

Original Research Article

Preference for Normal Vaginal Delivery or Elective Caesarean Section Delivery and Factors Influencing it among Antenatal Mothers in Selected Hospital at Mangalore

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ABSTRACT

The preference of a mode of delivery by an antenatal mother is a controversial subject. In recent years, the health authorities have expressed concern about the impact in the numbers of births by caesarean section and its potential negative consequences. In India, the rate of caesarean section delivery has increased from 3 per cent to 10 per cent between 1992-93 and 2005-06 (WHO ideal rate – 10% to 15 %). The popularity of Elective Caesarean Section (ELCS) over Normal Vaginal Delivery (NVD) is believed to be due to a combination of various demographic, socio-economic and institutional factors which include maternal age, birth order, insurance coverage/health scheme, living in urban areas, profit motivated private health institutions, the day and time of birth having an astrological significance and influence of public and private discourses of family, friends and acquaintances.

Aims: The study aimed to investigate the preferences and influencing factors for elective caesarean section or normal vaginal delivery among the antenatal mothers and to determine the association of preference for elective caesarean section or normal vaginal delivery among antenatal mothers with selected baseline variables.

Methodology: A descriptive exploratory design was used to explore the factors for preferring the mode of delivery among 150 antenatal mothers who were selected by purposive sampling technique. The data was collected using a Semi Structured Interview Questionnaire.

Results: The study findings show that majority participants (80%) preferred Normal Vaginal Delivery over Elective Caesarean Section as a mode of delivery. The major factors for preferring normal vaginal delivery were to avoid unnecessary surgical wound pain, speedy recovery from the postpartum period and safer for their baby. However, the major factors for preferring the caesarean section delivery were found to be fear of pain during the labour and found this mode as safer for the baby.

Key Words: Antenatal mothers, Elective Caesarean Section, Influencing factors, Normal Vaginal Delivery, Preference.

INTRODUCTION

Childbirth is a miracle which is complex yet fascinating. It's a process that involves many decisions to be made depending on various dimensions of maternal health and foetal wellbeing. This

has in turn given rise to a trend of writing a birth plan which is a possible wish list an antenatal woman has towards an ideal birth. Thus many expectant mothers prefer a mode of delivery which could be influenced by various factors.

Natural childbirth occurs with or without medical interventions and Elective Caesarean Section involves surgical delivery of the foetus and rates of this procedure have risen dramatically during the past decade, reaching more than 50% in some countries. [1] Several studies have examined possible reasons for the increasing Caesarean delivery rates. Some authors concluded that maternal request is a significant factor in the rising Caesarean section rates. [2] A cross sectional study, identified the most common reasons for preferring vaginal birth were “concern for maternal health”(85%), followed by “concern for maternal health”(73.2%), and “being a natural way of delivery”(49.6%). The main reason for preferring Elective C Section were “to avoid labour pain” (79.5%) and “concern for maternal health” (452%). [3] The investigators aimed to assess the preferred mode of delivery and factors influencing it among antenatal mothers in a view to contribute towards research that in turn will explore potential solutions to improve maternal and foetal outcomes.

Objectives of the study

1. To assess the preferences for elective caesarean section or normal vaginal delivery among the antenatal mothers.
2. To assess the influencing factors for elective caesarean section or normal vaginal delivery among antenatal mothers.
3. To determine the association of preference for elective caesarean section or normal vaginal delivery among antenatal mothers with selected baseline variables.

MATERIALS AND METHODS

Research Design: A descriptive exploratory design had been used to explore the factors for preferring the mode of delivery among antenatal mothers

Research Setting: The study setting comprised of the Out Patient Department,

antenatal wards and private wards at Father Muller Medical College Hospital, Mangalore which is a multi-speciality hospital with 1250 bed strength.

Sample, Sample Size and Sampling technique: 150 antenatal mothers were selected by purposive sampling technique that fulfilled the inclusion and exclusion criteria.

Criteria for sample selection

Inclusion criteria

- All antenatal mothers admitted in the antenatal ward, private wards and visiting the Obstetric OPD at Father Muller Medical College Hospital.

Exclusion criteria

- Antenatal mothers with previous caesarean section due to medical requirements.

Assumptions

- Some antenatal mothers prefer caesarean section delivery.
- Factors influencing preference to mode of delivery may be maternal, baby and socio economic factors.

Delimitations

- Antenatal mothers with previous caesarean section due to medical indications are excluded from this study.
- Antenatal mothers with the high risk conditions are excluded in this study.

Method of data collection: The study was carried out during the month of March 2017 after having obtained formal permission from the authority concerned before the data collection. The participants who fulfilled the criteria were explained the purpose of the study and informed consent was taken ensuring confidentiality of information. The data was then obtained by using Semi Structured Interview Questionnaire. The reliability of the tool was obtained by using Test Retest method ($r = 0.8$ and $r = 1.0$)

RESULTS

Section 1: Description of Sample Characteristics

Table 1: Frequency and percentage distribution of antenatal mothers who preferred NVD. n=120

Sl no	Variables	f	%
1	Age in years		
	17-20	21	18
	21-24	47	39
	25-28	47	39
	29-32	4	3
2	Religion		
	Hindu	40	33
	Muslim	54	45
	Christian	26	22
	Others	-	-
3	Education		
	Illiterate	2	2
	Primary	34	28
	Higher secondary	56	47
4	Occupation		
	Housewife	97	81
5	Opted Type of medical services		
	Private	95	79
6	Insurance status		
	Insured	101	84
7	Parity		
	Primi	61	51
8	History Abortion		
	No	118	98
9	History of caesarean delivery in relatives		
	Yes	46	38
10	Past Gynaecological history		
	Yes	3	3
11	Planned Pregnancy		
	Yes	114	95
	No	6	5

The data in table 1 revealed that among 120 antenatal mothers who preferred normal vaginal delivery belonged to 21-24 and 25-28 years (39%), 45% of them followed Islam, 47% had completed Higher secondary education, more than half (81%) of them were housewives and primi mothers (51%) preferred normal vaginal delivery.

The data in table 2 suggests that among 30 antenatal mothers who preferred Elective caesarean section majority subjected were in the age group of 25-28 years (33%), 37% completed primary education and 53% antenatal mothers were primipara.

Table 2: Baseline variables of Antenatal mothers who prefer Caesarean delivery n=30

Sl no	Variables	f	%
1	Age in years		
	17-20	7	23
	21-24	9	30
	25-28	10	33
2	Religion		
	Hindu	11	37
	Muslim	16	53
	Christian	3	10
3	Education		
	Primary	11	37
	Higher secondary	10	33
4	Occupation		
	Housewife	23	77
	Working	7	23
5	Opted Type of medical services		
	Private	27	90
6	Insurance status		
	Insured	23	77
7	Parity		
	Primi	16	53
8	History Abortion		
	No	30	100
9	History of caesarean delivery in relatives		
	Yes	20	67
10	Past Gynaecological history		
	Yes	1	3
11	Planned Pregnancy		
	Yes	23	77
	No	7	23

Section 2: Assess the preferences for Normal vaginal delivery or Caesarean section delivery.

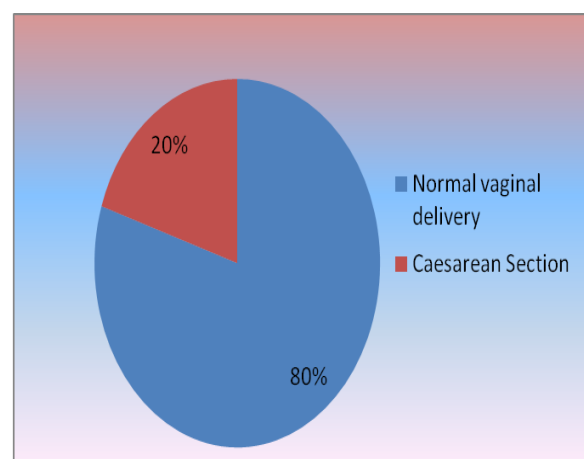


Figure 1: Percentage of preference of mode of delivery among antenatal mothers.

The data figure 1 shows that majority participants (80%) preferred choice

of mode of delivery as Normal Vaginal Delivery.

Section 3: Exploration of the influencing factors for preferring mode of delivery

Table 3: Influencing factors for preferring the normal vaginal delivery among antenatal mothers n=120

Sl.No	Variables	f	%
1	Maternal Factors		
	Pain	120	100
	Speedy recovery	120	100
	Previous experience	52	43
	Avoidance of anesthesia	101	84
	Less hospital stay	112	93
	Unnecessary incision	96	80
2	Baby's Factor		
	Safety	119	99
3	Socioeconomic Factors		
	Natural process	120	100
	Doctors advice	84	70
	Economical	46	38
	Advice from friends and relatives	70	58

The table 3 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.

Table 4: The influencing factors for preferring the caesarean section delivery among antenatal mothers. n=30

Sl.No	Variables	f	%
1	Maternal Factors		
	Fear of pain	28	93
	Postpartum sexual life	18	60
	Adopt family planning method	15	50
	Avoid vaginal tear	22	73
	Prevent urinary incontinence	13	43
	Past experience	5	17
	Bad experience in previous delivery	14	47
2	Baby's Factor		
	Select a birth date	4	13
	Safety	29	97
3	Socio-economic Factors		
	Modern trend	22	73
	Advice from friends and relatives	22	73

As shown in the Table 4 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.

Section 4: Association between the Preferred Mode of Delivery and Selected Baseline Variables

Table 5: Association between the preferred mode of delivery and selected baseline variables N=150

Variables	Normal vaginal delivery	Caesarean delivery	X ² (Chi square value)	P value
Age in years				
17-20	21	7	(Fisher Exact)	.203
21-24	47	9		
25-28	47	10		
29-32	4	4		
33-36	1	0		
Religion			2.125	0.346
Hindu	40	11		
Muslim	54	16		
Christian	26	3		
Education			(Fisher Exact)	0.483
Illiterate	2	0		
Primary	34	11		
Higher secondary	56	10		
Post graduates	28	9		
Occupation				0.388
Housewife	97	23		
Working	23	7		
Opted type of medical services			1.855	0.236
Private	95	27		
Government	25	3		
Insurance status			.942	.484
Insured	101	23		
Not insured	19	7		
Parity			.060	0.477
Primi	61	16		
Multipara	59	14		
History of Abortion				0.388
Yes	2	0		
No	118	30		
History of caesarean delivery in relatives			.256	0.80
Yes	74	20		
No	46	10		
Past Gynaecological history			10.191	.005*
Yes	3	1		
No	117	29		
Planned Pregnancy				
Yes	114	23		
No	6	7		

*P value <0.005

The findings in table 5 reveal that chi square value computed between the preferred mode of delivery and selected baseline variables less than p value 0.005. Hence the research hypothesis was accepted and can be concluded that there is significant association between the preferred modes of

delivery with the antenatal mothers' plan of pregnancy.

DISCUSSION

All subjects (100%) preferred normal delivery among which 70% preferred this mode of delivery doctor's advice, 38%) found it to be economical, 58% were advised by friends and family.

In comparison, a similar trend was observed in Turkish women's preferences of method of delivery and influencing factors where the subjects reported that they preferred vaginal delivery reasons such as feeling of self control during the delivery, finding it healthy and natural, more comfortable post-partum period, breastfeeding the baby earlier, swift healing process, no exposure to anaesthetics, seeing it as a safer approach to both mother and baby and experiencing previous vaginal delivery. Amongst 73% who preferred c-section delivery considered this to be a modern trend of delivery that also preferred this mode due influencing factors such as advice from their friends and relatives. This was similarly noticed in Turkish women who preferred C Section due to the fear of labor pain, finding c-section as less painful, easier for mother and safer for mother and baby, with no vaginal damage, and no risk for urinary incontinence. [4]

A study conducted in Tehran showed that the women preferred c-section delivery due to fear of vaginal childbirth and its side-effects, vaginal childbirth inability, husbands' disagreement with vaginal childbirth and past CS experience, suffering from some diseases, to set date for delivery and being negatively affected by others' ideas on vaginal childbirth. [5]

Similar views were observed in South Western Nigeria where the subjects preferred c-section delivery due to pain of vaginal delivery is unpleasant, they expressed that babies born by caesarean section are healthier than those delivered by vaginal delivery and that a woman has a right to choose a caesarean section for herself. [6]

The study conducted in Hong Kong Chinese women aged between 18-45 years showed that the factors which influenced them to choose c-section delivery were baby's factors such as health of the newborn, respiratory trauma to the newborn is less in c-section. Maternal factors such as advanced age for childbirth, labor pain is more in normal delivery, worry about tearing of the perineum, possible anal/urinary incontinence due to VD, possible better sexual satisfaction and social factors such as faster/more convenient method of delivery, certainty about the timing of the delivery, better planning for maternity leave, better planning for paternity leave, and choosing an auspicious date also influenced mothers to prefer C section. [7]

Implication of the study

The findings of the study have brought out certain facts that have four reaching implications of nursing in the areas of practice, nursing education, administration and research.

Nursing practice: All women have the right to a positive childbirth experience and midwives play an important role in preparing antenatal mothers for undergoing delivery. The findings of this study can be useful in promoting natural birth causing less potential for harm and reduce maternal and neonatal morbidity and mortality. Empowering women in their decision making regarding the mode of delivery can be initiated by health care professionals towards positive health care outcomes for both mother and child.

Nursing administration: Nursing administrators play a key role in policy making and its execution of quality nursing care based on research findings in a view to promote, protect and support normal birth. Periodic surveys should be conducted to evaluate effectiveness of awareness programs to promote normal vaginal delivery as the preferred mode of delivery where no complications are identified.

Nursing Education: Nurse educators can train the students and other multi disciplinary professionals to prepare various teaching material to disseminate the information and promotion of safe motherhood and child health.

Nursing research: Nursing, being a profession that strives to improve the practice of its members strives to update its body of knowledge and finding ways to improve maternal and newborn health by reducing MMR, IMR. This study will provide a basis for further research. The preference of antenatal mothers on their mode of delivery should be assessed and factors which influenced can be studied by conducting further studies. The findings of the research need to be disseminated through publications so that the utilization of such research findings must be encouraged.

Recommendations

On the basis of the findings of the study the following recommendations are suggested for the future research.

- The study can be replicated on a large sample and the findings can be generalized for a large population.
- In service education can be initiated on the importance of awareness on various modes of delivery during the course of the study

CONCLUSION

The study findings revealed that majority participants preferred NVD who were influenced by factors such as fear of pain of c-section, speedy recovery, avoidance of anaesthesia and unnecessary surgical incision; shorten hospital stay and safe confinement. Those who preferred ELCS were influenced by fear of pain during the labour (93.3%) and 96.7% felt it was safe for the baby. Though in the present study a vast majority preferred NVD as their planned mode of delivery there are still many who still prefer ELCS who do not have any underlying medical causes. Many researchers have expressed that ELCS has

increased alarmingly and has become a trend. The investigators in the present study strongly believe that women need to develop a positive attitude toward NVD and measures have to be undertaken to create awareness towards safe mode of delivery.

Conflict of Interest: None declared.

REFERENCES

1. Maznin NLB, Creedy DK. A comprehensive systematic review of factors influencing women's birthing preferences. *JB Libr syst Rev*.2012; 10(4):232-306
2. Jackson NV, Irvine LM. The influence of maternal request on the elective caesarean section rate. *Journal of Obstetrics and Gynecology* 1998 Mar; 18(2):115-9.
3. Loke AY, Davies L, Li Sau-fun. Factors influencing the decision that women make on their mode of delivery: The Health Belief Model. *Journal of BMC Health Services Research* 2015; 15(274)
4. Sema Dereli Yilmaz, Meltem Demirgoz Bal, Nezihe Kizilkaya Beji, Seyfettin Uludag. Women's Preferences of Method of Delivery and Influencing Factors. *Iranian Red Crescent Medical Journal*.2013 August; 15(8): 683-9.
5. Najarkolaei Rahmati Fatemeh, Eshraghi Tayebeh, Dopeykar Nooredin, Mehdizadeh Parisa. Influencing Factors to Delivery Selection in Pregnant Women; A Case study in Tehran. *Journal of Health Policy and Sustainable Health* 2014;3(1):85-88
6. Faremi Funmilola Adenike, Ibitoye Fatimo Olabisi, Olatubi Idowu Matthew, Koledoye N Patricia., Ogbeye Bolanle Gbemisola. Attitude of pregnant women in South Western Nigeria towards caesarean section as a method of birth. *International Journal of Reproduction, Contraception, Obstetrics and Gynecology* Faremi AF et al. *Int J Reprod Contracept Obstet Gynecol*. 2014 Sep;3(3):709-714

7. Loke Yuen Alice, Li Sau-fun and Davies Louise. Factors influencing the decision that women make on their mode of delivery: the Health Belief Model. BMC Health Services Research (2015) 15:274

How to cite this article: Moolya S, Rodrigues S, Shimi RS. Preference for normal vaginal delivery or elective caesarean section delivery and factors influencing it among antenatal mothers in selected hospital at Mangalore. Int J Health Sci Res. 2018; 8(8):189-195.
