# **ORIGNAL ARTICLE**

# Women Involvement in Decision Making to have Cesarean Section and their Postpartum Satisfaction

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# **ABSTRACT**

**Objective:** To determine the involvement in decision and satisfaction regarding the mode of delivery among women attending tertiary care hospital of Karachi, Pakistan.

**Methods:** This cross-sectional study was conducted at Dar-ul-Sehat Hospital, Karachi, from March 2017 to November 2017. All women admitted in the hospital whether from an emergency or outdoor who underwent for caesarean section and got the option of vaginal birth after first caesarean section were included. Information about women's involvement and satisfaction regarding their decision making of caesarean section were noted on 3<sup>rd</sup> and 4<sup>th</sup> day post-partum. All patients were provided with evidence-based information regarding risks and benefits of caesarean section versus vaginal birth after caesarean delivery.

**Results:** A total of 200 patients were included, amongst them 185 (92.5%) women were involved in the decision of mode of delivery. In most of the cases, consent was taken by doctors (n=192, 96%), followed by nurse (n=6, 3%) and consultant (n=2, 1%). The consent was given by husband in majority of the cases (n=173, 86.5%). A significant association of job employment of father with women's involvement in decision making was observed (p-value 0.022). Moreover, women's involvement in decision making was significantly associated with explanation of procedure (p-value 0.021) and satisfaction with indication of cesarean section (p-value <0.001).

**Conclusion:** The involvement of women in the decision of opting cesarean section as mode of delivery has shown a positive influence on the women's experience of childbirth.

**Key words:** Women's involvement, mode of delivery, childbirth

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# **INTRODUCTION**

Caesarean section is a mode of delivery in which one or more babies are delivered by surgical procedure in which incisions are made through a mother's abdomen and uterus. <sup>1</sup> Caesarean Section has many medical and obstetrical reason and some are being done upon patient's request. <sup>2</sup>

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Dr. Sagheera Anjum Obstetrics and Gynecology Department, Liaquat College of Medicine and Dentistry (LCMD) and Darul Sehat Hospital (DSH), Karachi, Pakistan Email: sagheeramunaver@hotmail.com Caesarean section rates are shown to be increased in many parts of the world with cesarean section on request in the absence of clear medical and obstetric indications being one the suggested reason.<sup>3</sup> Agreement by women is extremely important for their mode of delivery and should be considered, emotional support during pregnancy prevented caesarean section for women with previous bad experience.<sup>4,5</sup>

Women who have delivered by caesarean section do not usually have clear idea about the mode of delivery in their subsequent pregnancy. They are in need of help and guidance from medical personnel based on their individual circum - stances, and some are unhappy with the responsibility of deciding how to deliver in the current pregnancy. A study conducted on 278 women in Department of General Practice,

University of Adelaide reported that over a third of women felt they had not been involved in the decision to have a caesarean section others were very positive about it, but an appreciable proportion may not have received sufficient information. A broad-based strategy of providing more information to women and her partners could be one way of ensuring appropriate caesarean section rates and should be tested in a randomized controlled trial<sup>7</sup>, Cesarean section rate is quite high (45%) in indigent population in our set up. Certain causes are responsible for increasing rate of the caesarean section like insufficient care of primary providers and excessive use of oxytocics. Primary cesarean delivery require clinical assessment and judgment of the provider and the informed consent of the patient along with a clear understanding of the indication of cesarean section.8 In most time, wrong beliefs, abstract manners and unawareness of patients determines the method of delivery.9

One major issue is the restriction regarding the written and informed consent when an emergency caesarean section is taking place. Patients who got some reservations are more worried and concerned about maternal and fetal risks, this require more detailed risk discussion before the procedure and is desired for all pregnant patients.<sup>10</sup>

The basis of taking informed and written consent is a bit new application. Indeed, not only at time of the Egyptian civilization, but also the Greek and Roman, studies has shown that doctors and health care providers interference in somehow had to be agreed by the patient, it does forecast the issue, when a woman decide about caesarean section it has an impact on the subsequent mode of delivery. Asking women about their desire regarding mode of delivery in antenatal period might enhance the chance of providing better support and opportunity to reduce the caesarean section rate. The analysis shows that while many factors have complicated the decision elective caesarean section with no pure indicators is mostly a blend of patient wish and obstetric reasons that alone would not significantly indicate the need for a caesarean section. 11 We have planned this study to determine the involvement in decision regarding

the mode of delivery among women attending tertiary care hospital of Karachi Pakistan.

## **METHODS**

A cross-sectional study was conducted at Dar-ul-Sehat Hospital, Karachi, from March 2017 to November 2017. All women admitted in the hospital whether from an emergency or outdoor who underwent caesarean section and got the option of vaginal birth after first caesarean section were included in the study through non-probability consecutive sampling. While all women with history of more than two caesarean sections were excluded from the study as they had option decision making for mode of delivery.

Epi Info sample size calculator was used for the estimation of sample size taking confidence interval (CI) 95%, margin of error 5.5%, reported preference of women for cesarean section 19.3%, sample size came out to be 198.

All data were collected through a pre-designed questionnair and were filled by the women on their 3<sup>rd</sup> and 4<sup>th</sup> day post-partum. Information about women's involvement and satisfaction regarding their decision making of caesarean section was noted. The interviews were conducted by medical professionals through questionnaires, which included socio-demographic and obstetric background, educational qualification, type of caesarean section an indication of attitudes to decision-making, satisfaction and involvement of family member in decision making. All patients were provided with evidence-based information regarding risks and benefits of caesarean section versus vaginal birth after caesarean delivery.

Institutional ethical approval was obtained (IRB: DSH/IRB/2016/0008) and written informed consent was also taken from the study participants. SPSS version 20 was used for the purpose of data analysis. Continuous variables like age, was reported as mean and standard deviation. Quantitative variables like gender, mode of delivery and satisfaction level was presented as frequency and percentages. Chisquare test was applied to see the association of satisfaction level with other factors.

## **RESULTS**

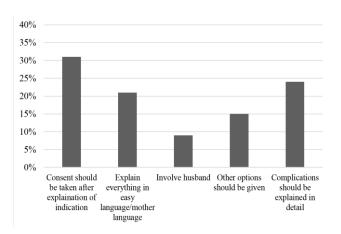
Out of total 200 women, 185 (92.5%) women were involved in the decision of mode of delivery. Elective surgery was conducted in majority (123, 61.5%) of the women as compared to emergency surgery (77, 38.5%). In majority of the cases, indications for cesarean section was Breech (n=82, 41%), followed by vaginal birth after cesarean section (n=37, 18.5%), fetal distress (n=28, 14%), non-progress of labor (n=26, 13%), cephalopelvic disproportion (n=14, 7%), women's wish (n=11, 5.5%) while only 2 (1%) women were presented with fetal insufficiency. In most of the cases, consent was taken by doctors (n=192, 96%), followed by nurse (n=6, 3%) and consultant (n=2, 1%) patient's. The consent was given by husband in majority of the cases (n=173, 86.5%).

There were total 197 (98.5%) women who were satisfied with antenatal care. Similarly, 197 (98.5%) women were also satisfied with the time given by the care provider during antenatal visits, 186 (93%) women were satisfied with the discussion of mode of delivery during the antenatal visits, 164 (82%) were satisfied that at the time of taking consent all information regarding procedure, pre-post-operative complications and effect on future delivery was explained while most of the women (n=189, 94.5%) were satisfied with the indication of cesarean section. The major expectations of women from health care provider were consent after explanation of indication (n=62, 31%), complications explained (n=48, 24%) and explain everything in easy language/mother language (n=42, 21%). (Figure 1)

A significant association of job employment of father with women's involvement in decision making was observed (p-value 0.022), moreover (p-value 0.091), education status of mother (p-value 0.525), cesarean type (p-value 0.327), and booking status (p-value 0.565) were found to have no association with the decision of mother. (Table 1)

When compared on the basis of satisfaction, women's involvement in decision making was significantly associated with explanation of procedure (p-value 0.021) and satisfaction with indication of cesarean section (p-value <0.001). (Table 2)

Figure 1: Women expectation from healthcare provider



**Table 1:** Comparison of women involvement in decision making with general characteristics of the patients (n=200)

V		Women Involvement in delivery decision				
Variables		Yes (n=185)	No (n=15)			
	Total	n (%)	n (%)	p-value		
			27.06			
Age, years		26.94 ±4.12	±4.41	0.91		
Education status						
of mother						
Illiterate	14	12 (85.7)	2 (14.3)	0.775		
≤Intermediate	64	59 (92.2)	5 (7.8)			
Graduate	105	98 (93.3)	7 (6.7)			
Postgraduate	17	16 (94.1)	1 (5.9)			
Job status of						
mother						
Employed	187	172 (92)	15 (8)	0.288		
Unemployed	13	13 (100)	0 (0)			
<b>Education status</b>						
of father						
Illiterate	7	6 (85.7)	1 (14.3)	0.525		
≤Intermediate	25	24 (96)	1 (4.0)			
Graduate	154	141 (91.6)	13 (8.4)			
Postgraduate	14	14 (100)	0 (0)			
Job status of						
father						
Employed	2	1 (50)	1 (50)	0.022		
Unemployed	198	184 (92.9)	14 (7.1)			
Cesarean Type						
Elective	123	112 (91.1)	11 (8.9)	0.327		
Emergency	77	73 (94.8)	4 (5.2)			
<b>Booking Status</b>						
Unbooked	4	4 (100)	0 (0)	0.565		
Booked	196	181 (92.3)	15 (7.7)			
All data presented as number (%)						

**Table 2:** Comparison of women involvement in decision making with satisfaction of antenatal care, procedure and CS indication (n=200)

W - 11		Women Involvement in delivery decision				
Variables		Yes (n=185)	No (n=15)			
	Total	n (%)	n (%)	p-value		
Antenatal care						
satisfaction						
Yes	3	3 (100)	0 (0)	0.619		
No	197	182 (92.4)	15 (7.6)			
Time given by the care provider adequate						
Yes	3	2 (66.7)	1 (33.3)	0.087		
No	197	183 (92.9)	14 (7.1)			
Procedure Explained						
Yes	164	155 (94.5)	9 (5.5)	0.021		
No	36	30 (83.3)	6 (16.7)			
Satisfied with indication of CS						
Yes	189	179 (94.7)	10 (5.3)	<0.001		
No	11	6 (54.5)	5 (45.5)	<0.001		
All data presented as number (%), CS: Cesarean Section Ch-square test applied, p-value <0,05 was taken as significant						

## **DISCUSSION**

The study suggests that majority of the patients were involved in their decision of mode of delivery, hence giving them a sense of contentment and fulfillment of their wishes.<sup>12</sup> Patients were satisfied by the time given to them during the antenatal period by the care provider which had helped them in making their decision of mode of delivery and they were satisfied with the indication of cesarean section. However, patients had expected from the care provider that indication of cesarean section was explained to them in their own language and indication and complications should be explained more clearly.<sup>13</sup> The patient's satisfaction in making decision of cesarean section was associated with indication and explanation of procedure. There was also a significant association of husband's involvement in decision making along with the educational status of woman.14

A study conducted in 2014 in Egypt had shown that the educational level and economic standard had an association of women's preference of cesarean section as mode of delivery<sup>12</sup>, as shown in our study, educational status of the women had an impact on decision making of cesarean section.

A study conducted in Nigeria in 2007 determining

the perceptions and attitude towards cesarean section showed that even though women had adequate knowledge of cesarean section only 6% of women were willing to accept cesarean section as their mode of delivery if it was the only option for saving lives. <sup>15</sup> In contrast to our study we had women who had better educational status and thus acceptance as satisfaction of cesarean section as their mode of delivery.

A study was conducted in 2013 by Spaich et al to assess the influence of mode of delivery on women's satisfaction with the experience of parturition; it evaluated the factors determining satisfaction. The study concluded that the mode of delivery did not influence the women's satisfaction but their involvement in decision making; support and analgesia during labor were the factors that improved women's experience of child birth. This is what was found in our study that that women's involvement in decision making improves their satisfaction and their experience of child birth.

In a study conducted by Nanji et al in Africa in 2012 which was conducted in three centers and they concluded that most of the women participating in the study were involved in the decision of cesarean section and were satisfied but they had the influence of physician and husband in decision making process.<sup>17</sup> This was similar in our study in which majority of women were involved in decision making and had influence of physician and husbands.

A study was conducted in 2009 in ISRA University in which information was obtained regarding the preferences of women's mode of delivery while attending antenatal clinics and 88 % did not receive adequate information regarding different mode of deliveries. However in our study women were adequately informed about cesarean section as, well as mode of delivery and were satisfied with their decision making.

Another study conducted in Jinnah postgraduate medical centre in 2012 assessed the involvement of women previous cesarean section in the decision making of mode of delivery.<sup>5</sup> Patients expressed satisfaction when they were given information and support and were involved in decision making, which was a similar finding in our study.

The findings of this study could be observed with certain limitations. Firstly, this study was

conducted in only one center. Secondly, this study It was conducted at a private tertiary care hospital dealing with population with better educational and financial status as compared to the population attending public sector hospital. Therefore, the results could not be a representative of those women who attended public sector hospital or belonged to low socioeconomic group. Most of the patients included this study were regular antenatal visitors. Despite these limitations, not much work is done locally in private hospital and this study suggests that women's involvement in decision making had a good impact on women's experience of childbirth.

## CONCLUSION

The involvement of patient in the decision of opting cesarean section as mode of delivery has shown a positive influence on the women's experience of childbirth. It has shown that women had better satisfaction levels.

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