



## Original Article

## Knowledge of Pregnant Women Regarding the Mode of Delivery among the Primary Gravida

 Imamah Zainab<sup>1</sup>, Humaira Saddique<sup>1</sup>, Rubina Jabeen<sup>1</sup>
<sup>1</sup>Department of Nursing, The Superior University, Lahore, Pakistan

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**\*Corresponding Author:**
 Imamah Zainab  
 Department of Nursing, The Superior University,  
 Lahore, Pakistan  
[umama5513@gmail.com](mailto:umama5513@gmail.com)

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## ABSTRACT

Caesarean sections (CS) are becoming more commonplace. Pregnant women's awareness of childbirth options, the causes contributing to their lack of information, and their desire for CS delivery were little understood. **Objective:** To assess the knowledge of pregnant women regarding the mode of delivery among the primary gravida. **Methods:** A descriptive cross-sectional research study design was conducted at Jinnah Hospital Lahore during January to June 2023. About 171 pregnant patients were enrolled to assess the knowledge of pregnant women of the first gravida. Data analysis was done through (SPSS) version 21.0. The Bartlett and KMO values have been checked to ensure validity and reliability in our context. **Results:** Out of 171 pregnant females, 90.6% were aged 21-30 years. Approximately 67.3% believed that vaginal birth is a natural and appropriate way of delivery, and 87.7% believed that the infant might be obtained early within minutes by vaginal delivery. About 88.3% females thought that vaginal delivery is better than cesarean section, however 85.5% also thought that it is also risky for baby. **Conclusions:** Generally, the knowledge of pregnant women about the mode of delivery and benefits of vaginal delivery is good in this study. But due to their thought about risk to the fetus, mostly select cesarean section over vaginal delivery. Therefore, the patient should be educated about the knowledge of pregnant women's mode of delivery to control the (CS) rate.

## INTRODUCTION

Birth via caesarean section is performed by making an incision in the mother's abdomen (laparotomy) and uterus (hysterectomy) to deliver the fetus. The procedure has come a long way since the first caesarean section in 1020. In Pakistan, nearly a million women have their infants through caesarean section each year, making it the most popular treatment in the country. From a rate of 5 per 100,000 births in 1970, it reached 31.9 in 2016 [1]. Despite continuous efforts, doctors do not anticipate a significant drop in the rate of caesarean sections for at least another decade. Some women may not have any other choice than to have a caesarean delivery, despite the potential for both immediate and long-term complications [2]. Vaginal

delivery is the safest choice for both the fetus and the mother when the pregnancy reaches full term, between 37 and 42 weeks [3]. Vaginal birth is favored over surgical birth because of the increased risks of complications and death that come with caesarean sections. Eighty percent of all singleton vaginal deliveries occur at full term with the help of robotic labor [4]. There are eleven preterm births and ten full-term births. In particular, the number of patients progressing to robotic labor has reduced over time due to the advent of operational and surgical delivery methods, while the number of cases requiring induction of labor has grown [5]. Reduced mother and newborn morbidity and death might result from fewer needless caesarean

sections if more women were educated about the risks and benefits of this delivery method. For improved gap identification, community and case awareness, and patient agency, investment in this area of patient care is essential [6]. The maternal mortality rate (MMR) in Pakistan was reduced by three-quarters between 1990 and 2015, while the under-five mortality rate (U5MR) was reduced by two-thirds. Both of these goals were part of the Millennium Development Goals (MDGs). The current prevalence of CS is far greater than the 10–15 percent target set by the WHO [7]. Pregnant women's knowledge of the mode of delivery and the factors that may influence their preference for CS delivery will be used by policymakers and healthcare providers to design effective programmes and interventions with the goal of reducing CS deliveries for better maternal and child health outcomes [8]. The purpose of this research was to determine how well women, particularly first-time mothers, understand the advantages of vaginal birth and the drawbacks of caesarean section. In order to encourage more women, particularly first-time mothers, to give vaginal birth a try and minimize the frequency of needless caesarean sections.

## METHODS

From January 2023 to June 2023, a descriptive cross-sectional research was conducted at the Jinnah Hospital's Department of Obstetrics and Gynecology in Lahore. There were 171 participants in this trial. Using a 95% confidence interval, a 7% margin of error, and the proportion of caesarean sections (31.9%), a sample size was determined [1]. Females were enrolled who fulfilled selection criteria below by using simple random sampling. The study targeted population were the primigravida females of age 18 – 40 years, presenting for antenatal booking at gestational age >8 weeks. Those women with any risk pregnancy including chronic or gestational hypertension, diabetes, anemia, morbidly obese, low lying placenta, twin or multiple gestation were excluded from this study. Then females were asked about vaginal delivery and its pros and cons by researcher. A pre-designed proforma was used to gather the information and responses of females. Data analysis was done through statistical package of social sciences (SPSS) version 21.0. Frequency and percentage were used to present responses of females.

## RESULTS

Table 1 shows that from total no of participants who responded in this study, those with the age group 18-20 year were 8(4.7%) those with the age group 21-30 year were 155(90.6%) and those age group 31-40 year were 8(4.7%). Those who had primary education were 86(50.3%) and those who had secondary education were 81(47.4%).

**Table 1:** Basic demographics of patients(n=171)

Demographics	Frequency (%)
<b>Age</b>	
18-20	8 (4.7)
21-30	155 (90.6)
31-40	8 (4.7)
<b>Education</b>	
Primary	86 (50.3)
Secondary	81 (47.4)
All ability of schools	4 (2.3)

Table 2 shows that from total no of participants who responded in this study, to question “vaginal delivery is a natural and acceptable mode of delivery” those who responded yes were 155(67.3%) and those who responded no were 56(32.7%). From total no of participants who responded in this study, to question “seeing a baby immediately after vaginal delivery is a pleasure for mother” those who responded yes were 150(87.7%) and those who responded no were 19(11.1%) and those who responded don't know were 2(1.2%). To the question “in term of outcome, vaginal delivery is more pleasant” those who responded yes were 149(87.1%), those who responded no were 19(11.1%) and those who responded don't know were 3(1.8%). Total number of participants who responded about the question “vaginal deliveries create a more affectionate mother baby relationship” those who responded yes were 149(87.1%), those responded no were 20(11.7%) and those who responded don't know were 2(1.2%).

**Table 2:** Mode of delivery and knowledge of females about vaginal delivery

Descriptive analysis	Response (%)
<b>Vagina delivery is natural and acceptable mode of delivery</b>	
Yes	115 (67.3)
No	56 (32.7)
<b>Seeing the baby immediately after vaginal delivery is a pleasure for mother</b>	
Yes	150 (87.7)
No	19 (11.1)
don't know	2 (1.2)
<b>The mother regains her health status soon after vaginal delivery</b>	
Yes	151 (88.3)
No	20 (11.7)
<b>In term of outcome, vaginal delivery is more pleasant</b>	
Yes	149 (87.1)
No	19 (11.1)
don't know	3 (1.8)
<b>Vaginal deliveries create a more affectionate mother baby relationship</b>	
Yes	149 (87.1)
No	20 (11.7)
don't know	2 (1.2)

Table 3 shows that from total number of participants who responded to the question “the emotional relationship

between mother and baby after vaginal delivery is better" those who responded yes were 151(88.3%), those who responded no were 15(8.8%) and those who responded don't know were 5(2.9%). Who responded about the question "Vaginal delivery is less risky for mother" those who responded yes were 147(86.0%), those who responded no were 15(8.8%) and those who responded don't know were 9(5.3%). To the question "Vaginal delivery is better in long term" those who responded yes were 139(81.3%), those who responded no were 15(8.8%) and those who responded don't know were 17(9.9%).

**Table 3:** Benefits of vaginal delivery (n= 171)

Descriptive analysis	Response (%)
<b>The emotional relationship between mother and baby after vaginal delivery is better</b>	
Yes	151 (88.3)
No	15 (8.8)
don't know	5 (2.9)
<b>Vaginal delivery is less risky for mother</b>	
Yes	147 (86.0)
No	15 (8.8)
don't know	9 (5.3)
<b>Vaginal delivery is better in long term</b>	
Yes	139 (81.3)
No	15 (8.8)
don't know	17 (9.9)

## DISCUSSION

World Health Organization (WHO) recommendations to limit population-based caesarean section (CS) rates to 10–15 are linked to reductions in maternal, neonatal, and child mortality; however, the number of cases reaching robotic labor has increased over the last three decades [9]. This rise in CS rates creates a pressure on public health resources, particularly when CS is done needlessly, resulting in profit and service shortages, as well as worse mother and child health outcomes. There is more evidence that CS increases the likelihood of complications such as infection, urinary tract infection, pain, headaches, anaesthetic issues, maternal mortality, and postpartum depression as compared to vaginal birth [10–12]. In this descriptive research, we surveyed primiparous women to see how much they knew about the various options for giving birth. An instrument for gauging primiparous mothers' familiarity with the various birthing options has been adapted for use with expectant women. In our study, more than 82% females had good knowledge about vaginal delivery and more than 80% females also know about benefits of successful vaginal delivery. In another Pakistan study, 68.1% of working women were thinking that those who want only one or two children are better to choose CS while 46.9% of housewives were in favor of CS in this regard. About 71.1% of working women and 43.1% of

housewives were in favor of CS however 20.8% of working women and 40.2% of housewives were in favor of vaginal delivery [13]. The majority of Saudi Arabians (45.4%) scored poorly on a test measuring awareness of complications associated with having a caesarean section, while just 12.6% scored well [14]. Eighty-nine percent of the women surveyed in an Indian research had a favorable opinion of vaginal birth. Patients with primary and secondary infertility had a higher prevalence of caesarean sections because they believed their infants would be healthier if they were born by caesarean section rather than vaginally [15]. A research among 245 women in Nigeria found that only 68.6% of the women knew about non-pharmacological techniques of reducing pain in labor, and the vast majority of these women thought their knowledge was too trivial to put into practice [16]. An estimated 90% of Nepali moms who visited the antenatal OPD had at least a moderate understanding of the benefits and risks associated with each possible delivery method. The majority of women (93%) are supportive of having a vaginal birth, whereas 6.6% are not. Attitudes towards caesarean sections were generally good among 24%, negative among 75%, and neutral among the remaining 25% [17]. Decisions made in the context of clinical practice that have been decided and People may now make more informed choices about their health thanks to personalized treatment alerts. Voluntary CS rates were shown to be lower when women knew more about the procedures' prerequisites and potential problems [18]. The study's findings suggest that most pregnant women may be unaware of the possible health risks associated with different types of childbirth. Pregnant teens and mothers who had their previous kid by caesarean section were more likely to be ill-equipped to handle the information. The trimester of pregnancy makes no difference in terms of knowledge. Ten percent of expectant mothers in the most current survey preferred a caesarean section, and this preference was particularly strong among women who were older, employed, had many children, or had previously given birth through CS. The World Health Organization (WHO) has addressed the rising prevalence of CS in both developed and underdeveloped countries [19]. Jadoon *et al.*, demonstrated that sociocultural and institutional factors rather than national economic conditions are what drive the practice of CS [20]. Pregnant women who lack sufficient information may accept the doctors' advice without exploring potential alternative delivery options or comprehending the dangers of CS delivery [21]. Pregnant women's positive attitudes towards vaginal birth are increased when they are given accurate information about all of their birthing options [22]. In the Islamabad, 30.2 of the women who took the community-based test succeeded. In the region, there are

few researches examining their demographic and artistic as obstetric concerns including mode of birth [23]. Not enough research has been done in Pakistan to determine the optimal method of CS delivery or the variables that influence women's and interpreters' choices to employ CS [24]. Women's knowledge of delivery options in Pakistan has to be investigated so that evidence-based policies and recommendations may be created to perhaps reduce the overall CS rate in the nation. Improved maternal education regarding the potential short- and long-term health problems associated with CS, especially repeated CS, should be a focus of efforts to minimize the incidence of CS, the research found. It is also important to make concerted attempts to include ANC appointments into which the possible benefits and drawbacks associated with different delivery methods are openly discussed. The findings of this study are congruent with those of earlier research [25].

## CONCLUSIONS

The results of this research highlight the need to educate pregnant women on the health risks connected with each delivery option. About ten percent of expecting mothers choose caesarean sections. Health policy reform aimed at empowering women should be innovative and should include information about other options for childbirth.

## Authors Contribution

Conceptualization: IZ

Methodology: HS

Formal analysis: RJ

Writing-review and editing: IZ, HS, RJ

All authors have read and agreed to the published version of the manuscript.

## Conflicts of Interest

The authors declare no conflict of interest.

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