexual dysfunction among pregnant women are a serious problem worldwide. Among the few studies that was found locally not sufficient to present the real picture of the situation due to shortage of information. and study was conducted few couple of year back which does not represent the present situation on this regard. Although the number of Epidemiology studies increase in this field, data regarding the prevalence of sexual dysfunction and concern about sexuality in pregnant Bangladesh women are still limited.

The Edinburgh Postnatal Depression Scale (EPDS), which has been validated in numerous nations, is a commonly used screening measure for prenatal depression. Recently, multiple scholars have examined the design of the EPDS and discovered that it evaluates more than just postpartum depression. The goals of this study were to: test the EPDS's potential for detecting pregnant women who will experience prenatal depression; examine the scale's factor structure; and identify the variables that are associated with a high EPDS score from three weeks prior.

Preconception sexual intercourse were of importance, as some of those had been shown to be associated with depression and sexual dysfunction during pregnancy. So it is very urgent to know the situation. For this reasons, one study is necessary to conduct on this topic to take the preventive measures and minimized the gap of the knowledge on this regard in our country. Pregnancy is one of the important factors affecting the quality and quantity of marital intercourses. Pregnancy is a period not only characterized by physical and emotional changes, but especially a shift in social interactions. This includes the couple's relationship, which can affect their sex life in a significant way. During this transitional phase, grow up psychological imbalance (depression, stress and anxiety) in women's life.

A psychosocial crisis caused by alterations in sexual function is linked to pregnancy. Continued sexual activity throughout pregnancy raised self-awareness, boosted sexual power, bolstered marital bonds, and reaffirmed the reality of sexual engagement. Women are more susceptible to stress in life than men are because pregnant women worry more about managing changes in looks, changes in personal relationships, labor and delivery stages, the health of their unborn child, and probable medical difficulties. Pregnant women are known to endure depression, stress, and

anxiety due to stressful life events like marital issues, employment issues, and worry about the challenges of pregnancy.

According to the importance of this problem, not enough research and controversy about this subject, this study is aimed to evaluate sexual problems during pregnancy. We hope the result of this study can increase the knowledge of people, health care providers, psychologists and counselor and improve family stability. Therefore, the aim of the present study was to evaluate the proportion of depression, and sexual dysfunction during pregnancy by using a validated questionnaire in Bangladesh pregnant women.

1.3 Research Question

- i. What is the proportion of pregnant women having depression?
- ii. What are the symptoms of sexual dysfunction among the pregnant women?

1.4 Objectives of the study:

1.4.1. General objective:

i. To determine the proportion of depression and sexual dysfunction among pregnant women in Dhaka city.

1.4.2. Specific objectives:

i. To calculate the proportion of pregnant women having depression attending different hospitals in Dhaka city.

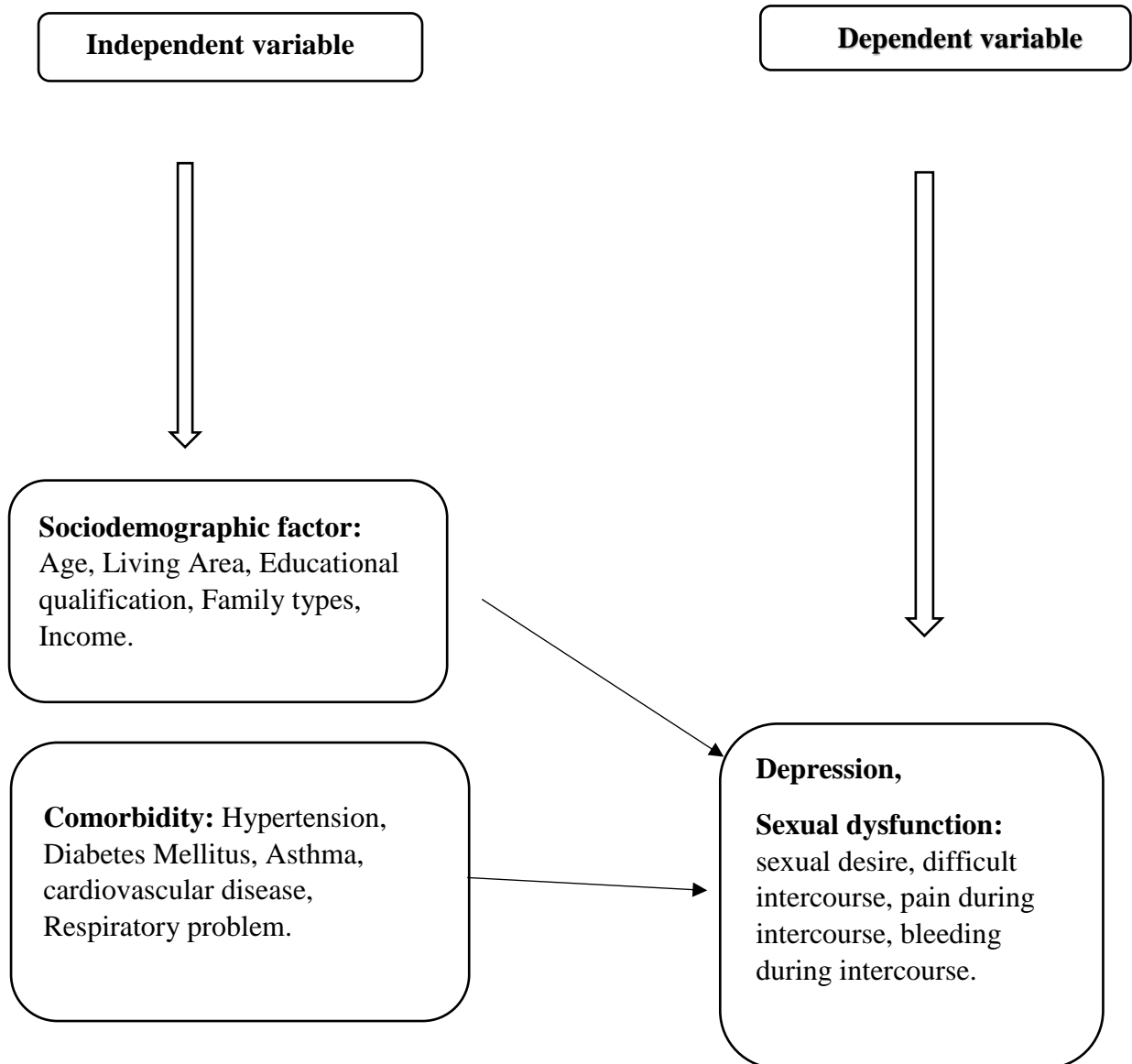
ii. To identify the symptoms of sexual dysfunction among pregnant women.

iii. To determine the sociodemographic information of the participants.

iv. To examine the association between depression and age of the pregnant women.

v. To Find out the association between sexual dysfunction and age of the pregnant women.

1.5 List of variables of the study



1.7 Operational Definitions of the variables

Age: Age of the respondents was recorded in completed years.

Depression: Depression is a widespread and dangerous medical condition that has an adverse impact on how you feel, think, and behave. Thankfully, it is also curable. Sadness and/or a loss of interest in previous hobbies are symptoms of depression. It can impair your ability to perform at work and at home and cause a number of mental and physical issues.

EPDS Scale: The Edinburgh Postnatal Depression Scale (EPDS) is a short 10-item self report questionnaire designed to identify mothers at risk for prenatal and postnatal depression. A 10-item questionnaire called the Edinburgh Postnatal Depression Scale (EPDS) was created to help women who experience pregnancy or postpartum depression be diagnosed. The scale's items are related to a variety of clinical depression symptoms, including feelings of guilt, sleep issues, fatigue, anhedonia, and suicidal thoughts.

Sexual Dysfunction: The term "sexual dysfunction" refers to any issues that an individual or couple may have with the many components of sexual engagement, such as attraction, arousal, pleasure, and orgasm. Extreme distress and negative effects on one's quality of life can result from sexual dysfunction.

Pregnancy: Pregnancy is the term used to describe the period in which a fetus develops inside a woman's womb or uterus. Pregnancy usually lasts about 40 weeks, or just over 9 months, as measured from the last menstrual period to delivery.

Clinically significant levels of depression during pregnancy have been linked to negative outcomes for mothers and their unborn children, including preterm birth. Postpartum depression, and cognitive, Behavioral and emotional issues. (Kingstone, et al. 2012). This is crucial since many typical pregnancy symptoms and indicators (such trouble sleeping) are also typical depression symptoms and signs, which may limit the usefulness of anxiety screening instruments in pregnant women. (Sinesi , et al. 2019). 10 item The EPDS is the most widely used depression screening instrument in perinatal care, and women who may be depressed are typically identified using cut-off values of 10 or higher and 13 or higher. (Hewitt, et al.2010).

The EPDS has several advantages over primary studies, including the ability to incorporate data from studies that collected EPDS and reference standard outcomes but did not publish accuracy results, the ability to consider results for all cut-off values from all included studies rather than just published cut-off results, the ability to conduct Around 90% of those who suffer from depression experience many episodes (Vos, et al 2004).

All women who are expecting or are thinking about becoming pregnant should be questioned about their personal and family histories of mental illnesses and treatment. Routine inquiries concerning antenatal depression are encouraged¹⁴ and should include inquiries based on the Edinburgh Postnatal Depression Scale, which is approved for use throughout pregnancy and is recommended by the National Institute for Health and Clinical Excellence. (Stewart, 2011). In order to determine the duration and intensity of the current symptoms, their impact on the patient's functioning and quality of life, and the patient's thoughts or plans regarding self-harm or suicide, as well as her level of anxiety, any psychotic symptoms, social supports, relationship with her partner, attitude toward her, a woman who has a positive result on a screening test for depression or in whom the clinician suspects depression should undergo a thorough evaluation. Inquiries concerning her past coping mechanisms for stressful situations and psychiatric history (such as depressive episodes and their length, anxiety, obsessions, compulsions, mania, suicidal thoughts, or psychotic symptoms and their response to therapy) should also be made. (Stewart, 2011).

In one of these studies, the stress depression, and anxiety cronbach's alpha coefficients were reported to be 0.73, 0.62, and 0.74 respectively. Although it was initially intended to be used for postpartum depression screening, the Edinburgh postnatal Depression Screening, the Edinburgh postnatal Depression Scale is an example of a short self-rating scale. With more than 50 language versions the EPDS is one of the most frequently used screening tools for depression in women. It has been shown to be effective in men, older adults and child bearing, non-childbearing and menopausal Women. The Edinburgh Depression Scale is now known as a result of this (Bergink., et al. 2010).

Whether or not a significant depressive episode is related to pregnancy, its natural course can vary. The likelihood of recovery without treatment is roughly 20% in the first week after the diagnostic criteria are met in patients who are not pregnant, according to longitudinal data, but it decreases with longer durations of depression (for example, after 6 months, the likelihood of recovery in a subsequent week is only 1%). The possibility of self-harm or suicide must be taken into account because depression may worsen over time or grow resistant to treatment. (Patten SB. 2006) subgroup analyses, which was not possible in primary studies, and the ability to report accuracy results separately for various reference standards. Our goals were to determine whether EPDS screening accuracy varies based on pregnancy versus postpartum status, age, and country human development to compare studies that used various types of reference standards separately. We also wanted to see if these differences held true for semi-structured interviews. (Levis, et al., 2020).

Prenatal loss is significantly connected with psychological and mental illness. In comparison to samples at pregnant, community or postpartum women. Women show considerably higher levels of despair and anxiety in the weeks and months after the loss (Blackmore, et al., 2011). The world health organization suggests a lower limit of 5% and upper limit of 15% of cesareans performed for both maternal and fetal reasons. Negative pregnancy and child outcomes such as preterm birth, stillbirth and developmental in children, can be made likely by depression and anxiety (Davis, et al., 2021).

As a result, it was impossible to identify the outcomes that were connected to mental health. The results of more recent research that examined the relationship

between specific obstetric outcomes and depression and anxiety are conflicting and equivocal (Reck, et al. 2013). The society of obstetricians and gynecologists of Canada currently recommends inducing labor to lesser mother worry in women who have a history of intrauterine mortality in a prior pregnancy as the only mental health reason for an obstetric intervention (Leduce., et al.2013). The university of Calgary's conjoint health Research Ethics Board gave the project its approval. Participants gave their informed agreement to link to their medical health records for the labor and delivery at the time of recruitment. The recruitment procedure data collection and questionnaire were all described in great detail in previous reports (Gracie., et al.2010).

Multiple psychological tests on women and repeated perinatal screening point to the fact the mental health status during pregnancy is dynamic. One could argue that assessing depression in the early stages of pregnancy may not be a reliable predictor because later depression development might go unnoticed. The use of antidepressants during pregnancy and their moderating influence, which has seldom, with few exceptions, been independently examined, is a significant confounder of the effect of depression on PTB (Yonkers, et al. 2012).

Healthy sexuality during pregnancy seems to be a crucial stage in a couple's development toward parenthood. Additionally, a number of studies have revealed that many couples are ill prepared to deal with their sexual issues during pregnancy, in part because of this due to their gynecologist providing them with incorrect information (Serati., et al. 2010). During pregnancy, sexual relationships frequently shift as a result of both physical and psychological changes. Additionally, cultural norms, tradition, bodily changes, and required medical restrictions have an impact on people's sexual habits and attitudes during pregnancy. The third trimester of pregnancy was when the level of sexual dysfunction was highest, as it grew as the pregnancy progressed. Additionally, compared to the first and second trimesters, the sexual function score had dropped in the third trimester (Erol, et al., 2007).

Infertility and dysfunctional sexual behavior are related. Sexual dysfunction may make it difficult to perform sexually while trying to get pregnant. It is vital to identify the prevalence of these illnesses in order to carry out the diagnostic evaluation and therapeutic intervention for sexual dysfunction in infertile women. Sexual dysfunction is more common in some populations than others and is influenced by a

variety of biological, psychological, socioeconomic, cultural, and racial factors. (Tabaghdehi, et al.,2016).

Pregnancy can therefore be said that, pregnancy is a condition that causes both organic and psychological changes in women. As a key contributor to the development and aggravation of sexual problems. Additionally, Men's sexual behaviors are impact during pregnancy, which has the potential to women's sexual dysfunction as well as develop new or worsen existing sexual disorders in men. Studies on the subject demonstrate that, compared to the pre pregnancy period, the propensity for sexual interactions declines and the prevalence of sexual problems significantly rises during pregnancy and even for a few months following delivery (Jamali, et al. 2013).

The socioeconomic level of the couple, their relatives, and their ties in the family can all contribute to marital conflict lower marital happiness. Economic difficulties are one of the elements that might strain relationships and have an impact on sexual activity (Charandabi, et al., 2014). Economic status has a significant impact on the prevalence of sexual dysfunction, which explains why those with lower incomes are more prone to experience sexual dysfunction (Amidu., et al., 2010).

The development of sexual dysfunction and sexual satisfaction in women in influenced by a number of risk factors, including mental health, sexual behavior, the sexual function of the female proterer and aspects of personality length of time spent getting to know the partner, infertility, medications, chronic illness, pelvic surgery (Shahrakiz., et al., 2018). Sexual dysfunction has a severe impact on women's physical, psychological, social and emotional heath and lowers their quality of life and sense of pleasure with other (Banaei., et al. 2016). Neglecting this issue also contributes to social problems including divorce, crime, drug addiction and a variety of mental and physical illness (Mccool., et al. 2018). As well as a diminished feeling of femininity, diminished feeling of femininity, diminished self-confidence and decreased security. Sexual function is impacted by a number of circumstances, including hormonal changes, menstruation, pregnancy, delivery, lactation, menopause and multiparty (Anbaran., et al. 2015).

Sexual inclination changes over time. These alterations include the transition brought on by pregnancy, which causes changes in sexual function and is thought to be a psychosocial crisis. Most women's sexual function declines during pregnancy and

stays low for a long time after giving birth (O' malley., et al. 2018). Due to several physical and psychological changes during pregnancy, sexual and marital interactions change. Sexual function during pregnancy may be impacted by a variety of factors, including a pregnant woman's physiological and anatomical changes. A woman's sexual response and ultimately the couple's relationship can be affected by a number of factors, such as giving up sexual activity and feeling guilty about it while pregnant, altered body image, diminished sense of charm for the spouse, fear of harming the fetus, fear of abortion, and early childbirth. These factors can cause anxiety and a lack of self-confidence in couples, which can disrupt their relationship in the long run (Fan, et al. 2017).

Many pregnancy symptoms, including nausea, vomiting, weight gain, exhaustion, breast soreness, and fatigue may be brought on by the elevated levels of hormones like estrogen, progesterone, and prolactin. These symptoms can also lessen sexual arousal and desire. Estradiol increases by about 50 times by the end of pregnancy, while progesterone levels rise to increasingly high levels as pregnancy goes on. A decrease in vaginal feeling may result from the actions of hormones like relaxin, which operate on vaginal tissue to increase epithelial cells and increase the circumference of the vaginal lumen. Maternal serum testosterone levels increase throughout pregnancy, along with plasma protein, serum sex hormone-binding globulin and other factors (Johnson, C.E., 2011).

Additionally, a pregnant woman's self-image gradually changes. Due to self-consciousness about her expanding belly, which affects her confidence and limits her ability to engage in certain sexual positions physically. In comparison to pre pregnancy, the length of the sexual encounter and the capacity for orgasm decrease as the pregnancy progresses, but dyspareunia considerably rises. Concerns about pregnancy issues as a result of sex are shared by both women and their partners (Pauleta., et al., 2010). Descriptive cross-sectional study in pregnant women 15 years of age and older, sexually active during gestation, receiving prenatal care at the San Juan de Dios Hospital in Ringer between January and March 2021. The exclusion criteria were patients with disability or cognitive impairment, or classified as having a mental disorder according to the WHO: pregnant women with chronic, placental, ovulation, hemorrhagic or infectious condition and patients whose pregnancy was the result of sexual assault. As

a component of responsible health sexuality is addressed as a need and a plan of action for achieving the millennium development objectives (Jan Ghorban., et al., 2014).

One of the foundational elements of a long lasting and intimate relationship is healthy sexual function and appropriate marital intercourses. These intercourses are also essential to the physical and emotional well being of spouses and the continuation of the family. Between 60 percent and 80 percent of women experienced various types of sexual dysfunction, which either directly or indirectly affected many facets of their life (Hajnasiri., et al. 2020).

Although Bangladesh is a poor, developing nation in south Asia with a population of roughly 160 million, it has made substantial progress in achieving millennium Development Goals related to health. (Report From Millennium Development Goals related to health report 2015). The literacy rate is also rising and according to recent data 61 percent of the population is at least 15 years old and enrolled in school. Unfortunately, health literacy is still aa neglected field and patients frequently come to the doctors affine with a variety of irrational health beliefs (Arafat., et al. 2017).

Services for sexual health and conversations about sexual health are still taboo and many are reluctant to discuss sexual issues (Arafa., et al., 2017). More barriers to female sexual dysfunction exist in Bangladesh cultures and societies. Sexuality had previously been documented in Iran that this questionnaire is valid and reliable (Pawleta, et al.,2010).

Although greater scores in orgasm were recorded. Since the majority of the respondents acknowledgment having sex during pregnancy in order to state their sexual appetite and also claimed sexual satisfaction the decrease in the FSFI score in the orgasm domain in our study may not be unrelated to psychological inhibitor that could come as a result of the fear of negative obstetric outcomes reported by the respondents as other research have shown, we saw from the index study that the prevalence of sexual dysfunction rose with increasing gestational age (Sampop, et al., 2011).

Furthermore, the retrospective study design, the use of no validated instruments to assess sexual function, and the lack of comparison with baseline data, could affect the results of several articles. In addition, it has been demonstrated that sexuality is not adequately investigated and questioning about its impact is often avoided both during routine scheduled antenatal care as well as after childbirth. The aim of our review is to

determine the current state of art of sexual function during pregnancy and after childbirth, evaluating the available evidence in the literature and to identify obstetric factors which may affect female sexuality. (Serati, et al., 2010). Sexual activity is influenced by a variety of fertility parameters including the number of pregnancies, history of deliveries and desired pregnancy. Between multiple and prim parous women there was a statistically significant difference in the overall score of sexual activity in the study (Galazka, et al., 2015).

While the measurement of sexual problems in men has focused almost exclusively on erections, female sexual responses have proved much more difficult to quantify, creating problems for researchers testing pharmacological therapies. In recent years, however, a host of new methods have been identified, and some clinicians now recommend, along with a physical and psychosocial examination, a comprehensive evaluation that can include the measurement of hormonal profiles, vaginal pH, and genital vibratory perception thresholds, as well as the use of ultrasonography to measure clitoral, labial, urethral, vaginal, and uterine blood flow. (Moynihan, R., 2003).

The scientific community has become increasingly interested in this subject over the past 50 years. Although there are numerous papers in the literature, the data are frequently incomparable and even contradictory. These investigations were conducted during several historical periods, during which the same ideas about sex and sexuality may have undergone significant change. A prior analysis, which covered all publications on sexuality during pregnancy and after childbirth published up through 1996, found that over the past few decades, researchers' areas of interest have gradually altered. In fact, the following perspectives have addressed this subject. (Serati, et al 2010).

The findings of a study conducted in 2016 should that depression had the largest impact on sexual interest and stimulation and that treating sex issues was also connected with treating Depression (Brotto., et al. 2016).

3.1 Study design

It was a cross sectional type of descriptive study carried out with the aim of determined the proportion of pregnant women having depression and symptoms of sexual dysfunction in some selected health centers.

3.2 Study place

Data for the present study were collected from the pregnant women in Medinova specialized Hospital, OGSB Hospital, Lab science diagnostic center in Dhaka city(Bangladesh).

3.3. Study period

The duration of the study period was 12 months, from 1st July 2022 to 30th June 2023.

3.4 Study population

Pregnant women attending different health centers in Dhaka city constituted the study population for the present study.

3.5 Sample size

The required sample size for the present study was calculated by using the following statistical formula.

Here,

n =Sample size

p = Prevalence 87% or 0.87 (Faruk, et al., 2016)

q = 1-P

z =1.96

d = 0.05

$$\begin{aligned}
 n &= \frac{pqz^2}{d^2} \\
 &= \frac{p(1-p)z^2}{d^2} \\
 &= \frac{0.87(1-0.87) \times (1.96)^2}{(0.05)^2} \\
 &= \frac{0.87 \times 0.13 \times 3.84}{0.0025} \\
 &= \frac{0.434}{0.0025} \\
 &= 173
 \end{aligned}$$

According to standard formula, $(n=z^2pq/d^2)$ sample size was 173. For the present study the sample size was 86. Due to time constraints, 86 pregnant women attending different health centers were interviewed.

3.6 Sampling technique

Convenience sampling technique was applied this study for selecting the respondents.

3.7 Eligibility criteria

3.7.1 Inclusion criteria

- Age: 15-42 years. (Faruk, et al., 2016).
- Pregnant women in some selected health centers.
- Mental stability.

3.7.2 Exclusion criteria

- The subject who was not willing to participant in the study.

3.8 Method of data collection

Face to face formal interview was used to collect information from the participants.

3.9 Instrument and tools of data collection

i. Edinburgh Postnatal Depression Scale: This is used to collect information on depression during pregnancy. It contains ten questions for the pregnant women. Each question has four options and they are allotted specific number (points). Each respondent earned a total score based on the response (options).

ii. A questionnaire was prepared by the researcher. It had two parts. The first part contained socio-demographic characteristics of the participants, the second part contained questions on sexual dysfunction in pregnancy.

3.9.1 Procedure of data collection

The researcher obtained permission from the hospital authority to carry out the study. The researcher herself collected data from the pregnant women in selected Hospitals in Dhaka city. Before starting the interview, the aims and objectives of the research were explained in details to the respondents. Obtaining informed written consent from the respondents, the researcher started the interview using the pretested questionnaire and Edinburgh Postnatal Depression Scale. After the interview the researcher thanked the participants.

3.9.2 Data entry

Data from the questionnaire were entered into SPSS program by the researcher herself.

3.9.3 Data analysis

Analysis of the data was carried out according to the objectives of the study. Mean and percentage were two measurements of descriptive statistics used in the most of the cases. Relationship was assessed between dependent and independent variables.

3.9.4 Data Presentation

The findings of the study have been presented by frequency tabulation of the characteristics. The results were also presented by various charts, graphs and description of the variables.

3.10 Ethical consideration

The researcher submitted a research proposal to the department of physiotherapy for approval and obtained the written permission in time from the Ethical review board of SAIC College of Medical Science and Technology (SCMST) to carry out the study.

Ethical review board informed by written document about aims and objectives of the study and that the patients of the study will not harmed or the clients name, address and personal information will be kept confidential by the investigator mentally and the dates will not be shared with others.

Data of the participants were maintained with strict confidentiality. Every participant was given a unique code number for this study. The documents for these code numbers linking subjects were kept in a locked cabinet under the direct supervision of the researcher.

The objective of the present study was to assess depression and sexual dysfunction among pregnant women in Dhaka city. The required data were collected from the respondents by using pretested questionnaire and analyzed with the help of SPSS program. The result has been presented by tabulation, graphs and description below.

4.1: Sociodemographic Information

4.1.1 Age of the participants

Table no. 1: Frequency distribution of the respondents by age.

Age group in years	Frequency	
	N	%
18-23	30	34.9
24-29	41	47.7
30-35	15	17.4
Total	86	100

Mean = 25.38, SD = \pm 3.998

Regarding frequency distribution of the respondents by age, it was found that out of 86, 41 (47.70%) belonged to the age group of 24-29 years. It was also found that 30(34.90%) respondents were in the age group of 18-23 years and 15(17.40%) respondents were in the age group of 30-35 years. The mean of the participants age was 25.38 and SD was \pm 3.998 (Table no. 1).

4.1.2 Living area

Table no. 2: Frequency distribution of the respondents by living area

Living area	Frequency	
	N	%
Urban	84	97.7
Semi urban	1	1.2
Rural	1	1.2
Total	86	100.00

About frequency distribution of respondents by living area, it was found that out of 86 participants, here highest number of urban area people 84(97.7 %), respondents were semi urban people 1(1.2%) and respondents were rural people 1(1.2%). (Table no. 2).

4.1.3 Educational qualification

Table no. 3: Frequency distribution of the respondents by educational qualification

Educational qualification	Frequency	
	N	%
Graduate	30	34.9
Primary level	5	5.8
Secondary level	11	12.8
Higher secondary level	21	24.4
Diploma	2	2.3
Post-graduation	16	18.6
Total	86	100.00

Regarding educational qualification, it was found that out of 86 (100.0 %) pregnant women, maximum participant complete Graduate and it was 30(34.9%). 5(5.8%) respondents had complete their primary education, 11(12.8%) respondents had secondary level, 21(24.4%) respondents had Higher secondary level, 2(2.3%) respondents had Diploma degree and 16(18.6%) respondents were complete Post graduation (Table no 3).

4.1.4 Occupation

Table no. 4: Frequency distribution of the respondents by Occupation

Occupation	Frequency	
	N	%
Employed	10	11.6
Housewife	76	88.4
Total	116	100.00

About occupational status, it was revealed that 10 (11.6%) participants were employed and 76(88.4%) participants were housewife (Table no. 4).

4.1.5 Family income

Table no 5: Frequency distribution of the respondents by family income

Income	Frequency	
	N	(%)
10000-39000	53	61.6
40000-69000	25	29.1
70000-100000	8	9.3
Total	86	100.0

Mean = 35779.07, SD = \pm 20002.00

About frequency distribution of the respondents by monthly income, it was revealed that out of 86, 53(61.6%) participant's family had monthly income Taka 10000-39000. It also found that 25(29.1%) participant's family had monthly income Taka 70000-100000. The mean of the participants family income is 35779.07 and Standard deviation (SD: \pm 20002.00) (Table no. 5).

4.1.6 Type of family the participants

It was found that out of 86 pregnant women, most of the participants family type was nuclear and it was 55(64.0%). It was also found that and 31(36.0%) participants family type was extended. (Figure no. 1).

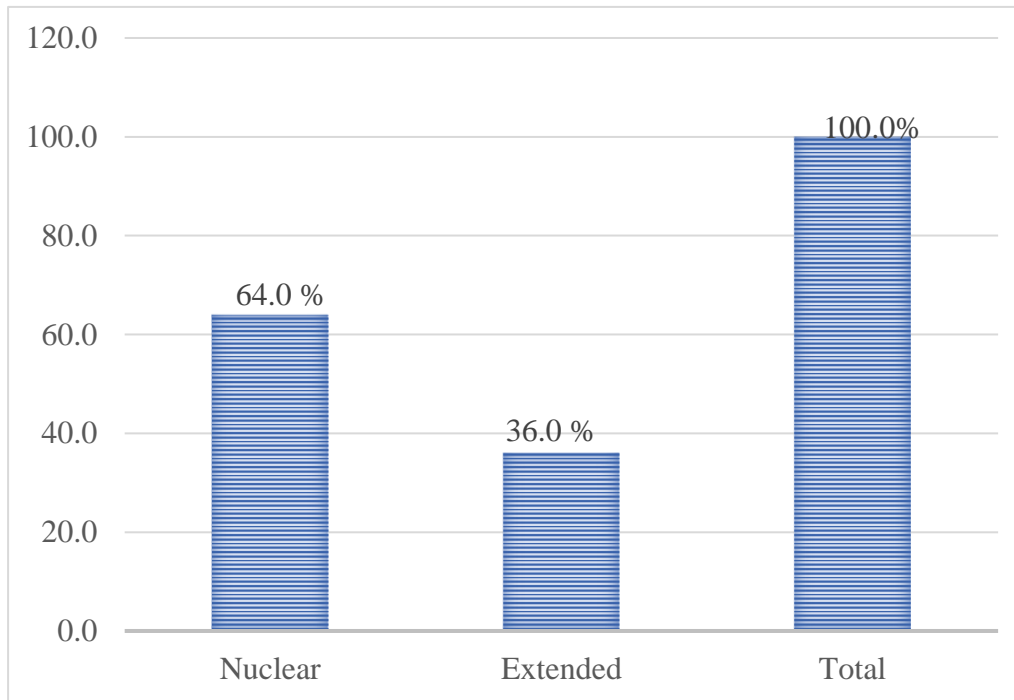


Figure no.1: Type of family the participants

4.1.7 Religion

Table no. 6: Frequency distribution of the respondents by Religion

Religion	Frequency	
	N	%
Muslim	81	94.2
Hindu	4	4.7
Buddhist	1	1.2
Total	86	100.00

The study showed that majority participants were Muslim and they were 81(94.2%). It also showed that 4(4.7%) were Hindu and 1(1.2%) were Buddhist (Table no. 6).

4.1.8 BMI group

Table no.7: Frequency distribution of the respondents by BMI group.

BMI	Frequency	
	N	(%)
Under weight	1	1.2
Normal weight	39	45.3
Over weight	29	33.7
obese	17	19.8
total	86	100.0

Mean =26.03, SD = \pm 4.257

Regarding frequency distribution of the respondents by BMI it was revealed that out of 86 participants BMI status, Highest BMI of the 39(45.3%) participants had normal weight (18.5-24.9). It was also found that 29(33.7%) pregnant women were Overweight (25.0-29.9). High risk of 17(19.8%) pregnant women were obese (>30). And 1(1.2%) pregnant women were underweight (<18.5). The mean BMI was 26.03 Standard deviation (SD: \pm 4.257). (Table no. 7).

4.2.1: General Health related information of the participants

Among the participant of this study out of 86 pregnant women, most of the women told suffering from sleeping problem and they were 66(76.7%) and 20(23.3%) participants had no sleeping problem. (Figure no.2)

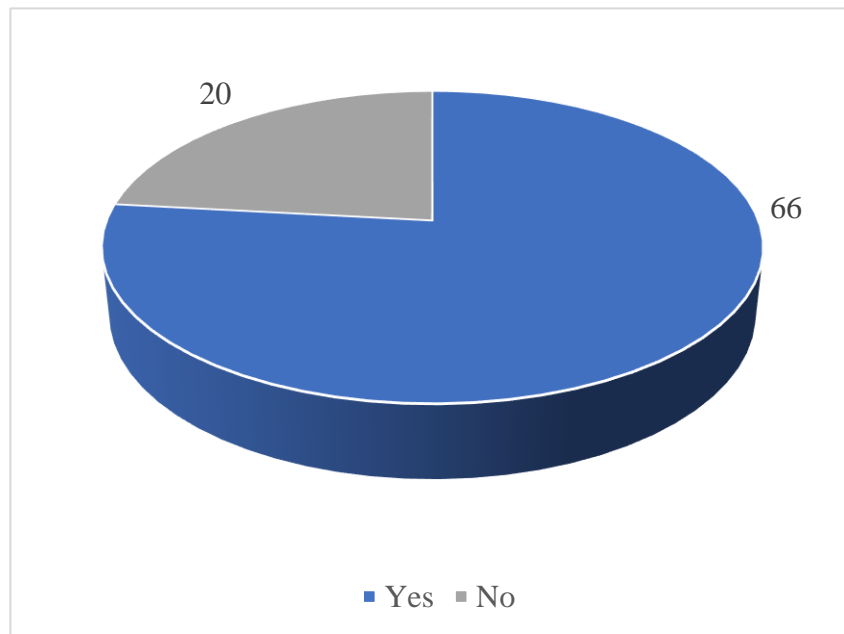


Figure no. 2: Sleep of the participants

4.2.2 vulnerable of the participants

The study showed that 22(25.6%) participants told they were feel vulnerable at morning, 37(43.0%) participants told they were feel vulnerable at afternoon and 27(31.4%) participants told they were feel vulnerable at evening. (Figure no.3).

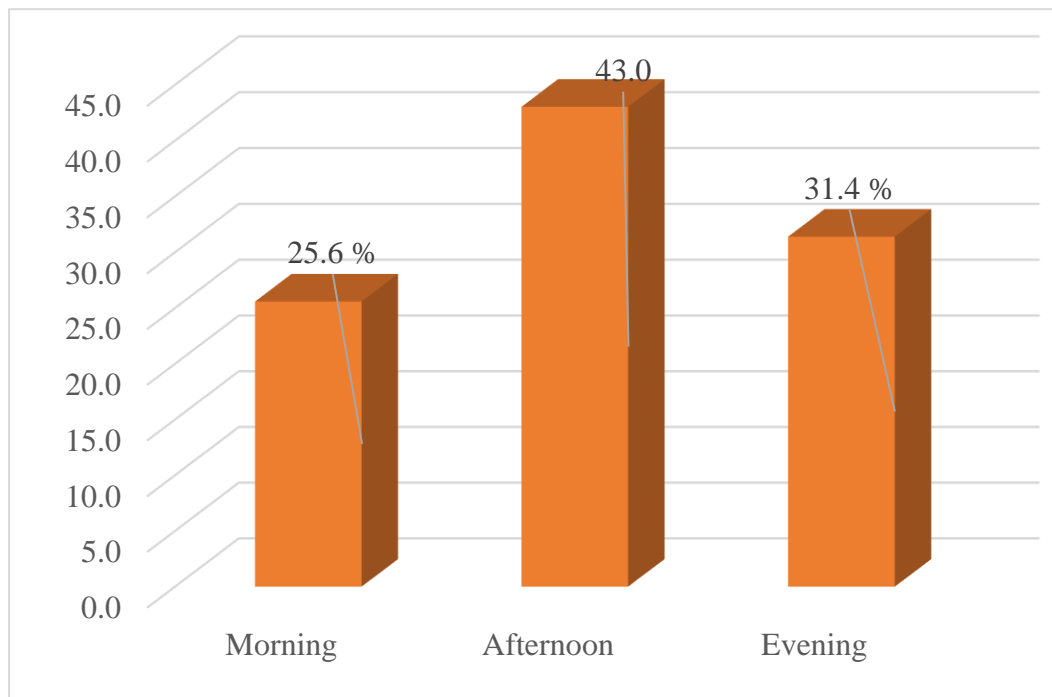


Figure no.3: vulnerable of the participants

4.2.3 General health problem

Table no.8: Frequency distribution of the respondents by general health problem.

General health problem	Frequency	
	N	(%)
hypertension	3	3.5
Diabetes mellitus	12	14.0
asthma	7	8.1
others problem	64	74.4
total	86	100.0

The study showed that out of 86 pregnant women, 3(3.5%) participants were suffering from hypertension. It was also found that 12(14.0%) participants had Diabetes mellitus, 7 (8.1%) participants had asthma and 64(74.4% participants) had others problem. (Table no.8).

4.3: Proportion of depression related information (EPDS)

Table no.9: Frequency distribution of the respondents by Proportion of depression.

Proportion of depression	Frequency	
	N	(%)
Yes	17	19.8
No	69	80.2
total	86	100.0

The study found that out of 86 pregnant women, 69(80.2%) respondents had no depressed during pregnancy. It was also found that the 17(19.8%) pregnant women were suffering from depression. (Table no.9).

4.3.1 Laugh and see the funny side of things.

Table no.10: Frequency distribution of the respondents by Laugh and see the funny side of things.

Laugh and see the funny side	Frequency	
	N	(%)
As much as I always could	48	55.8
Not quite so much now	11	12.8
Definitely not so much now	5	5.8
Not at all	22	25.6
total	86	100.0

The study found that, the participants told they had been able to laugh and see the funny side of things 48(55.8%) participants had as much as always could, 11(12.8%) participants had not quite so much now, 5(5.8%) participants had definitely not so much now and 22(25.6%) participants had not at all. (Table no.10).

4.3.2 Enjoyment of the participants

The study found that, the participants told they had been looked forward with enjoyment to things 21(24.4%) participants had as much as ever did, 25 (29.1%) participants had rather less than used to, 25(29.1%) participants had definitely less than used to and, 15(17.4%) participants had hardly at all. (Figure no.4).

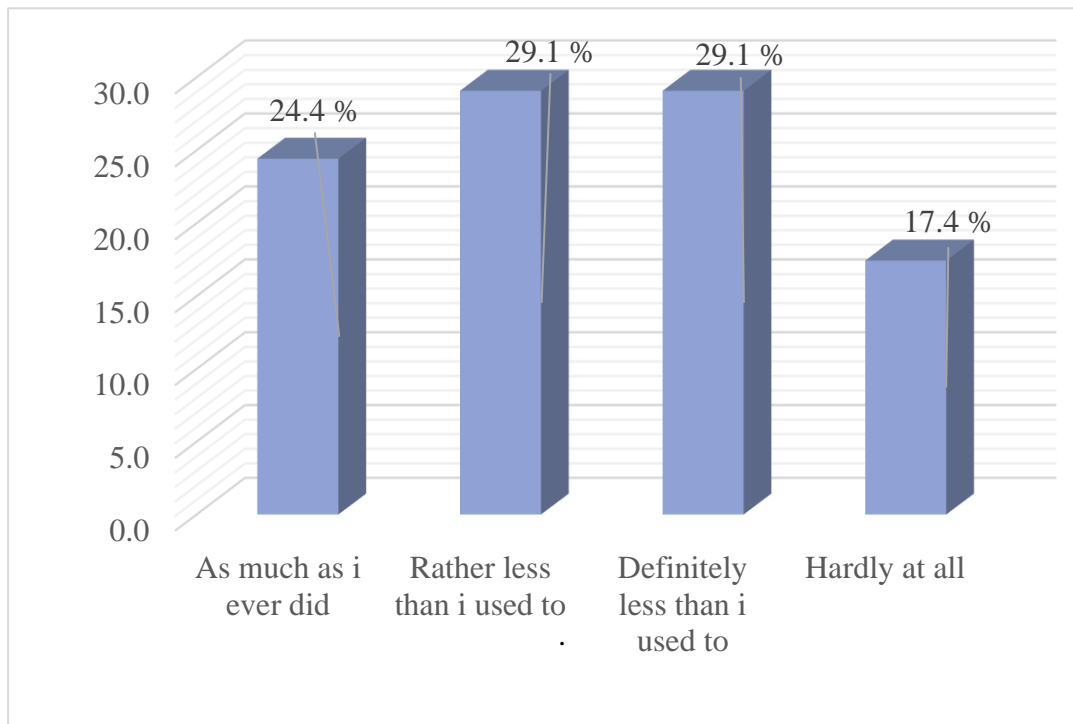


Figure no.4: Enjoyment of the participants

4.3.3 Blamed unnecessarily when things went wrong.

Table no.11: Frequency distribution of the respondents by blamed unnecessarily when things went wrong.

Blamed of the participants	Frequency	
	N	(%)
Yes, most of the time	3	3.5
Yes, some of the time	26	30.2
Not very often	37	43.0
No, never	20	23.3
total	86	100.0

The study revealed that, out of 86, 37 (43.0%) participants said that not very often had blamed herself unnecessarily when things went wrong. It was found that 26 (30.2%) participants said that Yes, some of the time. 20(23.3%) participants said that no, never and 3(3.5%) participants said that Yes, most of the time. (Table no.11).

4.3.4 Anxious or worried for no good reason

Table no.12: Frequency distribution of the respondents by anxious or worried for no good reason

Worried of the participants	Frequency	
	N	(%)
No, not at all	9	10.5
Hardly ever	13	15.1
Yes, sometimes	59	68.6
Yes, very often	5	5.8
total	86	100.0

The study showed that the participants had 86 pregnant women, 59 (68.6%) participants told that Yes, sometimes. 13(15.1%) participants told hardly ever.9(10.5%) participants told that no, not at all and 5(5.8%) participants told Yes, very often. (Table no.12).

4.3.5 panicky for no very good reason

Table no.13: Frequency distribution of the respondents by felt scared or panicky for no very good reason.

panicky for no very good reason	Frequency	
	N	(%)
Yes, quite a lot	2	2.3
Yes, sometimes	36	41.9
No, not much	35	40.7
No, not at all	13	15.1
total	86	100.0

The study showed that the participants had 86 pregnant women, 36 (41.9%) participants told that Yes, sometimes. 35(40.7%) participants told not much.13 (15.1%) participants told that no, not at all and 2(2.3%) participants told Yes, quite a lot. (Table no.13).

4.3. 6 Things have been getting.

Table no.14: Frequency distribution of the respondents by Things have been getting.

Things have been getting on top	Frequency	
	N	(%)
Yes, most of the time I haven't been able to cope at all	5	5.8
Yes, sometimes I haven't been coping as well as usual	21	24.4
No, most of the time I have coped quite well	42	48.8
No, I have been coping as well as ever	18	20.9
total	86	100.0

The study revealed that, out of 86, 42 (48.8%) participants said that no, most of the time I have coped quite well. 21 (24.4%) participants said that yes, sometimes I haven't been coping as well as usual. 18(20.9%) participants said that no, I have been coping as well as ever and 5(5.8%) participants told that yes, most of the time I haven't been able to cope at all. (Table no.14).

4.3.7 Difficulty sleeping of the participants

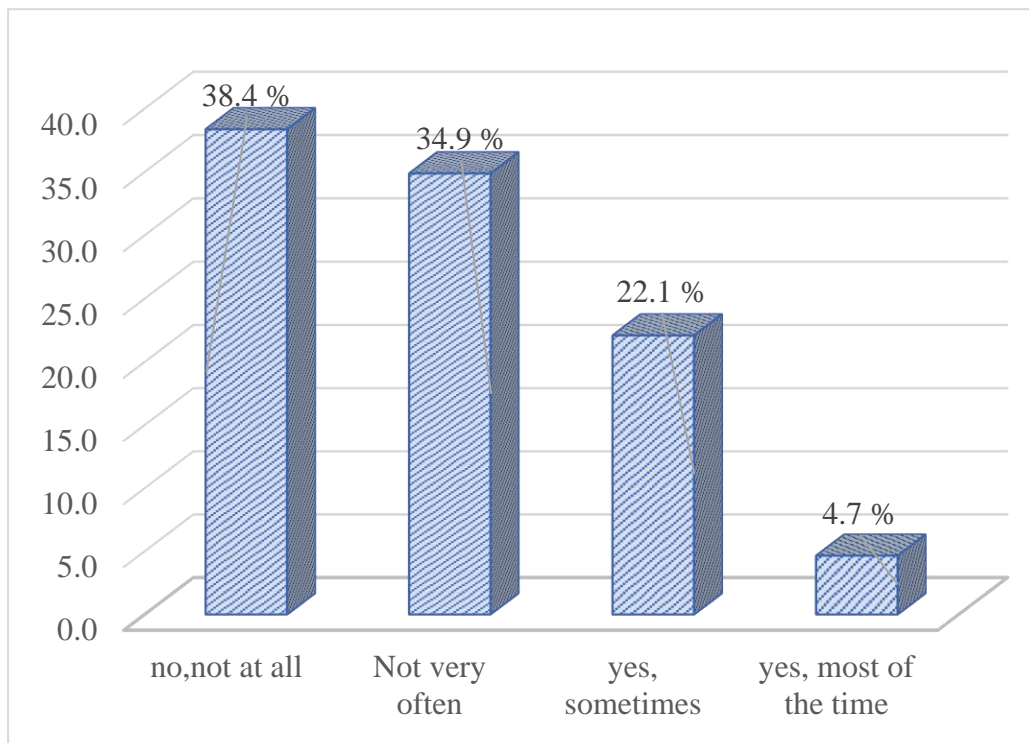


Figure no.5: Difficulty sleeping of the participants.

About unhappy that had difficulty sleeping, it was found that out of 86, 33(38.4%) participants said that no, not at all. The study also revealed that 30 (34.9%) participants said that not very often. 19 (22.1%) participants said that Yes, sometimes and it was reported that 4(4.7%) participants were most of the time had been so unhappy had difficulty sleeping (Figure no.5).

4.3.8 Felt sad or miserable

Table no.15: Frequency distribution of the respondents by felt sad or miserable.

Felt sad or miserable	Frequency	
	N	(%)
Yes,	44	51.2
Yes, quite often	36	41.9
Not very often	5	5.8
No, not at all	1	1.2
total	86	100.0

The study showed that 44(51.2%) participants told that they were felt most of the time sad or miserable, 36 (41.9%) participants told that they were quite often. 5 (5.8%) participants were not very often and 1(1.2%) participants told they were not at all felt sad or miserable (Table no.15).

4.3.9 Unhappy and crying

Table no.16: Frequency distribution of the respondents by unhappy and crying

unhappy and crying	Frequency	
	N	(%)
Yes, quite often	4	4.7
Only occasionally	20	23.3
No, never	62	72.1
total	86	100.0

The study showed that out of 86, 62(72.1%) respondents said that no, never unhappy and crying. It was found 20 (23.3%) respondents said only occasionally they were unhappy and crying. It was revealed that 4(4.7%) respondents said yes, quite often they were unhappy and crying. (Table no.16).

4.3.10 Harming occurred.

Table no.17: Frequency distribution of the respondents by harming occurred.

harming occurred	Frequency	
	N	(%)
Hardly ever	6	7.0
Never	80	93.0
total	86	100.0

The study showed that out of 86, 80(93.0%) respondents said that never thought of harming herself had occurred to him. It was also found 6 (7.0%) respondents said hardly ever they were thought of harming herself had occurred to him. (Table no.17).

4.4: Symptom of Sexual dysfunction related information

Table no.18: Frequency distribution of the respondents by Sexual desire.

Sexual desire	Frequency	
	N	%
Sometimes	56	65.1
Almost never or never	30	34.9
Total	86	100.00

The study showed that 56(65.1%) participants had felt sexual desire or interest during pregnancy and 30(34.9%) participants had almost never or never problem that required sexual desire. (Table no.18).

4.4.1 Level of sexual desire of the participants

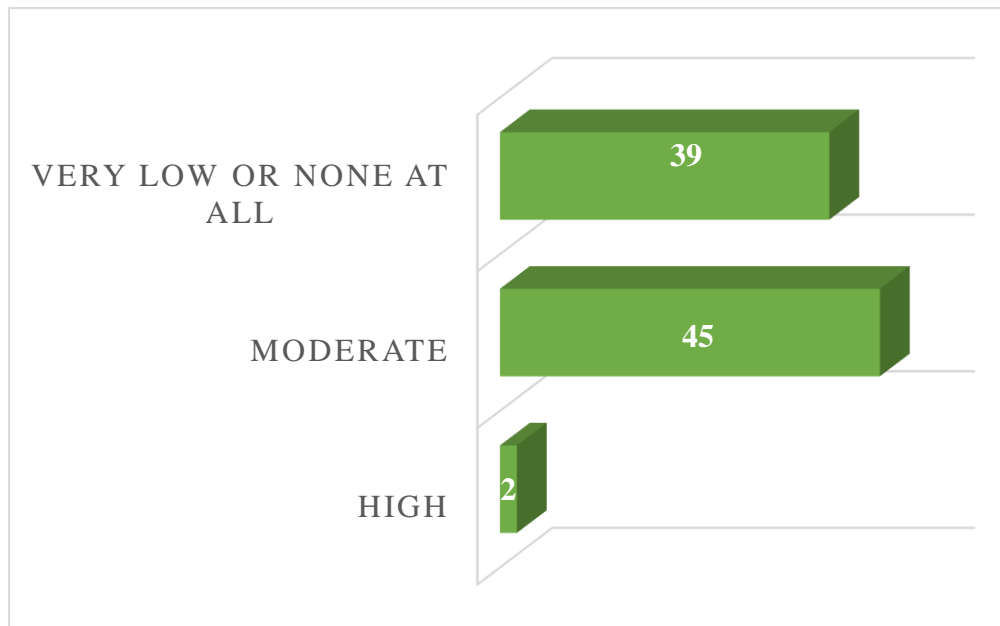


Figure no.6: Level of sexual desire of the participants

The study revealed that out of 45(52.3%)participants were moderate level of sexual desire. It was also found that 39(45.3%) participants were very low or none at all. It was observed that 2(2.3%) participants were high level of sexual desire. (Figure no.6).

4.4.2 Difficulty Intercourse of the participants

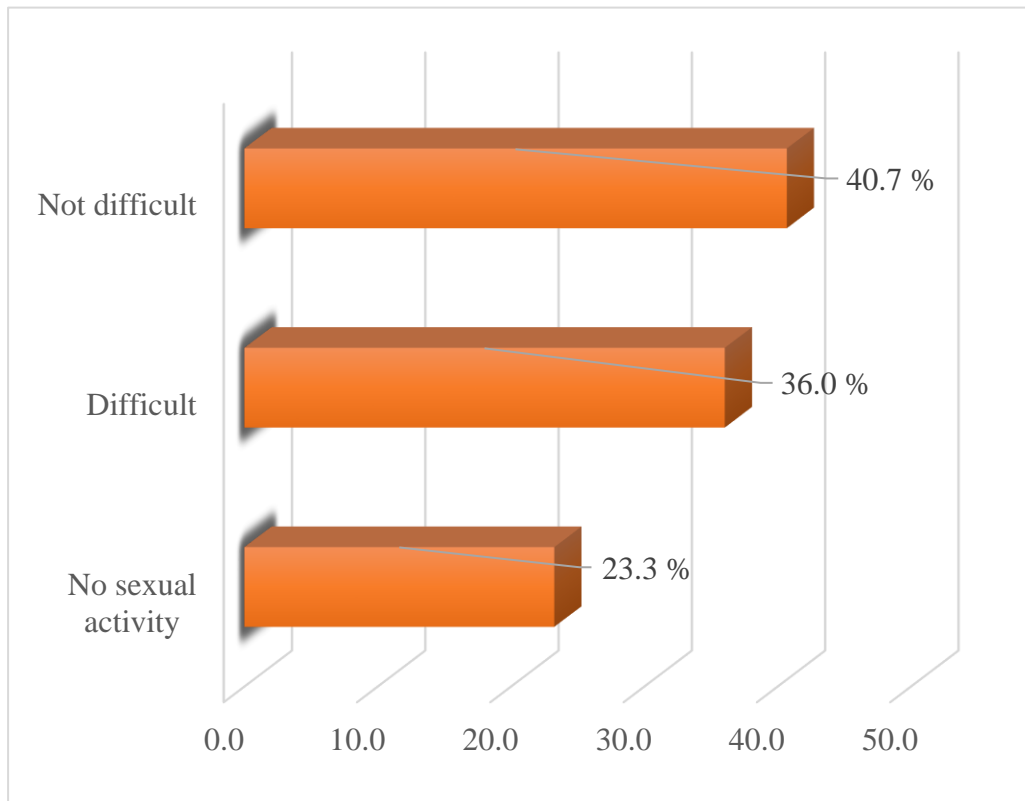


Figure no.7: Difficulty Intercourse of the participants

The study showed that 35(40.7%) participants said had not difficult sexual activity. It was also found that 31(36.0%) participants told had difficult sexual activity and 20(23.3%) participants told had no sexual activity. (Figure no.7).

4.4.3 Confident level of sexual aroused.

Table no.19: Frequency distribution of the respondents by Confident level of sexual aroused.

Confident level of sexual aroused	Frequency	
	N	(%)
No sexual activity	21	24.4
Sometimes	37	43.0
A few times	28	32.6
total	86	100.0

The study showed that out of 86, 37(43.0%) participants had high moderate confident level of sexual activity. It was found that 28(32.6%) participants had a few times of sexual activity and 21(24.4%) participants had no sexual activity. (Table no.19).

4.4.4 Pain during intercourse

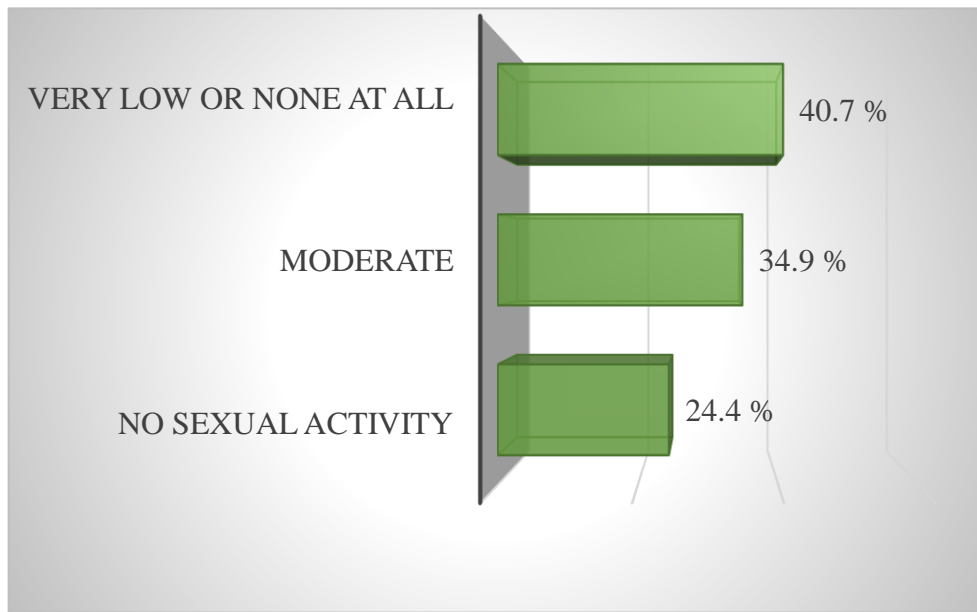


Figure no.8: Pain during intercourse

The study showed that out of 86, 35(40.7%) participants said they were experienced pain during intercourse while pregnant very low or none at all. It was reported that 30 (34.9%) participants said that moderate pain during intercourse and was also reported that 21(24.4%) participants were no sexual activity. (Figure no.8).

4.4.5 Bleeding during intercourse while pregnant.

Table no.20: Frequency distribution of the respondents by bleeding during intercourse while pregnant.

Bleeding during intercourse	Frequency	
	N	(%)
No sexual activity	21	24.4
Yes	5	5.8
No	60	69.8
total	86	100.0

About frequency distribution of the respondents by bleeding during pregnancy, it was revealed that 60(69.8%) respondents had no bleeding during intercourse, 21(24.4%) respondents were no sexual activity and 5(5.8%) respondents had bleeding during sexual intercourse. (Table no.20).

Table no.21: Frequency distribution of the respondents by age and depression among pregnant women.

Age group in years	Depression				Total	
	Yes		No			
	N	%	N	%	N	%
18-23	8	9.3	22	25.6	30	34.9
24-29	7	8.1	34	39.5	41	47.7
30-35	2	2.3	13	15.1	15	17.4
Total	17	19.8	69	80.2	86	100.0

$$\chi^2 = 1.48, df = 2, p = 0.477$$

The study showed that out of 86, 30(34.9%) were the age group 18-23 years. Among them 8(9.3%) respondents had suffered from depression, 22(25.6%) respondents had no suffered from depression. It also found that 41(47.7%) were the age group 24 – 29. Among them 7(8.1%) pregnant women had depression, 34(39.5%) had no suffered from depression. And it was also found that 15(17.4%) were the age group 30-35 years. Among them 2(2.3%) pregnant women had depression, 13(15.1%) had no suffered from depression

The association between age of the respondents and depression was not statistically significant ($\chi^2 = 1.48, df = 2, p = 0.477$) (Table no.21).

Table no.22: Frequency distribution of the respondents by age and Sexual interest among pregnant women.

Age group in years	Sexual interest				Total	
	Sometimes		Never			
	N	%	N	%	N	%
18-23	17	19.8	13	15.1	30	34.9
24-29	32	37.2	9	10.5	41	47.7
30-35	7	8.1	8	9.3	15	17.4
Total	56	65.1	30	34.9	86	100.0

$$\chi^2 = 6.21, df = 2, p = 0.045$$

The study showed that out of 86, 30(34.9%) were the age group 18-23 years. Among them 17(19.8%) respondents had felt sexual interest sometimes, 13(15.1%) respondents had never feeling sexual interest. It also found that 41(47.7%) were the age group 24 – 29. Among them 32(37.2%) pregnant women had feeling sexual interest sometimes, 9(10.5%) had never feeling sexual interest. And it was also found that 15(17.4%) were the age group 30-35 years. Among them 7(8.1%) pregnant women had sometimes sexual interest, 8(9.3%) had never feeling sexual interest.

The association between age of the respondents and sexual interest was statistically highly significant ($\chi^2 = 6.21, df = 2, p = 0.045$) (Table no.22).

The present study was carried out with the aim of conducted to assess the proportion of depression and sexual dysfunction among pregnant women in Bangladesh. The information was collected by using the EPDS scale questionnaire to assess depression in pregnant women had yielded very good result and self-administered questionnaire to identify the symptoms of sexual dysfunction. The discussion part has been presented in the following sections.

About age distribution the study revealed that 34.90% belonged to the age group 18-23. It also found that belong the age group (24-29) the percentage of the participants was 47.70% & the age group (30-35) the percentage of the participants was 17.40%. The mean of the participants age was 1.8256 and SD \pm 0.70614 (Table no. 1). The findings of the present study regarding age were similar to the study conducted by an Iranian study conducted by Hajnasiri et al. their study was done on 150 pregnant women aged 16 to 42 years, and their mean age was 27.87 \pm 5.49 years. (Hajnasiri, et al., 2020). Another study Daryani et al., (2021) stated that, the mean (standard deviation) age of participants was 29.7 (3.3) and their age range was 19 to 44 years. (Daryani, et al., 2021).

About distribution of the respondents by living area, it was found that out of 86 participants, here highest number of urban area people 97.7 %, respondents were semi urban people 1.2% and respondents were rural people 1.2%. (Table no. 2). The findings of the present study regarding living area were similar to the study conducted by Less than half 45.8% of the participants lived in their own houses. (Daryani, et al., 2021). The pregnant and parenting population of an urban centre in Canada (McDonald et al., 2013). In total, 23% of women experienced anxiety on at least one occasion during pregnancy, whereas 11% of women reported depressive symptoms.

Regarding educational qualification, it was found that out of 100.0 % pregnant women, maximum participant complete Graduate and it was 34.9%. 5.8% respondents had complete their primary education, 12.8% respondents had secondary level, 24.4% respondents had Higher secondary level, 2.3% respondents had Diploma degree and 18.6 respondents were complete Post graduation (Table no 3). the educational level was found to be significantly related to FSD. Additionally, we investigated the educational

level of male partners and found out that 9 of them were illiterate, Educational level of male was found to have a significant, inverse relationship with FSD ($p=0.001$). (Kucukdurmaz, et al.,2016).

About occupational status, it was revealed that 11.6% participants were employed and 88.4% participants were housewife (Table no. 4). The findings of the similar study regarding about occupational status 53.3% and 46.7% of the 413 respondents studied were attending UPTH and RSUTH, respectively Over 71.1% were employed, and over 50% earned less than \$100 per month. (wegbom, et al.,2023). Another study Safieh,et al., stated that, 22.2%, 30.7%, and 47.1% of the study subjects were in the first, second, and third trimesters, respectively. Most of the participants were housewives 29.4%. (Safieh,et al.,2013). The findings in this regard were higher than the present study.

About frequency distribution of the respondents by monthly income, it was revealed that out of 86, 61.6% participants family had monthly income Taka 10000-39000. It also found that 29.1% participants family had monthly income Taka 70000-100000. The mean of the participants family income is 35779.07 and Standard deviation (SD: ± 20002.00) (Table no. 5). The findings of the similar study regarding about occupational status 53.3% and 46.7% of the 413 respondents studied were attending, respectively Over 71.1% were employed, and over 50% earned less than \$100 per month. (wegbom, et al.,2023).

The study showed that majority participants were Muslim and they were 94.2%. It also showed that 4.7% were Hindu and 1.2% were Buddhist (Table no. 6). The findings of the present study regarding 96.6% were Christians. (wegbom, et al.,2023).

Regarding frequency distribution of the respondents by BMI it was revealed that out of 86 participants BMI status, Highest BMI of the 45.3% participants had normal weight (18.5-24.9). It was also found that 33.7% pregnant women were Overweight (25.0-29.9). High risk of 19.8% pregnant women were obese (>30). And 1.2% pregnant women were underweight (<18.5). The mean BMI was 26.03 Standard deviation (SD: ± 4.257). (Table no. 7).

The study showed that out of 86 pregnant women, 3.5% participants were suffering from hypertension. It was also found that 14.0% participants had Diabetes mellitus, 8.1% participants had asthma and 74.4% participants had others problem.

(Table no.8). The authors found that women's sexual function did not significantly change during the first trimester of pregnancy, if other potentially limiting symptoms such as nausea or vomiting were excluded.

The study found that out of 86 pregnant women, 80.2% respondents had no depressed during pregnancy. It was also found that the 19.8% pregnant women were suffering from depression. (Table no.9). The authors revealed varying degrees of depression among the pregnant women as follows: 78.0% were normal, 14.5% were mild, 7.3% were moderate, 1.5% were severe, and 0.7% were extremely severe depression cases. (wegbom, et al.,2023). A similar study conducted by, resulting in 121 eligible articles from 81 unique participant samples. Of these, 69% contributed datasets. Authors of included studies contributed data from two other studies that the search did not retrieve for a total of 58 datasets (15557 participants, 2069 with major depression). (Levis., et al.,2020). Another study Eberhard, et al.,2001 stated that, estimates of sensitivity ranged from 65% (specificity 96%) to 100% (specificity 80 to 96%). The specificity ranged from 49% (sensitivity 96%) to 100% (sensitivity 96%). Studies that used a high EPDS cut-off tended to show lower sensitivity and higher specificity. The inclusion of minor depressive disorders in the definition of prepartum depression tended to lower estimates of sensitivity.

In this current study, Sexual dysfunction was measured by self-administered question include Sexual desire, Level of sexual desire, Difficulty of Intercourse, Confident level of sexual aroused, Pain during intercourse, Bleeding during intercourse. In this current study showed that 65.1% participants had felt sexual desire or interest during pregnancy and 34.9% participants had almost never or never problem that required sexual desire. (Table no.18). A similar study conducted by, 25 women 9.8% stated that they did not have sexual desires during pregnancy and 18 cases 7% said that they did not have lubrication. In addition, 29 subjects 11.3% mentioned that they had not reached orgasm and 17 cases (6.7%) believed that they had not reached the sexual excitement and arousal phase. Besides, 53 women (20.6%) reported no pain during intercourse and only 3 subjects stated that they had no sexual satisfaction during pregnancy. (Jamali, et al.,2012).

The study showed that 40.7% participants said had not difficult sexual activity. It was also found that 36.0% participants told had difficult sexual activity and 23.3% participants told had no sexual activity. (Figure no.7). 43.0% participants had high moderate confident level

of sexual activity. It was found that 32.6% participants had a few times of sexual activity and 24.4% participants had no sexual activity. (Table no.19). The findings of the present study regarding difficulty sexual activity were similar to the study conducted by 70% of the study participants considered themselves sexually active and 98/124 had sexual satisfaction. However, only 39.5% of the women often initiated intercourse during the course of the pregnancy. (Adeyemi,et al.,2021). Another study conducted by, Jamali and Mosalanejad.,2013 stated that Among the study subjects, 197 ones (79.1%) had sexual dysfunction, while only 20.9% had normal sexual function. Moreover, the highest sexual dysfunction was reported in the third trimester (46.2%) and it was reported as 30.5% and 23.4% in the first and the second trimesters, respectively. In addition, a statistically significant relationship was observed among the domains of sexual function in all the 3 trimesters and correlated with sexual desire, sexual arousal, lubrication, orgasm, and sexual satisfaction.

The study showed that out of 86, 40.7% participants said they were experienced pain during intercourse while pregnant very low or none at all. It was reported that 34.9% participants said that moderate pain during intercourse and was also reported that 24.4% participants were no sexual activity. (Figure no.8). About frequency distribution of the respondents by bleeding during pregnancy, it was revealed that 69.8% respondents had no bleeding during intercourse, 24.4% respondents were no sexual activity and 5.8% respondents had pain bleeding during sexual intercourse. (Table no.20). The findings of the present study regarding bleeding during sexual intercourse. were similar to the study conducted by more than 70% engaged in sex to satisfy their sexual urge. The most common reason for not engaging in intercourse was reduced libido 86.5% followed by discomfort and pain. (Adeyemi, et al.,2021). Comparison of the domains of sexual function during pregnancy showed the lowest mean to be related to sexual desire (2.29 ± 1.67), sexual arousal (2.39 ± 1.86), orgasm (2.57 ± 2.06), pain during intercourse (2.90 ± 2.28), lubrication (3 ± 2.22), and sexual satisfaction (3.35 ± 2.30). Furthermore, 25 women (9.8%) stated that they did not have sexual desires during pregnancy and 18 cases (7%) said that they did not have lubrication. In addition, 29 subjects (11.3%) mentioned that they had not reached orgasm and 17 cases (6.7%) believed that they had not reached the sexual excitement and arousal phase. Besides, 53 women (20.6%) reported no pain during intercourse and

only 3 subjects stated that they had no sexual satisfaction during pregnancy. (Jamil, et al.,2012)

The study showed that out of 86, 34.9% were the age group 18-23 years. Among them 9.3% respondents had suffered from depression, 25.6% respondents had no suffered from depression. It also found that 47.7% were the age group 24 – 29. Among them 8.1% pregnant women had depression, 39.5% had no suffered from depression. And it was also found that 17.4% were the age group 30-35 years. Among them 22.3% pregnant women had depression,15.1% had no suffered from depression. The association between age of the respondents and depression was not statistically significant ($\chi^2 = 1.48$, $df = 2$, $p = 0.477$) (Table no.21). Similar findings from a study conducted in Compared with Māori women, a greater proportion of non-Māori women reported experiencing a period of poor mood prior to the current pregnancy ($\chi^2=4.51$, $p=0.034$). There were, however, no differences by ethnicity in the proportion of women who had sought professional help ($\chi^2=1.02$, $p=0.312$) or the level to which poor mood interfered with functioning and relationships, $t(178)=-0.29$, $p=0.771$. (Leigh Signal, et al.,2016).

The study showed that out of 86, 34.9% were the age group 18-23 years. Among them 19.8% respondents had felt sexual interest sometimes, 15.1% respondents had never feeling sexual interest. It also found that 47.7% were the age group 24 – 29. Among them 37.2% pregnant women had feeling sexual interest sometimes, 10.5% had never feeling sexual interest. And it was also found that 17.4% were the age group 30-35 years. Among them 8.1% pregnant women had sometimes sexual interest, 9.3% had never feeling sexual interest. The association between age of the respondents and sexual interest was statistically highly significant ($\chi^2 = 6.21$, $df = 2$, $p = 0.045$) (Table no.22) Similar findings from a study conducted in the mean total and the individual scores on desire, orgasm, and pain domains differed significantly among pregnant participants in each of the three pregnancy trimesters. There are significant differences in the total score between the participants in the first and second trimesters ($P = 0.042$), and those in the second and third trimesters ($P = 0.010$). In contrast, no significant difference was found between total scores of participants in the first and third trimesters ($P = 0.334$). The second trimester women had the highest total FSFI score, which was not significantly different from the total FSFI score in nonpregnant women ($P = 0.922$). (Mobasher, et al.,2019).

Every study has its own set of limitations. There was some situational limitation while considering the study. Those are as follows:

- Required sample size for the present study was 173. But researcher collected data from 86 pregnant women. Due to shortage of time data could not be collected from the calculated sample size.
- In this study researcher used only one tool was (EPDS) scale to measure the depression in pregnant women. Another was a self-administered questionnaire to determine the symptoms of sexual dysfunction. But, to do a perfect study, more tools could be used.
- Sexual dysfunction related questions about personal matters which made the subjects feel uncomfortable as they answered. In a similar study FSFI (Female Sexual Function Index) was used by another country but the recent study couldn't use due to the uncomfortable series of questions.
- Convenient sampling technique was applied to select the study participants. It is a non-probability sampling technique. Ideally random sampling technique should be used to prevent selection bias.
- Despite repeated requests some respondents showed lack of co-operation and were reluctant to answer some of the questions.
- The study was carried out at Medinova specialized Hospital, OGSB Hospital, Lab science diagnostic center in Dhaka city. It would be better to include different hospitals from 8 divisions of the country.

CHAPTER-VII: CONCLUSION AND RECOMMENDATION

7.1: Conclusion:

The present study was a cross-sectional type of descriptive one carried out with the objective to assessing the proportion of depression and sexual dysfunction among pregnant women in Bangladesh. The information was collected by using the EPDS scale questionnaire to assess depression in pregnant women and self-administered questionnaire to identify the symptoms of sexual dysfunction. The information was collected by a self-administered questionnaire from a sample size 86 pregnant women.

The results of the present study revealed considerable depressive symptoms and sexual dysfunction in pregnant women. In summary, discovered that a cutoff value of 13 or higher results in the EPDS's combined sensitivity and specificity being at its highest. Furthermore, there were no appreciable differences in accuracy according to participant characteristics or reference standards, including whether the EPDS was given during pregnancy. Since certain demographic characteristics and the EPDS were found to affect pregnancy related depression, it appears that pregnancy-related depression is indirectly related to sexual dysfunction. Since pregnancy is a risky and stressful period in women's life, and considering that sexual desire and function are part of women's health, efforts to reduce pregnancy-related depression.

The study showed that, the majority of the participants 47.70% belonged to the age group of 24 – 29 years and the mean age was 1.82 years. The study showed that 94.2% respondents were Muslim and highest number of urban area 97.7 % in pregnant women, maximum pregnant women 34.9% completed Graduate.

The survey showed that, 88.4% participants said they were housewife, in this study shown that was maximum pregnant women were housewives. The study found that, 64.0% participants mentioned that family type was nuclear. Additionally, it was discovered that 45.3% respondents highest BMI had normal weight (18.5-24.9). It was found that most of the women told suffering from sleeping problem and they were 76.7%. It was revealed that 74.4% participants had suffering from others health problems.

The study revealed that very few of participants 19.8% thought that were suffering from depression. The study found that, the majority of participants 65.1% had

felt sexual desire or interest during pregnancy. It was found that 36.0% participants told had difficult sexual activity. It was observed that 43.0% participants had moderate confident level of sexual activity. The study indicated that maximum pregnant women 40.7% said they were experienced pain during intercourse while pregnant. it was revealed that 60(69.8%) respondents had no bleeding during intercourse.

Therefore, it seems quite necessary to hold marital counseling classes in health centers in order for the women to discuss their sexual problems and benefit from the counseling methods, which itself is an important step in preventing family conflicts and its consequences, increasing direct and indirect support for educational and counseling programs. In addition, direct and indirect support for training and counseling programs should be increased.

Recommendation:

The following recommendations are made on the basis of the findings of the present study and have been described in this section.

- Still now in Bangladesh there is little research had been conducted about depression and sexual dysfunction among pregnant women socioeconomic status that need to conduct more study in this topic.
- Seminar, talk show should be arranged to make social awareness of depression and quality of life pregnant women.
- Psychotherapy and antenatal exercise, Kegel exercise training should be given to the healthcare professionals.
- Encouraging further research in this area should be done. Further research finds new insight about depression and sexual dysfunction in pregnant women in Bangladesh.
- More recommended that used for different measurement tools need to be included depression and sexual dysfunction scale, the brief psychiatric rating scale, Hospital anxiety and depression scale, Female Sexual Function Index Scale (FSFI).

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Appendix – A



SAIC COLLEGE OF MEDICAL SCIENCE AND TECHNOLOGY

Approved by Ministry of Health and Family Welfare
Affiliated with Dhaka University

Ref :

Date :

Ref.No: *SCMST/PT/ERB-2017-18/1-2023/38*

22nd January'2023

To

Monira Parvin

4th Professional B.Sc. in Physiotherapy

Saic College of Medical Science and Technology (SCMST)

Mirpur-14, Dhaka-1216.

Sub: Permission to collect data

Dear Parvin,

Ethical review board (ERB) of SCMST pleased to inform you that your proposal has been reviewed by ERB of SCMST and we are giving you the permission to conduct study entitled "The rate of depression, *and* sexual dysfunction among the pregnant women in Bangladesh" and for successful completion of this study you can start data collection from now.

Wishing you all the best.

Thanking You,

B. Ahmad
22/01/2023
Head of ERB

Ethical Review Board

Saic College of Medical Science and Technology

Abm. Haque
22.01.23
Principal

Saic College of Medical Science and Technology

Mirpur-14, Dhaka-1216

Address: Saic Tower, M-1/6, Mirpur-14, Dhaka-1206. Mobile: 01936005804
E-mail: simt140@gmail.com, Web: www.saicmedical.edu.bd

Appendix – B



SAIC COLLEGE OF MEDICAL SCIENCE AND TECHNOLOGY

Approved by Ministry of Health and Family Welfare
Affiliated with Dhaka University

Ref. No: SCMST/PT/ERB-2017-18/1-2023/38(b)

Date :

26th February 2023

To

1. The Managing Director, OGSB Hospital and IRCH, Section-17 (Old-13), Mirpur, Dhaka.
2. The Managing Director, Lab Science diagnostic center, 153, Green road, Dhaka-1205.
3. The Director, AI- Helal Specialized Hospital, 150, Begum Rokeya Sarani, Mirpur-10, Dhaka.


Sub: Permission to collect data.

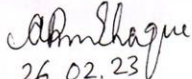
Dear Sir,


Ethical review board (ERB) of SCMST pleased to inform you that Monira Parvin of final year B.Sc. in Physiotherapy student from Saic College of Medical Science and Technology doing a thesis entitle of "The rate of depression and sexual dysfunction among the pregnant women in Bangladesh" which has been reviewed by ERB of SCMST and we are giving permission to her to conduct this study. Her data collection area is within Dhaka, so she wants to take data from your department.

I hope you will give kind permission to collect data to complete her study successfully and oblige thereby.

Thanking You,


Head of ERB
Ethical Review Board
Saic College of Medical Science and Technology


26.02.23
Principal
Saic College of Medical Science and Technology
Mirpur-14, Dhaka-1216


21/3/23


21.3.23
Faruk Ahmed
Managing Director
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Appendix – C

সম্মতি পত্র

প্রিয় অংশগ্রহণকারী,

উত্তরদাতার আইডি নং:

আমি মনিরা পারভীন, ঢাকা বিশ্ববিদ্যালয়ের মেডিসিন অনুষদের অধীনে সাইক কলেজ অফ মেডিক্যাল সাইন্স এন্ড টেকনোলজি বি.এস.সি ইন ফিজিওথেরাপি বিভাগের শেষ বর্ষের ছাত্র। আমার কোর্সটি শেষ করার জন্য আমি একটি গবেষণা করছি যার শিরোনাম “বাংলাদেশের গর্ভবতী মহিলাদের মধ্যে বিষণ্ণতা এবং যৌনকর্মহীনতার হার নির্ণয়” এখানে একটি ফর্ম রয়েছে যেটি আপনাকে পূরণ করতে হবে। আমি আমার অধ্যয়ন সংক্রান্ত কিছু তথ্য জানতে চাই। এটি আনুমানিক ১০-১৫ মিনিট সময় নেবে। আমি আপনাকে জানাতে চাই যে এটি একটি সম্পূর্ণরূপে একাডেমিক অধ্যয়ন এবং প্রাপ্ত তথ্য অন্য কোন কাজে ব্যবহার করা হবে না। আপনার দেয়া সমস্ত তথ্য গোপন রাখা হবে এবং তথ্যের উৎস বেনামি থাকবে। এই গবেষণায় আপনার অংশগ্রহণ স্বেচ্ছায় এছাড়াও স্বাক্ষাৎকারের সময় আপনি পছন্দ করেন না বা উত্তর দিতে চান না এমন একটা নির্দিষ্ট প্রশ্নের উত্তর না দেওয়ার অধিকার রয়েছে। আপনি আপনার ফর্মটি পূরণের জন্য গবেষণার বিষয়ে গবেষককে যে কোন প্রশ্ন করতে পারেন। আপনার সদয় সহযোগিতা একান্ত কাম্য।

অংশগ্রহণকারীর ঘোষণা ,

আমাকে এই জরিপে অংশগ্রহণের জন্য আমন্ত্রণ জানানো হয়েছে। উপরের তথ্যগুলো আমি পড়েছি। এখানে এটা স্পষ্ট যে এই স্বাক্ষাৎকারে আমি স্বেচ্ছায় অংশগ্রহণ করতে পারবো এবং যেকোনো সময় এটি প্রত্যাহার করতে পারব। আমি এই গবেষণায় অংশগ্রহণকারী হতে সম্মতি প্রদান করছি।

অংশগ্রহণকারীর নাম :

অংশগ্রহণকারীর স্বাক্ষর এবং তারিখ :

মোবাইল নাম্বার:

গবেষকের স্বাক্ষর:

সাক্ষীর স্বাক্ষর:

ঠিকানা:

APENDIX-D

Consent form

Dear participant,

Respondent ID no:

I am Mst Monira Parvin, student of B.sc in physiotherapy program in the Department of Physiotherapy at SAIC College of Medical Science and Technology (SCMST) which is affiliated by Dhaka University conducting the study entitled **“Depression and Sexual Dysfunction Among Pregnant Women in Bangladesh”** as a part my thesis work for the partial fulfillment of Bachelor degree. There is a list of question you need to fill up which include socio-demographic and musculoskeletal problem. For spending your time to participate in this self-administered interview which will take around 10-15 minutes. There is list of questionnaires and you need to fill up each answer. The information gained from this questionnaire will be used for academic purpose and will be kept confidential. Your participation in this study is totally voluntarily and you have the right to withdraw from the interview without any clarification at any moment. You can ask any question to the researcher and/or my research supervisor, Looking forward your kind cooperation.

Declaration of the participants,

I have been invited to participate in this survey. The foregoing information has been read to me and that have been answered to my satisfaction. I have noticed that my participation in this study is totally voluntary and I have the right to withdraw from the interview at any clarification. I give my consent voluntarily to be participants in this study.

Respondent name: Signature of the researcher:

Signature and date: Signature of the witness:

Mobile no:

Appendix – E

Questionnaire (English)

Depression and Sexual Dysfunction Among Pregnant Women in Bangladesh

Code no:

Date:

Participant name:

Address:

Phone number:

Section: 1. Sociodemographic information

Q.N	Question	Answer
1.	What is your age?.....	
2.	Where do you live?..... 1.Urban 2.Semi urban 3.Rural	
3.	What is your educational qualification? 1.Illiterate 2.Primary level 3.Secondary level 4.Higher Secondary level 5.Diploma 6.Graduate 7.Postgraduate 8.Others	

4.	<p>What is your occupational status?</p> <p>1. Employed</p> <p>2. Unemployed</p> <p>3. Housewife</p>	
5.	<p>What's about your monthly income?</p> <p>.....</p>	
6.	<p>Types of your family?</p> <p>1. Nuclear</p> <p>2. Extended</p>	
7.	<p>What is your religion?</p> <p>1. Muslim</p> <p>2. Hindu</p> <p>3. Buddhist</p> <p>4. Christian</p> <p>5. Others</p>	
8.	<p>Body Mass Index (BMI)</p> <p>Height of the participant (ft)</p> <p>Weight of the participant (kg)</p>	

Section 2: General Health Related Information

Q.N	Question	Answer
1.	Does your sleep suddenly break at night? 1.Yes 2.No	
2.	Do you feel vulnerable at any time? 1.Morning 2.Afternoon 3.Evening 4.Night	
3.	Are you suffering from any health problem? 1.Hypertention 2.Diabetes Mellitus 3.Asthma 4.Cardiovascular disease 5.Respiratory problem 6.Others	

Section3: Edinburgh Postnatal Depression Scale (EPDS)

The questionnaire below is called the Edinburgh Postnatal Depression Scale (EDPS)
The EDPS was developed to identify women who may have pregnant or postpartum depression. Each answer is given a score of 0 to 3. The maximum score is 30.

Please select the answer that comes closest to how you have felt in the past 7 days:

Serial no	Question
1.	I have been able to laugh and see the funny side of things
	0 As much as I always could 1 Not quite so much now 2 Definitely not so much now 3 Not at all

2.	I have looked forward with enjoyment to things
	0 As much as I ever did 1 Rather less than I used to 2 Definitely less than I used to 3 Hardly at all
3	I have blamed myself unnecessarily when things went wrong
	3 Yes, most of the time 2 Yes, some of the time 1 Not very often 0 No, never
4.	I have been anxious or worried for no good reason
	0 No, not at all 1 Hardly ever 2 Yes, sometimes 3 Yes, very often
5.	I have felt scared or panicky for no very good reason
	3 Yes, quite a lot 2 Yes, sometimes 1 No, not much 0 No, not at al
6.	Things have been getting on top of me
	3 Yes, most of the time I haven't been able to cope at all 2 Yes, sometimes I haven't been coping as well as usual 1 No, most of the time I have coped quite well 0 No, I have been coping as well as ever
7.	I have been so unhappy that I have had difficulty sleeping
	3 Yes, most of the time 2 Yes, sometimes 1 Not very often 0 No, not at all
8.	I have felt sad or miserable
	3 Yes, most of the time 2 Yes, quite often

	1 Not very often 0 No, not at all
9.	I have been so unhappy that I have been crying
	3 Yes, most of the time 2 Yes, quite often 1 Only occasionally 0 No, never
10.	The thought of harming myself has occurred to me
	3 Yes, quite often 2 Sometimes 1 Hardly ever 0 Never

Section 4: Information of sexual activity during pregnancy

Question	Response Options
1. How often did you feel sexual desire or interest during pregnancy?	1.Almost always or always 2.Sometimes 3.Almost never or never
2. How would you rate your level (degree) of sexual desire during pregnancy?	1. High 2.Moderate 3.Very low or none at all
3. How Difficult was intercourse for you while you were pregnant?	1. No sexual activity 2.Difficult 3.Not Difficult
4. How confident were you about becoming sexually aroused during sexual activity or intercourse?	1. No sexual activity 2. Sometimes 3.A few times
5. Have you experienced pain during intercourse while pregnant?	1. No sexual activity 2. Sometimes 3. Very low or none at all
6. Have you ever had bleeding during intercourse while pregnant?	1. No sexual activity 2.Yes 3.No

Appendix – E

প্রশ্নাবলি (বাংলা)

“বাংলাদেশের গর্ভবতী মহিলাদের মধ্যে বিষণ্ণতা এবং যৌন কর্মহীনতার হার নির্ণয়”

কোড নংঃ

তারিখঃ.....

অংশগ্রাহকের নামঃ.....

ঠিকানাঃ

মোবাইল নাম্বারঃ

সেকশনঃ ১. সামাজিক জনসংখ্যা সংক্রান্ত তথ্য

প্রশ্ন নং	প্রশ্ন	উত্তর	কোড নং
১.	আপনার বয়স কত ?		
২.	আপনি কোথায় বাস করেন ?	১। শহর ২। মফস্বল ৩। গ্রাম	
৩.	আপনার শিক্ষাগত যোগ্যতা কি ?	১। নিরক্ষর ২। প্রাথমিক স্তর ৩। মাধ্যমিক স্তর ৪। উচ্চ মাধ্যমিক স্তর ৫। ডিপ্লোমা ৬। স্নাতক ৭। স্নাতকোত্তর ৮। অন্যান্য	
৪.	আপনার পেশা কি ?	১। কর্মজীবী ২। বেকার ৩। গৃহিনী	
৫.	পরিবারের মাসিক আয় কত ?	
৬.	আপনার পরিবারের ধরন কি ?	১। একক পরিবার ২। যৌথ পরিবার	

৭.	আপনার ধর্ম কি ?	১। ইসলাম ২। হিন্দু ৩। বৌদ্ধ ৪। খ্রিষ্টান ৫। অন্যান্য	
৮.	বডি মাস ইনডেক্স ব্যক্তির উচ্চতা (ফিট) ব্যক্তির ওজন (কেজি)		

সেকশনঃ ২. সাধারণ স্বাস্থ্য সম্পর্কিত তথ্য

প্রশ্ন নং	প্রশ্ন	উত্তর	কোড নং
১.	রাতে কি হঠাৎ ঘুম ভেঙ্গে যায় ?	১। হ্যাঁ ২। না	
২.	আপনি কোন সময় বেশি দুর্বল বোধ করেন ?	১। সকালে ২। দুপুরে ৩। রাতে ৪। মাঝরাতে	
৩.	আপনি কি কোনো স্বাস্থ্যজনিত সমস্যায় ভুগছেন ?	১। উচ্চরক্তচাপ ২। বহুমূত্র রোগ ৩। শ্বাসকষ্ট ৪। হৃদরোগ ৫। শ্বাসযন্ত্রের সমস্যা ৬। ফুসফুস ক্যাশার ৭। স্নায়ুরোগ ৮ অন্যান্য	

সেকশনঃ ৩. এডিনবার্গ প্রসবোত্তর বিষণ্ণতা স্কেল (ইপিডিএস) নিম্নলিখিত প্রশ্নাবলিকে এডিনবার্গ প্রসবোত্তর বিষণ্ণতা স্কেল বলা হয় (ইপিডিএস) প্রসবোত্তর বিষণ্ণতা থাকতে পারে এমন মহিলাদের শনাক্ত করার জন্য ইপিডিএস তৈরি করা হয়েছিল। প্রতিটি উত্তরকে ০ - ৩ স্কের দেওয়া হয়েছে। সর্বোচ্চ স্কের হল ৩০।

আপনি গত ৭ দিনে কেমন অনুভব করেছেন তার সবচেয়ে কাছাকাছি উত্তরটি নির্বাচন করুন।

ক্র: নং	প্রশ্ন		উত্তর	কোড নং
১.	আমি হাসতে এবং মজার জিনিস দেখতে সক্ষম হয়েছি।	০	যতটা আমি সবসময় পারতাম।	
		১	এখন খুব বেশি না।	
		২	নিশ্চিতভাবে এখন এত বেশি নয়।	
		৩	একদমই না।	
২.	আমি কোন কিছু উপভোগের জন্য উন্মুখ হয়ে আছি।	০	যতটা আমি আগেও করেছি।	
		১	বরং আমি কম অভ্যস্ত।	
		২	আমি আগে থেকেই কম অভ্যস্ত।	
		৩	খুবই কম।	
৩.	যখন কোন কিছু ভুল হয়ে যায় তখন আমি অকারনে নিজেকে দোষারোপ করেছি।	০	হ্যাঁ বেশিরভাগ সময়।	
		১	হ্যাঁ কিছু সময়।	
		২	সব সময় না।	
		৩	কখনই না।	
৪.	আমি কোন কারন ছাড়াই উদ্ভিন্ন বা চিন্তিত ছিলাম।	০	একদম না।	
		১	খুব কমই।	
		২	হ্যাঁ মাঝে মাঝে।	
		৩	হ্যাঁ প্রায়ই।	
৫.	আমি কোন কারণ ছাড়াই ভয় বা আতঙ্কিত বোধ করেছি।	০	হ্যাঁ অনেক।	
		১	হ্যাঁ, মাঝে মাঝে।	
		২	না, তেমন বেশি না।	
		৩	একদমই না।	
৬.	আমার উপরে কোন দোষ দেওয়া হয়েছে।	০	হ্যাঁ, বেশিরভাগ সময়ই আমি কিছুতেই মানিয়ে নিতে পারিনি।	
		১	হ্যাঁ, কখনও কখনও স্বাভাবিক হিসাবে ভাল মোকাবেলা করতে পারিনি।	
		২	হ্যাঁ, বেশিরভাগ সময়ই আমি বেশ ভালভাবে মোকাবেলা করেছি।	
		৩	না, আমি বরাবরের মতই মোকাবিলা করছি।	
৭.		০	হ্যাঁ, বেশিরভাগ সময়ই।	

	আমি এতটাই অসুখী হয়েছি যে আমি ঘুমাতে পারিনি।	১	হ্যাঁ, মাঝে মাঝে।	
		২	সব সময় না।	
		৩	একদমই না।	
৮.	আমি দুঃখিত বা দুঃখিত বোধ করেছি।	০	হ্যাঁ, বেশির ভাগ সময়ই।	
		১	হ্যাঁ, প্রায়ই।	
		২	সব সময়ই না।	
		৩	একদমই না।	
৯.	আমি এত অসুখী হয়েছি যে, আমি কেঁদে ফেলেছি।	০	হ্যাঁ বেশিরভাগ সময়ই।	
		১	হ্যাঁ, প্রায়ই।	
		২	শুধু মাঝে মাঝে।	
		৩	কখনই না।	
১০.	নিজের ক্ষতি করার চিন্তা আমার মনে হয়েছে।	০	হ্যাঁ, প্রায়ই।	
		১	মাঝে মাঝে।	
		২	খুব কমই।	
		৩	কখনই না।	

সেকশনঃ ৪. গর্ভাবস্থায় যৌন কার্যকলাপ সম্পর্কিত তথ্য

ক্র: নং	প্রশ্ন	প্রতিক্রিয়া বিকল্প গুলি
১.	গর্ভাবস্থায় আপনি কখনও কি যৌন ইচ্ছা বা আগ্রহ অনুভব করেছেন ?	১ = প্রায় সবসময় বা সবসময়। ২ = কখনও কখনও (প্রায় অর্ধেক সময়)। ৩ = প্রায় কখনই বা কখনই না।
২.	গর্ভাবস্থায় আপনি আপনার যৌন ইচ্ছা বা আগ্রহের মাত্রাকে কীভাবে মূল্যায়ন করবেন?	১ = বেশি। ২ = মোটামুটি। ৩ = খুব কম বা একেবারেই না।
৩.	গর্ভাবস্থায় সহবাস করা আপনার জন্য কতটা কঠিন ছিল?	১= কোন যৌন কার্যকলাপ না। ২=কঠিন। ৩=কঠিন না।
৪.	গর্ভাবস্থায় সহবাসের সময় উত্তেজিত হওয়ার বিষয়ে আপনি কতটা আত্মবিশ্বাসী ছিলেন?	১= কোন যৌন কার্যকলাপ না। ২= মোটামুটি আত্মবিশ্বাস। ৩= খুব কম বা কোন আত্মবিশ্বাস নেই।

৫.	গর্ভাবস্থায় সহবাসের সময় আপনি কি ব্যাথা অনুভব করেছেন ?	১= কোন যৌন কার্যকলাপ না । ২ = মোটামুটি । ৩ = খুব কম বা একদমই না ।
৬.	গর্ভাবস্থায় সহবাসের সময় কখনও কি রক্তপাত হয়েছে ?	১= কোন যৌন কার্যকলাপ না । ২= হ্যাঁ । ৩= না ।

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Activities	July 22	Aug 22	Sep 22	Oct 22	Nov 22	Dec 22	Jan 23	Feb 23	Mar 23	Apr 23	May 23	Jun 23
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Proposal presentation												
Introduction												
Literature Review												
Methodology												
Data Collection												
Data Analysis												
Result												
1st progress Presentation												
Discussion												
Conclusion And Recommendation												
2nd Progress Presentation												
Communication With Supervisor												
Final Submission												