



# “A STUDY TO EXPLORE PRENATAL ATTACHMENT IN PRIMIGRAVIDA WOMEN WITH HER UNBORN CHILD IN THE SELECTED HOSPITALS OF CITY.”

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**Abstract:**

**Background of the study:** Maternal-fetal attachment (MFA) defines the relationship between a pregnant woman and her unborn and is demonstrated through the expression of her behaviors. It often begins when the woman learns that she is pregnant, and increases dramatically as she feels the baby grow and move within her body. Through a continuously evolving thought process, the woman develops an internal representation of her unborn baby, and begins the psychological task of identifying as a mother, while simultaneously accepting the fetus as a unique individual who is separate from her. Often, this process is enjoyable, providing a mixture of fantasies and thoughts about the realistic expectations of pregnancy and impending motherhood. Women can experience positive levels of attachment to their unborn fetuses, regardless of their health status or behaviors. MFA typically strengthens over the course of a pregnancy, but it can also be promoted through conscious intentions and actions. **Objectives :**1. To identify background variables of primigravida women. 2. To determine prenatal attachment of primigravida women with her unborn child. 3. To compare the prenatal attachment among first, second and third trimester primigravida women with her unborn child. 4. To identify association between prenatal attachment of primigravida women and background variables.

**Methodology:** The theoretical frame work adopted for this study was based on cranley's maternal fetal attachment. The research approach used was Quantitative approach, Exploratory Descriptive Survey design. **Result:** Prenatal attachment is increased in third trimester as mean in the first trimester  $\mu = 76.72 \pm 12.11$ ; in second trimester  $\mu = 81.04 \pm 9.97$  and in third trimester  $\mu = 83.75 \pm 10.54$ . This shows that the mean score of prenatal attachment is increased as gestational age goes on increasing. The difference in the pregnancy gestation age revealed significant difference in scores on the five subscales of the Maternal (Prenatal) Fetal Attachment Scale;  $p < 0.05$ . Hence the investigator accepts the  $H_1$  that the Maternal (Prenatal) Fetal Attachment of primigravida women significantly differ according to gestational age (Trimester of pregnancy); and rejects null hypothesis. **Conclusion:** This midwifery goal could be achieved by offering teaching, training to improve mother's attachment skills as well as providing guidance and counseling and closed antenatal care.

## INTRODUCTION

Over the past 25 years, increasing attention has been paid to the relationship exhibited between a mother and her newborn infant. This relationship has interchangeably been referred to as bonding and attachment. Fostering the development of this relationship has become a central issue for modern obstetrical practice, both in medicine and in nursing.

Rubin has suggested that the quality of the relationship between mother and infant hinges not only on the time immediately after birth and into early childhood but also on the mother's relationship with her fetus. This author also suggested that the mother comes to terms with and learns to love her unborn child through certain developmental tasks during pregnancy. These developmental tasks of pregnancy include the mother's acceptance and emotional incorporation of the fetus, the development of an affective tie, and giving of herself.<sup>1</sup>

Bowlby, J. and Ainsworth, M. introduced the attachment theory. The attachment theory emphasizes the attachment relationship between a caregiver and child. Bowlby theorized that the attachment process occurs throughout the lifespan of individuals, influencing their relationships with others. Bowlby integrated principles from ethology, psychoanalysis, developmental and cognitive psychology to explain and understand the bond between children and their caregivers and how that may impact their interpersonal functioning, personality development, and psychopathology.<sup>2</sup>

Evidence suggested that attachment begins during pregnancy as a result of physiological and psychological events. For five months or more of her pregnancy, the mother experiences physical and intellectual awareness of the fetus/child.<sup>3</sup>

The mother's growing bond is evidenced by her behaviour. Klaus and Kennel agree with this concept in their conclusion that strong evidence exists to suggest that once fetal movement begins, the pregnant woman becomes more aware of the developing life within and an attachment to the fetus begins.<sup>4</sup>

The development of maternal attachment during pregnancy has been suggested by Clark and Affonso. They hypothesize that the mother begins to "see" her unborn child based not only on her fantasies but also on sensations felt from within.<sup>5</sup>

Arbeit interviewed 30 women during their first pregnancies in order to identify factors involved in the development of maternal identity. She found that for some women, pregnancy was a time of psychological preparation for motherhood and those women frequently interacted with their unborn children. Examples of the latter finding were walking in order to calm the fetus, talking to the fetus and interpreting fetal movements, thereby elaborating a personal relationship.<sup>6</sup>

Based on the finding of research conducted by Leifer, Heidrich and Cranley, the perceived fetal movement is a significant variable that affects the changes in pregnant women's feelings of attachment.<sup>7</sup>

Maternal-fetal bonding, also known as prenatal attachment is defined as an emotional tie that develops between expectant parents and their fetus. An important part of prenatal attachment involves the parent developing loving and positive feelings about the fetus.<sup>8</sup>

A study was conducted by A. Siddiqui, B. Hagglof, and M. Eisemannat examined expectant mothers' attachment to their unborn babies. A total of 171 pregnant women at third trimester of pregnancy were recruited for the study. Three questionnaires regarding prenatal attachment, psychosomatic symptoms and attitudes towards pregnancy were used. A rating scale developed and administered by midwives on prenatal attachment was applied. The results revealed that prenatal attachment was a multidimensional construct including factors such as fantasy, interaction, affection, differentiation of self from foetus and sharing with others. Each dimension is expressed differently from other dimensions and some were more dominant than others. Maternal age, parity, partner relationship and a positive attitude towards pregnancy of both the mother and her partner played an important role, while psychosomatic discomfort was not significant for prenatal attachment.<sup>9</sup>

A longitudinal study of maternal attachment and infant developmental outcomes were studied by Alhusen, J.L., Hayat, M.J. & Gross, D. the research findings of their study revealed that women reporting higher MFA

during pregnancy had more secure attachment styles, and their children had more optimal early childhood development than those women reporting lower MFA and less secure attachment styles. Findings have implications for enhancing early intervention programs aimed at improving maternal and childhood outcomes. An earlier identification of disruptions in attachment may be beneficial in tailoring interventions focused on the mother-child dyad.<sup>10</sup>

### Problem statement

“A study to explore prenatal attachment in primigravida women with her unborn child in the selected hospitals of city.”

### Objectives of the study

- 1) To identify background variables of primigravida women.
- 2) To determine prenatal attachment of primigravida women with her unborn child.
- 3) To compare the prenatal attachment among first, second and third trimester primigravida women with her unborn child.
- 4) To identify association between prenatal attachment of primigravida women and background variables.

### Hypotheses

**H<sub>0</sub>1**= Prenatal attachment of primigravida women with her unborn child do not significantly differ according to gestational age.

**H<sub>1</sub>**= Maternal (Prenatal) Fetal Attachment of primigravida women significantly differ according to gestational age

**H<sub>0</sub>2** = There is no significant association between background variables and prenatal attachment of primigravida women with her unborn child

**H<sub>2</sub>** = There is significant association between background variables and Maternal (prenatal) attachment of primigravida women with her unborn child.

### METHODOLOGY

**Research approach:** In present study quantitative and qualitative integrated approach was used.

**Research design:** The research design used by the investigator in this study is exploratory descriptive survey design.

**Setting of the study:** Study was conducted at the antenatal Outpatient Departments (OPD) of selected local government hospital of the city, these Outpatient Department (OPD) units run every week days except Sunday.

On an average 50 to 70 pregnant women visits to these OPD's.

### Variables of the study

In the present study investigator has focused on two variables namely research variables that is prenatal fetal attachment in primigravida women with her unborn, this includes perception in relation to nature of mothering process, perception about discomforts and changes during pregnancy.

The second focus is on selected back ground variables that is timing of antenatal care registration, Age, Education, Marital status, Fetal age in terms of Gestational weeks, and Number of Ultra Sonographies (USG's).

**Population:** The target population of the present study includes the primigravida antenatal mothers who were attending the antenatal OPD of local government hospital of the city.

The accessible population consisted of primigravida women's who are in the first, second and third trimester and above period of pregnancy without high risk, who were attending the antenatal Out Patient Department (OPD) of selected hospital setting.

**Sample:** The samples for the study were the primigravida women who are in the first, second and third trimester and above period of pregnancy. Only those primigravida women who fulfilled inclusion criteria.

**Sample size:** The sample selected to participate in the study consisted of 200 primipara women without high risk pregnancy.

**Sampling technique:** In the present study the sample was drawn by non-probability purposive sampling technique.

#### **Criteria for sampling.**

#### **Inclusion criteria for sampling**

- Primigravida women with confirmed pregnancy.
- Primigravida women in the period of first trimester, Second trimester or Third trimester of pregnancy.
- Primigravida women who understand Marathi /Hindi /English.

#### **Exclusion criteria for sampling**

- Primigravida women diagnosed as high risk pregnancy such as: Pregnancy Induced Hypertension (PIH), Gestational Diabetes Mellitus (GDM), Intrauterine Growth Retardation (IUGR), Twins, fetus with congenital anomaly.
- Primigravida women who are not willing to participate in the study.

**Tools and technique:** Tools used in this study were:

1. Background variable sheet. (structured questionnaire)
2. Prenatal fetal attachment scale.(5 point Likert scale)

#### **Description of the tool**

Main data collection tool was sectioned into:

### Section I: Background Variables

### Section II: Prenatal fetal Attachment scale.

**Section I** consist total 8 items. First 6 items were measuring the background variables such as month of registration for antenatal care, Age, Education, Marital status, gestational weeks, and number of USG's. Last 2 items in section I were related to maternal processing.

### Plan for data analysis

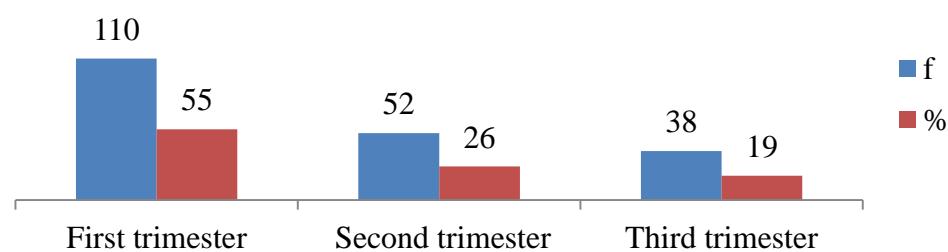
Analysis is the process of organizing and synthesizing the data so as to answer research questions and test hypothesis. Collected data was analysed statistically to fulfill the objective of the study and to test the research questions and hypothesis. Descriptive statistics was conducted on demographic data. Descriptive statistics includes frequency and percentages for nominal (categorical/dichotomous) data and means/standard deviations for continuous (interval/ratio) data. Inferential statistics was used for finding the association between background variable and prenatal attachment of primigravida women with her unborn child.

## CHAPTER IV

### ANALYSIS AND INTERPRETATION

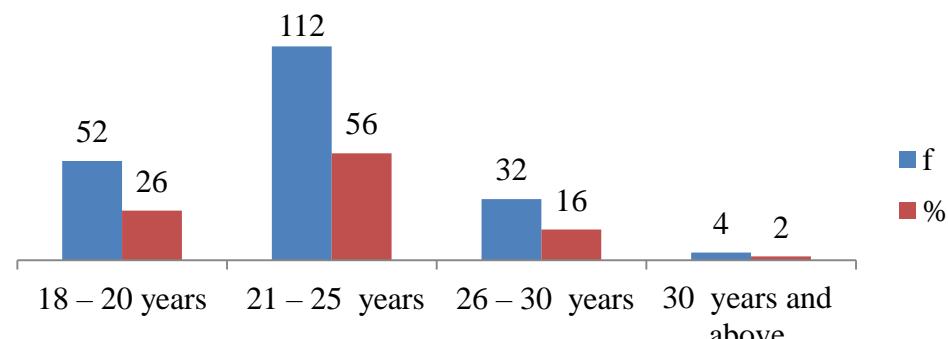
#### SECTION: I Objective 1: To identify background variables of primigravida women.

N=200



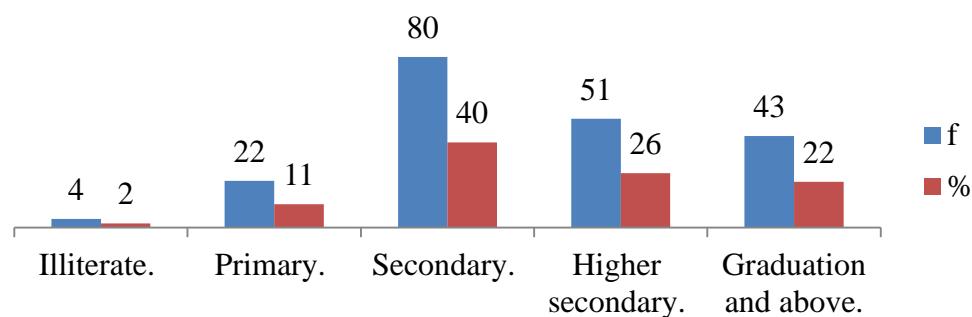
**Figure 3: Distribution of subjects according to antenatal registration.**

N=200

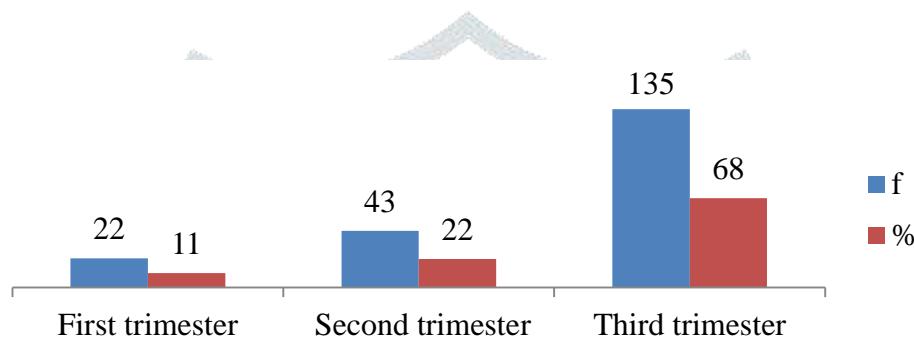


**Figure 4: Distribution of subjects according to age**

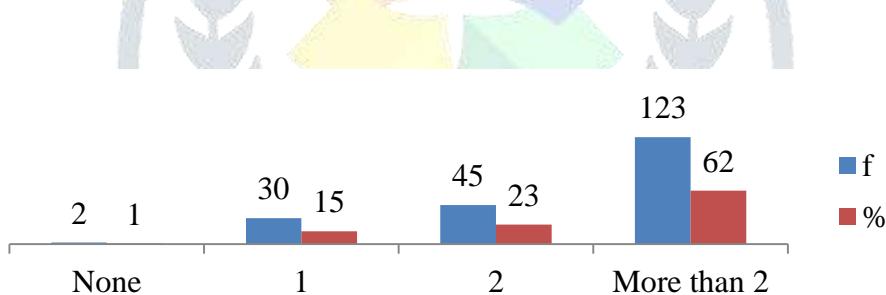
N=200

**Figure 5: Distribution of subjects according to level of education**

N=200

**Figure 6: Distribution of subjects according to gestational age (trimester) of pregnancy.**

N=200

**Figure 7 Distribution of subjects according to number of ultrsonographs performed during pregnancy****Table 2: Distribution of prenatal primigravida women according to their perception about botheration of symptoms.**

N=200

Botheration for the pregnancy symptoms	f	%
Not at all	102	51
A small amount	72	36
A moderate amount	22	11
A great deal	4	2

**Table 3: Distribution of prenatal primigravida women according to their thinking to become mother as same as their role model.**

N=200

Want to be the kind of mother like	f	%
Mother	169	85
Sister or other close relatives who is of same age	9	5
Friend	3	2
Mothers on TV	3	2
Experiences heard or read from experts on raising children	1	1
Other	15	8

**DATA ANALYSIS OF SECTION II:** Here the analysis is organized according research questions and hypotheses.

**Table 4: Distribution of prenatal primigravida women according to level of prenatal attachment with her unborn child.**

N=200

Level of prenatal attachment	F	%
No	0	0
Mild	31	15.5
Moderate	148	74
Sever	21	10.5

**Objective2: To determine prenatal attachment of primigravida women with her unborn child.**

**Table 5: Distribution primigravida women according the prenatal attachment behavior (Role-taking) with her unborn.**

N=200

Attachment behavior	No		Uncertain		Yes	
	f	%	f	%	f	%
Role-taking						
I picture myself feeding the Baby	35	17.5	4	2	161	80.5
I imagine myself taking care of the baby	12	6	3	1.5	185	92.5
I can hardly wait to hold the Baby	6	3	4	2	190	95
I try to picture what the baby Will	90	45	4	2	106	53

**Table 6: Distribution of antenatal women according the prenatal attachment behavior (Differentiation of self from fetus) with her unborn.**

N=200

Attachment behavior	No		Uncertain		Yes	
Differentiation of self from fetus	f	%	f	%	f	%
I enjoy watching my tummy jiggle as the baby kicks inside.	14	7	13	6.5	173	86.5
I'm really looking forward to seeing what the baby looks like.	33	16.5	4	2	163	81.5
I have decided on a name for a baby.	120	60	3	1.5	77	38.5

**Table 7: Distribution of antenatal women according the prenatal attachment behavior (Attributing characteristics and intentions) with her unborn.**

N=200

Attachment behavior	No		Uncertain		Yes	
Attributing characteristics and intentions	f	%	f	%	f	%
I wonder if the baby feels cramped in there.	51	25.5	6	3	143	71.5
I can almost guess what my baby's personality will be from the way he/she moves around.	76	38	27	13.5	97	48.5
I wonder if the baby can hear inside of me.	38	19	6	3	156	78
I wonder if the baby thinks and feels things inside of me.	64	32	12	6	124	62
It seems my baby kicks and moves to tell me it's eating time.	38	19	18	9	124	62
I can tell that my baby has the hiccoughs.	152	76	12	6	36	18

**Table 8: Distribution of antenatal women according the prenatal attachment behavior (Interaction with the fetus) with her unborn.**  
N=200

Attachment behaviour	No		Uncertain		Yes	
	F	%	F	%	f	%
<b>Interaction with the fetus</b>						
I talk to my unborn baby.	76	38	4	2	120	60
I refer to my baby by a, nick name.	101	50.5	6	3	93	46.5
I poke my baby to get him/her to poke back.	152	76	4	2	44	22
I stroke my tummy to quiet the baby when there is too much kicking.	81	40.5	11	5.5	108	54
I grasp my baby's foot through my tummy to move it around.	66	33	21	10.5	113	56.5
I sing poems and prayers for my unborn baby.	73	36.5	4	2	123	61.5

**Table 9: Distribution of antenatal women according the prenatal attachment behavior (Giving of self) with her unborn.**  
N=200

Attachment behaviour	No		Uncertain		Yes	
	F	%	F	%	f	%
<b>Giving of self</b>						
I feel all the trouble of being pregnant is worth it	62	31	15	7.5	123	61.5
I do things to try to stay healthy that I would not do if I were not pregnant	76	38	5	2.5	119	59.5
I eat meat and vegetables to be sure my baby gets a good diet	4	2	0	0	196	98
I feel my body is ugly	159	79.5	2	1	39	19.5
I give up doing certain things because I want to help my baby	32	16	1	0.5	167	83.5

**Objective 3: To compare the prenatal attachment among first, second, and third trimester primigravida women with her unborn child.**

**Table 10: Comparison of prenatal attachment scores of among first, second and third trimester primigravida women.**  
N=200

Prenatal attachment score values	First Trimester	Second Trimester	Third Trimester
	22 (n)	43 (n)	135 (n)
Mean	76.72	81.04	83.75
Std. Deviation	12.11	9.97	10.54
Grouped Median	75	80.8	83.16

<b>Variance</b>	146.77	99.47	111.2
			<b>F = 4.59;</b>
			<b>P = 0.001**</b>

**Table 11: Association between background variables and Maternal (prenatal) Fetal Attachment scores of primigravida women.**  
N=200

<b>Variables</b>	<b>F value</b>	<b>P value</b>
<b>Back ground variables</b>		
Registration month	0.80	0.5 <sup>ns</sup>
Age	1.60	0.10 <sup>ns</sup>
Education	2.90	0.00**
Gestational age (Trimester of Pregnancy)	4.60	0.00**
Number of USG	1.70	0.20 <sup>ns</sup>
<b>Maternal processing variables</b>		
Botheration for the pregnancy symptoms	0.20	0.90 <sup>ns</sup>
Want to be the kind of mother like	3.20	0.00**

### Summary:

This chapter deals with analysis and interpretation of data based on the objectives, research questions and hypotheses using descriptive and inferential statistics. The prenatal fetal attachment scale shows that primigravida women exhibit prenatal attachment with her unborn child. The result shows that prenatal attachment of primigravida women with her unborn child differs according to gestational weeks. Selected Background variables i.e. education, gestational age, and the role model to be the mother like, are associated with Maternal (prenatal) Fetal Attachment scores of primigravidawomen.

### DISCUSSION

The discussion is based on research questions of the present study. Predisposition to form intimate bond with other individuals is a basic component of human nature. Maternal prenatal attachment positively influence pregnancy related health behaviours such as taking adequate sleep, receiving prenatal care, eating healthy foods, not using illegal drugs or alcohol etc.

### Conclusion

The goal of maternal care should be healthy pregnancy with physically safe and emotionally satisfying experience for both the mother and the baby. From the above findings it is clear that primigravida women exhibit prenatal attachment with her unborn child. The maternity care can be offered through teaching, guidance, encouraging social support, consistent supervision and surveillance. Nurses are in an optimal position to enhance the Maternal fetal attachment level through pregnant women's education, training and applying maternal fetal attachment skills that may contributes to stronger prenatal attachment. Health

practitioners working in maternity services have a key role to play in supporting the development of the maternal-fetal relationship.

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