

A COMPARATIVE STUDY TO ASSESS THE LEVEL OF ANXIETY AMONG PREGNANT WOMAN PLANNED FOR NORMAL VAGINAL DELIVERY AND CAESAREAN SECTION DELIVERY IN AMCH, DIBRUGARH

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Abstract:

Background: Pregnancy and childbirth both are important life event in a women's life. It is a natural, normal physiological phenomenon which introduces new experiences in woman's reproductive life. Pregnancy-related anxiety (PrA) is a specific type of anxiety experienced during the perinatal period. It may concern a person's health and physical appearance, fetal development, hospital and health care experiences, impending childbirth, and early parenthood. The mode of delivery plays an important role in influencing the anxiety level of pregnant women. **Aim:** This study aims to compare the level of anxiety among pregnant women planned for normal vaginal delivery and cesarean section delivery. **Materials and Methods:** A comparative research design with a quantitative approach was adopted for the study. A total of 100 pregnant women (50 women who planned for Normal Vaginal Delivery & 50 women who planned for Caesarean section Delivery) were selected through convenient sampling technique in Dibrugarh district. Socio demographic data were collected by administering a self-structured socio demographic proforma. Anxiety level was assessed by using standardized tool Perinatal Anxiety Screening Scale (PASS). **Results:** Maximum number of the population under study planned for normal vaginal delivery i.e. 32 (32 %) were asymptomatic, 18(18%) were having mild to moderate symptoms. Maximum number of the population under study planned for caesarean section delivery i.e. 28 (28 %) were having mild to moderate symptoms, 14(14%) were asymptomatic and 8 (8%) were having severe symptoms. The findings concluded that pregnant women who planned for caesarean section delivery experienced higher anxiety than those who planned for normal vaginal delivery.

Key words: Level of anxiety, pregnant women, normal vaginal delivery, cesarean section delivery

INTRODUCTION

Pregnancy and childbirth both are important life event in a women's life. Pregnancy and childbirth as a whole gives meaning to the beauty of life. Child birth events have great physiological, emotional and social impact to the woman and her family.

Pregnancy-related anxiety (PrA) is a specific type of anxiety experienced during the perinatal period. It may concern a person's health and physical appearance, fetal development, hospital and health care experiences,

impending childbirth, and early parenthood. The mode of delivery plays an important role in influencing the anxiety level of pregnant women.

Some pregnant women prefer normal vaginal delivery because it is considered a natural process. However, fear of labor pain, prolonged labor and possible complications may increase anxiety among women planning for vaginal delivery. On the other hand, women planned for caesarean section delivery may experience anxiety related to surgery, anaesthesia, postoperative pain, delayed recovery and possible risks to maternal and fetal health.

NEED OF THE STUDY

According to the World Health Organization, maternal mental health is an essential component of maternal and child health care. WHO reported that a considerable number of pregnant women experience anxiety and emotional distress during pregnancy.

If anxiety is not identified and managed properly, it may lead to stress, sleep disturbances, hypertension, prolonged labor, poor coping ability and reduced maternal satisfaction. Dwivedi A.K. et al in 2023 conducted a study on antenatal anxiety and adverse pregnancy outcomes among pregnant women in India. The study reported that mothers with high anxiety had significantly higher rate of adverse outcomes, including preterm birth in 18% cases and low birth weight babies in 22% cases compared to non – anxious mothers.

Assessing the anxiety level among antenatal mothers can help health care professionals understand their emotional needs and provide appropriate counseling, reassurance and supportive care. Therefore, it is important to assess and compare the anxiety levels among pregnant women planning different modes of delivery.

RESEARCH METHODOLOGY

Population and Sample

A total of 100 pregnant women (50 women who planned for Normal Vaginal Delivery & 50 woman who planned for Caesarean Section Delivery) were selected through convenient sampling technique. Data were collected from pregnant women admitted in AMCH, Dibrugarh.

Theoretical Framework

Variables of the study contains research variables and demographic variables. Research variables of the study were level of anxiety among pregnant women and planned mode of delivery (normal vaginal delivery and cesarean section delivery). Demographic variables of the study were age, educational status, religion, area of living, type of family, occupation of husband, per capita family income, occupation of Pregnant woman, marital status, gestational age, gravida, parity, number of antenatal visits, Presence of any medical illness during pregnancy, previous obstetrical experience, preferred mode of delivery.

Sampling Technique

In this Research Study Researchers uses Non Probability Convenience Sampling Technique.

Sample Size

In this study, Sample was 100 pregnant Woman (50 women who planned for Normal Vaginal Delivery & 50 woman who planned for Caesarean Section Delivery) admitted in Assam Medical College & Hospital, Dibrugarh.

Inclusion Criteria

- All the pregnant woman planned for Normal and Caesarean Section Delivery attending Assam Medical College & Hospital, Dibrugarh.
- All the pregnant woman who are accessible during the period of data collection.
- All the pregnant women who are willing to participate in the study

Exclusion Criteria

- Pregnant woman who has diagnosed with severe psychiatric / mental disorders
- Pregnant woman who are in active labor during data collection

Description of Tool

Part 1: Self Structured Socio Demographic Performa This form was constructed to determine the personal characteristics, family properties and obstetrical data.

Part 2: Perinatal Anxiety Screening Scale (PASS)

Part 2 consist of the standardized Perinatal Anxiety Screening Scale (PASS) used to assess the anxiety of woman. Domains are related to excessive worry and specific fears, Perfectionism, control and trauma, social anxiety and Acute anxiety and adjustment.

Each item is scored on a Likert Scale, based on the frequency & severity of symptoms experienced by the Participants. Interpretation of PASS scores:

Anxiety Severity	Range of Scores
Asymptomatic	0-20
Mild -moderate	21-41
Severe	42-93

Higher scores indicate higher levels of anxiety

Reliability

The reliability of the scale was measured through Cronbach's alpha and found 0.96.

Data Collection:

Written permission was obtained from the concerned authorities to conduct the study. The data collection was done in Assam Medical College and Hospital Dibrugarh. Subjects were traced as per the inclusion criteria. The investigator after selecting the subjects using convenient sampling technique. After taking consent from the participants, both the tools were applied to a total study subjects of 100 pregnant women (50 women who planned for Normal Vaginal Delivery & 50 woman who planned for Caesarean Section Delivery) admitted in AMCH, Dibrugarh.

- Frequency and percentage distribution were used to analyze socio-demographic characteristics and level

of anxiety of the participants.

- t - test was used to compare the level of anxiety among pregnant women planned for normal vaginal delivery and cesarean section delivery.

RESULTS AND DISCUSSION

Table 1: Frequency and Percentage distribution of socio demographic variables (n=100)

Age	Frequency	Percentage (%)
Pregnant women planned for normal vaginal delivery		
a) <20 years	8	16
b) 20–25 years	27	54
c) 26–30 years	10	20
d) 31–35 years	4	8
e) >35 years	1	2
Pregnant woman planned for cesarean section delivery		
a) <20 years	5	10
b) 20–25 years	19	38
c) 26–30 years	15	30
d) 31–35 years	8	16
e) >35 years	3	6
Educational Status	Frequency	Percentage (%)
Pregnant women planned for normal vaginal delivery		
a) No formal Education	7	14
b) Primary	19	38
c) Secondary	14	28
d) Higher Secondary	7	14
e) Graduate	3	6
f) Post Graduate	0	0
Pregnant woman planned for cesarean section delivery		
a) No formal Education	5	10
b) Primary	22	44
c) Secondary	11	22
d) Higher Secondary	10	20
e) Graduate	2	4
f) Post Graduate	0	0
Religion	Frequency	Percentage (%)
Pregnant women planned for normal vaginal delivery		
a) Hindu	34	68
b) Muslim	12	24
c) Christian	4	8
d) Others	0	0

Pregnant woman planned for cesarean section delivery		
a) Hindu	40	80
b) Muslim	8	16
c) Christian	2	4
d) Others	0	0
Area of living	Frequency	Percentage (%)
Pregnant women planned for normal vaginal delivery		
a) Rural	41	82
b) Urban	8	16
c) Hilly	0	0
d) Semi Urban	1	2
Pregnant woman planned for cesarean section delivery		
a) Rural	30	60
b) Urban	16	32
c) Hilly	0	0
d) Semi Urban	4	8
Occupation	Frequency	Percentage (%)
Pregnant women planned for normal vaginal delivery		
a) Home Maker	42	84
b) Self-employed	0	0
c) Government employee	0	0
d) Private employee	0	0
e) Daily wage earner	8	16
f) Others	0	0
Pregnant woman planned for cesarean section delivery		
a) Home Maker		
b) Self-employed	37	74
c) Government employee	1	2
d) Private employee	6	12
e) Daily wage earner	1	2
f) Others	11	22
	0	0
Occupation of Husband	Frequency	Percentage (%)

Pregnant women planned for normal vaginal delivery		
a) Unemployed	0	0
b) Self-employed	12	24
c) Government employee	0	0
d) Private employee	3	6
e) Daily wage earner	35	70
Pregnant woman planned for cesarean section delivery		
a) Unemployed	0	0
b) Self-employed	20	40
c) Government employee	0	0
d) Private employee	4	8
e) Daily wage earner	26	5
Marital status	Frequency	Percentage (%)
Pregnant women planned for normal vaginal delivery		
a) Married	50	100
b) Unmarried	0	0
c) Widow	0	0
d) Separated	0	0
Pregnant woman planned for cesarean section delivery		
a) Married	49	98
b) Unmarried	1	2
c) Widow	0	0
d) Separated	0	0
Family Income	Frequency	Percentage (%)
Pregnant women planned for normal vaginal delivery		
a) Rs 47,348 and above	0	0
b) Rs 23,674 – 47,347	0	0
c) Rs 17,756 – 23,673	5	10
d) Rs 11,837 – 17,755	30	60
e) Rs 7,102 – 11,836	15	30
f) Rs 2,391 – 7,101	0	0
g) Less than Rs 2,390	0	0
Pregnant woman planned for cesarean section delivery		
a) Rs 47,348 and above		
b) Rs 23,674 – 47,347	0	0
c) Rs 17,756 – 23,673	1	2
d) Rs 11,837 – 17,755	10	20
e) Rs 7,102 – 11,836	26	52
f) Rs 2,391 – 7,101	13	26

g) Less than Rs 2,390	0 0	0 0
Type of family	Frequency	Percentage (%)
Pregnant women planned for normal vaginal delivery		
a) Nuclear Family	20	40
b) Joint Family	25	50
c) Extended Family	5	10
d) Single Parent	0	0
Pregnant woman planned for cesarean section delivery		
a) Nuclear Family	31	62
b) Joint Family	14	28
c) Extended Family	5	10
d) Single Parent	0	0
Gestational age	Frequency	Percentage (%)
Pregnant women planned for normal vaginal delivery		
a) <28 weeks	1	2
b) 28–32 weeks	4	8
c) 33–36 weeks	21	42
d) ≥37 weeks	24	48
Pregnant woman planned for cesarean section delivery		
a) <28 weeks	4%	8
b) 28–32 weeks	8%	16
c) 33–36 weeks	18%	36
d) ≥37 weeks	20%	40

Gravida	Frequency	Percentage (%)
Pregnant women planned for normal vaginal delivery		
a) Primi gravida	20	40
b) Multi gravida	30	30
Pregnant woman planned for cesarean section delivery		
a) Primi gravida	31	62
b) Multi gravida	19	38
Parity	Frequency	Percentage (%)
Pregnant women planned for normal vaginal delivery		
a) Nullipara	20	40
b) Primipara	16	32
c) Multipara	14	34
Pregnant woman planned for cesarean section delivery		
a) Nullipara	31	62
b) Primipara	9	18
c) Multipara	10	20
No. of antenatal visits	Frequency	Percentage (%)
Pregnant women planned for normal vaginal delivery		
a) <4 Visits	8	16
b) 4-6 Visits	25	50
c) >6 Visits	17	34
Pregnant woman planned for cesarean section delivery		
a) <4 Visits	15	30
b) 4-6 Visits	16	32
c) >6 Visits	19	38
Medical illness during pregnancy present	Frequency	Percentage (%)
Pregnant women planned for normal vaginal delivery		
a) Yes	11	22
b) No	39	78
Pregnant woman planned for cesarean section delivery		
a) Yes	39	78
b) No	11	22
Previous Obstetrical Experience	Frequency	Percentage (%)

Pregnant women planned for normal vaginal delivery		
a) Normal vaginal delivery	16	32
b) Caesarean section	0	0
c) Assisted delivery (Forceps/Vacuum)	0	0
d) Abortion/Miscarriage	3	6
e) Stillbirth	0	0
f) No previous experience (Primi)	31	62
Pregnant woman planned for cesarean section delivery		
a) Normal vaginal delivery	5	10
b) Caesarean section	19	38
c) Assisted delivery (Forceps/Vacuum)	0	0
d) Abortion/Miscarriage	6	12
e) Stillbirth	0	0
f) No previous experience (Primi)	20	40

Table 2:1 - Frequency and percentage distribution of pregnant women planned for normal vaginal delivery with respect to the level of anxiety (N=50)

Level of anxiety	Frequency	Percentage (%)
Asymptomatic (0-20)	32	32
Mild to moderate symptom (21-41)	18	18
Severe symptoms (42-93)	0	0

Table 2.2: - Frequency and percentage distribution of pregnant women planned for caesarean section delivery with respect to the level of anxiety (N=50)

Level of anxiety	Frequency	Percentage (%)
Asymptomatic (0-20)	14	14
Mild to moderate symptom (21-41)	28	28
Severe symptoms (42-93)	8	8

Table 3 : - Comparison between the levels of anxiety among the pregnant women planned for normal vaginal delivery and cesarean section delivery (n=100)

Comparison of levels of anxiety	Mean	SD	Mean percentage (%)	Range	Mean difference	t test value

Normal vaginal delivery	17.56	10.08	18.88 %	41	13.40	4.52*
Cesarean section delivery	30.96	18.35	33.29%	93		

*= Significant at 0.05 level, df = 98, table value = 1.96

CONCLUSION

From the findings of the study, it can be concluded that the majority of Pregnant Women planned for Normal Vaginal Delivery i.e. 32% were asymptomatic, whereas 18% had mild to moderate Anxiety symptoms. Among the Pregnant Women planned for Cesarean Section Delivery, the majority i.e. 28% had mild to moderate Anxiety symptoms, 14% were asymptomatic and 8% had severe Anxiety symptoms. The findings of the study revealed that Pregnant Women planned for Cesarean Section Delivery experienced higher Anxiety levels compared to Pregnant Women planned for Normal Vaginal Delivery. The study emphasizes the importance of psychological support, counselling and proper antenatal guidance to reduce Anxiety among Pregnant Women and to promote safe motherhood and positive maternal outcomes. Result of the study will help psychiatric nurses to plan intervention programs reduce the anxiety level of pregnant women and ultimately help in promotion of positive maternal and mental health.

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