

Exploring Determinants of Caesarean Section Preference Among Pregnant Women at Tamale Teaching Hospital

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ABSTRACT

Background: Caesarean Section (CS) is beneficial when the baby must be born earlier than the anticipated date of delivery and it is critical to save lives in situations where vaginal deliveries pose risks to neonates or both neonates and mothers, so for potential mothers and their partners to choose a birth technique. This study's primary goal was to explore determinants of caesarean section preference among pregnant women in Tamale Teaching Hospital in the Northern region of Ghana. **Methods:** A quantitative descriptive cross-sectional design was employed using 203 prenatal and postnatal women, including pregnant women above the age of 15 years who were seen at ANC in Tamale Teaching Hospital. A well-structured questionnaire was utilized to gather data, the data was analysed using SPSS and displayed using tables and charts. **Results:** The results also revealed that, a substantial proportion of respondents expressed negative views regarding CS for instance, 18.2% indicated agreement with the statement that "CS is an abomination" and 21.6% also agreed with the statement that women who delivered by CS have a tag of not being a real woman. These findings suggest that a significant portion of the surveyed women hold unfavorable perceptions of CS, highlighting potential misconceptions with this medical procedure. **Conclusion:** The results indicated that a majority of pregnant women hold diverse attitudes about caesarean section, encompassing feelings of worry and anxiety as well as feelings of relief and acceptance. Perceptions are substantially influenced by factors such as past birth experiences, cultural beliefs, and information sources.

KEY WORDS: Caesarean Section, Determinants, Antenatal care, Tamale Teaching Hospital, Postnatal, Prenatal.

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Introduction

The decision of how to give birth is still a hot topic in the field of maternal healthcare. Expectant mothers' views, convictions, and concerns regarding the surgical method of birthing are critical for their own health as well as having a significant influence on the wider field of obstetric care.^[1] study conducted in Edo state, utilizing descriptive statistics, examined how pregnant women perceived CS. The findings showed that a significant 79% of

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participants were apprehensive about choosing CS mostly due to concerns about potential mortality, while 82% leaned toward vaginal delivery based on family wishes, and 60% mentioned expense as a reason not to choose CS. Furthermore, the research revealed that individuals who had experienced CS had a more favorable perception of the procedure compared to those who had not undergone it. In line with this viewpoint, a cross-sectional study conducted in South East Nigeria by^[2] involving 344 women giving birth at the Federal Teaching Hospital in Abakaliki, yielded noteworthy findings, all participants were aware of CS as a surgical method for childbirth. This study highlights the prevalent aversion to CS among a majority of participants due to socio-cultural factors lacking robust evidence-based support. It delves into the perceptions and socio-cultural barriers affecting the acceptance of CS in a tertiary hospital setting in Abakaliki.

The prevalence of Caesarean Section (CS) is increasing in industrialized countries due to a higher acceptance rate over time, while developing countries struggle with lack of acceptance of CS despite its obvious danger to unborn children. The continent of Africa has the lowest prevalence rate of CS (7.3%), particularly in Western Africa (3%). In Ghana, the percentage of CS deliveries grew steadily over time, rising from 4.3% in 1999 to 6.9% in 2012. Despite the rise, the percentage still remains below the WHO goal of 15% of all births. According to a study done in Ghana, the vast majority of women preferred vaginal birth to CS. According to WHO, 298000 women worldwide who refused to undergo CS as indicated by a physician died in 2018 from pregnancy and birth-related factors. The majority of these deaths occurred in developing nations, with SSA alone accounting for 62% (17900) of all deaths worldwide as a result of different obstacles to the provision of high-quality healthcare services. Due to strong cultural values, women in the northern part of Ghana are frequently hesitant to accept CS when offered. This typically causes the surgery to be delayed, which could harm the mother and foetus.

There is a common perception that West African women dislike surgical birth and that having a CS is seen as a biological failure. Women who have had CS may feel that their idealized birth was lost, they lost a piece of their femininity, and other women will make fun of them because vaginal birth is seen as the perfect and eminence symbol of women^[3]. In contrast to women planning

for vaginal delivery, first-time mothers who seek planned CS frequently appear without clinically significant fears of childbirth^[4]. Even when there are life-threatening indications to both mother and baby, most women still prefer vaginal delivery to CS, despite the fact that the prevalence of CS has significantly grown globally. The aspiration of women to deliver vaginally, which they considered to be normal, the anxiety of abdominal surgery's pain and suffering, the concern of losing the joyful moment of a natural birth, a lack of training, and false traditional discernments may all contribute to this^[5].

Notwithstanding the fact that most women choose vaginal birth over CS because of the pain, trauma, loss of joyful memories and missed opportunities associated with it, women must understand that when all other options have failed, CS is the only method of delivery available to save lives. They must be upbeat about the process and its advantages. They need to be confident and have a positive outlook on the process and its advantages. According to a study by Walana et al., (2017)^[6] on the preference of birth delivery modes among women attending ANC and postnatal clinic revealed that among the 499 women who were interviewed, 85.0% (424) and 12.0% (60) preferred spontaneous vaginal delivery (SVD) and SVD with epidural anaesthesia respectively, while 3.0% (15) preferred delivery by Elective Caesarean Section (ECS). Majority (97.2%) of the respondents took self-decisions on their preferred mode of delivery, however, those who were influenced by healthcare workers were 1%, while 0.4% was influenced by their husbands and other family members respectively. For this reason, the research aims to establish the perception among pregnant women towards CS in Tamale Teaching Hospital.

Methods

Study design: A quantitative approach was used to conduct a cross-sectional design to evaluate the knowledge and perception among pregnant women towards CS in the Tamale Teaching Hospital. This study design is ideal because it helps researchers ask questions, report answers, interpret and describe relation between variables.

Setting: The study was conducted in Tamale Teaching Hospital in the Northern region of Ghana located in Tamale Metropolis.

Target Population : The target population included postnatal and prenatal women attending ante-natal care at TTH who are more than 15 years old.

Inclusion Criteria : Prenatal and postnatal clients attending antenatal care at TTH who are more than 15 years of age. Pregnant women who consented to take part in the study and have undergone CS in the past.

Exclusion Criteria: Pregnant women who are not willing to partake in the study. Women who delivered in TTH but do not attend postnatal care at TTH and are below the age of 15 years.

Sampling Technique and Size: A simple random sampling technique was used to select the desired number of pregnant women who participated in the study. Thus, each pregnant woman above 15 years was selected randomly with each having equal chance of being chosen. Data was collected from postnatal and prenatal women attending ANC at TTH. The estimated sample size used for the study was 203 pregnant women above the age of 15 attending ante-natal care at TTH. The sample size for this study was calculated using Cochran (1977) formula. Cochran formula was used because it allows researchers to calculate an ideal sample size given a desired level of precision, desired confidence interval and the estimated proportion of the attributed present in the population. Therefore, the sample size is calculated as:

$$n = \frac{(1.96)^2(0.157)(0.843)}{(0.05)^2}$$

$$n = 203.38 \approx 203$$

Hence the estimated sample size to be used for the study is 203 pregnant women above the age of 15 attending ante-natal care at TTH.

Data Collection Instrument: A structured questionnaire was used for this study. This method was used because it limits answers from participants that have no bearing on the study objectives. The questionnaire was structured in English Language and in 3 sections based on the study objectives. Section A assessed socio-demographic data of respondents, Section B ruled out the perception of pregnant women towards CS and Section E determined the proportion of pregnant women who have ever undergone CS.

Data Collection Procedure: Participants who qualified for the study were contacted with the researcher-developed questionnaire when the time for data collection was due. All items on the questionnaire that needed further explanation were enlightened where necessary.

Methodological Rigour: A pre-test was lead with administration of twenty (20) questionnaires among pregnant women at Tamale West Hospital to ensure a higher degree of validity and reliability of the instrument developed for the study. The responses from the pre-test were collated and used to determine the extent of validity and reliable of the developed instrument.

Ethical Consideration: For the purposes of ethics in research, an introductory letter was obtained from the School of Nursing and Midwifery, University for Development Studies and was sent to the research department of TTH in order to gain permission for data collection. Prior to administration of the questionnaires, the researchers sought consent from the ANC in-charge who accepted us and offered us a quiet room to take the data. Also, consent was sought from each participant, names of respondents were excluded from the demographic data for confidentiality purposes.

Study Findings

Socio-Demographic Information

This provides a comprehensive overview of the demographic characteristics of the 203 participants in our research study focusing on perceptions among pregnant women towards Caesarean section at Tamale Teaching Hospital in the Northern Region of Ghana. In terms of age distribution, the majority of participants fall within 31-35 age range, with 50% aged 26-30 and 49% aged 21-25. Women below 20 and those aged 41 and above represent smaller percentages, at 20% and 9%, respectively.

Religious diversity is evident among the participants, with Islam being the dominant religion, representing 72.9% of respondents, followed by Christianity at 25.6%. A small percentage, 1.5%, ascribes to traditional beliefs.

Marital status reveals that the majority of participants are married (84.7%), while 13.8% are single, and 1.5% is divorced.

Parity, or the number of previous pregnancies, varies among participants, with 28.1% having four or more previous pregnancies. The largest group is those with 2 previous pregnancies (24.1%), followed by those with 3 previous pregnancies (17.2%).

Ethnicity reflects the diverse composition of the Northern Region, with the Dagomba ethnic group being the most prevalent (68.0%), followed by Akan (16.3%), Hausa (8.4%), and smaller groups like Fulani and Frafra.

Participants' level of education ranges from primary education (6.4%) to tertiary education (32.0%), with 24.6% having no formal education. The occupational distribution shows that 36.5% are self-employed, 22.7% are employed, 21.7% are unemployed, and smaller percentages are housewives (8.9%) and students (10.3%).

The diverse demographic profile of participants used in this study provides valuable context for understanding the multifaceted factors that influence pregnant women's attitudes and perceptions regarding Caesarean sections in TTH. These demographic variables are also essential for interpreting and contextualizing the research findings.

Perceptions of Pregnant Women Towards CS:

Table 1 provides offers a comprehensive overview of respondents' attitudes and beliefs regarding Caesarean sections (CS), particularly focusing on negative perceptions and misconceptions surrounding this medical procedure. These findings shed light on the diverse range of opinions within the surveyed group.

In the first statement, "CS is an abomination," it becomes evident that a significant majority of respondents, 75.9% (154 individuals), disagree or strongly disagree with this notion. However, there is a notable minority, 18.2% (37 respondents), who express agreement or strong agreement with the belief that CS is an abomination, while 5.9% (12 respondents) remain neutral.

Moving to the second statement, "CS-delivered mothers have a tag 'not a real woman,'" the data reveals that the majority, 76.3% (155 respondents), disagree or strongly disagree with this stigmatizing belief. However, 21.6% (44 respondents) express agreement or strong agreement with this perception, indicating that a considerable portion of respondents

associates a negative label with mothers who have undergone CS. Only 2.0% (4 respondents) remain neutral.

The third statement, "CS increases maternal foetal mortality," highlights a misconception. A majority, 71.0% (144 respondents), disagree or strongly disagree with this false belief. Nevertheless, a significant minority 24.7% (50 respondents), express agreement or strong agreement with this misconception, while 4.4% (9 respondents) remain neutral.

The fourth statement, "CS is associated with complications," shows that 63.1% (128 respondents) agree or strongly agree that CS is linked to complications. On the other hand, 15.3% (31 respondents) disagree or strongly disagree, and 21.7% (44 respondents) remain neutral.

In the fifth statement, "CS is a sign of reproductive failure," the majority, 74.3% (151 respondents), disagree or strongly disagree with the belief that CS signifies reproductive failure. However, 20.7% (42 respondents) express agreement or strong agreement with this notion, while 4.9% (10 respondents) remain neutral.

The final statement, "After having CS, women can never deliver vaginally," reveals that the majority, 73.3% (169 respondents), disagree or strongly disagree with the misconception that women who have had CS can never deliver vaginally. Conversely, only 7.3% (15 respondents) express agreement or strong agreement with this misconception, while 9.4% (19 respondents) remain neutral.

Figure 1 below shows how women who have underdone CS are viewed.

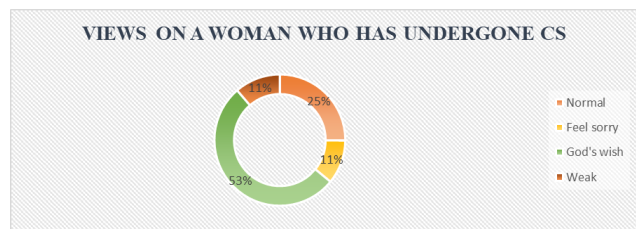


Figure 1:

Association Between Respondents' Characteristics and Knowledge on Caesarean Section:

Table 3 shows the association of each variable to the dependent variable. The multivariate regression

Table 1: Results on perceptions of pregnant women towards CS

VARIABLE	FREQ	(%)	M	SD
CS is an abomination				
SA/A	37	18.2		
SD/D	154	75.9	2.76	0.951
N	12	5.9		
CS-delivered mothers have a tag 'not a real woman'				
SA/A	44	21.6		
SD/D	155	76.3	2.63	0.888
N	4	2.0		
CS increases maternal-foetal mortality				
SA/A	50	24.7		
SD/D	144	71.0	2.77	0.969
N	9	4.4		
CS is associated with complications				
SA/A	128	63.1		
SD/D	31	15.3	3.57	1.297
N	44	21.7		
CS is a sign of reproductive failure				
SA/A	42	20.7		
SD/D	151	74.3	2.74	0.952
N	10	4.9		
After having CS, women can never deliver vaginally				
SA/A	15	7.3		
SD/D	169	73.3	3.00	0.847
N	19	9.4		
TOTAL	203	100	GMA=2.91	

analysis shows a significant relationship between the dependent variable and corresponding independent variables, $F(3,198)$ (AOR) = 0.033 $p < 0.05$. This indicates that marital status, parity and level of education play a significant role in the knowledge levels of women undertaking caesarean section ($b = 1.08$ p -value $< .001$) delivery where $P > 0.05$.

DISCUSSION

Determinants of Pregnant Women Towards CS:

The data was structured into several statements or beliefs about CS, and respondents' responses are categorized as strongly agree or agree (SA/A), strongly disagree or disagree (SD/D), and neutral (N). Each statement's mean score and standard deviation are also provided, offering valuable insights into the level of consensus and variability among the surveyed women.

One notable finding from the data is that a substantial proportion of respondents expressed negative views regarding CS. For instance, 18.2% of respondents indicated agreement with the statement that "CS is an abomination," with a mean score of 2.76. Similarly, 21.6% of participants agreed with the statement that "CS-delivered mothers have a tag 'not a real woman'," with a mean score of 2.63. These findings suggest that a significant portion of the surveyed women hold unfavorable perceptions of CS, highlighting potential misconceptions or stigma associated with this medical procedure.

On the contrary, there were statements with a higher level of agreement among respondents. For instance, a substantial 63.1% of participants expressed agreement with the statement that "CS is associated with complications," and the mean score for this statement was 3.57, indicating a relatively

Table 2: Proportion of Pregnant Women who had undergone CS and some of the reasons behind the decision

VARIABLE	FREQ	(%)
Have you ever undergone caesarean section?		
Yes	95	46.8
No	108	53.2
How many times have you undergone CS?		
Never	110	54.2
Once	58	28.6
Twice	34	16.7
Thrice	1	0.5
What was the indication for your first CS?		
Never done CS	102	50.2
Foetal distress	42	20.7
Don't know	8	3.9
Mal-presentation	13	6.4
Self-request	9	4.4
Failed induction	16	7.9
Cephalopelvic disproportion	7	3.4
Placenta abruption	3	1.5
Preterm	3	1.5
TOTAL	203	100

Table 3: Association between respondents' characteristics and knowledge on caesarean section

Variable	Beta coefficient	R ²	t-value	p-value
Marital status	0.018	0.033	0.686	.000
Parity	-0.011	0.033	-1.541	.000
Level of education	-0.018	0.033	-2.126	.035

high level of agreement. This finding suggests that a majority of respondents hold the belief that CS is linked to medical complications, signifying a common perception among the surveyed women.

Another noteworthy observation is the variability in responses. For example, while 7.3% of respondents agreed with the statement that "After having CS, women can never deliver vaginally," those who disagreed or were neutral made up a significant portion of the sample. The mean score for this statement was 3.00, indicating a relatively high level

of agreement among those who agreed, but the standard deviation of 0.847 suggests that there is still notable variability in this perception. Gauging from the grand mean averages in Table 1, it can be realized that the individual mean of this statement is far greater than the GMA which concludes that the majority of respondents do agree that women can deliver vaginally even after undergoing CS and this shows a positive perception towards the surgical procedure. The findings in this study corroborate with research findings conducted in the Obstetrics Unit at the Korle-Bu Teaching Hospital where respondents showed a positive degree of perception towards CS.

[7] Argue that sometimes doctors advise CS depending on convenience, schedule, or concern about litigation should issues arise. [8] Opined that higher demand for elective CS results from some societies' view of CS as a modern and safer delivery technique. On the other hand, because of conventional ideas about natural childbirth, vaginal birth is highly favoured in other societies. Pre-existing maternal health issues include diabetes, hypertension, or past uterine surgeries can call for CS for the safety of mother and child [9]. Complications including foetal pain, aberrant placement (such as breech presentation), or multiple pregnancies (such as twins or triplets) raise the risk of CS [10].

Factors That Influence the Perception of Women About CS:

Majority of respondents had a good perception about CS as respondents agreed that even there are complications associated with the surgical procedure (63.1%), one can still deliver vaginally after undergoing CS (73.3%). Both variable items also recorded a mean greater than the GMA. The regression analysis conducted revealed that knowledge about the procedure shaped respondent's perception about CS AOR=0.23 (CL=95%) p<0.001. This shows that knowledge significantly affects perceptions as one of the major factors. The knowledge could have been gained at school, antenatal visits where women are educated on the birthing process and medical options available. It could also have come about through the media where health talks are held regularly to sensitize the general public about medical procedures. Previous CS was also a factor identified that influences perceptions about CS. The current study findings corroborate with previous research conducted where a previous experience of CS was significantly associated with pregnant

women’s knowledge on CS. They stated that pre-operation preparations for CS played a key role in women knowledge level the procedure^[11].

Women can be deterred from entering the technology industry by society preconceptions that view CS as a field dominated by men. Media, family, and the classroom help to reinforce these preconceptions.^[12] Underline how cultural preconceptions about who belongs in CS produce a “masculine” image of the profession, therefore reducing women’s interest and self-efficacy. Even if women have aptitude for computer science, the belief that it is not a “feminine” area can discourage them from investigating it. To challenge these preconceptions, CS has to be rebranded as inclusive and diverse. Women’s impressions of the discipline might be much influenced by early exposure to CS ideas and favourable learning environments. Many women, meanwhile, say they feel lonely or unsupported in CS classrooms. Women who attended coding camps or had access to CS classes in high school were more likely, according to^[13], to view CS as a career path. Including CS into K–12 courses and designing encouraging learning settings would help to normalise women’s involvement in the sector and lower isolation levels.

One major obstacle is the belief of CS as a hostile or unwelcome surroundings for women. Typical reported problems are gender bias, unequal opportunity, and a lack of work-life balance.^[14] Explore how women’s marginalisation in tech’s workplace culture frequently results in lower retention rates and job satisfaction. Changing views and keeping women in CS professions depend on policies that support diversity, equity, and inclusion (DEI) thereby addressing workplace culture. Media and popular culture’s representation of women sometimes supports preconceptions about CS being a field dominated by males. Accurate and positive depictions of women in technology will help change impressions. Media portrayals of women in STEM raised girls’ desire in following STEM professions, according to^[15]. Media campaigns, films, and TV shows including women in CS roles can help to normalise the concept of women as technologists and inventors.

Conclusion

The perception of pregnant women varied in the study which consisted of 18.2% of respondents indicated agreement with the statement that CS is an abomination and 21.6% of participants agreed

with the statement that CS-delivered mothers have a tag ‘not a real woman’. A substantial 63.1% of participants expressed agreement with the statement that CS is associated with complications while 7.3% of respondents agreed with the statement that after having CS, women can never deliver vaginally. The results indicated that a majority of pregnant women hold diverse attitudes about caesarean section (CS), encompassing feelings of worry and anxiety as well as feelings of relief and acceptance. Perceptions are substantially influenced by factors such as past birth experiences, cultural beliefs, and information sources. Further investigation should focus on the precise variables that impact pregnant women’s attitudes towards CS, particularly among those from varied cultural backgrounds. Additionally, study should explore strategies to improve their comprehension and decision-making abilities surrounding this method of delivery.

Appendix QUESTIONNAIRES

The questionnaire proposed to be used for this research work is as follows:

There are seventeen questions categorized into three sections: A, B and C with each question having multiple options to choose from. Kindly circle an appropriate answer in each case:

SECTION A: Socio-demographic data of respondents

1. Age:

a. 15 - 20 b. 21 - 25 c. 26 - 30 d. 31- 35 e. 36 – 40 f. 41 and above

2. Religion:

a. Christianity b. Islam c. Traditionalist d. Other:

3. Marital status:

a. Married b. Single c. Divorced

4. Parity:

a. 0 b. 1 c. 2 d. 3 e. 4 f. 5 and above

5. Ethnicity:

a. Dagomba b. Hausa c. Akan c. Fulani d. Other:

6. Level of education:

a. Primary b. Junior High School c. Senior High School d. Tertiary e. None

7. Occupation:

a. Employed b. Unemployed c. Self-employed d. House wife e. Student

SECTION B: Perception of pregnant women towards CS in Tamale Teaching Hospital

Kindly tick an appropriate answer in each case.

S/NO	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
27.					
28.					
29.					
30.					
31.					
32.					

33. How do you view a woman that was delivered by CS?

a. Weak b. feels sorry c. God’s wish d. other:

SECTION C: Proportion of pregnant women who have ever undergone CS

34. Have you undergone CS before?

a. Yes b. No

35. How many times have you undergone CS?

a. Never b. Once c. Twice d. Three times e. Three times and above

36. What was the indication of your first CS? (Select the appropriate answers

- a. I don’t know / I was not told.
- b. Placental abruption.
- c. Cephalopelvic disproportion.
- d. Failed induction.
- e. Foetal distress.
- f. Mal-presentation.
- g. Preterm / small for gestational age.
- h. Self-request (please add your reason(s))

- i. Other (please specify):

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References

1. Ohaeri B, Owolabi G, Ingwu J. Skilled health attendants’ knowledge and practice of pain management during labour in health care facilities in Ibadan, Nigeria. *European Journal of Midwifery*. 2019;3(3):1–7. Available from: <https://doi.org/10.18332/ejm/99544>.
2. Lawani LO, Igboke FN, Ukaegbe CI, Anozie OB, Onu FA, Agbata TA, et al. Perception and socio-cultural barriers to the acceptance of caesarean delivery in a tertiary hospital in Abakaliki, South East Nigeria. *International Journal of Women’s Health and Reproduction Sciences*. 2019;7(2):163–168. Available from: <https://doi.org/10.15296/ijwhr.2019.27>.

3. Gandau BBN, Nuertey BD, Seneadza NAH, Akaateba D, Azusong E, Yirifere JY, et al. Maternal perceptions about caesarean section deliveries and their role in reducing perinatal and neonatal mortality in the Upper West Region of Ghana; a cross-sectional study. *BMC Pregnancy Childbirth*. 2019;19(1):1–14. Available from: <https://doi.org/10.1186/s12884-019-2536-8>.
4. Eide KT, Morken NH, Bærøe K. Maternal reasons for requesting planned cesarean section in Norway: a qualitative study. *BMC Pregnancy and Childbirth*. 2019;19(1):1–10. Available from: <https://doi.org/10.1186/s12884-019-2250-6>.
5. Orukowu U, Ene-Peter J. The Knowledge and Attitude of Pregnant Women towards Cesarean Section in the University of Port Harcourt Teaching Hospital (UPTH). *IPS Journal of Basic and Clinical Medicine*. 2022;1(3):1–12. Available from: <https://doi.org/10.54117/ijbcm.v1i3.3>.
6. Walana W, Acquah SEK, Vicar EK, et al. Preference of Birth Delivery Modes among Women Attending Antenatal and Postnatal Clinics in the Tamale Metropolis of Ghana. *Journal of Pregnancy and Child Health*. 2017;4(1):424–437. Available from: <https://psycnet.apa.org/doi/10.1037/edu0000061>.
7. D'Souza R, Arulkumaran S. To “C” or not to “C”? Caesarean delivery upon maternal request: a review of facts, figures and guidelines. *Journal of Perinatal Medicine*. 2013;41(1):5–15. Available from: <https://doi.org/10.1515/jpm-2012-0049>.
8. Betran AP, Torloni MR, Zhang JJ, Gülmezoglu AM. WHO Statement on Caesarean Section Rates. *BJOG*. 2016;123(5):667–670. Available from: <https://doi.org/10.1111/1471-0528.13526>.
9. WHO Statement on caesarean section rates. *Reproductive Health Matters*. 2015;23(45):149–150. Available from: <https://doi.org/10.1016/j.rhm.2015.07.007>.
10. Porter TF, Birsner ML. ACOG Committee Opinion No. 761 Summary: Cesarean Delivery on Maternal Request. *Obstetrics & Gynecology*. 2019;133(1):73–77. Available from: <https://doi.org/10.1097/aog.0000000000003006>.
11. KojoPrah J, Kudom A, Uwumborniyilasim O, Kwasi-Abu E. Knowledge, attitude and perceptions of pregnant women towards caesarean section among antenatal clinic attendants in Cape Coast. *Texila International Journal of Public Health*. 2017;5(1):1–8. Available from: <https://doi.org/10.21522/TIJPH.2013.05.01.Art007>.
12. Cheryan S, Master A, Meltzoff AN. Cultural stereotypes as gatekeepers: increasing girls’ interest in computer science and engineering by diversifying stereotypes. *Frontiers in Psychology*. 2015;6:1–8. Available from: <https://doi.org/10.3389/fpsyg.2015.00049>.
13. Sax LJ, Lehman KJ, Jacobs JA, et al. Anatomy of an Enduring Gender Gap: The Evolution of Women’s Participation in Computer Science. *The Journal of Higher Education*. 2017;88(2):258–293. Available from: <https://doi.org/10.1080/00221546.2016.1257306>.
14. Ashcraft C, McLain B, Eger E. Women in tech: The facts. 2016. Available from: https://www.ceoplaybook.co/wp-content/uploads/2019/11/womenintech_facts_fullreport_05132016-1.pdf.
15. Master A, Cheryan S, Meltzoff AN. Computing whether she belongs: Stereotypes undermine girls’ interest and sense of belonging in computer science. *Journal of Educational Psychology*. 2016;108(3):424–437. Available from: <https://psycnet.apa.org/doi/10.1037/edu0000061>.

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