ISSN: 2476-8642 (Print)
ISSN: 2536-6149 (Online)
www.annalsofhealthresearch.com
African Index Medicus, Crossref, African Journals Online, Scopus, C.O.P.E & Directory of Open Access Journals

Annals of HEALTH RESEARCH

(The Journal of the Medical and Dental Consultants' Association of Nigeria, OOUTH, Sagamu, Nigeria)

Volume 11 | No. 4 | Oct. - Dec., 2025

IN THIS ISSUE

PUBLISHED BY THE MEDICAL AND DENTAL CONSULTANTS ASSOCIATION OF NIGERIA, OOUTH, SAGAMU, NIGERIA.
www.mdcan.oouth.org.ng

Annals of Health Research
(The Journal of the Medical and Dental Consultants' Association of Nigeria, OOUTH, Sagamu, Nigeria)

Volume 11, Issue 4: 399-414
December 2025
doi:10.30442/ahr.1104-05-303

ORIGINAL RESEARCH

Myths and Misconceptions About Caesarean Section Among Women of Reproductive Age in Ogbomoso, Nigeria

Afolabi Olaoluwa A[1], Ogunlaja Olumuyiwa A[1], Bakare Tola Y[1], Bobo Temidayo I[1], Adeniji David O[1], Ladoye Olutade O[1], Ogunlaja Idowu P[2]

[1]Department of Obstetrics and Gynaecology, Bowen University Teaching Hospital, Ogbomoso, Oyo State
[2]Department of Obstetrics and Gynaecology, Kwara State University Teaching Hospital, Ilorin, Kwara State

Correspondence: Dr Ogunlaja Olumuyiwa A. Department of Obstetrics and Gynaecology, Bowen University Teaching Hospital, Ogbomoso. E-mail: lajamuyiwa2016@gmail.com ;
ORCID – https://orcid.ord/0000000216072362.

Citation: Afolabi OA, Ogunlaja OA, Bakare TY, Bobo TI, Adeniji DO, LAdoye OO, Ogunlaja IP. Myths and Misconceptions About Caesarean Section Among Women of Reproductive Age in Ogbomoso, Nigeria. Ann Health Res 2025;11:399-414. https://doi.org/10.30442/ahr.1104-05-303.

Abstract

Background: Caesarean section is one of the modes of birth in modern obstetrics. There is a misconception that these life-saving procedures are only performed in cases of medical emergencies or when a woman is incapable of vaginal delivery.
Objectives: To assess the myths and misconceptions concerning Caesarean section in women of reproductive age and determine the factors that influence its acceptance.
Methods: The study was a community-based, descriptive, cross-sectional study among females of reproductive age (15-49 years). The data was gathered using a semi-structured questionnaire administered by an interviewer.
Results: The mean age of the study participants was 22±3 years, with 32.3% (n = 129) young adults and 4.3% (n = 18) elderly women. Most respondents (54.0%) had satisfactory knowledge of caesarean section, while 46.0% (n = 184) had an unsatisfactory understanding of the procedure. Two hundred and two (50.5%) participants were willing to undergo caesarean section, and 5.0% (n = 20) had an average experience. About 95% (n = 382) of participants had a positive perception of caesarean section, while 4.5% of participants had a negative perception of caesarean section.
Conclusion: Despite prevalent myths, most women demonstrated satisfactory knowledge and positive perceptions of caesarean section, with half willing to accept it. This underscores the need for sustained community engagement and education.

Key words: Caesarean section, knowledge, misconception, Obstetric emergency, Surgical delivery.

Introduction

Caesarean sections are frequently used in obstetric procedures to deliver babies, and the frequency of caesarean birth has been rising over the past few decades. A caesarean section

is a surgical procedure performed to deliver a baby through an incision on the mother's abdomen and uterus. This procedure is typically performed when a vaginal delivery is not possible or safe for the mother or baby. Caesarean section can be done as an emergency or unplanned procedure, or it may be planned. While it can be life-saving for both mother and baby in certain situations, it is not without controversy. Globally, caesarean section is beginning to gain acceptance as an option of delivery. Nevertheless, many cultures have widespread myths and misconceptions about caesarean sections, which have detrimental effects on maternal and foetal health outcomes through problems of acceptance and health-seeking behaviours.[1] Despite an increase in the safety of caesarean birth brought on by advancements in anaesthesia, antibiotic use, surgical techniques, and blood transfusion, women in low-income nations still exhibit strong aversions to the procedure. In 2015, approximately 303,000 women died during and after pregnancy and childbirth. The World Health Organisation (WHO) reported that more than 500,000 women die yearly from complications of pregnancy and birth.[2]

Caesarean sections can be carried out as either elective (planned) or emergency (unplanned) operations. [3-5] Comparing elective caesarean sections to their emergency counterpart, elective caesareans are safer for the mother and the foetus, whereas emergency caesarean sections account for the bulk of caesarean deliveries in Nigeria. Various myths and misconceptions about caesarean sections stem from cultural views, religious connections, and geographic regions.[6] Some religious beliefs hold that a baby must be delivered vaginally to be accepted. [2] Caesarean section can occasionally be perceived as an indication of frailty or a lack of trust in divine ability to deliver a baby safely. [7] In some cultures, a woman's uterus is thought to be "uncooperative" or "incapable" of carrying out its normal role of contracting during labour: that is the myth of the lazy uterus. [8] Although caesarean section necessitates a lengthier hospital stay than vaginal deliveries, many women can return home safely after a few days without complications.[9]

Maternal and child health outcomes following births are of utmost importance to the family, healthcare institutions, and society at large. Therefore, myths and misconceptions should be debunked, and awareness of the procedure's safety should be promoted. The objective of the study was to assess the knowledge, myths and misconceptions, perceptions, and factors influencing the acceptance of caesarean section among women of reproductive age in the community.

Methods

The study was conducted in Ogbomoso, a cosmopolitan town in Oyo State, in the south-western part of Nigeria, with an estimated population of 628,682 according to the World Population Review 2023.

Study design

The study is a community-based, descriptive, cross-sectional study of females of reproductive age (15-49 years).

Ethical considerations

Ethical approval for the study was obtained from the ethics committee of the Bowen University Teaching Hospital, Ogbomoso, with approval number BUTH/REC-728. Permission was also obtained from the appropriate authorities of the selected locations while informed consent was obtained from the prospective participants. Confidentiality was also maintained throughout the study.

Study sample determination

The desired sample size was obtained using the formula $n = Z^2\ pq/d^2$, where n = the minimum sample size when the population is more than 10,000, Z is the standard deviation set at 1.96, P

is the prevalence of knowledge of caesarean section, placed at 59%, [10]
$q = 1 - p$, d is the degree of accuracy desired, which was set at 0.05. This gave a calculated minimal sample size of 372 but a 400 was eventually studied.

Research tool and data collection
The tool used for the collection of data was a self-administered questionnaire constructed in simple English (See Appendix). The data were obtained using a semi-structured questionnaire. The questionnaires were administered on the streets in the communities of Ogbomoso. The questionnaires had sections on respondents' socio-demographic data, knowledge, attitudes, and perceptions of caesarean section. The knowledge, attitudes, and perceptions of the myth and misconceptions among the respondents were measured using a scale of 0-10; values of 5 or higher were considered positive or satisfactory, while values below 5 were considered negative or unsatisfactory.

Data analysis
After checking the completeness of the collected data, statistical analysis was carried out using the Statistical Package for the Social Sciences (SPSS) version 22. Descriptive statistics summarized variables using frequencies, percentages, means, and standard deviations. Chi-square tests assessed associations between categorical variables, while logistic regression identified independent predictors of variables of interest. Statistical significance was set at $p < 0.05$ with 95% confidence intervals.

Results

The mean age of the 400 participants was 22±3 years. There were 314 (78.5%) Christians, while 64.5% (n = 258) had a tertiary education. Nearly 44% (175/400) were students, and 27.5% (110/400) were traders. About 88% (n = 353) of the participants belonged to the Yoruba ethnic group (Table I).

Two hundred and sixteen (54.0%) participants had satisfactory knowledge of caesarean section. Fifty-one (12%) had had a caesarean section, 5.0% had an average experience, and 53.3% (213/400) had a positive attitude towards caesarean section. Above half (n = 202) of the participants were willing to undergo a caesarean section. About 95% (382/400) demonstrated positive perceptions of caesarean section, as only 24.3% (97/400) strongly disagreed that caesarean section is dangerous, while 34.0% (136/400) disagreed that caesarean section is mainly attributed to complications of pregnancy and labour.

Table II shows the relationship between socio-demographic characteristics and the knowledge of caesarean section. There was a statistically significant relationship between knowledge of caesarean section and the following variables except for age ($\chi^2 = 10.820$, df = 5, p = 0.054), marital status ($\chi^2 = 20.966$, df = 2, p = 0.0001), religion ($\chi^2 = 12.580$, df = 3, p = 0.006), number of pregnancies ($\chi^2 = 16.046$, df = 6, p = 0.013), occupation ($\chi^2 = 39.968$, df = 8, p = 0.0001), level of education ($\chi^2 = 23.302$, df = 3, p = 0.0001), income ($\chi^2 = 13.438$, df = 3, p = 0.004), and ethnicity ($\chi^2 = 11.521$, df = 8, p = 0.01).

Tables III and IV show the relationship between socio-demographic characteristics and the attitude and perception of the study participants towards caesarean section. There was a statistically significant relationship between attitude towards caesarean section and the following variables: age ($\chi^2 = 35.085$, df = 5, p = 0.0001), marital status ($\chi^2 = 41.867$, df = 2, p = 0.0001), religion ($\chi^2 = 7.819$, df = 3, p = 0.050), number of times pregnant ($\chi^2 = 43.953$, df = 6, p = 0.0001), number of children alive ($\chi^2 = 39.123$, df = 6, p = 0.0001), occupation ($\chi^2 = 67.093$, df = 8, p = 0.0001), level of education ($\chi^2 = 40.175$, df = 3, p = 0.0001), income ($\chi^2 = 31.868$, df = 3, p = 0.0001), and ethnicity ($\chi^2 = 18.237$, df = 8, p = 0.019).

In Table V, education level was a significant predictor of knowledge on caesarean section. Married women were less likely to have a satisfactory understanding of caesarean section compared to the unmarried or single group (OR = 0.88, CI = 0.880 – 0.880). Table VI shows that education was a significant predictor of a positive attitude towards caesarean section. Married women were less likely to have a positive attitude towards caesarean section compared to the single participants (OR = 0.22, CI = 0.220 – 0.220).

Table I: Socio-demographic characteristics of the study participants

Variable	*Category*	*Frequency (%)*
Age (years)	15-19	67 (16.8)
	20-24	129 (32.3)
	25-29	70 (17.5)
	30-34	63 (15.8)
	35-39	32 (8.0)
	40-44	39 (9.8)
Marital status	Single	183 (45.8)
	Married	217 (54.3)
Religion	Christianity	314 (78.5)
	Islam	83 (20.8)
	Traditionalist	3 (0.8)
Number of pregnancies	0	204 (51.0)
	1	52 (13.0)
	2	49 (12.3)
	3	47 (11.8)
	4	34 (8.5)
	>4	14 (3.6)
Number of children alive	0	222 (55.5)
	1	46 (11.5)
	2	56 (14.0)
	3	47 (11.8)
	4	23 (5.8)
	>4	6 (1.6)
Occupation	Unemployed	17 (4.3)
	Trader	110 (27.5)
	Civil servant	63 (15.8)
	Student	175 (43.8)
	Hairdresser	8 (2.0)
	Tailor	17 (4.3)
	Caterer	1 (0.3)
	Cleaner	9 (2.3)
Level of Education	No formal education	5 (1.3)
	Primary	20 (5.0)
	Secondary	117 (29.3)
	Tertiary	258 (64.5)
Income	#18,000 and below per month	106 (26.5)
	#19,000 - #30,000 per month	79 (19.8)
	#31,000 and above per month	215 (53.8)
Ethnicity	Yoruba	353 (88.3)
	Igbo	27 (6.8)
	Hausa	7 (1.8)
	Ebira	4 (1.0)
	Igala	2 (0.5)
	Ibibio	4 (1.0)
	Ukwani	2 (0.5)
	Fulani	1 (0.3)

Table IIa: Bivariate analysis showing the relationship between socio-demographic characteristics and knowledge of caesarean section

Variable	*Knowledge of Caesarean section*		*Statistics*
	Satisfactory (%)	*Non-satisfactory (%)*	
Age in years			
15-19	36 (9.0)	31 (7.7)	
20-24	83 (20.8)	46 (11.5)	$\chi^2 = 10.820$
25-29	32 (8.0)	38 (9.5)	df = 5
30-34	27 (6.7)	36 (9.0)	p = 0.054
35-39	18 (4.5)	14 (3.5)	
40-44	20 (5.0)	19 (4.8)	
Marital Status			
Single	77 (19.3)	106 (26.5)	$\chi^2 = 20.966$
Married	139 (34.8)	77 (19.4)	df = 2 p <0.0001
Religion			
Christianity	183 (45.9)	132 (33.0)	$\chi^2 = 12.580$
Islam	32 (8.0)	50 (12.6)	df = 3
Traditionalist	0 (0.0)	2 (0.6)	p <0.006
Number of pregnancies			
0	128 (32.0)	76 (19.0)	
1	22 (5.5)	29 (7.3)	$\chi^2 = 16.046$
2	25 (6.3)	24 (6.0)	df = 6
3	18 (4.5)	29 (7.3)	p <0.013
4	15 (3.8)	19 (4.8)	
5	7 (1.8)	7 (1.7)	
Number of children alive			
0	134 (33.5)	88 (22.0)	
1	22 (5.5)	23 (5.8)	$\chi^2 = 10.429$
2	23 (5.8)	33 (8.4)	df = 6
3	22 (5.5)	25 (6.3)	p =0.94
4	11 (2.8)	12 (3)	
5	3 (0.7)	3 (0.7)	

Discussion

More than half of the respondents possessed satisfactory knowledge of caesarean births. This is higher than a study conducted in Ondo State, Nigeria, which reported that 17.2% of respondents had a good understanding of caesarean section, [10] but lower than reported in a study in Rivers State, where 62.42% of respondents had good knowledge of caesarean section.[11] This may be because most of the respondents had some form of education. Similar studies conducted in other developing countries showed varying levels of knowledge: Pakistan (63.75%), Ethiopia (32%), and Saudi Arabia (37.5%). [12-14] The present study found a significant association between the knowledge of Caesarean section and age, marital status, religion, number of pregnancies, occupation, level of education, income, and ethnicity of respondents. This study revealed that the level of education was significantly associated with knowledge of caesarean section. This finding agrees with a study conducted in Edo State, Nigeria [15] but contrasts with a survey carried out in Baghdad.[16] Women with a tertiary level of education were more knowledgeable about the Caesarean sections.

Table IIb: Bivariate analysis showing the relationship between socio-demographic characteristics and knowledge of Caesarean section

Variable	*Knowledge of Caesarean section*		*Statistics*
	Satisfactory	*Non-satisfactory*	
Occupation			
Unemployed	10 (2.5)	7 (1.7)	
Trader	38 (9.5)	72 (18)	
Civil servant	38 (9.5)	25 (6.2)	
Student	117 (29.3)	58 (14.5)	
Hairdresser	3 (0.8)	1 (0.3)	$\chi^2 = 39.968$
Tailor	5 (1.3)	12 (3)	df = 8
Caterer	3 (0.7)	2 (0.5)	p <0.0001
Cleaner	2 (0.5)	7 (1.7)	
Level of Education			
No formal education	1 (0.2)	4 (1.0)	
Primary	12 (3)	8 (2.0)	$\chi^2 = 23.302$
Secondary	43 (10.8)	74 (18.5)	df = 3
Tertiary	160 (40.0)	98 (24.5)	p <0.0001
Income			
#18,000 and below per month	43 (10.7)	63 (15.7)	$\chi^2 = 13.438$
#19,000- #30,000 per month	40 (10.0)	39 (9.8)	df = 3
#31,000 and above per month	133 (33.3)	82 (20.5)	p <0.004
Ethnicity			
Yoruba	187 (92.6)	166 (95.4)	
Igbo	15 (3.8)	11 (2.8)	
Hausa	3 (0.8)	4 (1.0)	$\chi^2 = 11.521$
Igbira	4 (1.0)	0 (0.0)	df = 8
Igala	2 (0.5)	0 (0.0)	p <0.01
Ibibio	4 (1.0)	0 (0.0)	
Ukwani	1 (0.3)	1 (0.3)	
Fulani	0 (0.0)	2 (0.5)	

This is because educated women are exposed to a wide range of information and have the opportunity to learn about caesarean sections through print and electronic media. This exposure probably boosts their level of understanding of caesarean section. Marital status was significantly associated with knowledge in the present study, similar to findings in Ghana. [16 - 18] The significant association with religion and ethnicity was similarly observed in a study conducted in Ondo State, Nigeria.[19]

The present study shows that 53.3% of respondents had a positive attitude towards caesarean section. The majority of the respondents (50.5%) reported that they would opt for a caesarean section if indicated. This is higher than a study conducted in Iran (33%) [20] and lower than studies conducted in another part of southwest Nigeria (85%) [20] and parts of Ghana. [21, 22] The study also showed that 42.8% of respondents will refuse a caesarean section if indicated. The main reasons proffered included fear of pain during and after surgery, religious disapproval and fear of death. This assertion agrees with the findings in Ghana, [23] which stated that the fear of death, complications, and other negative perceptions about caesarean section make women unwilling to opt for the procedure. Less than half (42.0%) of the respondents in the present study who would not choose a caesarean section even if indicated stated that they would accept it if either their life or the life of their baby were at risk. This is lower than findings in a study conducted in the Niger Delta, [24] which reflected that 83.2% of mothers would accept a caesarean section if it were a necessity that would protect them and their babies.

Table IIIa: Bivariate analysis showing the relationship between socio-demographic characteristics and Attitude towards Caesarean section.

Variable	*Attitude towards Caesarean section*		*Statistics*
	Positive	*Negative*	
Age in years			
15-19	34 (8.4)	33 (8.3)	
20-24	94 (23.5)	35 (8.7)	$\chi2 = 35.085$
25-29	32 (8.0)	38 (9.5)	df = 5
30-34	23 (5.7)	40 (10.0)	p = <0.0001
35-39	10 (2.5)	22 (5.5)	
40-44	20 (5.0)	19 (4.7)	
Marital Status			
Single	66 (16.5)	117 (29.3)	$\chi2 = 41.867$
Married	147 (36.7)	70 (17.5)	df = 2 p = <0.0001
Religion			
Christianity	177 (44.4)	138 (34.6)	$\chi2 = 7.819$
Islam	35 (8.8)	47 (11.8)	df = 3
Traditionalist	0 (0.0)	2 (0.5)	p = <0.0001
Number of times pregnant			
0	140 (35.0)	64 (16.0)	
1	21 (5.3)	30 (7.5)	$\chi2 = 43.953$
2	20 (5.0)	29 (7.3)	df = 6
3	16 (4.0)	31 (7.7)	p = <0.0001
4	11 (2.8)	23 (5.7)	
5	4 (1.0)	10 (2.5)	
Number of children alive			
0	148 (37.0)	74 (18.6)	
1	18 (4.5)	27 (6.7)	$\chi2 = 39.123$
2	18 (4.5)	38 (9.6)	df = 6
3	17 (4.3)	30 (7.5)	p = <0.0001
4	8 (2.0)	15 (3.8)	
5	3 (0.7)	3 (0.7)	

Table IIIb: Bivariate analysis showing the relationship between socio-demographic characteristics and Attitude towards Caesarean section.

Variable	*Attitude towards Caesarean section*		*Statistics*
	Positive	*Negative*	
Occupation			
Unemployed	5 (1.3)	12 (3.0)	
Trader	35 (8.6)	75 (18.7)	
Civil servant	37 (9.3)	26 (6.5)	
Student	129 (32.3)	50 (12.5)	
Hair dresser	0 (0.0)	4 (1.0)	$\chi2 = 67.093$
Tailor	5 (1.2)	12 (3.0)	df = 8
Caterer	0 (0.0)	1 (0.2)	p = <0.0001
Cleaner	2 (0.5)	7 (1.8)	
Level of Education			
No formal education	3 (0.7)	2 (0.5)	
Primary	7 (1.7)	13 (3.3)	$\chi2 = 40.175$
Secondary	36 (9.0)	81 (20.3)	df = 3
Tertiary	167 (41.8)	91 (22.7)	p = <0.0001
Income			
#18,000 and below per month	35 (8.7)	71 (17.8)	$\chi2 = 31.868$
#19,000 - #30,000 per month	37 (9.3)	42 (10.5)	df = 3
#31,000 and above per month	141 (35.2)	74 (18.5)	p = <0.0001

Table IVa: Bivariate analysis showing the relationship between socio-demographic characteristics and Perception of Caesarean section

Variable	*Perception of CS*		*Statistics*
	Positive	*Negative*	
Age in years			
15-19	62 (15.5)	5 (1.3)	
20-24	125 (31.5)	3 (0.7)	$\chi 2 = 3.474$
25-29	66 (16.5)	4 (1.0)	df = 5
30-34	60 (15.0)	2 (0.5)	p = 0.627
35-39	30 (7.5)	2 (0.5)	
40-44	37 (9.3)	2 (0.5)	
Marital Status			
Single	171 (42.3)	12 (3.0)	$\chi 2 = 3.348$
Married	209 (52.3)	6 (1.5)	df = 2 p = 0.187
Religion			
Christianity	303 (75.8)	9 (2.3)	$\chi 2 = 9.964$
Islam	73 (18.3)	9 (2.3)	df = 3
Traditionalist	3 (0.7)	0 (0.0)	p = <0.034
Number of times pregnant			
0	197 (49.3)	6 (1.5)	
1	48 (12.0)	2 (0.5)	$\chi 2 = 6.438$
2	47 (11.8)	2 (0.5)	df = 6
3	44 (11.0)	2 (0.5)	p = 0.376
4	31 (7.8)	3 (0.7)	
5	12 (3.0)	2 (0.5)	
Number of children alive			
0	213 (53.3)	8 (2.0)	
1	43 (10.8)	2 (0.5)	$\chi 2 = 6.976$
2	55 (13.8)	1 (0.2)	df = 6
3	42 (10.5)	4 (1.0)	p =0.323
4	21 (5.3)	2 (0.5)	
5	5 (1.3)	1 (0.2)	

Table IVb: Bivariate analysis showing the relationship between socio-demographic characteristics and Perception of Caesarean section

Variable	*Perception of cs*		*Statistics*
	Positive	*Negative*	
Occupation			
Unemployed	17 (4.3)	0 (0.0)	
Trader	99 (24.7)	11 (2.8)	
Civil servant	61 (15.3)	1(0.2)	
Student	174 (43.5)	4 (1.0)	
Hairdresser	4 (1.0)	0 (0.0)	$\chi 2 = 19.432$
Tailor	15 (3.8)	2 (0.5)	df = 8
Caterer	1 (0.2)	0 (0.0)	p = <0.006
Cleaner	9 (2.3)	0 (0.0)	
Level of Education			
No formal education	5 (1.3)	0 (0.0)	
Primary	17 (4.3)	3 (0.8)	$\chi 2 = 13.624$
Secondary	107 (26.7)	10 (2.5)	df = 3
Tertiary	251 (62.8)	5 (1.3)	p = <0.0093
Income			
#18,000 and below per month	98 (24.5)	10 (2.5)	$\chi 2 = 8.390$
#19,000- #30,000 per month	76 (19.0)	3 (0.8)	df = 3
#31,000 and above per month	208 (52.0)	5 (1.3)	p = <0.0024

Table Va: Predictors of the knowledge of Caesarean section

Variables	*Odds Ratio*	*95% Confidence Interval*		*p-value*
		Lower	*Upper*	
Age in years				
15-19	1.103	0.500	2.432	0.808
20-24	1.714	0.831	3.535	0.145
25-29	0.800	0.365	1.753	0.577
30-34	0.713	0.320	1.589	0.407
35-39	1.221	0.478	3.124	0.676
40-44	0.000	0.123	4.356	0.727
Marital Status				
Single	0.277	0.097	0.797	0.999
Married	0.880	0.880	0.880	0.017
Religion				
Christianity	2.038	0.000	0.000	0.995
Islam	1.117	0.000	0.000	0.995
Traditionalist	5.028	0.000	0.000	0.990
Occupation				
Unemployed	4.629	0.609	35.172	0.139
Trader	1.871	0.337	10.377	0.474
Civil servant	4.610	0.798	26.621	0.088
Student	4.956	0.782	31.421	0.089
Hairdresser	8.551	0.486	150.351	0.142
Tailor	14.316	0.798	256.801	0.071
Caterer	2.135	0.287	15.854	0.458
Cleaner	1.014	0.000	0.000	0.995
Level of Education				
No formal education	0.299	0.030	3.016	0.306
Primary	4.616	1.341	15.888	p <0.05
Secondary	0.758	0.415	1.384	0.367
Tertiary	0.000	0.000	0.000	p <0.05
Income				
#18,000 and below per month	0.815	0.069	9.642	0.871
#19,000- #30,000 per month	1.085	0.091	12.902	0.948
#31,000 and above per month	1.409	0.123	16.154	0.783
Ethnicity				
Yoruba	9549509.879	0.000	0.000	0.994
Igbo	4627072.406	0.000	0.000	0.994
Hausa	6232967.050	0.000	0.000	0.994
Igbira	1.335	0.000	0.000	0.989
Igala	1.369	0.000	0.000	0.990
Ibibio	1.600	0.000	0.000	0.989
Ukwani	3860540.650	0.000	0.000	0.994
Fulani	7.510	0.000	0.000	0.999

This suggests that the need to preserve their safety and that of their infant is a significant determinant of women's acceptance of caesarean birth in Nigeria. About 11.2% of respondents stated that the procedure is too expensive and this finding is consistent with the low-income levels reported by a large proportion of respondents. It aligns with studies that revealed that family economic pressure in a country with a relatively low average monthly income would make acceptance of caesarean birth difficult.[25]

However, about one-fifth (21.2%) of the respondents stated that they will not accept a caesarean section under any circumstances.

This is higher than the rate observed in Edo State, with 12.1%.[26] In contrast, studies conducted in the United Kingdom revealed that it is uncommon for women to opt against a caesarean birth when confronted with such option. [27] This is due to their increased understanding of the need for and safety of caesarean sections. In our study, some respondents felt that women who delivered via caesarean section were weak and deserved to be pitied.

Table 6a: Predictors of attitude towards Caesarean section

Variables	*Odds Ratio*	*95% Confidence Interval*		*p-value*
		Lower	*Upper*	
Age in years				
15-19	1.103	0.500	2.432	0.808
20-24	1.714	0.831	3.535	0.145
25-29	0.800	0.365	1.753	0.577
30-34	0.713	0.320	1.589	0.407
35-39	1.221	0.478	3.124	0.676
40-44	0.000	0.123	4.356	0.727
Marital Status				
Single	0.135	0.048	0.383	<0.05
Married	0.220	0.220	0.220	<0.05
Religion				
Christianity	5.228	0.000	0.000	0.994
Islam	5.792	0.000	0.000	0.994
Traditionalist	4.312	0.000	0.000	0.990
Number of times pregnant				
0	1.770	0.300	10.456	0.528
1	1.089	0.232	5.104	0.914
2	1.421	0.311	6.489	0.650
3	1.064	0.231	4.909	0.937
4	0.848	0.173	4.161	0.839
5	0.000	0.000	0.000	0.893
Number of children alive				
0	0.400	0.026	6.170	0.512
1	0.320	0.021	4.983	0.416
2	0.139	0.009	2.054	0.151
3	0.273	0.020	3.633	0.325
4	0.401	0.034	4.777	0.470
5	0.000	0.000	0.000	0.844

Perception of caesarean section showed most respondents had a satisfactory performance, with many scoring above 90% (acceptable). This may be due to the educational level of the respondents, as most of the respondents had tertiary level education. There was a significant association between their level of education, religion, occupation, income level, and perception of caesarean section. Those with tertiary education had the highest number of respondents, compared with those with lower educational qualifications. This is probably due to the level of exposure they have in terms of more advanced information.

The present study also found that a significant proportion of participants believed that a caesarean section is not an expected mode of delivery, with 76.5% either agreeing or strongly agreeing with this statement. This is consistent with a study conducted in Pakistan, which found that 74.2% of participants believed that vaginal delivery is the natural mode of delivery. In comparison, only 25.8% believed that a caesarean section is also a natural mode of delivery. [28] The majority of the participants (81.5%) agreed that the mother's health condition determines the mode of delivery.

This is consistent with the results of a study conducted in Saudi Arabia, which found that 78.5% of participants believed the mother's health condition is the primary factor in determining the mode of delivery.[29] This is also similar to a study conducted in India, which reported that 84.8% of participants believed that the mother's health condition is the primary factor in determining the mode of delivery.

Table 6b: Predictors of attitude towards Caesarean section

Variables	*Odds Ratio*	*95% Confidence Interval*		*p-value*
		Lower	*Upper*	
Occupation				
Unemployed	4.629	0.609	35.172	0.139
Trader	1.871	0.337	10.377	0.474
Civil servant	4.610	0.798	26.621	0.088
Student	4.956	0.782	31.421	0.089
Hairdresser	8.551	0.486	150.351	0.142
Tailor	14.316	0.798	256.801	0.071
Caterer	2.135	0.287	15.854	0.458
Cleaner	1.014	0.000	0.000	0.995
Level of Education				
No formal education	0.299	0.030	3.016	0.306
Primary	4.616	1.341	15.888	<0.05
Secondary	0.758	0.415	1.384	0.367
Tertiary	6.102	0.000	0.000	<0.05
Income				
#18,000 and below per month	0.815	0.069	9.642	0.871
#19,000 - #30,000 per month	1.085	0.091	12.902	0.948
#31,000 and above per month	1.409	0.123	16.154	0.783
Ethnicity				
Yoruba	9549509.879	0.000	0.000	0.994
Igbo	4627072.406	0.000	0.000	0.994
Hausa	6232967.050	0.000	0.000	0.994
Igbira	1.335	0.000	0.000	0.989
Igala	1.369	0.000	0.000	0.990
Ibibio	1.600	0.000	0.000	0.989
Ukwani	3860540.650	0.000	0.000	0.994
Fulani	7.510	0.000	0.000	0.999

Regarding perceptions of caesarean section and its potential complications, a high percentage of respondents disagreed or strongly disagreed with this statement (52.5%) indicating that they knew caesarean section is generally, a safe procedure with a low risk of complications. However, some respondents may have had personal experiences or heard stories of complications associated with caesarean section, which could have influenced their perceptions. Respondents had a positive perception of caesarean sections, a finding consistent with a study conducted in another part of Nigeria, which reported that 65.5% of respondents did not believe caesarean sections are hazardous.[30] This is a positive finding as it shows that most of the participants understood that caesarean sections are a safe procedure when performed by a skilled healthcare provider. The study also revealed that a significant number of participants were unsure about the impact of caesarean birth on sexual satisfaction and competence. This finding is consistent with a study conducted in Iran, which reported that 44.9% of the participants were unsure about the impact of caesarean section on sexual function.[31] This may be due to the lack of education and awareness about

the matter, as well as cultural taboos surrounding discussions about sexuality.

Conclusion

The knowledge, attitude, and perception of caesarean section amongst women of reproductive age in Ogbomoso were explored, and the result was unsatisfactory. The media, the greatest tool for raising awareness in this age, could go the extra mile in this regard. Hospitals and health workers should be the strongest advocates for educating people about caesarean sections, promoting their benefits and debunking associated myths and misconceptions. Raising awareness about the modes of delivery is necessary. Improvement in these areas will benefit both literates and non-literates as it will influence their relevant health-seeking behaviours. People need to understand that a caesarean birth does not translate to death and should refrain from stigmatising those affected. Improved knowledge, safety assurance, and societal views will improve awareness of Caesarean section and increasing its acceptance and uptake.

Acknowledgement: The authors wish to appreciate the Bowen University medical students who were involved in data collection during this research.
Authors' Contributions: AOA conceived and designed the study. AOA and OOA did data analysis and interpretation. AOA drafted the manuscript. OOA, BTY, BTI, ADO, LOO and OIP revised the draft for sound intellectual content. All the authors approved the final version of the manuscript.
Conflicts of Interest: None.
Funding: Self-funded.
Publication History: Submitted 14 February 2025; **Accepted** 19 May 2025.

References

1. Suwanrath C, Chunuan S, Matemanosak P, Pinjaroen S. Why do pregnant women prefer cesarean birth? A qualitative study in a tertiary care center in Southern Thailand. BMC Pregn Childbirth 2021;21:1–6. https://doi.org/10.1186/s12884-020-03525-3
2. Oladipo IA, Akinwaare MO. Trends and patterns of maternal deaths from 2015 to 2019, associated factors and pregnancy outcomes in rural Lagos, Nigeria: A cross-sectional study. Pan Afr Med J 2023;44:185. https://doi.org/10.11604/pamj.2023.44.185.37567
3. Sung S, Mikes BA, Martingano DJ, Mahdy. H. Cesarean Delivery [Internet]. Treasure Island (FL): StatPearls Publishing; 2025 Jan– [updated 2024 7 December; cited 2025 8 April]. Available from: https://www.ncbi.nlm.nih.gov/books/NBK546707/
4. Muhammad T, Srivastava S, Kumar P, Rashmi R. Prevalence and predictors of elective and emergency caesarean delivery among reproductive-aged women in Bangladesh: evidence from the Demographic and Health Survey, 2017–18. BMC Pregn Childbirth 2022;22:512. https://doi.org/10.1186/s12884-022-04833-6
5. Benton M, Salter A, Tape N, Wilkinson C, Turnbull D. Women's psychosocial outcomes following an emergency caesarean section: A systematic literature review. BMC Pregn Childbirth 2019;19:535. https://doi.org/10.1186/s12884-019-2687-7
6. Elom NA, Nwimo IO, Ilo CI, Ngwakwe PC, Ezugwu UA, Alegu DN, *et al.* Belief towards caesarean section: A community-based study of male partners in Ebonyi State, Nigeria. SAGE Open Med 2023;11:20503121221147810. https://doi.org/10.1177/20503121221147810
7. Ogunlaja IP, Babarinde FO, Ogunlaja AO, Bakare TY. Influence of beliefs of religious leaders on the acceptance of Caesarean section as a delivery option among women in Ogbomoso, South West Nigeria. Sch Int J Obstet Gynecol 2024;7:49–59.
8. McEvoy A, Sabir S. Physiology, Pregnancy Contractions [Internet]. Treasure Island (FL): StatPearls Publishing; 2024 Jan– [updated 2022 19 September; cited 2025 8 April]. Available from:

https://www.ncbi.nlm.nih.gov/books/NBK532927/

9. Sung S, Mikes BA, Martingano DJ. Cesarean Delivery [Internet]. Treasure Island (FL): StatPearls Publishing; 2025 Jan– [updated 2024 7 December; cited 2025 8 April]. Available from: https://www.ncbi.nlm.nih.gov/books/NBK546707/
10. Ashimi A, Amole T, Aliyu L. Knowledge and attitude of pregnant women to caesarean section in a semi-urban community in northwest Nigeria. J West Afr Coll Surg 2013;3:46–61.
11. Aziato L, Acheampong AK, Umoar KL. Labour pain experiences and perceptions: A qualitative study among postpartum women in Ghana. BMC Pregn Childbirth 2017;17:73. https://doi.org/10.1186/s12884-017-1248-1
12. Hameed W, Avan BI, Mir AM. Women's perceptions about caesarean section: Exploratory study from Pakistan. J Pak Med Assoc. 2018;68(8):1214–1218.
13. Zewudu L, Keshaun F, Silesh M, Tefera M, Bogale EK, Demis A, *et al.* Preference of cesarean delivery and its associated factors among pregnant women attending antenatal care at public health facilities of Debrebrehan City, Ethiopia: Cross-sectional study. PLoS ONE 2024;19:e0296990. https://doi.org/10.1371/journal.pone.0296990
14. Albishi AM, Alshaikh RA, Alsulami AA, Bardisi WM, Alqurashi DA. Practice in child restraint system use among attendees of well-baby clinics in Jeddah, Saudi Arabia. J Fam Med Prim Care 2022;11:512–519. https://doi.org/10.4103/jfmpc.jfmpc_1273_21
15. Amiegheme F, Adeyemo F, Onasoga O. Perception of pregnant women towards caesarean section in Nigeria: A case study of a missionary hospital in Edo, Nigeria. Int J Community Med Public Health 2016;3:2040–2044. https://doi.org/10.18203/2394-6040.ijcmph20162542
16. Boah M, Mahama AB, Ayamga EA. They receive antenatal care in health facilities, yet do not deliver there: Predictors of health facility delivery by women in rural Ghana. BMC Pregn Childbirth 2018;18:125. https://doi.org/10.1186/s12884-018-1749-6
17. Afaya RA, Bam V, Apiribu F, Afaya A. Knowledge of pregnant women on caesarean section and their preferred mode of delivery in Northern Ghana. NUMID Horizon Int J Nurs Midwifery 2018;2:71.
18. Gyaase D, Enuameh YA, Adjei BN, Gyaase S, Nakua EK, Kabanunye MM, *et al.* Prevalence and determinants of caesarean section deliveries in the Kintampo Districts of Ghana. BMC Pregn Childbirth 2023;23:286. https://doi.org/10.1186/s12884-023-05622-5
19. Adigun MO, Kio JO. Factors influencing acceptance of caesarean section among women of reproductive age in comprehensive health centres in Akure South of Ondo State. J Nurs Midwifery Stud 2020;2:68–84.
20. Awoyinka BS, Ayinde OA, Omigbodun AO. Acceptability of caesarean delivery to antenatal patients in a tertiary health facility in southwest Nigeria. J Obstet Gynaecol. 2006;26(3):208–10.
21. Aali BS, Motamedi B. Women's knowledge and attitude towards modes of delivery in Kerman. Islamic Republic of Iran. East Mediterr Health J 2005;11:663-672.
22. Prah J. Knowledge, attitude and perceptions of pregnant women towards caesarean section among antenatal clinic attendants in Cape Coast, Ghana. Trop J Public Health 2017;5:Art. 007. https://doi.org/10.21522/TIJPH.2013.05.01.Art007
23. Naa Gandau BB, Nuertey BD, Seneadza NA, 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 Pregn Childbirth 2019;19:1–4. https://doi.org/10.1186/s12884-019-2536-8
24. Abah M, Umoh A. Perception and attitude towards caesarean section - The views are changing: Findings among antenatal attendees in a Niger Delta tertiary facility. Caliphate Med J 2015;3:239–244.

https://doi.org/10.47837/CMJ.19770126.201531167

25. Binyaruka P, Mori A. Economic consequences of caesarean section delivery: Evidence from a household survey in Tanzania. BMC Health Serv Res 2021;21:10. https://doi.org/10.1186/s12913-021-07386-0
26. Aziken M, Omo-Aghoja L, Okonofua F. Perceptions and attitudes of pregnant women towards caesarean section in urban Nigeria. Acta Obstet Gynecol Scand 2007;86:42–47.
27. Betran AP, Temmerman M, Kingdon C, Mohiddin A, Opiyo N, Torloni MR, *et al.* Interventions to reduce unnecessary caesarean sections in healthy women and babies. Lancet. 2018;392:1358–1368. https://doi.org/10.1016/S0140-6736(18)31927-5
28. Sharma S, Dhakal I. Cesarean vs. vaginal delivery: An institutional experience. J Nepal Med Assoc 2018;56:535–539.
29. Welay FT, Gebresilassie B, Asefa GG, Mengesha MB. Delivery mode preference and associated factors among pregnant mothers in Harar Regional State, Eastern Ethiopia: A cross-sectional study. Biomed Res Int 2021;2021:1751578. https://doi.org/10.1155/2021/1751578
30. Adewuyi EO, Auta A, Khanal V, Tapshak SJ, Zhao Y. Cesarean delivery in Nigeria: Prevalence and associated factors—A population-based cross-sectional study. BMJ Open. 2019;9:e027273. https://doi.org/10.1136/bmjopen-2018-027273
31. Shirzad M, Shakibazadeh E, Hajimiri K, Betran AP, Jahanfar S, Bohren MA, *et al.* Prevalence of and reasons for women's, family members', and health professionals' preferences for cesarean section in Iran: a mixed-methods systematic review. Reprod Health 2021;18:1–30. https://doi.org/10.1186/s12978-020-01047-x

APPENDIX

QUESTIONNAIRE

Myths and Misconceptions About Caesarean Section Among Women of Reproductive Age in Ogbomoso, Nigeria

Instructions:
This questionnaire is anonymous. There are no right or wrong answers. Please respond honestly.
Tick (✓) or circle the option that best represents your view.

SECTION A: SOCIO-DEMOGRAPHIC CHARACTERISTICS

1. Age (years):
   ☐ 15–19 ☐ 20–24 ☐ 25–29 ☐ 30–34 ☐ 35–39 ☐ 40–44 ☐ 45–49
2. Marital status:
   ☐ Single ☐ Married ☐ Divorced ☐ Widowed
3. Religion:
   ☐ Christianity ☐ Islam ☐ Traditional ☐ Others (specify): _____
4. Ethnicity:
   ☐ Yoruba ☐ Igbo ☐ Hausa ☐ Others (specify): _____
5. Highest level of education attained:
   ☐ No formal education ☐ Primary ☐ Secondary ☐ Tertiary
6. Occupation:
   ☐ Student ☐ Trader ☐ Civil servant ☐ Unemployed ☐ Artisan ☐ Others: _____
7. Average monthly income:
   ☐ ≤ ₦18,000 ☐ ₦19,000–₦30,000 ☐ ≥ ₦31,000
8. Number of times pregnant:
   ☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ ≥5
9. Number of living children:
   ☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ ≥5

SECTION B: KNOWLEDGE OF CAESAREAN SECTION

(Tick one option for each statement)

Statement True/ False/ Don't know

1. Caesarean section is a surgical method of childbirth | ☐ | ☐ | ☐ |
2. Caesarean section is only done when vaginal delivery fails | ☐ | ☐ | ☐ |
3. Caesarean section can be planned or done as an emergency | ☐ | ☐ | ☐ |
4. Caesarean section can save the life of the mother and baby | ☐ | ☐ | ☐ |
5. A woman can have more than one caesarean delivery | ☐ | ☐ | ☐ |
6. Caesarean section always results in infertility | ☐ | ☐ | ☐ |

SECTION C: MYTHS AND MISCONCEPTIONS

(Indicate your level of agreement)

Statement: Strongly Agree/ Agree/ Disagree/ Strongly Disagree

1. Women who deliver by caesarean section are weak | ☐ | ☐ | ☐ | ☐ |
2. Caesarean section means failure of womanhood | ☐ | ☐ | ☐ | ☐ |
3. Caesarean section is against God's will | ☐ | ☐ | ☐ | ☐ |
4. A "lazy womb" causes caesarean section | ☐ | ☐ | ☐ | ☐ |
5. Caesarean section leads to frequent death | ☐ | ☐ | ☐ | ☐ |

SECTION D: ATTITUDE TOWARDS CAESAREAN SECTION

1. If medically indicated, I will accept a caesarean section
   ☐ Strongly agree ☐ Agree ☐ Disagree ☐ Strongly disagree
2. I will refuse caesarean section even if my life is at risk
   ☐ Strongly agree ☐ Agree ☐ Disagree ☐ Strongly disagree
3. I will accept caesarean section if my baby's life is at risk
   ☐ Yes ☐ No ☐ Not sure
4. I would encourage another woman to accept caesarean section if needed
   ☐ Yes ☐ No ☐ Not sure

SECTION E: PERCEPTION OF CAESAREAN SECTION

Statement: Strongly Agree/ Agree/ Disagree/ Strongly Disagree

1. Caesarean section is a safe procedure | ☐ | ☐ | ☐ | ☐ |
2. The doctor's advice should determine the mode of delivery | ☐ | ☐ | ☐ | ☐ |
3. Vaginal delivery is the only natural way to give birth | ☐ | ☐ | ☐ | ☐ |
4. Caesarean section negatively affects sexual life | ☐ | ☐ | ☐ | ☐ |
5. Caesarean section is too expensive for most families | ☐ | ☐ | ☐ | ☐ |

SECTION F: ACCEPTANCE AND EXPERIENCE

1. Have you ever had a caesarean section?
   ☐ Yes ☐ No
2. If yes, how was your experience?
   ☐ Good ☐ Average ☐ Poor
3. Will you accept a caesarean section if medically indicated in the future?
   ☐ Yes ☐ No ☐ Not sure
4. What is your main reason for refusing caesarean section (if applicable)?
   ☐ Fear of death ☐ Fear of pain ☐ Religious belief ☐ Cost ☐ Stigma ☐ Others: ____

Thank you for your participation.