

Assessment Of The Relationship Between Partner Support During Pregnancy And Antenatal Self-Care And Care Utilization Among Postnatal Mothers In Selected Hospitals, South 24 Parganas, West Bengal

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Abstract

Background: Maternal mortality and Infant mortality are a worldwide problem, especially in developing countries owing to several factors. The factors may be less partner support, low awareness about antenatal diet, health check-ups, or antenatal self-care. The aim of the study is to assess the relationship between partner support during pregnancy and antenatal self-care and care utilization among postnatal mothers.

Materials and methods: The Investigator conducted a descriptive co-relational study to assess the relationship between partner support during pregnancy and antenatal self-care and care utilization among postnatal mothers in selected hospitals. Here, the sample was postnatal mother. Approx. 110 Postnatal mothers were recruited by total enumeration sampling technique. Data will be collected from postnatal mother admitted in postnatal ward by interview technique. Data will be analysed by frequency percentage distribution, chi-square calculation, and Pearson product-moment correlation. It is recommended that comparative study can be conducted between rural and urban community to assess partner support with antenatal self-care and care utilization.

Results: From the statistical analysis, it reveals that the proportion of partner support was 66.36%. There was a positive relationship between partner support and antenatal self-care which was statistically significant. The significant association between antenatal self-care with demographic factor such as age, participant's education, living children, type of pregnancy and education of the participant's husband also present

Keywords: Antenatal self-care, Antenatal care utilization, Partner support

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I. Introduction

The journey towards motherhood, a transitional process starting with pregnancy, brings several psychological changes including the relationship with the partner. In the United States (US), perinatal problems such as pregnancy difficulties, low birth weight, and prematurity are to blame for about 50% of all newborn deaths¹. A maternal mortality ratio (MMR) of 130 or above per 100,000 live births is considered to be extremely high. Punjab, Uttarakhand, and West Bengal all have 'high' MMRs. This means 100-130 maternal deaths per 100,000 live births. That's why it is very crucial to take some actions to reduce maternal mortality². Maternal and newborn mortality remains unacceptably high. It is a worldwide problem. Involving fathers during pregnancy, labour, and the postpartum period is advised by the World Health Organization's Intervention for Maternal and New-born Health³.

Every year more than 500 000 maternal deaths occur in developing countries due to major complications of pregnancy. The complications that affect mothers during pregnancy and childbirth affect the fetus as well. According to WHO every year around 8.1 million infants die, one-half of infants within the first month of life and most of them die within a few days of birth⁴. According to the report of Govt. of India, the developing country India has improved maternal mortality ratio (MMR). The report shows that in 2018-2020 the MMR was further dropped down to 97 per lakh live birth⁵. Continuous partner support is the outcome of

reproductive health. Partner support is any kind of support such as physical, psychological, and economic support that can improve the outcome of pregnancy.

Partner support in antenatal self-care and care utilization is a priority issue during the pregnancy of an antenatal mother. Lack of support from a partner can have an impact on a woman's health, decision-making process, use of medical facilities, antenatal self-care, and care utilization. These are the key causes of the rising rates of maternal and infant mortality. To lower teen pregnancy, maternal and newborn mortality, unsafe abortions, and the overall fertility rate, partners must support reproductive health⁶.

II. Material And Methods

This study is hospital based Descriptive co-relational study with the sample of postnatal mothers at from 6.3.2023 to 1.4.2023. The study was conducted among 110 postnatal mothers at Baruipur Super Speciality Hospital, South 24 Parganas

Study Design: Descriptive co-relational.

Study Location: The investigator conducted the final study at Baruipur Super Speciality Hospital, South 24 Parganas, West Bengal.

Study Duration: at: 6.3.2023 to 1.4.2023.

Sample size: In this present study, population comprised to the postnatal mothers who admitted at Baruipur Super speciality Hospital, South 24 Parganas. A total 110 postnatal mothers were the sample.

Sample size calculation: In this study sample size is obtained by using single population proportion formula-

$$\text{Sample size calculation, } N = \frac{1.96^2 \times 0.23(1-0.23)}{(0.1)^2} = 68$$

Where: N= Required sample

p= estimated prevalence of 23% respondents who reports low partner support from previous study⁶.

t= confidence level at 95% (standard value of 1.96).

m= Margin of error at 10% (standard value of 0.1).

Subjects & selection method: After entering the postnatal ward of Baruipur Super speciality Hospital, South 24 Parganas, sample were selected according to total enumeration sampling technique. I have taken 110 postnatal mothers.

Inclusion criteria:

- ✓ Women who agreed to take part in the study.
- ✓ Women who admitted in the postnatal ward.
- ✓ Who can understand Bengali & English?

Exclusion Criteria

- ✓ Seriously ill postnatal mothers
- ✓ Mother who delivered Still born baby
- ✓ Widow & divorced mother.

Procedure methodology

Institutional Ethical committee permission was sought. Administrative permission was taken from Block medical officer of health. Anonymity and confidentiality were maintained.

After written informed consent was obtained, one record analysis proforma and three well-designed interview schedules were used to collect the data of the recruited persons retrospectively.

Tools were tested for content validity by six experts. CVI was 0.8. Reliability was established by inter-rater method. The tool was translated to Bengali and re translated to English by language experts. Hence the tool was found valid and reliable for the purposes of the study.

Statistical analysis

In the present study, analysis and interpretation of data were based on the data collected through the interview schedule from 110 postnatal mothers of selected hospital, south 24 parganas. Analysis and interpretation of data was done in relation to the objectives of the study. Mean ± SD is used to assess partner support, Antenatal self-care and care utilization. The value is classified in > Mean + 1SD (Very Good), Mean to Mean + 1SD (Good), Mean to Mean - 1SD (Poor), <Mean - 1SD (Very Poor). In addition, Pearson r was calculated to see the relationship of Partner support and antenatal self-care among postnatal mothers.

III. Result.

It was found that among 110 participants maximum 57.27 % (63) mothers were in the age group 18-23 years and minimum 4.55 % (5) of the participants belongs to ≤ 17 years of age.

The data further showed that among 110 participants maximum 54.55 % (60) mothers belonged to Muslim religion and among 110 participants maximum 60% (66) mothers were educated up to Class IX to XII and minimum 0.91%.The data also found that among 110 participants maximum 34.55% (38) participants' husbands were educated up to class V to VIII and minimum 2.73%.Data also found that maximum 58.18 % (64) mothers had one child.

Table1: Frequency & percentage distribution of participants demographic variables.

N=110

Sl. No.	Sample characteristics	Frequency	Percentage (%)
1.	<u>Age(in Years)</u>		
	≤17	5	4.55
	18-23	63	57.27
	24-29	27	24.55
	30-35	15	13.63
2.	<u>Religion</u>		
	Hindu	50	45.45
	Muslim	60	54.55
3.	<u>Participant's Education</u>		
	No formal education	8	7.27
	Near literate/can read or write	1	0.91
	Up to class IV	2	1.82
	Class V to VIII	24	21.82
	Class IX to XII	66	60.00
	Graduation and above.	9	8.18
4.	<u>Husband's Education</u>		
	No formal education	14	12.73
	Near literate/can read or write	3	2.73
	Up to class IV	11	10
	Class V to VIII	38	34.55
	Class IX to XII	31	28.18
	Graduation and above.	13	11.81
5.	<u>Living children</u>		
	One	64	58.18
	Two	35	31.82
	More than two	11	10.00

Table 2: Frequency & percentage distribution of participants.

N=110

Sl. No.	Sample characteristics	Frequency	Percentage (%)
1.	<u>Participant's occupation</u>		
	Govt. Employee	1	0.91
	Business	1	0.91
	Daily Wage Earner	6	5.45
	House Wife	102	92.73
2.	<u>Husband's occupation</u>		
	Govt. Employee	5	4.55
	Private employee	11	10.00
	Business	9	8.18
	Unemployed	1	0.91
	Daily Wage Earner	84	76.36
3.	<u>Type of family</u>		
	Joint	13	11.82
	Nuclear	47	42.73
	Extended	50	45.45
4.	<u>Information regarding antenatal self-care</u>		
	Yes	110	100.00
5.	<u>Type of pregnancy</u>		
	Planned	67	60.91
	Unplanned	43	39.09

The data further showed that among maximum 92.73% (102) mothers were house wife and 76.36% (84) husbands were the daily wage earner.The data further showed that among 110 population maximum 60.91% (67) mothers' pregnancy were planned.

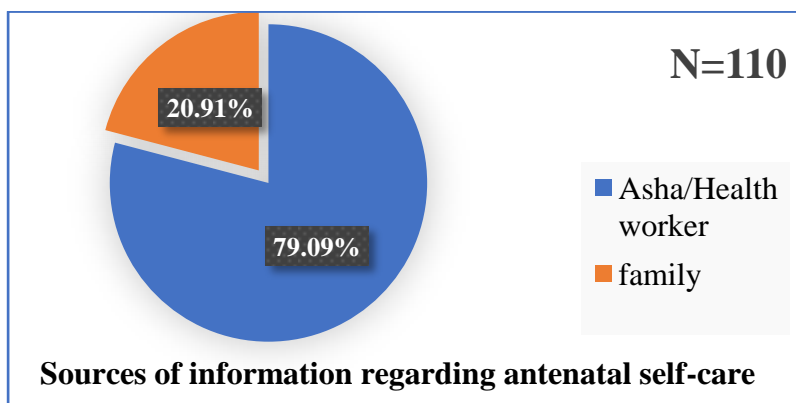


Figure 1: Percentage distribution of participants according to the sources of information regarding antenatal self-care

Figure 1 indicates that out of 110 mothers maximum 79.09% (87) participants get information from Health worker/Asha.

Data showed that maximum 62.73% (69) participants get support from their husband and also data found that maximum 40% (44) mothers belong to (1230-2464) monthly family income per month (Rs.).

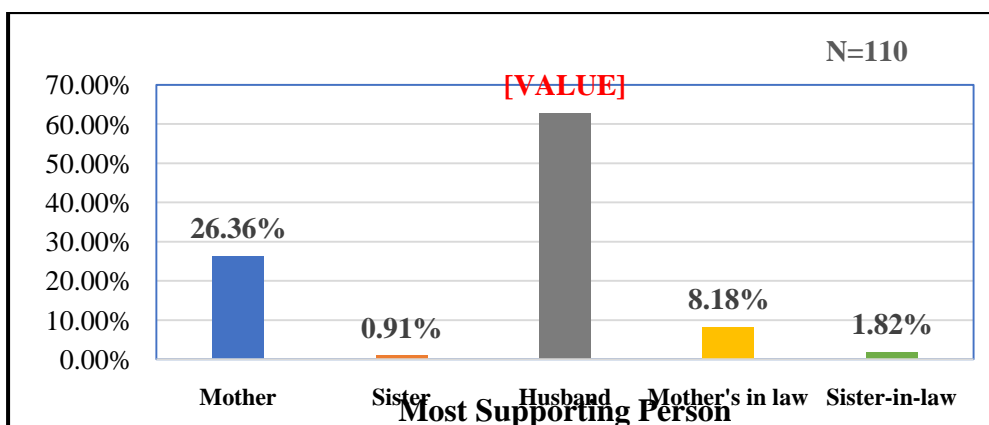
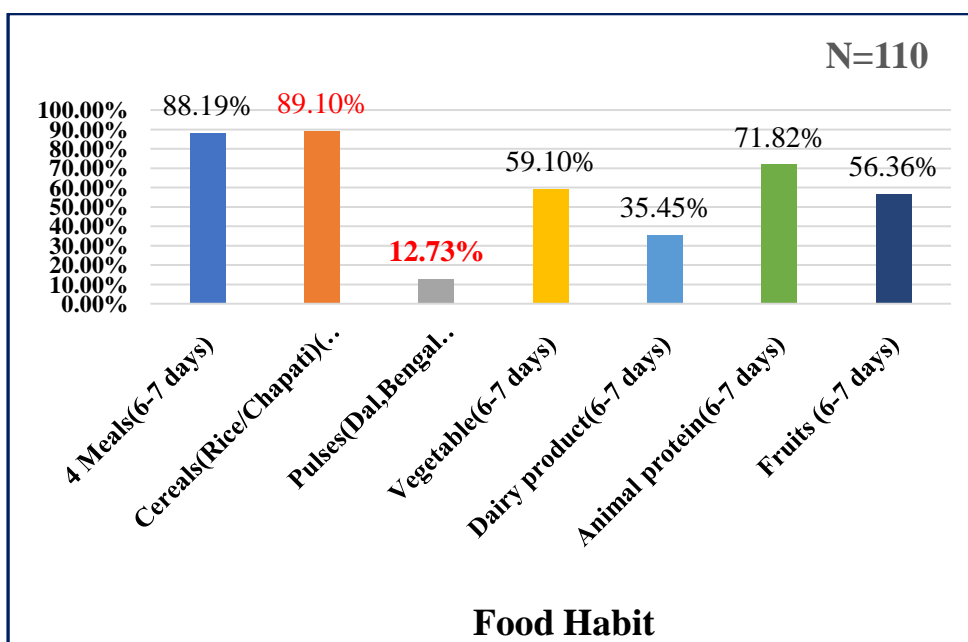


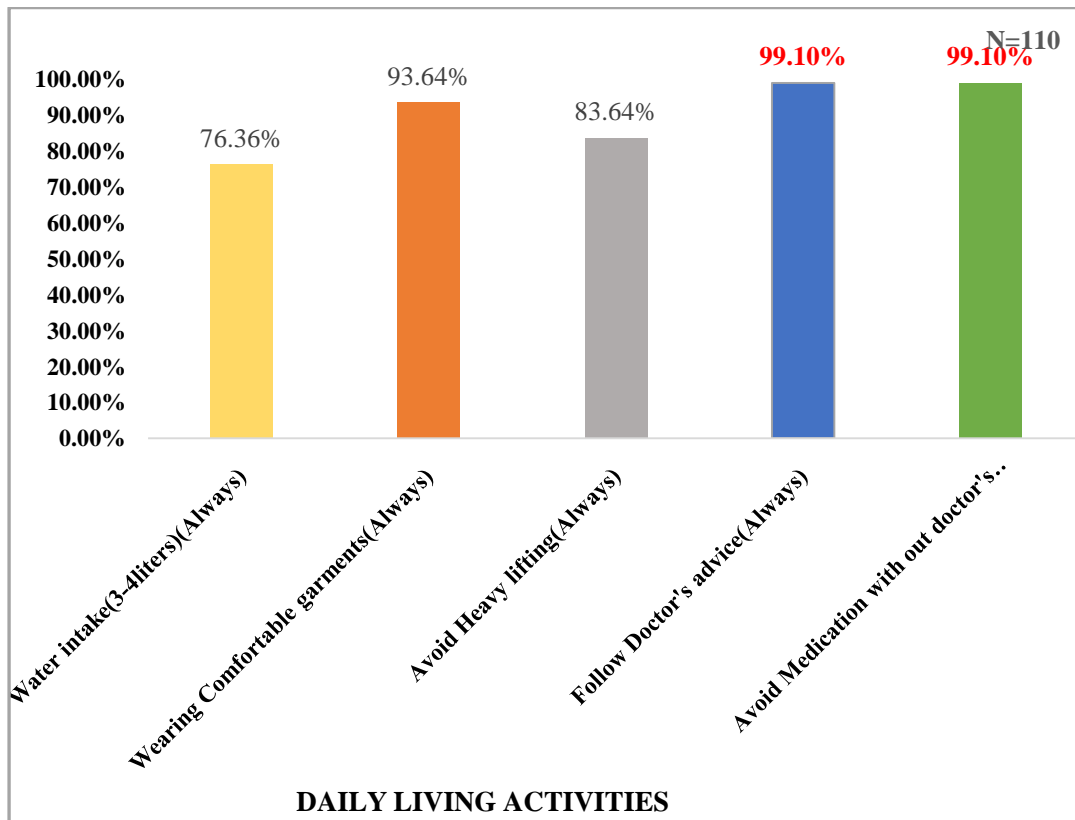
Figure 2: Percentage distribution of participants according to most supporting person.



*Data are not mutually exclusive and exhaustive.

Figure 3: Distribution of participants about antenatal self-care based on Food Habit on regular (6-7 days) basis.

Data also presented in the figure 3 showed that among 110 postnatal mothers' maximum 89.10% (98) mothers have taken cereals (Rice/chapati) regularly (6-7 days) in a week.



*Data are not mutually exclusive and exhaustive.

Figure 4: Distribution of participants about antenatal self-care based on daily living activities

Data also presented in the figure maximum 99.10% (109) mothers avoided taking medicine without doctor's advice regularly.

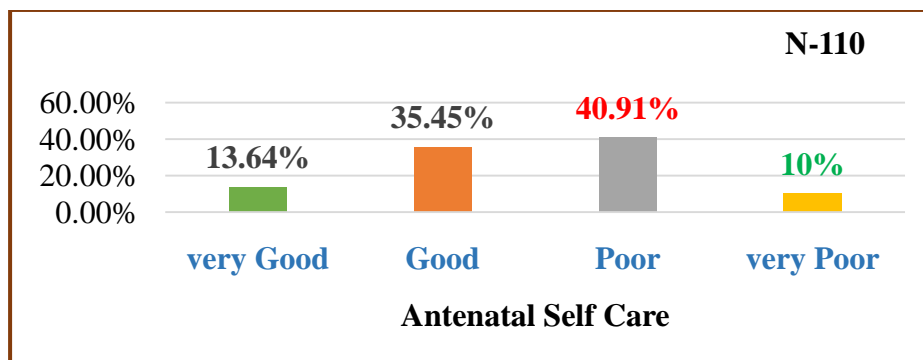


Figure 5: Distribution of participants about antenatal self-care

Data presented in the figure 5 showed that among 110 postnatal mothers' Maximum 40.91% (45) have taken poor antenatal self-care and minimum 10% (11) have taken very poor self-care during her pregnancy.

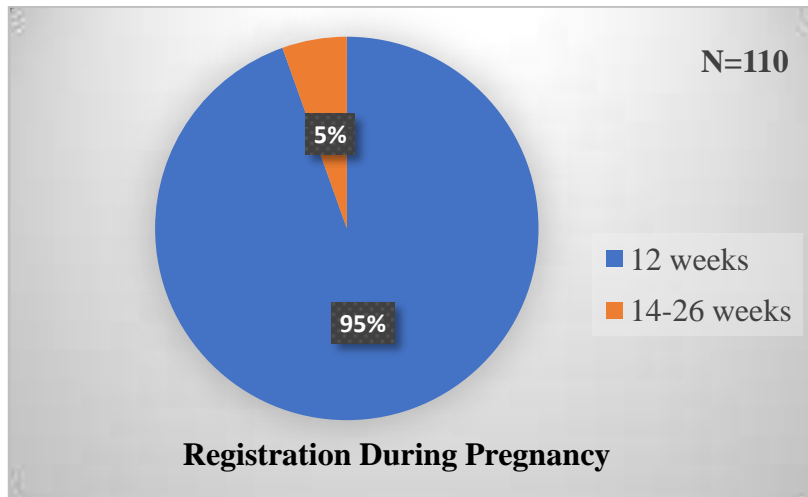


Figure 6: Distribution of participants about registration during pregnancy

Data presented in the figure10 showed that among 110 postnatal mothers’ maximum 95% (104) registered their pregnancy within 12 weeks.

The data in the figure 7 showed that out of 110 postnatal mothers’ all of 100% (110) mothers visited for antenatal check-up within 14-26 and maximum 79.09% (87) mothers examined routine blood test within 12 weeks.

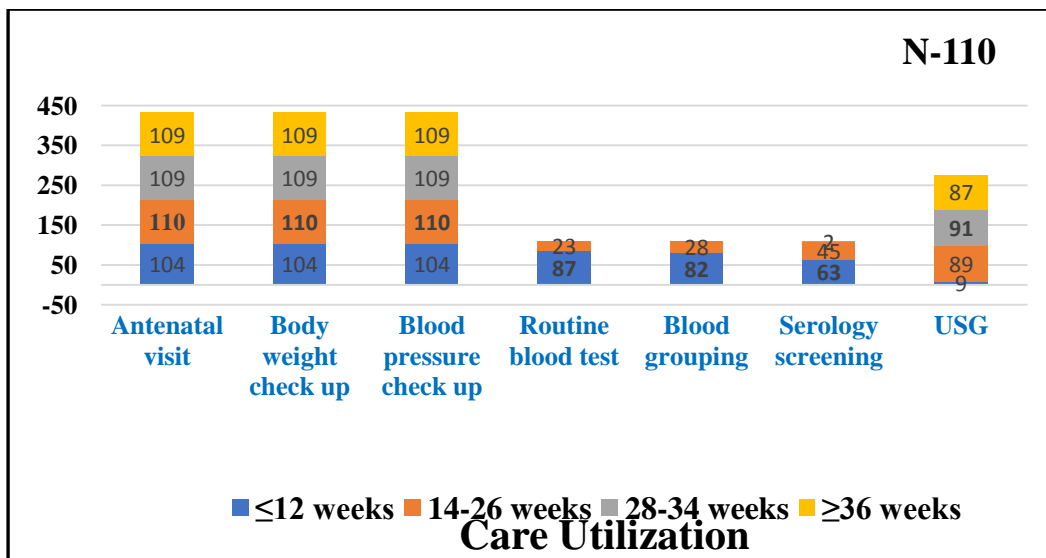


Figure 7: Distribution of participants about care utilization during pregnancy

* The Data are not mutually exclusive and exhaustive

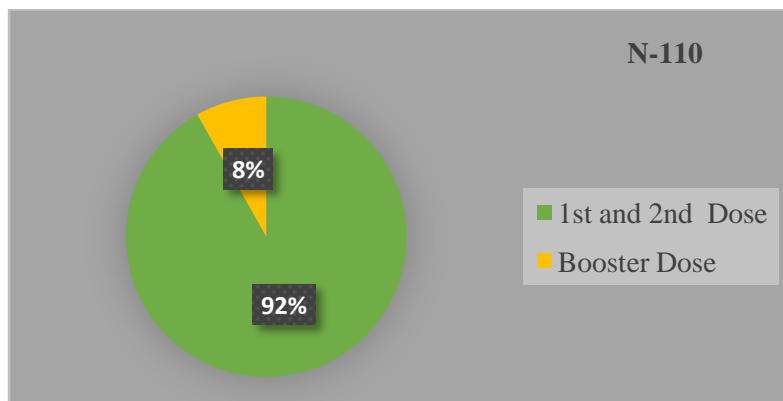


Figure 8: Distribution of participants having Injection T.T/T.D/ Booster during pregnancy

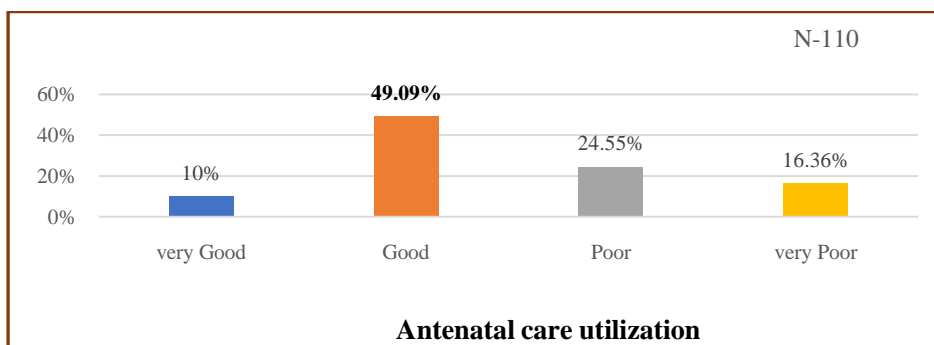


Figure 9: Distribution of participants Antenatal care Utilization

Data presented in the figure 9 that among 110 postnatal mothers' Maximum 49.09% (54) have utilised good antenatal care and minimum 10% (11) have utilised very good antenatal care. Data in the figure 10 showed that maximum 66.36% (73) mothers have got good partner support.

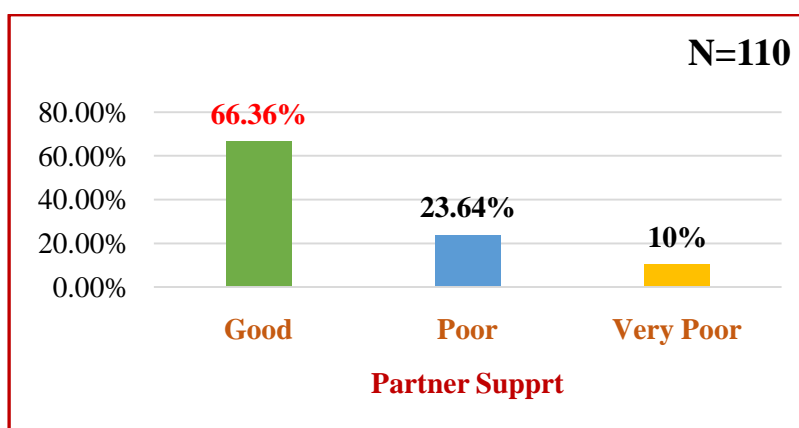


Figure 10: Distribution of participants about partner support

Table No.3 Findings related to the relationship between Partner support and antenatal self-care among postnatal mothers. N=110

Characteristics	Mean	SD	Correlation coefficient	Table value
Partner support	45.74	5.00	0.33*	0.195
Antenatal Self-Care	79.49	5.40		

p<0.05, [df(108)=0.195 as per df (100)]

Data presented in that table, partner support mean value 45.74 with SD 5.00 and antenatal self-care mean value 79.49 with SD 5.40 and 'r' value is 0.33 gives the positive relationship with partner support and antenatal self-care. The data in this table depicts that the calculated 'r' value (0.33) is greater than the table value (0.195) at 0.05 level of significance.

It indicates that the research hypothesis(H₁) is accepted and the null hypothesis(H₀) is rejected.

Table :4 Findings related to association between Antenatal self-care and selected socio-demographic factors: N=110

SL.NO.	variables	Antenatal self-care		Calculated Chi Square χ^2	α level	df	Table value
		Good	Poor				
1.	<u>Age(in Years)</u>			6.75*	0.05	2	5.99
	≤23	40	28				
	24-29	9	18				
	30-35	5	10				
2.	<u>Religion</u>	28	22	1.75	0.05	1	3.84
	Hindu	26	34				

	Muslim						
3.	Most Supporting Person Husband others	33 21	36 20	0.119	0.05	1	3.84
4.	Participants Education Upto class VIII Class IX to above	11 43	24 32	6.40*	0.05	1	3.84
5.	Per capita income ≤ 2464 ≥ 2465	35 19	33 23	0.40	0.05	1	3.84
6.	Living children < 2 ≥ 2	39 15	25 31	8.594*	0.05	1	3.84

Table 5: Findings related to association between Antenatal self-care and selected socio-demographic factors. **N-110**

SL. NO.	variables	Antenatal self-care		Calculated Chi Square χ^2	α level	df	Table value
		Good	Poor				
1.	Type of pregnancy Planned Unplanned	39 15	28 28	5.70*	0.05	1	3.84
2.	Any Obstetrical Complication during pregnancy Yes No	6 48	6 50	0.004	0.05	1	3.84
3.	History of Miscarriage Yes No	7 47	5 51	0.46	0.05	1	3.84
4.	Type of family Joint Nuclear Extended	6 19 29	7 28 21	3.04	0.05	2	5.99
5.	Husband's Education Upto class IV Class IX to above	25 29	41 15	8.299*	0.05	1	3.84
6.	Husband's Occupation Daily wage earner others	37 17	47 9	3.61	0.05	1	3.84

The calculated chi square value of selected demographic variable i.e., Age, participant's education, living children, type of pregnancy, husband's education which are greater than the table value.

It indicates that the research hypothesis (H_3) is accepted and the null hypothesis (H_0) is rejected. Thus, there is an association between antenatal self-care with selected socio-demographic variables at 0.05 level of significance.

IV. Discussion

Based on the study findings, the following discussion can be drawn. From the study findings, it is found that half a proportion of the sample avail good to better antenatal self-care during their pregnancy period. Maximum 59.10% (65) mothers have taken vegetables regularly (6-7 days) and 99.10% (109) mothers avoided taking medicine without a doctor's advice regularly. Nguyen L D et al conducted a study showing that 40% consumed enough fiber and five servings of vegetables a day. 71.7% avoided using traditional medicine without physicians' prescriptions. Only 13% of pregnant women often or always did physical exercise at least three times a week.²⁴ This study also indicates that 100% of mothers registered their pregnancy during the antenatal period and mothers had taken antenatal care utilization properly. Kumar H, Chacko I V, Mane, S, N. Govindan, N, & Prasanth, S conducted a study that shows that 100% of women registered their pregnancy, and 75.5% of them registered their pregnancy within 12 weeks of pregnancy and checked their health in an antenatal clinic. Further, 89.9% of the women had received two doses of Tetanus Toxoid as well as iron and folic acid tablets during their pregnancy.¹⁶ Also, mothers have got good partner support from their husbands physically and psychologically. Most of the partner were very concerned about their wife's pregnancy. According to Alemi.S,

the study demonstrates that male involvement during antenatal check-ups is 69.4%, whereas in my study maximum of 66.36% (73) mothers had good partner support. Partners were accompanied by their wives and adequately utilized the antenatal services.¹¹ From the statistical analysis, it is found that there is a positive relationship between partner support and antenatal self-care. This study also depicts that there is no relationship between partner support and antenatal care utilization. In this study, there is no association between antenatal care utilization and socio-demographic variables. A significant association between antenatal self-care with age, Participant's education, living children, type of pregnancy, and education of the participant's husband is also present.

V. Conclusion

The result is consistent with the conclusion that a partner support is most important qualities of his relationship with his wife regarding antenatal self-care and antenatal care utilization during her pregnancy period. It reveals that the proportion of partner support was 66.36% South 24 Parganas, West Bengal, India. Partner's engagement is positively associated and related with the mother's and child's health.

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Authors' contribution

The authors worked jointly to complete the study. Ms. Sanjukta Dhara conceived of the study and participated in its design and implementation and wrote the manuscript. The study has been undertaken with the expert guidance of Mrs. Purbasha Banerjee. Prof. (Dr.) Kasturi Mandal helped to develop the tool of the study. With the opportunity to conduct the research study and for all of the resources and support they provided. Dr. Monoj kumar Barman helped to calculate and analyze the statistical data.

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