

## Women's Perception About Rising Cesarean Section Rates

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### ABSTRACT

**Background:** The proportion of births by cesarean section in Pakistan has recently exceeded from WHO recommendation of 15% to 25%. Unlike previous researches, which have focused on women's role and Gynecologist's view about increasing cesarean trends, this study aimed to explore the women's perspective about rising trend of cesarean section.

**Methods:** A self-completion structured questionnaire was given to a sample of 250 women at Out Patients Department of Sheikh Zayed Hospital, a tertiary referral public hospital in LAHORE, Pakistan. Sample was calculated by epitool. The questionnaire included two sections, one of the sections included questions to evaluate the role of doctors, women and role of Community in rising cesarean section according to women's view, and other included socio-demographic questions.

**Results:** Of the total sample, 236 women responded to the questionnaire. On personal view of women about cesareans section, 196 (82.6%) women disagreed to consider the cesarean section an easier way of giving birth and didn't prefer cesarean without any maternal and fetal complications. 144 (59.5%) of women are in favor of the statement that doctors do cesarean section for the sake of their convenience and are not giving proper information about indication of procedure. In evaluation of women's perspective about community, (69.4%) 165 are in view of that community don't encourage them to have cesarean section.

**Conclusions:** Current study strengthens the fact, that majority proportion of Pakistani women, independent of socio-demographic variables such as age, locality and education level, are still considering normal delivery as a more easier convenient and safer mode of delivery than cesarean. Their views towards community show that community does not play any significant role in encouraging cesarean over normal delivery. But they express blaming attitude towards doctors and consider that doctors (mainly private hospital doctors) are encouraging cesarean to save their time.

**Keywords:** Rise in cesarean section, women's perception about cesarean

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### INTRODUCTION

The recent increase in cesarean section rates all over has led the world to consider it as a major public health issue.[1] This drastic change has become the major risk factor for maternal and fetal health.[2].

In recent years the rate of cesarean section has increased to a record level of 46% in china or 25% or above in many Asian countries. The proportion of births by cesarean section in Pakistan has exceeded from WHO recommendation of 15% to 25%.[3]. The cesarean rates in rural areas of Pakistan are up to 11.5% and in urban areas 25.7% according to Pakistan institute of development economics. There is also a large difference of cesarean rates between private and government sector hospitals.[4]

Many factors either directly or indirectly are responsible for high cesarean rates ranging from medical, Institutional, legal, psychological to socio-demographic changes.[5] Maternal preferences for CS has achieved equal importance, and two different types of studies explained the women's role in rising CS rates—looking either at maternal request for CS or at rates of CS based on maternal characteristics.

First, a study conducted in Sweden explore the reasons behind the maternal request for cesarean section.[6]and than a critique of 10 studies was conducted which also aimed to identify factors responsible behind purported maternal request for cesarean section[7]. Simultaneously, a series of studies were also conducted

which focused to find the predictors of cesarean section rates—drawing a relationship between maternal characteristics, such as their age [8], previous complicated delivery [9]and their health insurance status [10],and the incidence of cesarean section[11, 12].Although understanding these factors is undoubtedly very important, these studies only focused on the women's role in rising cesarean section, rather than acknowledging broader socio-cultural views.

Recently, studies from Italy [13] and Australia [14], in particular put emphasis on the cultural and social norms of cesarean section. The author of Australian research focused to find women's perception about community acceptance of cesarean section. Some studies also put emphasis on women's perception about cesarean section [15-17]. In contrast, women's own perception about community acceptance of cesarean section has not been studied in various settings. This research aimed to explore the perspective of Pakistani women's about their own, community and doctors participation in rising cesarean section. This study sought to shift the onus from individual level to socio-cultural underpinnings of rising cesarean section.

### METHODOLOGY

A cross-sectional study was conducted to explore the women's perspective about rising trend of cesarean section. The study was carried out at Sheikh Zayed

Hospital's Out Patient Department; Lahore from April, 2017 to July 2017. It's a tertiary care hospital with a high risk pregnancy services and neonatal intensive care unit.

Study participants included a consecutive sample of antenatal women who had at least one child. Informed Consent was obtained from all participants before giving them Questionnaires. Data was collected from women who attended the Out Patient Department of Sheikh Zayed Hospital. A sample size of 250 antenatal women (n=250) was calculated by non-probability convenient sampling technique through epitool. 250 antenatal women were given questionnaires, out of these 242 women returned the questionnaire, 236 were completely filled while 6 were not completely filled, and rest of 8 women did not return the questionnaire.

A self made Questionnaire was prepared. A pilot test with 30 antenatal women was conducted and on expert consulting, items were developed and translated into participant's respective language.

The questionnaire included two sections, one of the sections included questions to evaluate the Women's role, doctor's role and role of Community in rising cesarean section according to women's view, which was assessed on a 5-point Likert scale (1 = strongly agree, 2=agree, 3=disagree, 4= strongly disagree, 5= neutral) for the following 10 statements: (1) Do you think cesarean section is more easier and convenient way of giving birth than normal delivery? ; (2) Would you prefer cesarean without any maternal and fetal complication?; (3) Would you prefer cesarean section over normal because of fear of labor pains?; (4) Do you think doctors are encouraging cesarean over normal delivery? ; (5) Do you think mostly doctors prefer cesarean section to save their time? ; (6) Do you think doctors are giving proper information regarding indication and procedure of cesarean section? ; (7) Do you think doctors of private hospitals encourage women for cesarean section more than the doctors of govt. hospitals? ; (8) Do your family and friends encourage you to have cesarean section? ; (9) Cesarean is no longer seen as a major surgery (10) Do you think rise in cesarean section is a healthy step?

Second, socio-demographic data, including age, education level, number of children, and rural/ urban residence were recorded.

**Data analysis:** Data was analyzed by using statistical package for social sciences (SPSS) version 21. Women's perception was analyzed using one way frequency

distribution and bar charts, to determine magnitude of response to the statements.

Chi square test was employed to detect an association between socio-demographic details and agreement with statements. The 5 point Likert scale was changed as follows: those who strongly agreed or agreed were coded as "agree"; those who were disagreed, neutral or strongly disagreed were coded as "disagree".

Table no. 1

| Socio-demographic detail |             |
|--------------------------|-------------|
| Mean Age (yr)            | 25.661      |
| Age range (yr)           | 18 to 35    |
| Education                |             |
| Up to primary            | 21 (8.7%)   |
| Secondary                | 40 (16.5%)  |
| Intermediate             | 67 (27.7%)  |
| University               | 114 (47.1%) |
| Locality                 |             |
| Rural                    | 185 (76.4)  |
| Urban                    | 57 (23.5%)  |
| Parity                   |             |
| Primiparas               | 71 (29.3%)  |
| Multiparas               | 171 (70.7%) |
| Mode of delivery         |             |
| Yes                      | 132 (54.5%) |
| NO                       | 110 (45.5%) |

## RESULTS

Total 250 potentially eligible women were given questionnaire, out of these 242 women returned the questionnaire, 236 were completely filled while 6 were not completely filled, and rest of 8 women did not return the questionnaire. The term "potentially eligible" refers to those women who were in their antenatal period and more than 18 years of age. Socio-demographic characteristics of the participants are given in Table no 1.

The range of responses in terms to evaluate the Women's role, doctor's role and role of Community in rising cesarean section according to women's perspective is given in Table 2, Table 3, and Table 4 respectively together with their bar charts.

Table 2 and figure 1 reveals personal view of women about cesarean section acceptance. It shows that only 2.5% strongly agree and 14% agree to consider the cesarean

Table no. 2

| Statement   | Strongly Agree | Agree      | Disagree   | Strongly Disagree | Neutral  |
|---|----------------|------------|------------|-------------------|----------|
| 1) Do you think cesarean is an easier way of giving birth than normal delivery? | 8 (3.3%)       | 28 (11.6%) | 7 (28.9%)  | 122 (50.4%)       | 12 (5%)  |
| 2) Would you prefer cesarean without any Fetal and maternal complications?      | 13 (5.4%)      | 30 (12.4%) | 62 (25.6%) | 126 (52.1%)       | 9 (3.7%) |
| 3) Would you prefer cesarean over normal because of fear of labor pains?        | 19 (7.9%)      | 43 (17.8%) | 66 (27.3%) | 107 (44.2%)       | 7 (2.9%) |
| 4) Mean of all statements   | 6 (2.5%)       | 34 (14%)   | 76 (31.4%) | 124 (51.2%)       | 2 (.8%)  |

Section an easier way of giving birth and didn't prefer to have CS due to fear of labor pains without any maternal and fetal complications. Majority of women (31.2% women strongly disagree and 51.2% disagree) are not in favor of

cesarean section and consider normal delivery as the best mode of delivery.

Table 3 and figure 2 reflects women's view about doctors role in rising cesarean sections. Total aggregate of

questions shows that most of women (59.5%) are in favor that doctors do cesarean section for the sake of their convenience and are not giving proper information about indication and procedure of their cesarean section. only 36% of women respond in favor of doctors while 4.5% of women remain neutral.

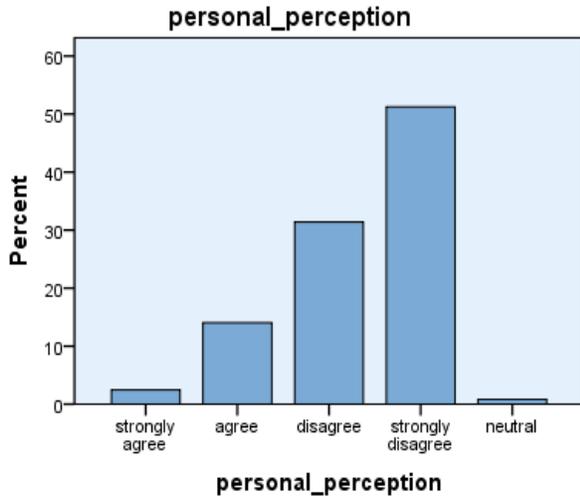


Fig. 1

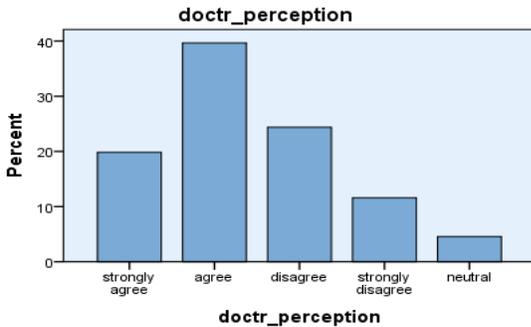


Fig. 2

Table no. 3

| Statements   | Strongly Agree | Agree       | Disagree   | Strongly disagree | Neutral    |
|--|----------------|-------------|------------|-------------------|------------|
| 1) Do you think doctors are encouraging cesarean over normal delivery?                                       | 61 (25.2%)     | 56 (23.1%)  | 49 (20.2%) | 29 (12%)          | 45 (18.6%) |
| 2) Doctors of private hospitals are encouraging women for cesarean more than the doctors of govt. hospitals? | 50 (20.7%)     | 100 (41.3%) | 31 (12.8%) | 14 (5.8%)         | 44 (18.2%) |
| 3) Do you think mostly doctors prefer cesarean section to save their time?                                   | 49 (20.2%)     | 8 (3.1%)    | 49 (20.2%) | 30 (12.4%)        | 34 (14%)   |
| 4) Do you think doctors are not giving proper information regarding indication and procedure of cesarean?    | 36 (14.9%)     | 68 (28.1%)  | 72 (29.8%) | 34 (14%)          | 32 (13.2%) |
| 5) Mean of all statements  | 48 (19.8%)     | 96 (39.7%)  | 59 (24.4%) | 28 (11.6%)        | 11 (4.5%)  |

Table no. 4

| Statement   | Strongly Agree | Agree       | Disagree   | Strongly Disagree | Neutral   |
|---|----------------|-------------|------------|-------------------|-----------|
| 1) Do your family and friends encourage you to have cesarean section? | 22 (9.1%)      | 67 (27.7%)  | 71 (29.3%) | 71 (29.3%)        | 11 (4.5%) |
| 2) CS is no longer seen as a major surgery?                           | 53 (21.9%)     | 103 (42.6%) | 35 (14.5%) | 30 (12.4%)        | 19 (7.9%) |
| 3) Do you think rise in cesarean section is a healthy step?           | 4 (1.7%)       | 9 (3.7%)    | 63 (26%)   | 157 (64.95)       | 8 (3.3%)  |
| 4) Median of all questions  | 13 (5.4%)      | 61 (25.2%)  | 85 (35.1%) | 81 (33.5%)        | 2 (.8%)   |

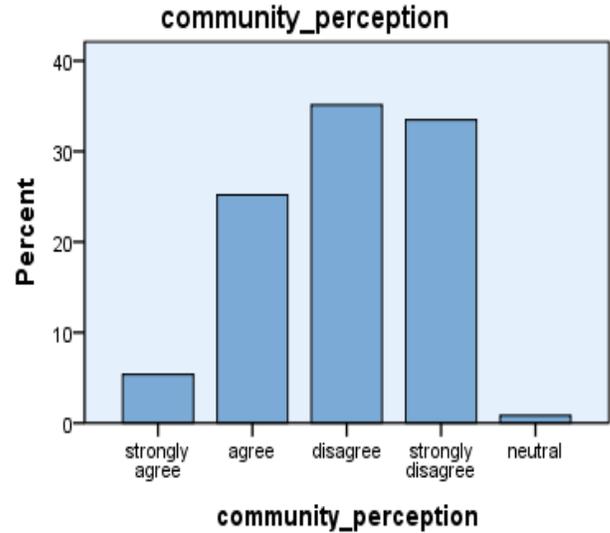


Fig. 3

Table 4 and figure 3 reveals the perception of women about community role in rising cesarean section. Majority of women (about 35.1% disagree and 33.5% strongly disagree) are in favor of community and are in view of that community don't encourage them to have cesarean section. Table 5 shows the total percentage of women's view about community, doctors and personal perception.

Table 6 presents further analysis on the relationship between socio-demographic variables and questions about community's, doctor's and personal role of women in rising cesarean section. The association between socio-demographic variables and questions is very small and did not reach statistical significance. Table no. 7 shows the combine result of all 3 variables.

Table no. 5

| Characteristics                   | Agree<br>No. % | Disagree<br>No % | TOTAL | Chi<br>square | p value |
|-----------------------------------|----------------|------------------|-------|---------------|---------|
| <b>PERSONAL PERCEPTION</b>        |                |                  |       |               |         |
| <b>Education</b>                  |                |                  |       |               |         |
| Up to primary                     | 4              | 17               | 21    | 2.53          | .469    |
| Secondary                         | 8              | 32               | 40    |               |         |
| Intermediate                      | 7              | 60               | 67    |               |         |
| university                        | 21             | 93               | 114   |               |         |
| <b>Locality</b>                   |                |                  |       |               |         |
| Urban                             | 20             | 165              | 185   | 26.44         | .000    |
| rural                             | 19             | 37               | 57    |               |         |
| <b>Age</b>                        |                |                  |       |               |         |
| 18 TO 24                          | 7              | 27               | 34    | 4.572         | .206    |
| 25 to 29                          | 21             | 78               | 99    |               |         |
| 30 to 35                          | 6              | 41               | 47    |               |         |
| Above 35                          | 6              | 56               | 62    |               |         |
| <b>Mode of delivery</b>           |                |                  |       |               |         |
| CESAREAN                          | 30             | 102              | 132   | 8.07          | .004    |
| NORMAL                            | 10             | 100              | 110   |               |         |
| <b>PERCEPTION ABOUT COMMUNITY</b> |                |                  |       |               |         |
| <b>Education</b>                  |                |                  |       |               |         |
| Up to primary                     | 8              | 13               | 21    | 5.7           | .125    |
| Secondary                         | 9              | 31               | 40    |               |         |
| Intermediate                      | 27             | 40               | 67    |               |         |
| university                        | 30             | 84               | 114   |               |         |
| <b>Locality</b>                   |                |                  |       |               |         |
| Urban                             | 55             | 130              | 185   | 2.515         | .473    |
| rural                             | 18             | 29               | 54    |               |         |
| <b>Age</b>                        |                |                  |       |               |         |
| 18 TO 24                          | 8              | 26               | 34    | 3.112.363     |         |
| 25 to 29                          | 28             | 71               | 99    |               |         |
| 30 to 35                          | 19             | 28               | 47    |               |         |
| Above 35                          | 19             | 43               | 62    |               |         |
| <b>Mode of delivery</b>           |                |                  |       |               |         |
| CESAREAN                          | 40             | 92               | 132   | .010          | .919    |
| NORMAL                            | 34             | 76               | 110   |               |         |
| <b>PERCEPTION ABOUT DOCTORS</b>   |                |                  |       |               |         |
| <b>Education</b>                  |                |                  |       |               |         |
| Up to primary                     | 10             | 11               | 21    | 1.64.645      |         |
| Secondary                         | 23             | 17               | 40    |               |         |
| Intermediate                      | 40             | 27               | 67    |               |         |
| university                        | 71             | 43               | 114   |               |         |
| <b>Locality</b>                   |                |                  |       |               |         |
| Urban                             | 105            | 80               | 185   | 5.4           | .139    |
| rural                             | 39             | 17               | 56    |               |         |
| <b>Age</b>                        |                |                  |       |               |         |
| 18 TO 24                          | 21             | 13               | 34    | 1.97          | .577    |
| 25 to 29                          | 54             | 45               | 99    |               |         |
| 30 to 35                          | 31             | 16               | 24    |               |         |
| Above 35                          | 38             | 24               | 98    |               |         |
| <b>Mode of delivery</b>           |                |                  |       |               |         |
| CESAREAN                          | 84             | 48               | 132   | 2.05          | .151    |
| NORMAL                            | 60             | 50               | 110   |               |         |

Table no. 6

| Women's pperception        | AGREE       | DISAGREE    |
|----------------------------|-------------|-------------|
| Personal perception        | 40 (16.5%)  | 196 (82.6%) |
| Perception about doctors   | 144 (59.5%) | 92 (40.5%)  |
| Perception about community | 74 (30.6%)  | 165 (69.4%) |

**DISCUSSION**

As during recent years the rate of cesarean section rises drastically in both developed and developing countries. Unlike previous research, which has focused on women's role in increasing rates of cesarean section and Gynecologists view about increasing cesarean trends, this study aimed to explore the women perspective about role of doctor, community role and her own role in rising trend of

cesarean section. The data derived from women shows that on personal perspective 200(82.6%) of women are not in favor of cesarean section. Majority of the respondents considered vaginal birth more easier and safer way of delivery than cesarean section and didn't prefer cesarean without any complication. Only 40(16.5%) were reported to consider cesarean more convenient way of delivery and were willing to accept CS as a method of delivery to avoid labor pain and complications of delivery. Current findings show almost similar results as reported from a previous research, where almost 90% of patients rejected to prefer cesarean.[17]This data also correspond with previous research in which literature review of 6 different researches has combined and concluded that "the number of women preferring or requesting a cesarean section is far fewer than the number of women receiving the procedure"and

some other studies also correlate with this findings.[7, 18][16]

Significant 166 (69.4%) respondents indicated negative cultural perception of their communities about cesarean section. Majority of respondent said that their family and friends didn't encourage them to have cesarean while 36.8% of women gave positive response in the answer of this question. This shows that community common belief, values, culture and traditions surrounding women's are still discouraging cesarean section in Pakistan. [14]

The previous research on literature review said that "the psychosocial context of obstetric care reveals power imbalance in favor of physicians". This study reveals the women perception about obstetric care.[6, 7, 19] In present study major concern expressed by the respondents was the blaming attitude towards doctors. 144 (59.5%) respondents agreed with statements that doctors are encouraging cesarean over normal delivery. Majority of them considered that doctors prefer cesarean to save their time. Majority of women also agreed on statement that the private doctors were doing more cesarean section than the government doctors. Current findings also correlate with previous research findings that obstetricians perform more cesarean sections when there are financial incentives to do so and people consider that there is a link between economic incentives and medical decision making of doctor during selecting mode of delivery.[20, 21] This blaming view of women showed untrusting attitude of women towards doctor. In the answer of question that "Do you think doctors are not giving proper information about indication and procedure of cesarean section" 43% of the women agreed that doctors are not giving proper information.[22]

## CONCLUSION

Current study strengthens the fact that majority proportion of antenatal clients is still considering normal delivery as a more easier convenient and safer mode of delivery than cesarean. Their personal perception and recommendation are still in favor of vaginal birth. Their views towards community show that community does not play any significant role in encouraging cesarean over normal delivery. But they express blaming attitude towards doctors and consider that doctors (mainly private hospital doctors) are encouraging cesarean to save their time. Majority of women are in view that doctors are not giving proper information about cesarean. This shows the distrustful attitude of women towards obstetricians. In order to rescind this view of women, specific attention should be given to the action and attitudes of Obstetricians and Health systems in lowering cesarean section rates. Doctors must need to reassure and inform women properly about the indication and procedure of their cesarean section and carefully evaluate the indication in every case and must take an unbiased decision to build healthy and trustworthy relationship between doctor and patient.

**Suggestion:** Further research should be predicated to analyze the doctor's view about rising cesarean sections and comparing perceptions of both women's and doctors to find more accurate results

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