https://doi.org/10.5281/zenodo.12788776

PAKISTAN ISLAMICUS
(An International Journal of Islamic and Social Sciences)
Volume:04, Issue:03, 2024, Pages:19-28
Journal Website: https://pakistanislamicus.com/index.php/home
Publisher Website: https://www.mircpk.net

THE ROLE OF BODY IMAGE, SOCIAL SUPPORT AND ANTEPARTUM DEPRESSION AMONG PREGNANT WOMEN

Amna Noor[1], Dr Shammem Akhtar[2].

[1] MPhil Scholar Psychology, Riphah International University Faisalabad, Punjab, Pakistan.

[2] Assistant Professor, Department of Clinical Psychology, University of Management and Technology, Sialkot Campus, Punjab, Pakistan.

HEC "Y" Category
HJRS HEC Journal Recognition System

ARTICLE INFO

Article History:

Received: June 06, 2024
Revised: July 06, 2024
Accepted: July 09, 2024
Available Online: July 11, 2024

Keywords:

Body Image
Social Support
Antepartum Depression
Pregnant Women
Primigravida & Multigravida

Funding:

This research journal (PIIJISS) doesn't receive any specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

ABSTRACT

The current study aim was to explore Body Image, Social Support, and Antepartum Depression among pregnant women. Current research seeks to identify key factors that can help mitigate the risk of depression in expectant mothers. The sample for the present study consisted of 200 pregnant women selected from different obstetrics clinics and hospitals in Faisalabad. A correlational research design and purposive sampling technique was employed to measure the study variables. The Body Shape Questionnaire (Evans & Dolan, 1993) was used to measure body image dissatisfaction, the Multidimensional Scale of Perceived Social Support (Zimet et al., 1988) used to evaluate perceived social support, and the Edinburgh Natal Depression Scale (Cox et al., 1987) was utilized to assess symptoms of depression. The findings suggest a significant positive relationship between body image and antepartum depression among pregnant women, indicating that higher body image dissatisfaction is associated with higher levels of antepartum depression. Moreover, a significant negative relationship was found between social support and antepartum depression. No significant differences were found between primigravida and multigravida women in terms of body image, social support, and antepartum depression. In conclusion, addressing body image concerns and enhancing social support are crucial for mitigating antepartum depression and improving the mental health and overall well-being of pregnant women. These findings have implications for healthcare providers to develop targeted interventions to improve the mental health and overall well-being of pregnant women.

Corresponding Author's Email: shammem.akhtar@skt.umt.edu.pk

INTRODUCTION

The present research study a complex aspect of maternal health and well-being by looking at the relationships between body image, social support and antepartum depression among pregnant women. A woman's understanding of her body is often altered during pregnancy due to the physiological changes that come with it, which may have an impact on her mental well-being. Any person's perception of their body's size, shape, and attitude toward each component is referred to as their body image (Khosravi et al., 2023). A prior study indicated that among pregnant women who had a high BMI and high parity, 45%

had body dissatisfaction. Further research has assessed the relationship between body shape and other psychological factors in expectant mothers who claim that depression, poor self-esteem, and a greater body mass index (BMI) might cause unfavorable views toward their bodies (Meireles et al., 2022).

Strong social support for the women in pregnancy is a common tactic to aid in reducing the risk of pregnancy issues and unfavorable birth impact as a result of psychological illness. The extent to which interpersonal connections satisfy particular needs such as those for emotional, practical, loving, and tangible support or the level of social integration are the key indicators of social support. Additionally, social support can offer pregnant women a useful coping strategy to manage stressful situations (Bedaso et al., 2021). Numerous studies have examined the function of social support as a modifiable and preventing factor in the context of antepartum or postpartum depression. While some researchers have explored the substantial association between depression in the postpartum period and social support, others have shown that low social support during pregnancy is related with an increased chance of antepartum or postpartum depression. Few research, however, have looked at how social support varies during the perinatal period and how depression relates to it at different points in the perinatal period (Li et al., 2017).

Depression, according to the World Health Organization (WHO), is a typical psychological illness that manifests as diminished energy, a depressed mood, a lack of interest or joy, accompanied by emotions of guilt or diminished self-esteem, disturbed sleepiness or appetite, and difficulty concentrating. Antepartum depression, a major unipolar depression with 8–14 symptoms that last longer than two weeks, affects 11% of women with depressive symptoms (APA, 2013). Clinical depression known as antepartum depression (APD) can be brought on by stress and anxiety about the potential for pregnancy to cause more severe levels of the illness. Prenatal stress in any form can negatively impact multiple aspects of fetal development, potentially resulting in harm to both the mother and the child (Shitu Ayen et al., 2021). Researches indicate that antepartum depression is significantly correlated with a lack of self-worth, going through difficult life events, having a history of depressive symptoms, being sick in the prior month, and having a family history of psychiatric disorders, all of which fall under the psychological or psychiatric category (Choosuk et al., 2021). Witt et al., (2011) conducted a nationwide survey and discovered that pregnant women experiencing bad mental health were almost 11 times more likely to report bad mental health after giving birth than pregnant women without mental health issues.

THEORETICAL AND CONCEPTUAL FRAMEWORK

Several schools of thought have studied body image in clinical psychology. Psychodynamic theory dominated the way body image was conceptualized and studied for many years. Fisher, a prominent psychodynamic scholar, introduced the body image boundaries theory. The theory states that the body serves as a wall separating the individual from the outside world. The concepts of barriers and penetration which were regarded as indicators of the tensile strength and permeability of the body image boundary, were tested using projective techniques. Shontz played a significant role in changing the conversation

about body image from a psychodynamic perspective to one that placed more emphasis on the physical features of the body. He recommended examining body image from the perspectives of Gestalt psychology, field theory, and cognitive theory. Physical aspects of the body have remained the sole focus of body image research since Shontz's time (Burke et al., 2012). There have been acknowledged precursors to the creation of the social-support theory, including the sociological theories of role, anomie, and symbolic interactionism. Theoretical explanations of social support derived from attribution, coping, social exchange, social comparison, and loneliness theories are typically disregarded, though. Equity theory by Adam (1963), also known as social-exchange theory, can be used to explain the advantages of bidirectional support. Theories of attribution, equity, and social comparison can help interpret the advantages and disadvantages of support (Steward, 1989).

MATERIAL AND METHODS

Study Design

The current quantitative study is based on a correlational research design. Due of its low cost, this design works best on a large population. As a kind of non-experimental study, correlational design makes it easier to anticipate and explain how variables relate to one another (Seeram, 2019).

Sampling Technique

The present study utilized purposive sampling technique for data collection procedure. By selecting respondents who are most likely to offer pertinent and useful information, purposive sampling is a strategy for identifying and selecting cases that will make the most use of the limited research resources (Palinkas et al., 2015). The current study took into account the sample size, with 200 pregnant women between the ages of 18 and 45 who were categorized by the WHO as young age (Dyussenbayev, 2017), were included in all three trimesters and both gravid (primigravida and multigravida) groups.

Procedure

The present study involved collecting data physically from pregnant women in various hospitals and private obstetrics and gynecology clinics. Initial steps included obtaining permission and approval from relevant administrations for the study. Upon approval, eligible pregnant women were recruited based on specific criteria. Before distributing questionnaires, detailed explanations about the goals, methods, possible dangers, and advantages of the study were provided to participants. Informed consent was obtained, with an offer to share study results upon completion. Participants were then given clear instructions on completing the questionnaires, which included assessments like the Body Image Questionnaire (BSQ-16B), Multidimensional Scale of Perceived Social Support (MSPSS), and Edinburgh Postnatal Depression Scale (EPDS). It takes around 10 to 15 minutes for completion of questionnaire. At the end of the questionnaire filling, expressed gratitude to the participants. Throughout the data collection procedure, utmost care was taken to confirm the privacy and confidentiality of participants' information.

RESULTS

Table 1: *Demographic Characteristics of the Sample (Frequencies & Percentage) (N=200)*

Characteristics		*f*	*%*
Age	*16-20*	*7*	*3.5*
	20-24	*44*	*22.0*
	25-29	*81*	*40.5*
	30-34	*47*	*23.5*
	35 or more	*21*	*10.5*
Educational Level	*Illiterate*	*19*	*9.5*
	Primary	*20*	*10.0*
	Secondary	*52*	*26.0*
	Higher Secondary	*36*	*18.0*
	Graduate or above	*73*	*36.5*
Current Status	*Student*	*9*	*4.5*
	Housewife	*172*	*86.0*
	Job holder	*19*	*9.5*
Family Structure	*Joint*	*146*	*73.0*
	Nuclear	*54*	*27.0*
Duration of Marriage	*1-5 years*	*132*	*66.0*
	5-10 years	*46*	*23.0*
	10-15 years	*32*	*11.0*
Perceived Economical Income	*Good*	*52*	*26.0*
	Moderate	*123*	*61.5*
	Bad	*25*	*12.5*
Pregnancy Trimester	*First trimester*	*57*	*28.5*
	Second trimester	*55*	*27.5*
	Third trimester	*88*	*44.0*
Gravida Status	*Primigravida*	*81*	*40.5*
	Multigravida	*119*	*59.5*
Nature of Pregnancy	*Planned*	*108*	*54.0*
	Unplanned	*92*	*46.0*
Bad Obstetric History	*Present*	*72*	*36.0*
	Absent	*128*	*64.0*

The above table shown that 3.5% pregnant women are in the age range of 15-20 and 22.0% women lies in the age range of 20-24. Most of the pregnant women having age range of 25-29 which means that 40.5% of entire population, 23.5% having age between 30-34, and 10.5% pregnant women having age 35

or above. The presentation of educational data uses percentages and frequencies. There are five categories within it which include illiterate, primary, secondary, higher secondary, and graduate or above. The first category is illiterate and percentage were 9.5% respectively. The second category is primary and having 10.0%. In the third category, 26.0% population were secondary, 18.0% women lies in higher secondary category and 36.5% women lies in the category of graduate or above. The next frequency is the current status, where 4.5% pregnant women are student, 86.0% pregnant women are housewife, and 9.5% women are job holder. Other frequency includes family structure where 73.0% pregnant women have joint family system and 27.0% pregnant women have nuclear family system. The next frequency is duration of marriage where 66.0% women have 1-5 years duration, 23.0% women have 5-10 years duration and 11.0% have 10-15 years of marriage duration. The next frequency is perceived economical income where 26.0% pregnant women have good, 61.5% women have moderate, and 12.5% pregnant women have bad economical income.

The pregnancy related demographic variables include pregnancy trimester, 28.5% women lies in first trimester category, 27.5% women are in second trimester, and 44.0% women are in third trimester. The next frequency is gravida status where 40.5% pregnant women are primigravida and 59.5% pregnant women are multigravida. The nature of pregnancy frequencies indicate that 54.0% pregnancies are planned and 46.0% pregnancies are unplanned in entire population. 36.0% of pregnant women have bad obstetric history and 64.0% pregnant women do not have bad obstetric history.

Table 2: *Cronbach's Alpha of the Body Shape Questionnaire (BSQ), Multidimensional Scale of Perceived Social Support (MSPSS) and Edinburgh Postnatal Depression Scale (EPDS) (N=200)*

Research Measures	*α*	*Items*
BSQ	*0.95*	*16*
MSPSS	*0.94*	*12*
EPDS	*0.86*	*10*

The data was utilized to define the reliability utilizing variables, as indicated by the findings in the above table. The multidimensional scale of perceived social support (MSPSS) has a Cronbach's alpha value of 0.947, the Edinburgh postnatal depression scale (EPDS) has a Cronbach's alpha value of 0.869, and the body shape questionnaire (BSQ) has a Cronbach's alpha value of 0.957. Examining the specific values of each variable shows that the data clearly demonstrate the excellent reliability indicated by the Cronbach's Alpha rating.

Table 3: *Descriptive Statistics of the Body Shape Questionnaire (BSQ), Multidimensional Scale of Perceived Social Support (MSPSS) and Edinburgh Postnatal Depression Scale (EPDS)(N=200)*

Variables	*M*	*SD*	*Skewness*	*Kurtosis*
BSQ	*36.59*	*16.15*	*1.04*	*.41*
MSPSS	*61.89*	*13.66*	*-.74*	*.18*
EPDS	*21.54*	*5.76*	*.07*	*-.80*

Note: M= Mean and SD= Standard Deviation

The study's variables are included in the table along with the statistics that go with them. The first column displays the study's variables including Body image (BSQ), Social support (MSPSS) and Antepartum depression (EPDS). Second column shows the means of the variables and third column indicates standard deviation respectively. Likert scale is used for the measurement of responses for Body shape questionnaire (BSQ), Multidimensional scale of perceived social support (MSPSS) and Edinburgh postnatal depression scale (EPDS).

Body shape questionnaire (BSQ) is independent variable with mean = 36.59 and S.D = 16.159. Multidimensional scale of perceived social support (MSPSS) is independent variable with mean = 61.89 and S.D = 13.662. Edinburg postnatal depression scale (EPDS) is dependent variable with mean = 21.54 and S.D = 5.761. The fact that the standard deviation of each variable under investigation in the preceding table is within the intended range indicates that the data is normally distributed. The skewness of body shape questionnaire (BSQ) is 1.04 and kurtosis is .41. The skewness of multidimensional scale of perceived social support (MSPSS) is -.74 and kurtosis is .18. The skewness of Edinburgh postnatal depression scale (MSPSS) is .07 and kurtosis is -.80.

Table 4: *Inter correlation between study variables: Body Image (BSQ) and Antepartum Depression (EPDS) among Pregnant Women (N=200)*

Measures	*1*	*2*
BSQ	*1*	*.613***
EPDS		*1*

Note: **. Correlation is significant at the 0.01 level (2-tailed).

The correlation between the research variables is shown in the following table. Antepartum Depression and Body Image had a positive and statistically significant association (r=.613, p<.01). Given the size of 0.613 and the positive, highly significant association between body image and antepartum depression in pregnant women, our first hypothesis that there would be a substantial relationship is accepted.

Table 5: *Inter correlation between study variables: Social Support (MSPSS) and Antepartum Depression (EPDS) among Pregnant Women (N= 200)*

Measures	*1*	*2*
MSPSS	*1*	*-.507***
EPDS		*1*

Note: **. Correlation is significant at the 0.01 level (2-tailed).

The correlation between the research variable is shown in the above table. Antepartum depression and social support had a negative and statistically significant correlation (r= -.507, p<.01). Because the magnitude is -0.507 and the association is negative and highly significant, our second hypothesis that there would be a substantial relationship between social support and antepartum depression among pregnant women is accepted.

Table 6: *Difference in Primigravida and Multigravida in term of Body Image, Social Support and Antepartum Depression. Primigravida (N=81), Multigravida (N=119)*

	Primigravida (N=81)		*Multigravida (N=119)*			*95% CI*		
Measures	*M*	*SD*	*M*	*SD*	*t*	*LL*	*UL*	*Cohen's d*
BSQ	*36.88*	*16.91*	*36.39*	*15.69*	*.21*	*-4.11*	*5.09*	*.03*
MSPSS	*63.69*	*11.04*	*60.66*	*15.11*	*1.54*	*-.84*	*6.89*	*.23*
EPDS	*22.07*	*5.83*	*21.17*	*5.71*	*1.08*	*-.73*	*2.53*	*.15*

Note: M= Mean, SD= Standard Deviation, T= t-test value, P= Significant value, LL= Lower limit, UL= Upper limit

The above table depicts the difference in primigravida and multigravida in term of body image, social support and antepartum depression among pregnant women. Table shows no significant difference primigravida and multigravida in term of all study variables because all p-values not less than alpha which indicate no significant difference. The primigravida mean score on body shape questionnaire (BSQ) is 36.88, Multidimensional scale of perceived social support (MSPSS) is 63.69, and Edinburgh postnatal depression scale (EPDS) is 22.07. The multigravida mean score on Body shape questionnaire (BSQ) is 36.39, Multidimensional scale of perceived social support (MSPSS) is 60.66, and Edinburgh postnatal depression scale (EPDs) is 21.17. The t-test value of Body shape questionnaire (BSQ) is .212, Multidimensional scale of perceived social support (MSPSS) is 1.544, and Edinburgh postnatal depression scale (EPDS) is 1.082. The Cohen's d value of body shape questionnaire (BSQ) is .03, multidimensional scale of perceived social support (MSPSS) is .23, and Edinburgh postnatal depression scale is .15.

DISCUSSION

This study examines pregnant women's prenatal depression, social support, and body image. Because of how the data has been arranged and presented, every research topic may be addressed using the information that has been gathered. The first hypothesis of the study, which holds that there is a significant relationship between antepartum depression and body image among pregnant women**.** The results of the study support the presence of a relationship between several variables that were assessed. There is a statistically significant relationship between body image and antepartum depression ($r = .613$, $p < .01$). There is a positive correlation of .613 between these two variables or we could say that body image are significantly correlates with antepartum depression among pregnant women. Similar findings were obtained from previous research in which 151 pregnant women with a mean age of 30 prospectively completed survey questionnaires by mail throughout the first, second, and third trimesters. The findings of this prior study shown a substantial correlation between prenatal depression and body image dissatisfaction in pregnant women. These women reported feeling less satisfied with their bodies and exhibited more depressive symptoms (Rauf & Downs, 2011). The results of the previous longitudinal research are comparable in which a long-term investigation, 457 women were selected as a sample. The results show a significant correlation between prenatal depression and body dissatisfaction. Women who

were dissatisfied with their body image had a three times higher chance of experiencing perinatal depression compared to those who were not (Riquin et al., 2019).

The second hypothesis is about the relationship between social support and antepartum depression. It states that there is significant relationship between social support and antepartum depression among pregnant women. The results of the present study show that there is a statically significant relationship between social support and antepartum depression ($r = -.507$, $p < .01$). This indicates negative correlation of -.507 between the two variable which means that antepartum depression increases as social support decreases among pregnant women. A longitudinal study showed similar results in which a total of 240 pregnant women were selected from a Chinese general hospital's prenatal clinic. The risk of depression and the perception of social support during late pregnancy were assessed using the Edinburgh Postnatal Depression Scale (EPDS) and the Perceived Social Support Scale (PSSS). Pearson correlation analysis revealed a negative relationship between late-pregnancy PSSS scores and EPDS scores ($r = -0.3$, $P < .001$). Antepartum depression was less common in pregnant women with higher PSSS levels (Li et al., 2017). In another descriptive-correlational research, 70 pregnant women who were sent to private clinics in Karaj, Iran, throughout a six-month period for prenatal treatment in the final three months of gestation were the subjects. The results revealed a strong relationship between depression during pregnancy and marital satisfaction ($r=-0.316$) and social support ($r= -0.368$) (Noury et al., 2017).

The third hypothesis is about the difference in primigravida and multigravida in term of body image, social support and antepartum depression. The hypothesis states that there would be significant difference in primigravida and multigravida in term of body image, social support and antepartum depression among pregnant women. The results in table 6 indicates insignificant difference in primigravida and multigravida in term of body image, social support and antepartum depression among pregnant women because all p-values is not less than alpha. Comparable outcomes were found in cross-sectional research that lasted 15 months and involved the recruitment of 146 pregnant patients from a tertiary care facility. It was shown that there is a strong correlation between depression and issues with body image and poor sleep. Additionally, the study's findings revealed that there was no significant difference in pregnant women's levels of depression between primigravida and multigravida (Kadam et al., 2023). In another study, similar results were reported using a different survey research style and variable. Ninety women, both primigravida and multigravida, comprise the sample. The study was carried out at the Geetanjali Medical College and Hospital's gynecology department in Udaipur, Rajasthan, India. The study's findings demonstrated that there was no significant difference between the individuals' mental health in the primigravida and multigravida groups (Sharma & Sharma, 2022).

LIMITATIONS

One limitation of the study is its reliance on self-reported measures, which can introduce response biases such as social desirability or inaccurate recall, potentially affecting the data's reliability on body image, social support, and depression. Additionally, the correlational design limits the ability to establish

causality between these variables; it only allows for the identification of associations, not causal relationships. The purposive sampling method, focusing on a single geographic location (Faisalabad) and specific settings (obstetrics clinics and hospitals), may limit the generalizability of the findings to a broader population, as it may not account for regional or cultural variations in perceptions of body image, social support, and depression. Furthermore, the study did not account for other potential confounding variables, such as socioeconomic status, pre-existing mental health conditions, or differences in medical care, which could influence the observed relationships.

RECOMMENDATIONS

To further advance our understanding of maternal mental health during pregnancy, several recommendations are suggested. Longitudinal research should be pursued to track mental health patterns across different pregnancy stages and the postpartum period, offering insights into the dynamic changes in body image, social support, and antepartum depression. Additionally, qualitative research methods, such as in-depth interviews and focus groups, can complement quantitative data by providing rich, detailed personal narratives that highlight the emotional complexities and varied experiences of pregnant women. It is also crucial to examine the influence of cultural and socioeconomic factors on body image, social support, and mental health to develop culturally competent and effective interventions. Intervention studies are essential to evaluate the effectiveness of programs aimed at enhancing maternal mental health, focusing on self-acceptance, building social support, and implementing preventive measures for antepartum depression.

REFERENCES

Adams, J. S. (1963). Towards an understanding of inequity. *The Journal of Abnormal and Social Psychology*, *67*(5), 422–436. https://doi.org/10.1037/h0040968

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.).

Bedaso, A., Adams, J., Peng, W., & Sibbritt, D. (2021). The relationship between social support and mental health problems during pregnancy: a systematic review and meta-analysis. *Reproductive health*, *18*(1), 1-23. https://doi.org/10.1186/s12978-021-01209-5

Burke, N. L., Schaefer, L. M., & Thompson, J. K. (2012). Body image. *Encyclopedia of Human Behavior*, 365–371. https://doi.org/10.1016/b978-0-12-375000-6.00066-5

Choosuk, P., Pitanupong, J., & Suwanrath, C. (2021). Prevalence and Factors Associated with Antepartum Depression: A University Hospital-Based. *Siriraj Medical Journal*, *73*(10), 667-675. https://he02.tci-thaijo.org/index.php/sirirajmedj/index

Cox, J. L., Holden, J. M., & Sagovsky, R. (1987). Detection of postnatal depression: development of the 10-item Edinburgh Postnatal Depression Scale. *The British journal of psychiatry*, *150*(6), 782-786.

Dyussenbayev, A. (2017). Age periods of human life. *Advances in Social Sciences Research Journal*, *4*(6), 258-63.

Evans, C., & Dolan, B. (1993). Body Shape Questionnaire: derivation of shortened "alternate forms". *International Journal of Eating Disorders*, *13*(3), 315-321.

Kadam, K. S., Anvekar, A. R., & Unnithan, V. B. (2023). Depression, sleep quality, and body image disturbances among pregnant women in India: a cross-sectional study. *Journal of Yeungnam Medical Science*, *40*(4), 394-401. Doi: 10.12701/jyms.2023.00087

Khosravi, H., Mehrbakhsh, Z., Moghasemi, S., & Samiei, G. (2023). Preferred mode of delivery association with the body image and genital image in pregnant women-a cross-sectional study. *BMC Pregnancy and Childbirth*, *23*(1), 490-500. https://doi.org/10.1186/s12884-023-05589-3

Li, Y., Long, Z., Cao, D., & Cao, F. (2017). Social support and depression across the perinatal period: a longitudinal study. *Journal of clinical nursing*, *26*(17-18), 2776-2783. https://doi.org/10.1111/jocn.13817

Meireles, J. F. F., Neves, C. M., Amaral, A. C. S., Morgado, F. F. D. R., & Ferreira, M. E. C. (2022). Body appreciation, depressive symptoms, and self-esteem in pregnant and postpartum Brazilian women. *Frontiers in Global Women's Health*, *3*(3), 834040-834047. https://doi.org/10.3389/fgwh.2022.834040

Noury, R., Karimi, N., & Mohammadi, M. (2017). Relationship between prenatal depression with social support and marital satisfaction. *Sarem Journal of Medical research*, *2*(3), 153-157. 10.29252/sjrm.1.4.153

Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015). Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Administration and policy in mental health and mental health services research*, *42*(11), 533-544. DOI 10.1007/s10488-013-0528-y

Rauff, E. L., & Downs, D. S. (2011). Mediating effects of body image satisfaction on exercise behavior, depressive symptoms, and gestational weight gain in pregnancy. *Annals of behavioral medicine*, *42*(3), 381-390. https://doi.org/10.1007/s12160-011-9300-2

Riquin, E., Lamas, C., Nicolas, I., Lebigre, C. D., Curt, F., Cohen, H., ... & Godart, N. (2019). A key for perinatal depression early diagnosis: The body dissatisfaction. *Journal of affective disorders*, *245*(2), 340-347. https://doi.org/10.1016/j.jad.2018.11.032

Seeram, E. (2019). An overview of correlational research. *Radiologic technology*, *91*(2), 176-179.

Sharma, H., & Sharma, S. (2022). Mental health among pregnant women: A comparative study between Primi and multigravida subjects. *International Journal of Community Medicine and Public Health*, *9*(5), 2195-2199. https://doi.org/10.18203/2394-6040.ijcmph20221240

Shitu Ayen, S., Alemayehu, S., & Tamene, F. (2021). Antepartum depression and associated factors among pregnant women attending ANC clinics in Gurage Zone Public Health Institutions, SNNPR, Ethiopia, 2019. *Psychology research and behavior management*, *13*(1), 1365-1372.

Stewart, R. C., Umar, E., Tomenson, B., & Creed, F. (2014). Validation of the multi-dimensional scale of perceived social support (MSPSS) and the relationship between social support, intimate partner violence and antenatal depression in Malawi. *BMC psychiatry*, *14*(1), 1-11. http://www.biomedcentral.com/1471-244X/14/180

Witt, W. P., Wisk, L. E., Cheng, E. R., Hampton, J. M., Creswell, P. D., Hagen, E. W., ... & DeLeire, T. (2011). Poor pre-pregnancy and antepartum mental health predicts postpartum mental health problems among US women: a nationally representative population-based study. *Women's Health Issues*, *21*(4), 304-313. https://doi.org/10.1016/j.whi.2011.01.002

Zimet, G. D., Dahlem, N. W., Zimet, S. G., & Farley, G. K. (1988). The multidimensional scale of perceived social support. *Journal of personality assessment*, *52*(1), 30-41.