



## **Knowledge, Attitude and Willingness to Accept Cesarean Section Among Pregnant Women Attending Antenatal Care at Banadir Hospital Mogadishu, Somalia**

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*Received, 7 September 2022*

*Accepted, 8 October 2022*

*Available Online, 13 October 2022*

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### **ABSTRACT**

**Background:** Cesarean section (CS) is the operation for delivering a baby through incisions made in the mother's abdominal wall and uterus. It is one of the most performed major surgeries in obstetric practice intended to save the lives of the mother and child, significantly reducing the maternal and prenatal mortality. **Objective:** The objective of this study was to investigate Somali pregnant women's knowledge, attitude, and willingness to accept cesarean section in Banadir hospital, Mogadishu, Somalia. **Methodology:** This is a descriptive cross-sectional study conducted at Mogadishu's Banadir Hospital. The study was conducted over a period of 1 month (3rd April to 5th May 2021). The systematic random sampling technique was used to select respondents, with a sample interval of two. The inclusion criteria were met by any pregnant woman who was mentally and physically capable of being interviewed during the time frame specified, while those refusing to participate in the study, non-pregnant women, women with mental illness and severely ill patients were excluded. Data was collected using an interviewer-administered questionnaire. The statistical package for social sciences (SPSS), version 25.0, was used to analyze the data. **Result:** Of the 208 respondents, 31.7% were within the age group of 25-29 years. Most of the participants 92.8% were married. 76.9% of the women were multigravida. Over two-thirds 78.8% gave birth through normal vaginal delivery. About 67.3% mentioned that CS requires a longer stay in hospital, 51% said CS may lead to admission to ICU, 82% considered that abnormal woman delivered by CS, while 89%

mentioned that women who undergo C-section are at risk to die due to this procedure. However, 42.8% were willing to accept CS delivery if indicated, while over half 57.2% responded that they were not willing to accept CS delivery, the main reasons being: fear of death 15.9%, C-section would lead to a disability 12.5%, non-acceptance by the husband 9.1% and CS is an expensive procedure 8.2%. Conclusion and recommendations: The study concluded that most of respondents had inadequate knowledge and negative attitudes about CS. The study also revealed that the refusal rate for CS was high, and was significantly contributing to raising both the prenatal and maternal morbidity and mortality. We accordingly recommend that this issue be addressed through mass awareness to change the attitude of pregnant women towards CS and dispel the myths leading to CS refusal.

**Keywords:** Knowledge, attitude, willingness, caesarean section, Banadir Hospital, Mogadishu, Somalia.

## 1. INTRODUCTION

Cesarean section (CS) is the operation of delivering a baby through incisions made in the mother's abdominal wall and uterus (1). It is one of the most commonly performed major surgeries in obstetric practice intended to save the mother and child, in turn, reducing the maternal and prenatal mortality (2). Advantages of having a CS especially when it has been planned over the vaginal births includes: no vaginal injury and reduced bleeding while its disadvantages include: increased cost, uterine rupture and increased probability of complications (3). Since its introduction in obstetric practice, caesarean section rates have continuously increased in both developed and developing countries (4). According to WHO, caesarean section use continues to rise globally, now accounting for more than 1 in 5 (21%) of all childbirths. This number is set to continue increasing over the coming decade, with nearly a third (29%) of all births likely to take place by caesarean section by 2030 (5). Maternal mortality is excessively high, about 830 women die from pregnancy or childbirth-related complications around the world every day (6). Sub-Saharan Africans suffer from the highest maternal mortality ratio 533 maternal deaths per 100,000 live births, or 200,000 maternal deaths a year. This is over two thirds (68 %) of all maternal deaths per year worldwide (7). The Maternal Mortality Rate in Somalia has reduced from 829 per 100,000 live births in 2017 and drop to 692 per 100,000 live births in 2020 (8). This study is aims to investigate Somali

pregnant women's knowledge, attitude and willingness to accept cesarean section in Banadir maternity hospital.

## **2. METHODS**

### **Study design**

The study design was descriptive cross-sectional study carried out Banadir maternity and child hospital, Mogadishu, Somalia.

### **Study population**

The target population was pregnant women attending Antenatal care at Banadir hospital during the study period and fulfill inclusion criteria with a total population of 485.

### **Study period**

The study was conducted from 3<sup>rd</sup> April to 5<sup>th</sup> May 2021.

### **Sampling technique**

The systematic random sampling technique was used to select respondents, with a sample interval of two. The inclusion criteria were met by any pregnant woman who was mentally and physically capable of being interviewed during the time frame specified, while those refusing to participate in the study, non-pregnant women, women with mental illness and severely ill patients were excluded.

### **Data collection and analysis**

The researcher and trained research assistants used a semi-structured questionnaire with closed-ended questions to collect data. The questionnaire took the participant about 15-25 minutes to complete. Participation in the study was voluntary and no woman was interviewed twice. Data was analyzed using Statistical Package for social Science (SPSS) tool Version 25.0 statistical software.

### **Ethical consideration**

Clearance to conduct the study was obtained from the Ethics Board at Somalia National Institute of Health (NIH). Permission to collect data was obtained from Banadir Maternity and Child Hospital, and informed consent was obtained from the participants prior to recruitment into the study.

### 3. RESULT

The Participants selected for this study consisted of a total of 219 pregnant women, all of whom were approached for participation. Of these 219, 208 pregnant women consented for participation, while the rest refused to participate the study. A total of 208 questionnaires were correctly completed, creating a response rate of 94.9%. Majority of the respondents 66 (31.7%) were within the age group of 25-29 years. Most of participants 158 (76%) were illiterate (*See Table 1*). Majority of the respondents 164 (76.9%) were multigravida. About their last place of delivery 88 (42.3%) gave birth at hospital. Regarding previous mode of deliveries 164 (78.8%) gave birth through normal vaginal delivery (*See Table 2*). Almost all of the respondents 204 (98.1%) reported that they have heard of caesarian section and were able to identify who is required to undergo Cs, 177 (85.1%) of them mentioned that Pregnant women with complication will require to undergo Cs (*See Table 3*). Regarding Cs, most of the respondents 119 (57.2%) said CS is a major surgery and 189 (90.9%) said that blood transfusion before and after the procedure is required. Majority of the respondents 140 (67.3%) revealed that Cesarean section requires a longer stay in hospital after delivery (*See Table 4*). A total number of 171 (82%) respondents consider abnormal woman that has delivered by C-section. 150 (72%) of the respondent said that women who undergo one Cs will always be delivered by Cs in future pregnancies. About have of study participants 102 (49%) indicate that cesarean delivery can prevent maternal and neonatal death (*See Table 5*). Over half of the participants 119 (57.2%) responded that they are not willing to accept C-section delivery, one of the major reasons for not willing to accept Cs was 33 (15.9%) Fear of death (*See Figure 1*).

**Table 1: Shows the Socio-demographic Characteristics of Respondents**

Variables	Frequency (n)	Percentage (%)
Age		
<b>15-19</b>	19	9.1
<b>20-24</b>	56	26.9
<b>25-29</b>	66	31.7
<b>30-34</b>	49	23.6
<b>&gt;35</b>	18	8.3
Marital status		
<b>Married</b>	193	92.8
<b>Divorced</b>	9	4.3
<b>Widow</b>	6	2.9

Educational level		
<b>Illiterate</b>	158	76.0
<b>Primary</b>	26	13.5
<b>Secondary</b>	16	7.7
<b>Tertiary</b>	6	2.9
Occupational status		
<b>Housewife</b>	163	78.4
<b>Private business</b>	21	10.1
<b>Employee</b>	5	2.4
<b>Unemployment</b>	19	9.1
Family income per month		
<b>Low income less than \$200</b>	157	75.5
<b>Middle \$200-\$400</b>	45	21.6
<b>High income more than \$500</b>	6	2.9

**Table 2: Shows the obstetric characteristics of Respondents**

<b>Variables</b>	<b>Frequency (n)</b>	<b>Percentage (%)</b>
Gravida		
<b>Primigravida</b>	48	23.1
<b>Multigravida</b>	160	76.9
Last place of delivery		
<b>Hospital</b>	88	42.3
<b>MCH</b>	36	17.3
<b>Home</b>	57	27.4
<b>Didn't give birth before</b>	27	13.0
Previous mode of deliveries		
<b>Vaginal delivery only</b>	164	78.8
<b>Cesarean section only</b>	17	8.2
<b>Didn't give birth before</b>	27	13.0

**Table 3: Shows knowledge of C-section**

<b>Variables</b>	<b>Frequency (n)</b>	<b>Percentage (%)</b>
Have you heard about caesarean section?		
<b>Yes</b>	204	98.1
<b>No</b>	4	1.9

Who is required to undergo C-section?		
<b>Pregnant women with complication</b>	177	85.1
<b>Pregnant women without complication</b>	12	5.8
<b>Mothers who request to deliver cesarean section</b>	6	2.9
<b>Mothers who had previous cesarean section</b>	13	6.3
Information you need to know before the Caesarea section if indicated to you		
<b>Reason for having the caesarean section</b>	93	44.7
<b>Complications of the surgery</b>	40	19.2
<b>Duration of stay in hospital</b>	3	1.4
<b>Cost of the caesarean section</b>	6	2.9
<b>All</b>	66	31.7

**Table 4: Displays the results of the knowledge regarding Cesarean Section**

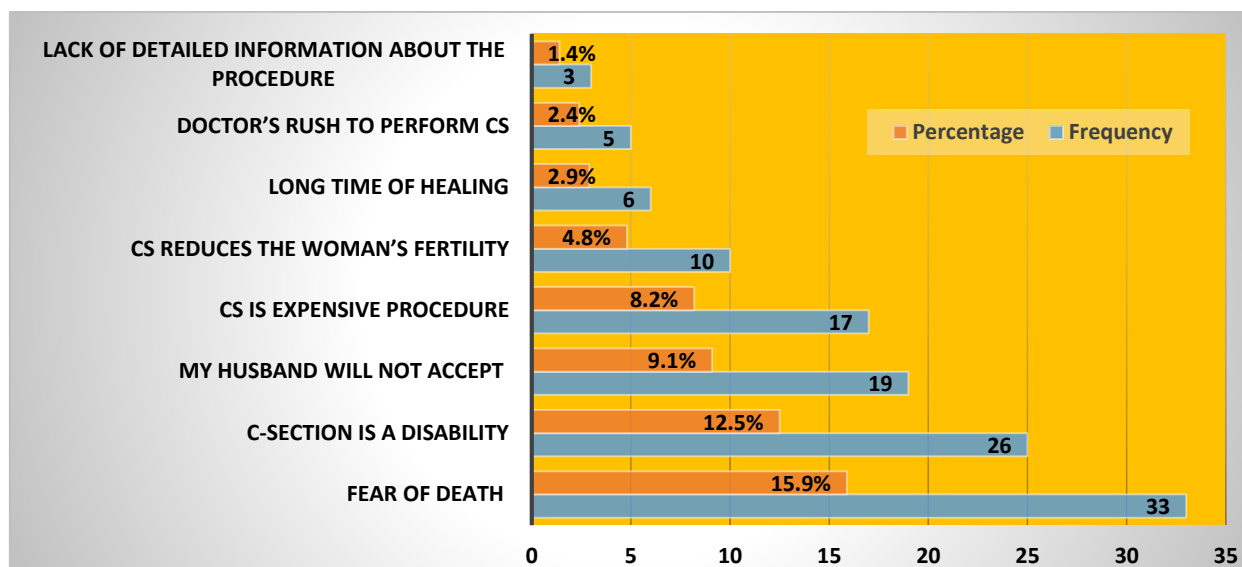
<b>Variables</b>	<b>Frequency (n)</b>	<b>Percentage (%)</b>
Caesarean section is a major surgery		
<b>Yes</b>	119	57.2
<b>No</b>	71	34.1
<b>I don't know</b>	18	8.7
The surgery is done under anesthesia		
<b>Yes</b>	181	87.0
<b>No</b>	9	4.3
<b>I don't know</b>	18	8.7
Transfusion of blood before and after the procedure may be required		
<b>Yes</b>	189	90.9
<b>No</b>	7	3.4
<b>I don't know</b>	12	5.8
Cesarean section requires a longer stay in hospital after delivery		
<b>Yes</b>	140	67.3
<b>No</b>	54	26.0
<b>I don't know</b>	14	6.7
Is there severe headache		
<b>Yes</b>	66	31.7
<b>No</b>	54	26.0
<b>I don't know</b>	88	42.3

Admission to intensive care unit		
<b>Yes</b>	106	51.0
<b>No</b>	49	23.6
<b>I don't know</b>	53	25.5
Need for an emergency operation to remove the uterus		
<b>Yes</b>	70	33.7
<b>No</b>	93	44.7
<b>I don't know</b>	45	21.6
Is there any bad effect to a baby delivered by Cesarean Section?		
<b>Yes</b>	64	30.8
<b>No</b>	26	12.5
<b>I don't know</b>	118	56.7

**Table 5: Shows attitude towards caesarean section**

<b>Variables</b>	<b>Frequency (n)</b>	<b>Percentage (%)</b>
Do you consider normal for woman that has delivered by C-section?		
<b>Yes</b>	37	17.8
<b>No</b>	171	82.2
Do you think Women who undergo C-section are at risk to die due to this procedure?		
<b>Yes</b>	186	89.4
<b>No</b>	22	10.6
Women who undergo one C-section will always be delivered by CS in future pregnancies		
<b>Yes</b>	150	72.1
<b>No</b>	58	27.9
Can cesarean delivery prevent maternal and neonatal death?		
<b>Yes</b>	102	49.0
<b>No</b>	106	51.0
Do you think cesarean section is more comfortable than vaginal delivery?		
<b>Yes</b>	32	15.5
<b>No</b>	176	84.6

**Figure 1: Shows the reasons for unwillingness to accept C-section among pregnant women attending ANC Banadir Hospital, Mogadishu-Somalia (n=119)**



#### 4. DISCUSSION

Regarding previous mode of deliveries 78.8% gave birth through normal vaginal delivery, with only 8.2% had had a previous history of Caesarean section this indicate low cesarean section rate. Low CS rates are indicative of unmet obstetric need for potentially life-saving care and appear to be an important contributor to prenatal mortality as well as maternal morbidity and mortality (9). Almost all of the respondents 98.1% mentioned that they have heard of caesarian section, this is similar to a similar study in Nigeria reported that 93.8% of the respondents had heard about CS (10). This study also shows that most of the respondents 57.2% said CS is a major surgery, 90.9% said that blood transfusion before and after the procedure is required. This was similar to a study in Nigeria which reported that 86.4% of the respondents were aware that transfusion of blood during or after the procedure may be required (10).

As revealed in Table 4, knowledge gaps were demonstrated with 51% of the respondents think that CS may lead to admission in intensive care unit, while 30.8% think that there is bad effect to a baby delivered by Cesarean Section. There was considerable misconception particularly about the belief that an emergency operation to remove the uterus with 21.6% of the respondent think that an emergency operation to remove the uterus can happen in cesarean section delivery. In this study, there was a substantial negative attitude towards caesarean section. The study



revealed that about 82.2% of respondents consider abnormal for the woman who had delivered through C-section while 17.8% consider normal. This is in line with a similar study in Somaliland vast majority of respondents which is 69% perceived these women delivered by C-section are abnormal while 23% believe that it is normal and the rest are not sure of it (11).

In our study about 89% of the respondent said that women who undergo C-section are at risk to die due to this procedure, also 72% of the respondent said that Women who undergo one C-section will always be delivered by CS in future pregnancies. About 84.6% think that normal vaginal delivery is more comfortable than cesarean section. There were also mixed findings in which half of study participants 51 % indicate that cesarean delivery cannot prevent maternal and neonatal death while 49% said that cesarean delivery can prevent maternal and neonatal death. These are serious attitudinal problems and need to be addressed.

Major findings of this study are that over half of the participants 57.2% are not willing to accept C-section delivery even if indicated while 42.8% responded that they are willing to accept C-section delivery if indicated, this finding is contrary to a similar study carried out in Berbera demonstrated that 62% of respondents are willing to undergo C-section if indicated while the rest (38%) are not willing to undergo C-section (11).

Main reasons for not willing to accept Cs was 15.9% Fear of death, and 8.2% CS is expensive procedure. This finding is in agreement with a study that was conducted in Nigeria shows the responses of respondents to commonest factor responsible for non-acceptance of CS are 79% of the respondents indicated that they refused acceptance of CS for fear of death and 60% indicated that cost is a reason why they refused CS (3).

## **5. CONCLUSION AND RECOMMENDATION**

The study assessed Knowledge, attitudes, and willingness to accept cesarean sections among pregnant women at Banadir Hospital in Mogadishu, Somalia. In terms of educational level majority were illiterate, most of them were housewives, Majority of the respondents were multigravidas, majority gave birth through normal vaginal delivery with only about eight percent had a previous history of caesarean section, this indicates low SC rate among pregnant women attending antenatal care.

Generally, most of respondents had inadequate knowledge about Cesarean section as was demonstrated Knowledge gaps when half of the respondents mentioned that CS may lead to

admission in intensive care unit, while others think that there is bad effect to a baby delivered by Cesarean Section. There was considerable misconception particularly about the belief that CS an emergency operation to remove the uterus. The study revealed there was a substantial negative attitude towards caesarean section. Most respondents think that normal vaginal delivery is more comfortable than cesarean section and they consider abnormal for the woman who had delivered through C-section. In our study, majority of the respondent stated that women who undergo CS are at risk to die due to CS procedure; these are serious attitudinal problems and need to be addressed.

One other major finding of this study is that over half of the participants were unwilling to accept cesarean section, the refusal rate for CS was high and main reasons for not willing to accept Cs was fear of death, this would lead to low cesarean section rate and it is significant contributor to both prenatal and maternal morbidity and mortality, this needs to be addressed through education in order to change pregnant women's attitude towards CS and to eliminate the misunderstandings that it leads to Cesarean section refusal.

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