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Perceptions and Beliefs Regarding Caesarean Section among Pregnant Women receiving Antenatal Care at Ishaka Adventist Hospital

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ABSTRACT

This study explores the knowledge, attitudes, and beliefs regarding Caesarean sections among pregnant women receiving antenatal care at Ishaka Adventist Hospital in Bushenyi, Southwestern Uganda. The research aims to investigate the influence of these factors on the overall rate of Caesarean deliveries. A cross-sectional study was conducted between March and April 2021, involving 239 pregnant mothers attending antenatal care at Ishaka Adventist Hospital. Data was collected using semi-structured questionnaires and analyzed with SPSS version 20, presenting results in tables, frequencies, and percentages. The study revealed that the majority of the pregnant mothers were aged 18-30 years (57.2%), of Banyankole ethnicity (47.7%), Seventh-day Adventists (32.6%), engaged in peasant farming (42.3%), and had a primary level of education (38.5%). All participants had heard of Caesarean sections and could explain its meaning. Indications for Caesarean sections mentioned included pelvic inadequacy (56.1%), fetal distress (29.3%), macrosomia (7.9%), and previous Caesarean section scar (4.6%). Known complications of Caesarean sections included wound healing issues (66.5%), the risk of future Caesarean sections (11.7%), postpartum bleeding (4.6%), anesthesia-related concerns (1.7%), and other complications (4.2%). The majority (89.1%) exhibited a positive attitude towards Caesarean sections, although only 18.8% expressed a preference for this mode of delivery. Among those who preferred Caesarean sections, most were aware of potential complications (41/45), held a positive attitude (38/45), believed that health professionals recommend Caesarean sections for medical reasons (42/45), and indicated that their choice is not influenced by family (44/45). In conclusion, the study found that pregnant women had a solid understanding of Caesarean sections, with pelvic inadequacy and wound healing concerns being commonly recognized indications and complications. Additionally, they believed that medical professionals only recommend Caesarean sections when medically necessary and that their choice of delivery method is independent of family influence.

Keywords: knowledge, attitude, caesarian section, pregnant women, antenatal care.

INTRODUCTION

Caesarean section, also known as C-section, is a surgical procedure where one or more incisions are made through a mother's abdomen and uterus to deliver one or more babies [1-6]. It is often performed when a vaginal delivery would put the baby's or mother's life or health at risk. Caesarean section can effectively prevent maternal and newborn mortality when used for medically indicated reasons [7-13].

According to Main and colleagues in 2012, about 23 million C-sections were done globally [14-18]. Furthermore a steady increase in the global Caesarean section rates have been recorded over the last few decades however this trend has not been accompanied with significant maternal or perinatal benefits [7] yet available evidence shows that beyond a certain threshold, increasing caesarean section rates may be associated with increased maternal and perinatal morbidity including short- and long-term risks that can extend many years beyond the current delivery; and affect the health of the woman, the child and future pregnancies [19-28].

The factors contributing to the rise in caesarean section rates are complex, and identifying interventions to address them is challenging [29-33]. Factors associated with caesarean births include changes in the characteristics of the population such as increase in the prevalence of obesity and of multiple pregnancies, and increase

in the proportion of nulliparous women or of older women [7, 34-43]. These changes are unlikely, however, to explain the large increases and wide variations in caesarean section rates across countries [44-48].

This prevails when over 289,000 women worldwide still die each year as a result of pregnancy and childbirth regardless of the fact that there has been a significant reduction in the Maternal Mortality ratio over the last 3 decades. About 10 percent of mothers suffer a maternal complication during pregnancy or in the intra-partum period, and up to 40 percent may have morbidities or disabilities post-birth that are attributable to the pregnancy or birth [49-52].

Uganda national literature reveals that Cesarean delivery rates increased both at facility and population levels with a 9.9% overall CS facility rate, increasing from 8.5% in 2012 to 11% in 2016 and 4.7% overall population-based CS rate increasing from 3.2 to 5.9% over the same period [53]. Health Centre IV level facilities have recorded the largest annual increase in CS rate between 2012 and 2016. Among all 112 districts, majority (72%) had a population CS rate of 1% - 5%. The national facility-based CS rate is projected to increase by 36% in 2021 while the population-based CS rate is estimated to have doubled from the baseline in 2016 [53].

METHODOLOGY

Study Design

The study employed a cross-sectional descriptive qualitative and quantitative facility-based study design

Study Area

The study was conducted at Ishaka Adventist Hospital. Ishaka Adventist Hospital has 120 beds and offer healthcare services to the districts of Bushenyi, Buhweju, Rubirizi, Kasese and Ntungamo.

Study Population

The study population involved pregnant mothers attending ANC services at the ANC clinic at Ishaka Adventist Hospital

Sample Size Determination

Using the modified Kirsch and Leslie formula (2009);

$n = (Z\alpha + Z\beta)2\ P(1-P)/D2$

Where;

n= desired sample size.

Zα= confidence level at 95% (standard value of 1.96);

Zβ = at 80% power of confidence (standard value of 0.84)

D= 5% degree of precision, i.e. 0.05.

P = Proportion of mothers with good knowledge and/or attitude towards caesarean section as a mode of delivery

Using a 8.3% proportion of women with a good attitude towards caesarean section operation as per a study done in Ngora District Eastern Uganda, 0.083 (Waniala et al., 2020)

$n = (1.96 + 0.84) \times 0.083(0.917) \div (0.05)$

N = 239 Pregnant mothers

Thus,

239 pregnant mothers were interviewed.

Sampling Procedure

The study used simple random sampling of mothers who would have come for Antenatal care services at the hospital.

Inclusion Criteria

All pregnant mothers irrespective of gestation age at the Antenatal care clinic who consented to participate were included. 3.4.3 Exclusion Criteria

Pregnant mothers had severe complications (medically ill) and those who declined consent were excluded

Data Collection Procedure

After meeting the inclusion criterion, mothers were interviewed one at ago and with help from the research assistants. The questionnaires were checked for completeness and consistency and secured storage was later ensured.

Data Analysis

The quantitative data collected was statistically analyzed and documented using SPSS v.20. The analyzed data was then presented in form of tables and graphs, which was a basis for discussion, conclusion among others.

Ethical Considerations

Clearance was obtained from institutional ethical review committee Board of KIU – Western Campus. Also, permission was sought from medical superintendent of Ishaka Adventist Hospital and the In-charge ANC clinic was also consulted for permission before data collection. In the process of data collection, consent was obtained from the participants as enrolled into the study, and privacy was ensured using private codes known only by the researcher.

RESULTS

A sample 239 pregnant mothers were accessed. Considering age as a socio-demographic, majority were aged between 18-30 years (57.2%), followed by those aged greater than 30 years (38.9%) and then those below 18 years (3.8%). Majority of the mothers were Banyankole (114), followed by Bakonjo (76), Bakiga (35) and then those of other tribes (14). About their religion, 32.6% were SDA, 24.7% were Protestants, 22.6% were Catholics, 15.9% were of other religious denominations whereas 4.2% were Moslems. Many of the sampled mothers were peasant farmers (42.3%), followed by house wives (29.3%), then those who are self-employed (18.0%) and lastly those who had formal employment (10.5%). Regarding their highest education level, majority had attained primary education (92) followed by those with secondary (77), tertiary (42) and then those who had normal formal education (28) as shown in table 1 below.

Table 1: showing pregnant mothers socio-demographic features

VARIABLE		FREQUENCY	PERCENTAGE
Age of the mother			
	Below 18 years	9	3.8
	18-30	137	57.3
	Greater than 30 years	93	38.9
Tribe			
	Munyankole	114	47.7
	Mukonjo	76	31.8
	Mukiga	35	14.6
	Others	14	5.9
Religion			
	Protestant	59	24.7
	Catholic	54	22.6
	SDA	78	32.6
	Moslem	10	4.2
	Others	38	15.9
Occupation			
	Self employed	43	18.0
	Formal employment	25	10.5
Peasant farmer		101	42.3
House wife		70	29.3
Level of Education			
None		28	11.7
Primary		92	38.6
Secondary		77	32.1
Tertiary		42	17.6

From table 2 below, all pregnant mothers had ever heard about cesarean section and all of them could clearly explain what cesarean section means. About the indications for C/S, majority knew Pelvic Inadequacy (56.1%), followed by those who knew Fetal Distress (29.3%), those who knew big baby (7.9%), those who knew having a previous cesarean scar (4.6%) and then those who could mention other indications (2.1%). Majority of the pregnant mothers knew that C/S can result into complications (212), while 7 and 20 mentioned that C/S has no complications and were not sure respectively. Among those who agreed that C/S can result into complications, most of them stated Inability of the wound to heal (66.5%), followed by Risk of next C/S (11.7%), Bleeding (4.6%), others

complications (4.2%) whereas 4 (1.7%) mentioned pregnant mothers can die from anesthesia.

Table 2: showing mothers' knowledge toward C/S as a mode of delivery

Ever had about C/S		
Yes	239	100.0
No	00	0.0
Could explain meaning of C/S		
Yes	239	100.0
No	00	0.0
Which indication for C/S do you know?		
Fetal Distress	70	29.3
Pelvic Inadequacy	134	56.1
Having a previous C/S	11	4.6
Big baby	19	7.9
Others	5	2.1
Can C/s result into complication?		
Yes	212	88.7
No	7	2.9
Not sure	20	8.4
If yes, which complications do you know?		
Bleeding (PPH)	11	4.6
Death due to anesthesia	4	1.7
Risk of next C/S	28	11.7
Inability of the wound to heal	159	66.5
Others	10	4.2
N/A	27	11.3

Source: Patients data

Out of the 239 pregnant mothers, majority, 213 (89.1%) had a positive attitude towards Cesarean delivery while only 26 (10.9%) had a negative attitude as seen in figure 2 below. Concerning the mode of delivery, they wish to deliver, majority mentioned vaginal birth, 194 (81.2%) where 45 (18.8%) would wish to deliver by cesarean section as illustrated in figure 3 below.

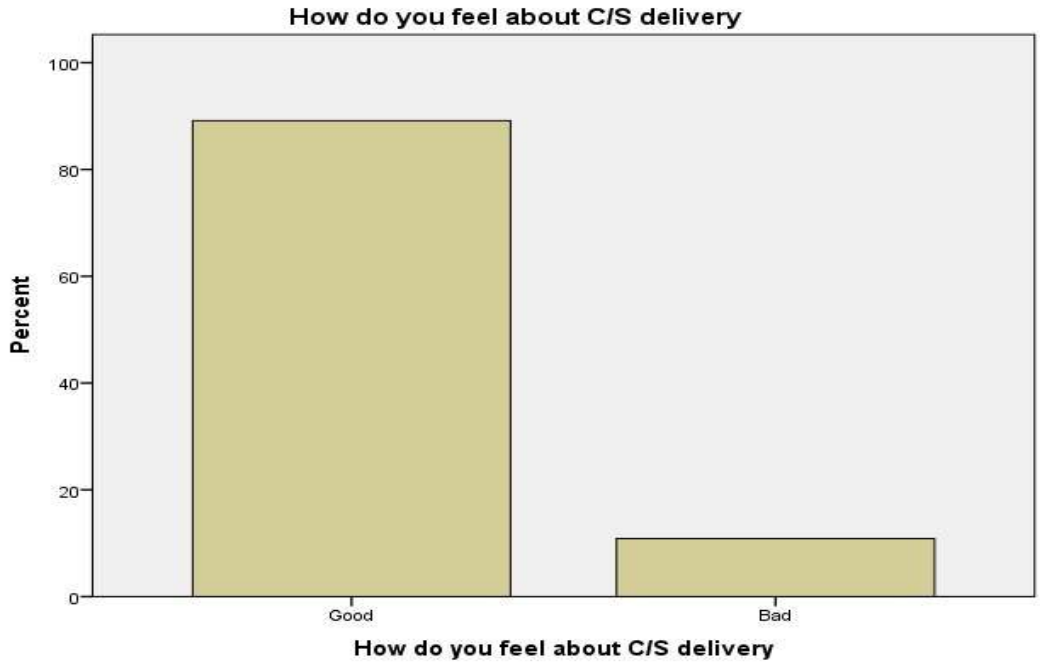

Figure 1: showing pregnant mothers' attitude towards C/S as a mode of delivery

Figure 2: showing pregnancy mothers' wish for mode of delivery

From table 3 below, many mothers believe pregnant mothers deliver by C/S just because the doctors at the hospital recommend it (77.0%), 14.2% that because

such mothers unable to push, 4.2% that because it is their choice, 2.9% that because C/S is safe for the baby and mother while 1.3% and 0.4% that because it is a painless procedure and for other reasons respectively. Majority (209/239) of the pregnant mothers disagreed to the statement that some health workers/facilities indicate C/S for financial reasons but 30 (12.6%) agreed to it. Almost all (97.9%) pregnant mothers disagreed to the statement that their husband/family member can influence their mode of delivery.

Table 3: showing pregnant mothers beliefs towards C/S as a mode of delivery

VARIABLE	FREQUENCY	PERCENTAGE
Why do you think mothers are delivered by C/S?		
Unable to push	34	14.2
It is painless	3	1.3
Sometimes it's their choice	10	4.2
C/S is safe for baby and mother	7	2.9
Doctors recommend it	184	77.0
Other reasons	1	0.4
Some health workers/facilities indicate C/S for financial reasons		
I agree	30	12.6
I disagree	209	87.4
Can husband/family influence you to deliver by C/S?		
Yes	5	2.1
No	234	97.9

Source: Patients' Data

Among the pregnant mothers who would wish to deliver by C/S, majority knew that C/S can result in complications (41/45) while the remaining 4 (8.9%) were not sure if C/S can result in complications. Similarly, within those who would wish to deliver by C/S, majority has a positive attitude towards C/S (38/45) and 7/45 had a negative attitude but would anyway wish to deliver by C/S. Furthermore, among the pregnant mothers who would wish to deliver by C/S, majority (42/45) disagreed to the statement that health workers/facilities indicate C/S for financial reasons. In the same trend among the pregnant mothers who would wish to deliver by C/S, many (44/45) disagreed to the statement that their husband/family can influence her to deliver by C/S as illustrated in table 4 below.

Table 4: showing mothers' knowledge, attitude and beliefs against potential C/S as a mode of delivery

VARIABLE	Potential Mode of Delivery		
	C/S, n (%)	Vaginal Birth, n (%)	Total, N (%)
Ever heard about C/S			
Yes	(100.0)	(100.0)	(100.0)
No	(0.0)	(0.0)	(0.0)
Could explain the meaning of C/S			
Yes	(100.0)	(100.0)	(100.0)
No	(0.0)	(0.0)	(0.0)
Can C/S result in complications			
Yes	(91.1)	(88.1)	(88.7)
No	(0.0)	(3.6)	(2.9)
Not sure	(8.9)	(8.2)	(8.4)
How do you feel about C/S?			
Good	(84.4)	(90.2)	(89.1)
Bad	(15.6)	(9.8)	(10.9)
Health workers/facilities indicate C/S for financial reasons			
agree	(6.7)	(13.9)	(12.6)
disagree	(93.3)	(86.1)	(87.4)
Can husband/family influence you to deliver by C/S?			
Yes	(2.2)	(2.1)	(2.1)
No	(97.8)	(97.9)	(97.9)

DISCUSSION

This study has revealed that all pregnant mothers had ever heard about cesarean section and could clearly explain the meaning of cesarean section. More than half (56.1%) of the mothers' new pelvic inadequacy as an indication for Cesarean section, with other mentioned indications included fetal distress (29.3%), big baby (7.9%) and having a previous cesarean scar (4.6%). 88.7% knew that Cesarean section can result in complications while 8.4% and 2.9% were not sure or said no respectively. Among the complications, majority knew inability of the wound to heal (66.5%) with risk of next cesarean section (11.7%) and bleeding (4.6%) as other known complications.

This improvement in understanding of C/S could partly be attributed to the increasing rates of this mode of delivery whereby mothers are getting exposed and informed about the practice even before they think of or get pregnant. It is however equally important more information concerning the various indications and/or possible complications are thoroughly taught to these mothers during their ANC a way to also ensure an above average knowledge as far as indication and complications of cesarean section are concerned [53].

This current study shows that majority (89.1%) of the pregnant mothers have a positive attitude towards Cesarean Section however only 18.8% would wish to deliver by cesarean section. A big proportion of the pregnant mothers think that pregnant mothers are delivered by cesarean section because doctors recommend it (77.0%) with other commonly mentioned reason being inability mothers to push (14.2%). Majority (87.4%) disagreed that health workers indicate cesarean section for financial reasons as were those whose decision to deliver by cesarean section was not influenced by husband/family (97.9%). These findings are divergent as compared to a study at Jos University Hospital Nigeria, where Caesarean section

was considered to be dangerous by 55.1% with the commonest reason that the mother could die (47.37%). Other reasons for aversion to caesarean section were fear of operation (48.98%), lack of finance (30.61%) and fear of being stigmatized (26.53%) [53]. At a University Teaching Hospital in Nigeria, majority had both negative perception (65.44%) and negative attitude (58.05%) towards caesarean section delivery however statistical analysis showed that there was a significant difference between perception and attitude towards caesarean section delivery [53].

But similar as related to findings from Cape Coast Ghana where although 40% perceived that most women undergoing CS may die, 95.7% were willing to undergo the operation when indicated however 4.3% of the pregnant women would refuse the surgery even if indicated [54]. In rural Bangladesh, where women had a strong preference for normal vaginal birth, they were willing to accept the attending health care provider's decision for caesarean birth regardless of the fact that some women had the misconception that episiotomy itself is a 'small caesarean [55]. In Western Ghana, majority of women preferred spontaneous vaginal delivery (87.4%) to caesarean section however many of them (73%) indicated their willingness to have a caesarean section if necessary. The main reason for not wanting a CS was the long recovery time (51.8%), did not know or feel that CS can promote child survival (45.1%) and believed that CS can have adverse effects on child survival (21.6%) [56].

This study has also discovered that out of those who would wish to deliver by cesarean section (45/239), majorities knew that cesarean section can result in complications (91.1%), had positive attitude toward cesarean section (84.4%), believed that health workers do not indicate cesarean section for financial reasons (93.3%) and affirmed that their choice to deliver by cesarean section is not influenced by husband/family (97.8%).

CONCLUSION

All pregnant mothers know what cesarean section means and majority have a positive attitude towards cesarean section. The most commonly known indication for cesarean section is pelvic inadequacy while commonly known complication is inability of wound to heal. Majority of the pregnant mothers believe that doctors do not indicate cesarean section for financial reasons; and their decision to deliver by cesarean section is not influenced by husband or family.

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