December 2023; 10(12) ISSN: ISSN: 2349-5340 Impact Factor: 4.054

AWARENESS AND KNOWLEDGE OF INDIAN WOMEN TOWARDS

CAESAREAN DELIVERY Aarohi Kadam, Dr Nikita Vijay

MBBS Student, NKP Salve Institute of Medical Sciences, Nagpur Associate Professor, Obstetrics & Gynaecology Department, NKP Salve Institute of Medical Sciences, Nagpur

Abstract

Background: Caesarean section is one of the common surgical procedures taking place all over the world. The increase in the number of CS deliveries above the threshold of 10-15% mentioned by WHO is a matter of public concern. This research was conducted to understand the common indications that mothers are aware of regarding CS deliveries.

Objectives: The research was conducted keeping in mind the following objectives (1) To find the knowledge and awareness Indian mothers have regarding CS deliveries (2) To assess the common indications for CS deliveries.

Methods: The study adopted a descriptive cross-sectional design and was conducted in a tertiary health hospital in Nagpur. Around 111 females who attended the Obstetrics and Gynaecology ward of the hospital were questioned in a one-to-one interview according to a pre-validated questionnaire. The participants were selected based on inclusion criteria involving a history of at least one CS delivery.

Results: The potential demand for CS has increased from 8.5% to 11% when compared to a similar study conducted in the same hospital. The common indications for CS were found to be oligohydramnios leading to foetal distress followed by breech or transverse presentation.

Conclusions: It is seen that there is a lack of general awareness among mothers regarding CS deliveries as most mothers answered according to their previous experience rather than knowledge. There is a need for government to increase education among rural women through ASHA and Anganwadi workers

Keywords:

Caesarean section, overutilization, Oligohydramnios, Malpresentation

Introduction

Caesarean section (CS) is a surgical procedure by which a baby is delivered through a laceration in the mother's abdomen and uterus. (1) Being one of the oldest surgical techniques it was used as a post-mortem procedure to remove a live or dead foetus from the mother's womb. With further advances, CS became a life-saving technique or the last resort to rescue a mother and foetus from protracted labour. These advances were aided by the use of chloroform and antibiotics to further reduce maternal mortality due to infections. (2) Unfortunately, nowadays CS is being used indiscriminately as a luxurious amenity by many communities. (3)

According to WHO, CS is recommended only when there is a risk to the life of the mother or baby and the ideal threshold for CS deliveries in all countries should be 10-15%. (4) Despite the given limit, there has been overutilization of CS procedures in both developing and developed countries. Several research studies done in countries like China and Bangladesh show a tremendous increase in the number of CS deliveries resulting in a major public health issue. (5,6) A study in China showed that there was an increase in CS deliveries in rural areas compared to urban areas. (7) According to National Family Health Survey, the current CS rates in India are 21.5%, which is higher than the mentioned threshold. In addition to the health consequences of high rates of CS, it also puts an additional financial burden on the healthcare systems, particularly in low and middle-income countries. (8)

December 2023; 10(12) ISSN: ISSN: 2349-5340 Impact Factor: 4.054

India is one of the countries with an upward trend in CS deliveries, it is important to know the awareness and knowledge that women who have experienced a CS delivery have. Healthcare workers must know about the common indications for performing a CS delivery.

Keeping the above concerns in mind, this research focuses on the following objectives mentioned below.

Objectives:

To find the knowledge and awareness among Indian women regarding CS.

To find the common indications for performing CS deliveries.

Methodology:

This study is a cross-sectional, descriptive study which was conducted in Lata Mangeshkar Hospital, a tertiary health centre in Nagpur. The data was collected by convenience sampling technique and 111 women who fit into the inclusion criteria were recruited as the participants of the study. The inclusion criteria for the study were (1) Women with a history of at least one CS delivery and (2) Willingness to participate in the research. The questionnaire for this study was a pre-validated questionnaire which was similar to a previous study. (9) It comprised of questions regarding the socio-demographic information of the women, their knowledge as well as awareness and the same was approved by the Institutional Ethics Committee. The participants were informed about the purpose of the research and questions were asked after taking their consent for the same. The questions were asked in the local language preferred by the participant in a private one-to-one interview and the questionnaire was filled out by the author on the behalf of the participant. The knowledge and awareness of the participants were analysed as well as their source of information regarding the same was asked.

Results:

A total of 118 women were interviewed out of which participants were excluded for the following reasons:

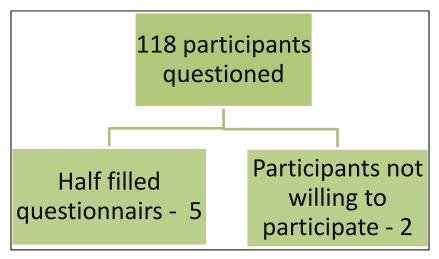


Figure 1: Flowchart showing exclusion criteria

So a total of 111 women were recruited as the participants of this study.

The women were asked questions regarding their socio-demographic information, knowledge, attitude etc.

December 2023; 10(12)

ISSN: ISSN: 2349-5340

Impact Factor: 4.054

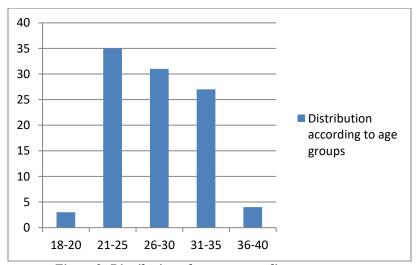


Figure 2: Distribution of women according to age group

Most of the women belonged to the age group of 21-25 years. When questioned about their employment status, most of them were housewives.

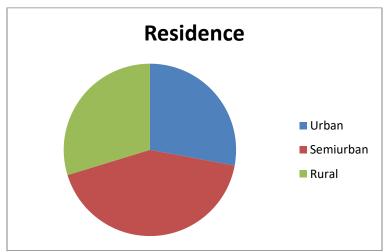


Figure 3: Distribution of women according to residence

It has been seen that women living in urban areas tend to prefer CS more than those in rural areas which is why the women were questioned regarding their area of residence.

In this research 54% of the participants were primigravida. It is generally seen that mothers with prior experience have more knowledge.

December 2023; 10(12)

ISSN: ISSN: 2349-5340

Impact Factor: 4.054

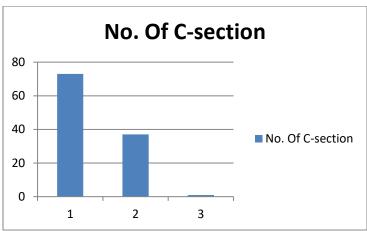


Figure 4: No. of CS deliveries

It is seen that a significant number of women have undergone repeat CS.

Knowledge-

The participants were asked about their knowledge of CS. Most of the women agreed that they have heard about the term "Caesarean Section" but didn't know exactly what it meant and its indications weren't clear to them.

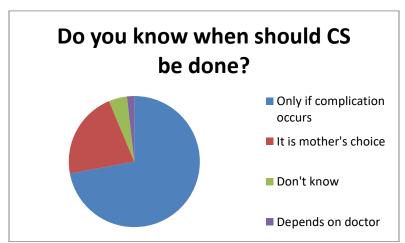


Figure 5 Distribution of women according to their knowledge regarding the indication of CS

Around 21.62 % of women said that it's the mother's choice to decide whether a CS is to be done or normal delivery. Only 37% of women themselves consented to the CS delivery while others said that another family member consented on their behalf.

December 2023; 10(12)

ISSN: ISSN: 2349-5340

Impact Factor: 4.054

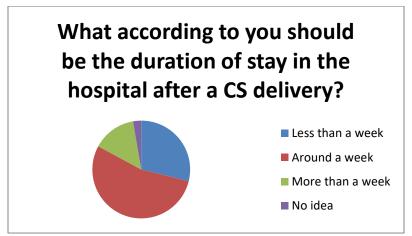


Figure 6: Distribution of women according to the knowledge regarding their stay in the hospital

Around 54.1% of women thought that it requires around a week for the stitches of CS to open up and so till then should stay in the hospital.

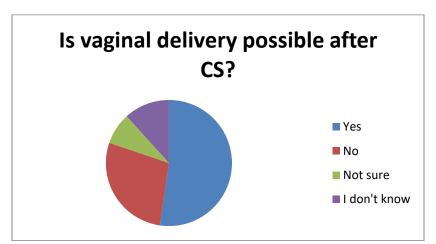


Figure 7: Distribution according to knowledge regarding the mode of second delivery after a prior CS delivery

Around 27.9% of women said that a C- section is the only option left after a previous history of CS.

Reason For First Cs

It is important to know the indications of Caesarean section for the clinicians as well as the mothers. The participants were interviewed regarding their 1st as well as their repeat CS.

December 2023; 10(12)

ISSN: ISSN: 2349-5340

Impact Factor: 4.054

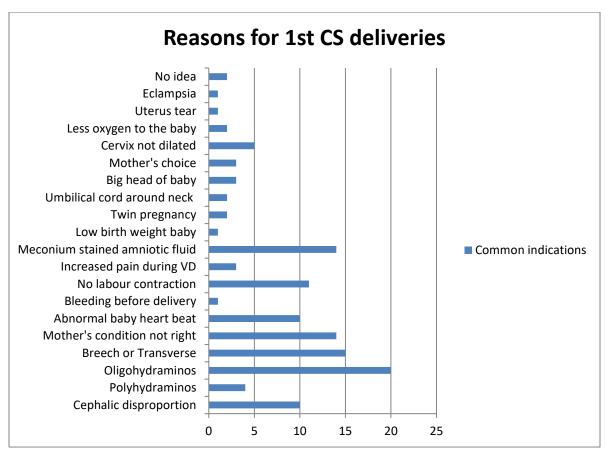


Figure 8: Reasons given by mothers for the first CS delivery

It is seen that the most common cause for first CS delivery is Oligohydraminos followed by breech or transverse position.

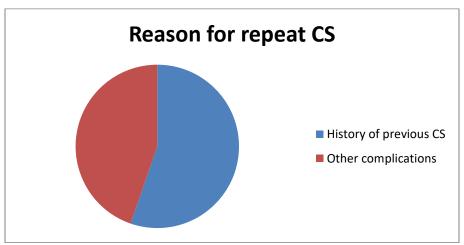


Figure 9: Reason given by mothers for repeat CS

It is seen that 55.3% of the females underwent repeat CS due to previous history of CS.

December 2023; 10(12) ISSN: ISSN: 2349-5340 Impact Factor: 4.054

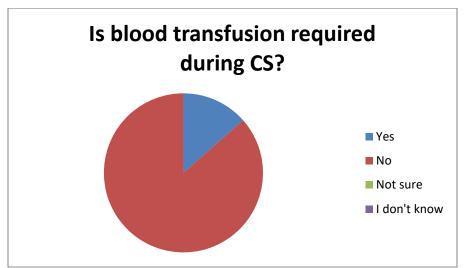


Figure 10: Distribution according to knowledge regarding blood transfusion

Most of the women answered according to their experience and didn't know that some complications might require a blood transfusion.

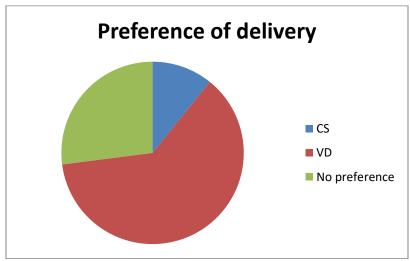


Figure 11: Distribution according to the preferable mode of delivery

When the mothers were asked about their delivery preference, 62% of the mothers preferred VD while the potential demand for CS is around 11%.

December 2023; 10(12)

ISSN: ISSN: 2349-5340

Impact Factor: 4.054

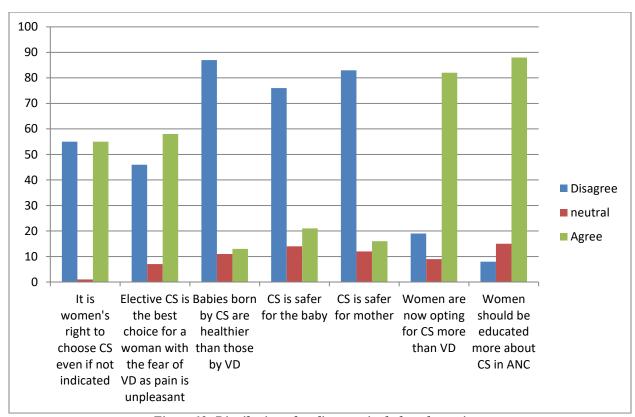


Figure 12: Distribution of replies to attitude-based questions

It is seen that there was equal opinion regarding the mother's right for choosing the method of delivery. After analysing the data, it is seen that 4.5% of the participants disagreed about the mother's right for choosing the method of delivery but agreed that a mother facing pain during VD should undergo a CS.

Most women believed that mothers should have adequate knowledge regarding CS before undergoing an operation.

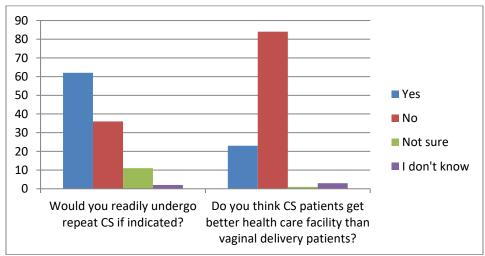


Figure 13: Distribution of replies according to the experience of CS delivery

© Indian J Med Res Pharm Sci

December 2023; 10(12) ISSN: ISSN: 2349-5340 Impact Factor: 4.054

It is seen that most women had no problem undergoing a repeat CS. Approximately 6.3% of the women believed that they received better hospital facilities due to CS.

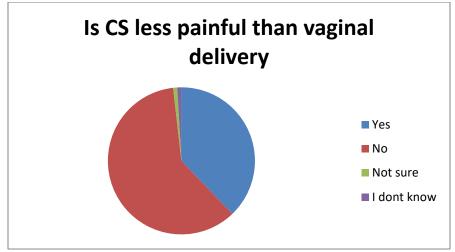


Figure 14: Pie chart showing replies regarding the more painful mode of delivery

Most of the women were comfortable undergoing a VD had it not been for the indications mentioned above. When asked about the source of information regarding reproductive health, 42% of the participants said it to be the hospital and health workers were the main resource of information while 30.63% said that their relatives provided them with the information for the same.

Discussion:

Various factors have been implicated in the rising cases of CS. Among the various factors, the place of residence, education, caste, economic status of household etc. are some of the important determinants of CS. In previous studies, it is seen that the rates of CS have more than doubled in India i.e. from 8% of deliveries in 2005 to 17% in 2016. (10) When comparing our study to a previous study conducted a decade ago in the same hospital, it was seen that the potential demand for CS has increased from 8.5% to 11%. (11) Even though most of the mothers were aware of the term Caesarean Delivery, most of them lacked knowledge in the field and their answers were based on their experience while undergoing the procedure. Many women acquired knowledge regarding deliveries from their relatives and neighbours which is not an authentic source of information. Many women got to know about the procedure directly from the health care providers in the later stages of pregnancy.

In our research, 34.23% (38/111) of the participants have undergone repeat CS, out of which 55.26% (21/38) underwent CS due to a previous history of CS. On further analysis, it is seen that 57.14% (12/21) out of them knew that a history of previous CS is not an appropriate indication for performing a CS. It was seen that most mothers were still inclined on undergoing vaginal delivery.

The mothers were asked questions regarding the indications of CS on which it was seen that the most common reason for CS deliveries was Oligohydraminos leading to foetal distress followed by breech or transverse presentation of the child while more than 50% of repeat CS were due to a history of previous CS. These findings were similar to a study done earlier. (12)

It is seen that 52.25% of participants felt that a woman should undergo a CS procedure in case of unbearable labour pain. This means that even though most women are inclined towards a vaginal delivery, a general fear of labour pain can induce one to undergo a Caesarean delivery.

December 2023; 10(12) ISSN: ISSN: 2349-5340 Impact Factor: 4.054

It was seen in this study that very few participants believe in myths like a baby delivered via CS is healthier or CS is a safer procedure for a baby which is favourable for a progressing community as it is very difficult to clear taboos and myths from the minds of the rural community.

When the mothers were asked questions regarding their CS delivery experience, a significant number of women believed that they received a good healthcare facility due to a CS delivery and wouldn't have received the same in the case of a VD. This might be because CS delivery is an institutional procedure done in sterile environments while some women might have themselves been subjected to or witnessed vaginal deliveries at home under a trained dais. The mothers were also asked questions regarding any complications that they were facing due to CS. It is important to know the difficulties that mothers think they are facing due to CS deliveries. Around 16% of the total participants said that they suffered minor complications out of which 55% mentioned back pain as the most common complication of CS.

Conclusion:

Even though CS is now a common procedure done in India, it is seen that women lack adequate knowledge regarding the procedure. There should be measures taken by the government so that women get to know the indications as well as the procedure of CS before their deliveries. Adequate knowledge regarding CS among women is crucial as it might help in lowering the burden of CS deliveries on the health care providers. Also, the advantages and disadvantages of CS deliveries should be explained properly to the mothers.

References:

- 1. Roy N, Mishra PK, Mishra VK, Chattu VK, Varandani S, Batham SK. Changing scenario of C-section delivery in India: Understanding the maternal health concern and its associated predictors. J Fam Med Prim Care. 2021 Nov;10(11):4182–8.
- 2. (PDF) A brief history and indications for cesarean section [Internet]. [cited 2022 Oct 14]. Available from: https://www.researchgate.net/publication/355168059_A_brief_history_and_indications_for_cesarean_section.
- 3. Rafiei M, Saei Ghare M, Akbari M, Kiani F, Sayehmiri F, Sayehmiri K, et al. Prevalence, causes, and complications of cesarean delivery in Iran: A systematic review and meta-analysis. Int J Reprod Biomed. 2018 Apr;16(4):221–34.
- 4. Betrán A, Torloni M, Zhang J, Gülmezoglu A, Zongo A, Yunis K. WHO Statement on Caesarean Section Rates. BJOG Int J Obstet Gynaecol. 2015 Jul 1;123.
- 5. (PDF) Risk factors for cesarean section in women of urban Puducherry, India: A matched case-control study [Internet]. [cited 2023 Feb 17]. Available from: https://www.researchgate.net/publication/363503579_Risk_factors_for_cesarean_section_in_women_of_ur ban Puducherry India A matched case-control study
- 6. Ahmmed F, Manik MMR, Hossain MJ. Caesarian section (CS) delivery in Bangladesh: A nationally representative cross-sectional study. PLOS ONE. 2021 Jul 15;16(7):e0254777.
- 7. Li H tian, Hellerstein S, Zhou Y bo, Liu J meng, Blustein J. Trends in Cesarean Delivery Rates in China, 2008-2018. JAMA. 2020 Jan 7;323(1):89–91.
- 8. Haider MR, Rahman MM, Moinuddin Md, Rahman AE, Ahmed S, Khan MM. Ever-increasing Caesarean section and its economic burden in Bangladesh. PLoS ONE. 2018 Dec 10;13(12):e0208623.
- 9. (PDF) Awareness, Knowledge, and Attitude of Egyptian Women toward Cesarean Delivery: A Cross-sectional Survey [Internet]. [cited 2022 Oct 14]. Available from: https://www.researchgate.net/publication/346537262_Awareness_Knowledge_and_Attitude_of_Egyptian_Women_toward_Cesarean_Delivery_A_Cross-sectional_Survey
- 10. Bhatia M, Banerjee K, Dixit P, Dwivedi LK. Assessment of Variation in Cesarean Delivery Rates Between Public and Private Health Facilities in India From 2005 to 2016. JAMA Netw Open. 2020 Aug 3;3(8):e2015022.
- 11. (PDF) Women's Knowledge, Perceptions, and Potential Demand towards Caesarean Section [Internet]. [cited 2022 Oct 14]. Available from:

December 2023; 10(12) ISSN: ISSN: 2349-5340 Impact Factor: 4.054

 $https://www.researchgate.net/publication/292815921_Women's_Knowledge_Perceptions_and_Potential_Demand_towards_Caesarean_Section$

12. Desai G, Anand A, Modi D, Shah S, Shah K, Shah A, et al. Rates, indications, and outcomes of caesarean section deliveries: A comparison of tribal and non-tribal women in Gujarat, India. PloS One. 2017;12(12):e0189260.