

International Journal of Medical Science and Innovative Research (IJMSIR)

IJMSIR : A Medical Publication Hub

Available Online at: www.ijmsir.com

Volume – 8, Issue – 1, February – 2023, Page No. : 131 – 139

A study to identify the preference of childbirth method among the antenatal mothers in selected areas of east khasi hills district, Meghalaya

¹Kalung Pinky, B.Sc. Nursing students, College of Nursing, North Eastern Indira Gandhi Regional Institute of Health and Medical Science (NEIGRIHMS), Shillong, Meghalaya, India, Pincode-793018

²Anita Lamare, B.Sc. Nursing students, College of Nursing, North Eastern Indira Gandhi Regional Institute of Health and Medical Science (NEIGRIHMS), Shillong, Meghalaya, India, Pincode-793018

³Ankita Arya, B.Sc. Nursing students, College of Nursing, North Eastern Indira Gandhi Regional Institute of Health and Medical Science (NEIGRIHMS), Shillong, Meghalaya, India, Pincode-793018

⁴Habung Tatung, B.Sc. Nursing students, College of Nursing, North Eastern Indira Gandhi Regional Institute of Health and Medical Science (NEIGRIHMS), Shillong, Meghalaya, India, Pincode-793018

⁵Priyanka Mary Kharnaior, B.Sc. Nursing students, College of Nursing, North Eastern Indira Gandhi Regional Institute of Health and Medical Science (NEIGRIHMS), Shillong, Meghalaya, India, Pincode-793018

⁶Ramshemla Ningshen, B.Sc. Nursing students, College of Nursing, North Eastern Indira Gandhi Regional Institute of Health and Medical Science (NEIGRIHMS), Shillong, Meghalaya, India, Pincode-793018

⁷Tage Nyimung, B.Sc. Nursing students, College of Nursing, North Eastern Indira Gandhi Regional Institute of Health and Medical Science (NEIGRIHMS), Shillong, Meghalaya, India, Pincode-793018

⁸Erbatemon Pyngrope, Tutor/Clinical Instructor, College of Nursing, North Eastern Indira Gandhi Regional Institute of Health and Medical Science (NEIGRIHMS), Shillong, Meghalaya, India, Pincode-793018

Corresponding Author: Kalung Pinky, B.Sc. Nursing students, College of Nursing, North Eastern Indira Gandhi Regional Institute of Health and Medical Science (NEIGRIHMS), Shillong, Meghalaya, India, Pincode-793018

Citation this Article: Kalung Pinky, Anita Lamare, Ankita Arya, Habung Tatung, Priyanka Mary Kharnaior, Ramshemla Ningshen, Tage Nyimung, Erbatemon Pyngrope, "A study to identify the preference of childbirth method among the antenatal mothers in selected areas of east khasi hills district, Meghalaya", IJMSIR- February - 2023, Vol – 8, Issue - 1, P. No. 131 - 139.

Type of Publication: Original Research Article **Conflicts of Interest:** Nil

Abstract

Normal vaginal birth (NVD) is the child birth process which takes place without any form of medical intervention. Cesarean section is a surgical procedure used to deliver a baby through incisions in the abdomen and uterus. It has been reported that the poorer communities lack facilities for opting LSCS, so they go for NVD. So it is important to identify the preference of childbirth method among the antenatal mothers especially in rural areas.

A non-experimental study was conducted using semi structured questionnaires with 122 antenatal mothers in the rural areas of Meghalaya using purposive sampling techniqueue.

The majority of the participants 120 to be specific, (98. 36%) preferred NVD. "Speedy recovery" preferred by 92 participants (75. 40%) is found to be the most common factor for choosing NVD. While 2 participants (1.63%) preferred Caesarean Section and "modern trend" 02(1.63%) is found to be the most common factor for choosing caesarean section.

The study concluded that majority of the participants preferred normal vaginal delivery over elective cesarean section.

Keywords: Antenatal mothers, Normal vaginal delivery and cesarean section.

Introduction

Background of the study

Normal vaginal birth (NVD) is the child birth process which takes place without any form of medical intervention. These days, medications may be used to alleviate the pain and speed up the delivery process. However, one may choose not to opt for any medical interventions at all. (All in all, a normal delivery is, in other words, a completely natural delivery of a baby by the mother without any medical interventions). On the other hand, ccesarean section is a surgical procedure used to deliver a baby through incisions in the abdomen and uterus. A C-section might be planned ahead of time if any pregnancy delivery develops. In a study conducted by Ms. Shruthi Moolya, et.al. (2018) in Mangalore, Karnataka among 150 antenatal mothers using purposive sampling technique; It was found that majority of the participants (80%) preferred normal vaginal delivery over elective cesarean section as a mode of delivery.^[2]

Going through labor and having a vaginal delivery is a long process that can be physically grueling and is hard work for the mother. But there are benefits of having a vaginal delivery. They are shorter hospital stay, shorter recovery time, avoiding a major surgery and its

associated risks, and spontaneous breast feeding. This is not to say that there are no risks associated to vaginal delivery. There are risks which include stretching or tearing of the skin and tissues around the vagina and developing problems with bowel or urinary incontinence. After a vaginal delivery, a woman may also experience lingering pain. On the other hand, C-section is a surgical birth procedure that is scheduled in advance, making it more convenient and predictable than a vaginal birth. It also causes less labour pain. Some of the dis advantages of C-section include longer stay in the hospital, blood loss, physical complaints following delivery (such as pain or infection at the site of the incision and longerlasting soreness), possible injuries to the bowel or bladder, and formation of blood clot. The knowledge of the advantages and disadvantages as mentioned above plays a very important role in the process of decision making among expectant mothers.^[3]

Need of the study

India has experienced increase in cesarean delivery rates similar to those observed in the rest of the world. Cesarean delivery rates have more than doubled in India from 8% in 2005 and 2006 to 17% in 2015 and 2016.

The WHO recommends that the percentage of cesarean delivery should not exceed 10% to 15% in any nation. Study says that cesarean birth rate in India has crossed the WHO threshold of 15%.

It has also been reported that the poorer communities lack facilities for opting LSCS, so they go for NVD which is more challenging.

Through this study, the preference of the mothers would be known. We will also understand the factors that influence their choices and decisions. This study would provide data on the emerging choice of the mother in the local region and the associated data will aid further studies.^[2].

Objectives

Primary objectives

• To identify the preferences for normal vaginal delivery or elective cesarean section among the antenatal mothers.

Secondary objective

• To identify the factors that can influence the preference of the antenatal mothers regarding the mode of delivery.

Hypothesis

H1: Most of the antenatal mothers in community level would prefer normal vaginal delivery due to the fear of pain of C-section, avoidance of anaesthesia and unnecessary surgical incision; low cost, speedy recovery, shorten hospital stay and safe confinement.

Operational definition

Antenatal mother

Woman at their reproductive age when they are expecting a baby.

Methodology

Research approach

In this study the quantitative research approach was considered appropriate in order to identify the preference of child birth method among the antenatal mothers.

Research design

In the present study a survey research design to identify the preference of child birth method of the antenatal mothers.

Research variables

Independent variables

Age, Religion, Caste/tribe, Education, Socio-economic factors

Dependent variables

Preference of childbirth method among antenatal mothers

Study settings

The study was conducted at Laitkor and Nongkrem, East

Khasi Hills, Meghalaya.

Study population

In this study, the population comprises of all the antenatal mothers residing in the selected area of East Khasi Hills, Meghalaya.

Sample size

A total of 121 participants was included in the study.

Inclusion criteria

• Antenatal mothers residing in Laitkor, East Khasi Hills, Meghalaya

Exclusion criteria

- Antenatal mothers who are not at home
- Antenatal mothers who are not willing to participate
- Antenatal mothers with previous cesarean section due to medical Requirements

Sampling technique

In this study, purposive sampling technique was used for selecting the participants.

Data collection procedure

Prior to data collection, approval was taken from the Principal of College of Nursing, NEIGRIHMS and permission was obtained from the Directorate of Health and Services Government of Meghalaya, Medical Officer and Public Health Nurse of the Primary Health Centre of the selected area of East Khasi Hills, Meghalaya. Data was collected from 2 villages- Laitkor (Laitkor 1, Laitkor 2, Laitkor 3 and Laitkor 4) and Nongkrem (Kharbuli, Mawpynthaw, War bah, Nong kyn dong and Iewp pomtiah), Meghalaya from 23rd May 2022 to 1st June 2022 which was a period of one week and 3 days.

122 participants who met the inclusion criteria were selected. Prior to data collection a written consent form was taken from the participants on the day of data collection.

Tools for data collection

The Data collection tools included the following sections:

Section 1

Questionnaire to collect the socio-demographic data like Age, Religion, Education, Occupation, Gravida, Antenatal checkups (7 Questions were included).

Section 2

This section consists of questions related to the preference of child birth method and factors influencing them.

Analysis, interpretation and discussion

The data collected from the subject were analyzed by using descriptive statistics like frequency and percentage. The data are presented in the form of tables and graphs as illustrated below.

Organization of findings

The data are presented under the following headings:

Section 1: Findings related to the socio-demographic data of the participants.

Section 2: Findings related to the preference of child birth method of the participants and the factors influencing their preferences.

Section 1: findings related to the socio-demographic data of the participants

Table 1: Frequency and percentage distribution of the participants according to the socio-demographic data. n=122

Demographic characteristics	Frequency (f)	Percentage (%)
Age (in years)		
18-24	41	33.6
25-30	45	36.8
31-36	29	23.7
37 and above	07	5.73
Religion		
Christian	113	92.6
Indigenous	09	7.37

Education		
Illiterate	05	4
Primary	30	24.5
Secondary-Higher Secondary	73	59.8
Graduate- Post Graduate	14	11.47
Occupation		
Home Maker	91	74.5
Farmer	03	2.45
Laborer	13	10.65
Professionals	10	8.19
Others	05	4.09
Gravida		
Primigravida	42	34.42
Gravida 2	30	24.5
Multi Gravid (3-5)	42	34.42
Grand Multi (Above 5)	08	6.55
Antenatal Check up		
Yes	120	98.36
No	02	1.63
If yes, place of antenatal che	ck	
սթ		
Sub Centre	95	77.86
Primary Health Centre	05	4.09
Hospital	16	13.11
Private Clinic	06	4.91

Data presented in table 1 shows that majority of the participants 45 (36.8%) belong to the age group 25-30. 113 (92.6) participants are Christian. Majority of participants have Secondary-Higher Secondary level qualification 73 (59.8%).

Majority of the participants are Homemakers 91(74.5%). Majority of the participants are Primigravida and Multi Gravida (3-5) 42 (34.2%).

120 (98.36%) participants go for Antenatal Checkup. Majority of the participants goes for Antenatal check up in the Sub Centre 95(77.86%) Section 2: findings related to the preference of the

child birth method of theparticipants

Table 2: Frequency and percentage distribution of the preference of child birth method of the participants. n=122

Preference Of Child Birth	nFrequency	Percentage
Method	(f)	(%)
Normal Vaginal Delivery	120	98.36
Elective Cesarean Section	02	1.63

Data presented in table 2 depicts that majority of the participants 120(98.36%) prefer normal vaginal delivery. Table 2 (a): Frequency and percentage distribution of the factors influencing Normal Vaginal Delivery as the preference of child birth method of the primigravida participants. n=42

Factors	Frequency	Percentage
	(f)	(%)
Maternal		
Speedy Recovery	24	57.14
Less Painful Than CS	20	47.61
Short Hospital Stay	25	59.52
Safer Than CS	15	35.71
Avoidance Of Anesthesia	12	28.57
No Abdominal Scar	13	30.95
Less Expensive	31	73.80
Baby		
Early Bonding with Mother	37	88.09
Early Initiation of Breast	32	76.19
Feeding		

Data presented in table 2 (a) depicts that the factors influencing Normal vaginal delivery as the preferred child birth method of the primigravida participants include maternal factors and baby factors.

Table 2 (b): Frequency and percentage distribution of the factors influencing Normal Vaginal Delivery as the

preference of child birth method of the gravida 2

participants. n=30

Factors	Frequency	Percentage
	(f)	(%)
Maternal		
Speedy Recovery	21	70
Less Painful Than CS	17	56.66
Short Hospital Stay	18	60
Safer Than CS	13	43.33
Avoidance Of Anesthesia	11	36.66
No Abdominal Scar	9	30
Less Expensive	23	76.66
Baby		
Early Bonding with Mother	25	83.33
Early Initiation of Breast	27	90
Feeding		

Data presented in table 2 (b) depicts that the factors influencing Normal vaginal delivery as the preferred child birth method of the gravida 2 participants include maternal factors and baby factors.

Table 2 (c): Frequency and percentage distribution of the factors influencing Normal vaginal delivery as the preference of child birth method of the multi gravida (3-5) participants. N=40

Factors	Frequency (f)	Percentage (%)
Maternal		
Speedy Recovery	32	80
Less Painful Than CS	21	52.5
Short Hospital Stay	25	62.5
Safer Than CS	15	37.5
Avoidance Of Anesthesia	16	40
No abdominal Scar	17	42.5
L ess Expensive	32	80
Baby		
Early Bonding with Mother	38	95
Early Initiation of Breast Feeding	36	90

Data presented in table 2 (c) depicts that the factors influencing Normal vaginal delivery as the preferred child birth method of the multi gravida (3-5) participants include maternal factors and baby factors.

Table 2 (d): Frequency and percentage distribution of the factors influencing Normal vaginal delivery as the preference of child birth method of the grand multi (>5) participants. N=8

Factors	Frequency	Percentage
	(f)	(%)
Maternal		
Speedy Recovery	6	75
Less Painful Than CS	1	12.5
Short Hospital Stay	5	62.5
Safer Than CS	3	37.5
Avoidance Of Anesthesia	2	25
No Abdominal Scar	2	25
Less Expensive	8	100
Baby		
Early Bonding with Mother	7	87.5
Early Initiation of Breast	8	100
Feeding		

Data presented in table 2 (d) depicts that the factors influencing Normal vaginal delivery as the preferred child birth method of the grand multi (>5) participants include maternal factors and baby factors.

Table 2 (e): Frequency and percentage distribution of the factors influencing Cesarean Section as the preference of child birth method of the participants. N=02

Factors	Frequency (f)	Percentage (%)
Maternal		
Modern Trend	02	100
Adopt Family Planning Method	01	50
Baby		
Lower Risk Of Injury To The	01	50
baby		

Data presented in table 2 (e) depicts that the factors influencing Cesarean Section as the preferred child birth method of the participants include maternal factors and baby factors.

Discussion

The present study "A study to identify the preference of childbirth method among the antenatal mothers in selected area of East Khasi Hills District, Meghalaya". In the present study majority of the participants 45(36.8%) belong to the age group 25-30. 113(92.6) participants are Christian. Majority of participants have Secondary-Higher Secondary level qualification 73(59.8%). Majority of the participants are Homemakers 91(74.5%). Similarly in a study conducted by Bhattacharyya H, Pala S (2012) out of 340 women who were interviewed 145 (42.6%) belong to age group 25-35 years, 245 had (72.0%) had done schooling.^[15]

In our study majority of the participants 120(98.36%) prefer normal vaginal delivery. Similarly in a study conducted by Shruthi Moolya M., et al (2018) shows that out of 150 antenatal mother 120(80%) of antenatal mothers preferred normal vaginal delivery.^[2] Similarly in another study conducted by Dogra P., et al (2017) it shows that total of 100 womenn interviewed in the study. Mmajority (85%) had received education up to High school and above. Majority of the women (90%) had the positive attitude towards vaginal delivery.^[9]

In the present study the factors influencing Normal vaginal delivery as the preferred child birth method of the primigravida participants include maternal factors and baby factors. Wherein "less expensive" 31 (73.8%) is found to be the most common factor among the other maternal factors followed by "Short hospital stay" 25 (59.52%). While "Early bonding with mother" 37 (86.09%) is the most common among the baby factors. Similarly in a study conducted by Shruthi Moolya M., et

al (2018) shows that the major factors for preferring normal vaginal delivery are to avoid unnecessary surgical wound pain (100%), get speedy recovery from the postpartum period (100%). Majority of antenatal mothers have preferred normal vaginal delivery considering that the NVD is safer for their baby (99%). They also preferred to give birth by natural process (100%). Only 38% of the antenatal mothers preferred this mode of delivery because they consider it is economical.^[2]

In the present study the factors influencing Cesarean Section as the preferred child birth method of the participants includes maternal factors and baby factors. Wherein "Modern Trend" 02(100%) is found to be the most common factor among the other maternal factors followed by "Adopt family planning method" 01(50%). While "Lower risk of injury to the baby" 01(50%) is the most common among the baby factors. Similarly in a study conducted by Shruthi Moolya M., et al (2018) shows that the major factors for preferring the caesarean section delivery are fear of pain during the labour 93% and 97% for the safety of their baby.^[2]

Out of all the similarities in a study conducted by Kaur j., et al (2013) it shows that Caesarean section rates were inexorably rising which had led to the possibility of negative impact on maternal and neonatal health. The prevalence of Caesarean Sections (65%) was higher over vaginal births (35%). It had higher number of Emergency (52.31%) over Elective (47.70%) caesarean sections.^[12]

Conclusion

From the study it was found that majority of the participants preferred normal vaginal delivery over elective cesarean section. The factors influencing normal vaginal delivery as the preferred child birth method of the participants included maternal factors and baby factors. The study reveals that the most common factor among the maternal factors which influence their preference was "less expensive" followed by "speedy recovery". While the preference for the baby factors varies according to the gravida of the participants such as "early bonding with mother" being the most common for primigravida and multi gravida (3-5) and "early initiation of breastfeeding" was the most common for the gravida 2 and grand multi (>5) participants.

Similarly the factors influencing elective cesarean section as the preferred child birth method of the participants included maternal factors and baby factors. Where "modern trend" was preferred by the majority of the participants among the maternal factors followed by "adopt family planning method", and "lower risk of injury to the baby" as the baby factor that influence their preferences.

References

 Sharma Suresh K. Nursing Research and Statistics: population, sample and sampling. 2nd edition. Kundli, Haryana (India); Elsevier India Pvt. Limited;2014. Page no. 206-241

2. Shruthi Moolya M, Rodrigues S, Shimi M, Alvares TR, Neeta J, Ebnezar P. Preference for normal vaginal delivery or elective caesarean section delivery and factors influencing it among antenatal mothers in selected hospital at Mangalore [Internet]. Ijhsr.org. [cited 2021 Feb 13]. Available from: https:// www. ijhsr. org/ IJHSR _ Vol. 8_Issue.8_Aug2018/28.pdf

3. Zakerihamidi M, Roudsari RL, Khoei EM. Vaginal delivery vs. cesarean section: a focused ethnographic study of women's perceptions in the north of Iran. International journal of community-based nursing and midwifery. 2015 Jan;3(1):39. [cited 2021 Feb 13] Available from: https:// PubMed. ncbi. nlm. nih. gov/ 32 349704/

4. Maharlouei N, Mansouri P, Zahmatkeshan M, Lanka Rani KB. Low-risk planned caesarean versus planned

vaginal delivery at term: early and late infantile outcomes. Eastern Mediterranean Health Journal. 2019 Jul 1; 25 (7). [cited 2021 Feb 19] Available from: https:// www. emro. who. int/ emhj-volume-25-2019/volume-25issue-7/ low – risk – planned – caesarean – versus – planned – vaginal – delivery – at – term – early – and – late - infantile-outcomes.html

5. Mazzoni A, Althabe F, Gutierrez L, Gibbons L, Liu NH, Bonotti AM, et al. Women's preferences and mode of delivery in public and private hospitals: a prospective cohort study. BMC Pregnancy Childbirth [Internet]. 2016 [cited 2023 Jan 31]; 16 (1):34. [cited 2021 Feb 19] Available from: https:// PubMed. ncbi. nlm. nih. gov/ 268 57448/

6. Shams-Ghahfarokhi Z, Khalajabadi-Farahani F. Intention for cesarean section versus vaginal delivery among pregnant women in Isfahan: Correlates and determinants. Journal of reproduction & infertility. 2016 Oct; 17 (4): 230. [cited 2021 Feb 17] Available from: https:// www. ncbi. nlm. nih. gov/ pmc/ articles/ PMC 512 4342/

7. Khamehchian M, Adib-Hajbaghery M, Heydari Khayat N, Rezaei M, Sabery M. Primiparous women's experiences of normal vaginal delivery in Iran: a qualitative study. BMC pregnancy and childbirth. 2020 Dec; 20:1-8. [cited 2021 Feb 18] Available from: https:// bmc pregnancy child birth. Bio med central. com/articles/ 10.1186/s12884-020-02954-4

8. Schindl M, Birner P, Reingrabner M, Joura EA, Hussle in P, Langer M. Elective cesarean section vs. spontaneous delivery: a comparative study of birth experience. Acta obstetricia et gyneco logica Scan dinavica. 2003 Jan 1;82(9):834-40. [cited 2021 Feb 18] Available from: https:// PubMed. ncbi. nlm. nih. gov/ 129 11445/ Dogra P, Sharma R. Preferences of pregnant women regarding mode of delivery: a questionnaire-based study.
Int J Sci Rep. 2017 Nov;3(11):292-95 [cited 2021 Feb 18] Available from: https:// www. scirep. com/ index. php/ scirep/ article/view/348

 Shweta Yadav SK, Yadav SS, Thakur B. 2016
Analysis of cesarean rate, indications and complications: review from medical college Ambala, Haryana, India. Int J Reprod Contracept Obstet Gynecol. 2016 Oct; 5 (10): 3326-9. [cited 2021 Feb 18] Available from: https:// www.ijrcog.org/index.php/ijrcog/article/view/404

11. Gupta M, Garg V. The rate and indications of caesarean section in a tertiary care hospital at Jaipur, India. Int J Reprod Contracept Obstet Gynecol. 2017 Apr 27; 6 (5):1786-92. [cited 2021 Feb 20] Available from: https:// www. ijrcog. org/ index. php/ ijrcog/ article/ view/ 2617

12. Kaur J, Singh S, Kaur K. Current trend of caesarean sections and vaginal births. Adv Appl Sci Res. 2013 Sep;4(4):196-202. [cited 2021 Feb 21] Available from: https://www.researchgate.net/publication/269929240_Ka ur_Jaspinder_Singh_Sargun_Kaur_Kawaljit_Current_tre nd_of_caesarean_sections_and_vaginal_births_Advances _in_Applied_Science_Research_2013_Sep_44_196-202

13. Thakur V, Chiheriya H, Thakur A, Mourya S. Study of maternal and fetal outcome in elective and emergency caesarean section. Int J Med Res Rev. 2015;3(11):15. [cited 2021 Feb 15] Available from: https:// ijmrr. Med research. in/index. php/ijmrr/article/view/410

14. Nambiar A, Singh KJ. A Spatial Analysis of Caesarean birth in Northeast States, India [cited 2021 Feb 20] Available from: https:// dhsprogram. com/ publications/ journal-details. cfm? Article _ id = 3594 & C _ id=0&T_ID=0&P_ID=183&r_id=0

15. Bhattacharyya H, Pala S. Assessment of delivery pattern and factors influencing the place of delivery

among women in East Khasi hills District of Meghalaya. Journal of Evolution of Medical and Dental Sciences. 2012;1(4):391-99. [cited 2021 Jan 20] Available from: https://www.researchgate.net/publication/274881587_AS sessment_of_delivery_pattern_and_factors_influencing_t he_place_of_delivery_among_women_in_east_khasi_hill s_district_of_meghalaya

16. Govt. of India Ministry of Health and Family Welfare. National Family Health Survey- 5: district fact sheet East Khasi Hills, Meghalaya. 5th edition. Mumbai, India; International institute for population sciences (Deemed University); 2020. [cited 2021 Feb 18] Available from: http://rchiips.org/nfhs/factsheet_NFHS-5.shtml