### **Original Research Article**

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# Preferences of pregnant women regarding mode of delivery: a questionnaire based study

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#### **ABSTRACT**

**Background:** The rising rate of caesarean section is the subject of concern worldwide. The aim of our study was to know the knowledge, attitude and preferences of pregnant women towards the mode of delivery in a tertiary care centre and hence to see weather this is a contributing factor towards rinsing trend of caesarean delivery or not.

**Methods:** This was a prospective questionnaire study conducted on 100 antenatal women in third trimester who attended the antenatal clinic in SLBS GMC Mandi at Nerchowk from 1<sup>st</sup> June, 2017 to 1<sup>st</sup> September 2017. The information regarding socio-demographic profile, obstetric history, knowledge and attitude statements towards vaginal delivery and caesarean section was collected and analysed.

**Results:** Total of 100 women was interviewed in our study. Out of these, majority (85%) had received education up to High school and above. Majority of the women (90%) had the positive attitude towards vaginal delivery. The most frequently mentioned source of information about the mode of delivery was relatives and friends. Almost half of women agreed to the statement that vaginal delivery creates a more affectionate mother and baby relationship. Majority of women co-relate that caesarean section was associated with more complications and not good in long term outcome. Economic factors did not play an important role in deciding caesarean birth.

**Conclusions:** Majority of pregnant women interviewed were interested to deliver vaginally, while some women were indecisive due to lack of knowledge and some due to apprehension of labor pains during vaginal delivery wanted to undergo a caesarean section. Appropriate counselling of pregnant women and their partners will help in changing their outlook and make them a better judge while choosing their preferences.

Keywords: Caesarean delivery, Vaginal delivery, Preferences, Mode of delivery

#### INTRODUCTION

The childbirth experience has always represented as a very important event in women's lives, a unique and special moment, marked by the transformation of the woman in her new role, that of being a mother. In developed countries, women often opt for caesarean delivery because of their improved understanding of its role and safety and increasing importance given to the right to self-decision making, regarding mode of delivery. However in developing countries like India,

women are reluctant to accept caesarean delivery because of their traditional beliefs and socio-cultural norms, hence they even try to avoid hospital delivery and engage in the services of untrained and unskilled care providers. These women usually report to hospital with life threatening complications and in such situations most of the caesareans are performed as an emergency procedure under suboptimal circumstances.<sup>2</sup> Main reason of choosing caesarean section by pregnant women is the fear and lack of sufficient knowledge about normal vaginal delivery. Although in specific situations caesarean section can prevent serious morbidity and mortality of the

fetus and mother, but data indicates that in many cases the procedure is not indicated and vaginal delivery could have been achieved safely.<sup>3</sup> An increasing rate of births by caesarean section is an issue of concern in many countries. Despite the recommendations by WHO that no region in the world is justified to have a caesarean section rate greater than 10-15%, it is the most common obstetrical operation worldwide.<sup>4,5</sup> A rising trend of caesarean sections has been noted with the advent of electronic fetal monitoring, better operative techniques and availability of tertiary care neonatal facilities. When medically justified, a caesarean section (CS) can effectively prevent maternal and perinatal mortality and morbidity.<sup>6</sup> A cohort study showed that women are increasingly inclined to opt for delivery by caesarean for non-medical reasons such as fear of labour pain, concerns about date or time of birth that are traditionally believed to be auspicious and the belief that delivery by caesarean ensures protection of the baby's brain.<sup>7</sup>

#### Aims and objectives

This survey on knowledge, attitude and preferences of women about vaginal versus cesarean delivery may help to define strategies for reducing cesarean birth rates. This survey will also tell us about the preferences of women about mode of delivery and co-relating this with rising trend of caesarean section.

#### **METHODS**

This was a questionnaire based; prospective study conducted on 100 antenatal women in third trimester who attended the antenatal clinic in SLBSGMC, Mandi at Nerchowk, Himachal Pradesh from 1 June, 2017 to 1<sup>st</sup> September, 2017. The information regarding sociodemographics, age, educational status, occupation, obstetric history, previous mode of delivery, knowledge, attitude and preferences towards vaginal versus caesarean delivery has been collected.

A questionnaire was designed for this study contained the information of demographic data and questions for evaluating knowledge, attitude and preferences of women about vaginal versus caesarean delivery. We approached the 100 pregnant women among those who attended the antenatal clinic in Dept. of Obstetrics & Gynaecology at SLBSGMC, Mandi at Nerchowk from 1<sup>st</sup> June to 1<sup>st</sup> September, 2017.

The questionnaires filled by the pregnant women at the antenatal clinic. For illiterate women the researcher read the questions to the patients and selected the answers based on their opinion.

#### Inclusion criteria

All pregnant women in third trimester attending the antenatal clinic of our institute.

#### Exclusion criteria

Not fulfilling the inclusion criteria and not willing to participate in our study.

Data of various demographic parameters and questionnaire data based on knowledge, attitude and preferences towards mode of delivery was collected, master chart was framed and statistical analysis by descriptive statistics was done.

#### **RESULTS**

Majority of women in the present study were in the age group of 26-35 years (51%). 91% were house wives. 85% had received education up to High school and above. Relatives and friends were the main sources of information regarding mode of delivery (98%). Majority of them (62%) were multigravidas (Table 1).

Table 1: Demographic data.

Demographic	Number	Percentage			
characteristics	(Total=100)	(%)			
Age (Years)					
<25	48	48			
26-35	51	51			
>35	1	1			
Occupation of patients					
Housewife	91	91			
Working	9	9			
Education					
Illiterate	1	1			
<high school<="" td=""><td>14</td><td colspan="3">14</td></high>	14	14			
High school	20	20			
Secondary school	43	43			
Graduate	16	16			
Postgraduate	6	6			
Booked/unbooked					
Booked	73	73			
Unbooked	27	27			
Parity					
Primigravida	35	35			
Multigravida	62	62			
Grandmultigravida	3	3			
Source of information about modes of delivery					
Relatives	63	63			
Friends	35	35			
Media	2	2			
Previous mode of delivery					
Primigravida	37	37			
Normal vaginal delivery	49	49			
Caesarean section	14	14			
Any previous complications					
No complication	83	83			
Had complication	17	17			

Table 2: Questions for evaluating knowledge, attitude and preferences.

Questions for evaluating knowledge, attitude and preferences					
S. No.	Questions	Yes	No	Don't know	
1	Vaginal delivery is natural and acceptable mode of delivery.	90	7	3	
2	Seeing the baby immediately after vaginal delivery is a pleasure for the mother	88	7	5	
3	Mother regains her health status soon after vaginal delivery	93	5	2	
4	In term of outcome vaginal delivery is more pleasant	87	9	4	
5	Vaginal deliveries create a more affectionate mother baby relationship	74	21	5	
6	Emotional relationships between mother and baby after vaginal delivery is better	73	21	6	
7	Vaginal delivery preferred due to fear of operation	80	17	3	
8	In term of fear of anaesthesia vaginal delivery is preferable	68	26	6	
9	Vaginal delivery is better in long term	93	6	1	
10	Prefer vaginal delivery because don't like scar marks on their body	73	24	3	
11	Vaginal delivery is less risky for the mother	90	9	1	
12	Cost of vaginal delivery is less then caesarean section	85	7	8	
13	Vaginal delivery increases the risk of bleeding from vagina	58	35	7	
14	Caesarean section is associated with complications	89	8	3	
15	Maternal complications of caesarean are greater	88	8	4	
16	Infection risk of caesarean section is greater	89	7	4	
17	Prolonged bed rest required in caesarean section	87	11	2	
18	Caesarean section is preferable as pain of vaginal delivery is unbearable	47	47	6	
19	Caesarean section is preferable as mother's position on delivery table is unpleasant	24	51	25	
20	Caesarean section is preferable in the absence of economic problems	28	54	18	
21	Concurrent caesarean section is suitable option for tubal ligation	46	35	19	
22	Caesarean section prevents pelvic relaxation	35	34	31	
23	Caesarean section prevents uterus and bladder prolapse	33	26	41	
24	Caesarean section prevents deformation and malformation of female genital tract	39	27	34	
25	Choosing caesarean section is option for high social class	35	43	22	
26	Main reason of choosing caesarean section is fear and lack of sufficient knowledge about normal vaginal delivery	19	45	36	
27	Caesarean section preferred because there is sexual dysfunction after vaginal delivery	11	50	39	
28	Babies born by caesarean section are healthier than those delivered by vaginal delivery	5	53	42	
29	Infants bone fractures are impossible in caesarean section	8	50	42	
30	Respiratory disorder in infants born by caesarean section is less than vaginal delivery	3	43	54	

Majority of women (90%) in our study believed that the vaginal delivery is natural and acceptable mode of delivery only 7% of the women have biased for caesarean delivery.85% believed that vaginal delivery is less costly and 93% of women considered vaginal delivery better in long term outcome. Vaginal delivery favoured by 80% of women due to fear of operation and by 68% of women due to fear of anaesthesia. 88% of women considered it pleasure for mother to see the baby immediately after vaginal delivery, according to 74% women vaginal delivery culminates in affectionate relationship with baby and 87% of women believed that in term of outcome vaginal delivery is more pleasant. 53% women did not agree that the infants born by caesarean section are healthier than those born by vaginal delivery. 50%

women did not consider that vaginal delivery leads to sexual dysfunction. Attitude of majority of women showed that vaginal delivery is the natural mode of birth (90%), health recovery is fast (93%) and involves less risk (90%). The attitude towards caesarean section shows that this mode of delivery is associated with more complications (89%), 87% believed that prolonged bed rest is required after caesarean section, 89% believed that caesarean section is associated with more infection rate. Almost half of women disagreed with the opinion that caesarean section is preferred due to unpleasant pain of vaginal delivery (47%) or economic problems (54%). Higher percentage of women (43%) did not consider that caesarean section is option of high class society (Table 2).

#### **DISCUSSION**

The present study showed that the majority of the women visiting our hospital were undergraduate and gained knowledge about mode of delivery from their relatives and friends. According to the traditional view of our society they consider vaginal delivery as a natural method of childbirth and caesarean section is considered as a deviation from normal way of giving birth because it is associated with higher rate of complications, prolonged bed rest, bleeding risks and costly as well. Similar results were seen by Aali et al.<sup>8</sup>

Women who preferred vaginal delivery generally felt that caesarean sections were associated with more complications and were more costly while the women who preferred caesarean delivery felt that caesarean section was safe, comfortable and less painful. Similar findings were reported in a study by Adageba et al.<sup>9</sup>

In developing nations the lower education level is responsible for poorer knowledge of human reproduction than women in developed countries. 10 These findings suggest that the missing link is counselling and informed discussions with the pregnant women and their partners by health professionals about the need and true picture of risks and benefits that are associated with either mode of delivery. Though majority of patients considered this fact, that if caesarean section is necessary for betterment of fetus and mother then this mode of delivery is justified and acceptable beside their preferences. The majority of women also responded that there is no correlation between the financial status and caesarean delivery if they are justified. In our set up, with increasing use of medical technologies during childbirth and increasing numbers of institutional births, the trend of CS delivery is also sharply rising, especially in private sector where the cost for caesarean delivery is much more compared with normal delivery.11

In our study majority (90%) of the women preferred vaginal delivery as natural and acceptable mode of delivery. Our results are comparable with study done by Ajeet et al.<sup>12</sup> This also concludes that in our setup patient's preference is not a contributing factor for the increasing trend of caesarean section.

#### CONCLUSION

Majority of pregnant women interviewed in our institution believed that the vaginal delivery is the natural and acceptable mode of delivery, while many were indecisive due to lack of accurate knowledge and phobia of labor pains during vaginal delivery. The rising caesarean birth rate in developing countries is an important issue; to decline this trend health professional should provide the true information to the pregnant women and their partners about the modes of delivery, their indications, advantages and adverse consequences during antenatal period. This knowledge will change their

outlook and make them a better judge while choosing their preferences.

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institutional ethics committee

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