

## Original Research Article

## Assessment of Psychological Trauma from Application of Anaesthesia during Caesarean Section among Women in Urban Areas of South-South, Nigeria

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**Abstract:** Surgery is made easy with the application of anaesthesia that makes the patients not to feel pains during the surgery. However, due to certain complications that occur during and after surgery, most women have expressed fear and passed through certain psychological trauma before and after surgery. This study aimed to Assess Psychological Trauma from Application of Anaesthesia During Caesarean Section (CS) among Women In Urban Areas of South-South, Nigeria. This was a cross-sectional study involving 250 women. Participants' age is between 18 to 47 years. A well-structured questionnaire was administered to participants. The study lasted for a period of 2 months. Statistical analysis was done using SPSS version 25.0 and  $p < 0.05$  was significant. The results revealed that 28% of the participants were single, 56% married, 12% divorced, 4% widowed, 72% had tertiary level of education, 48% were civil servants, 76% have 1 child, 76 have undergone previous caesarean section, 80% agreed that they were not informed of the possible side effects of anaesthesia, 76% developed anxiety, 80% had fear, 80% had emotional stress, and 80% are uncomfortable during CS. The results revealed that majority of the participants experienced worry, fear, stress and pain each time they were booked for CS.

**Keywords:** Assessment, Psychological Trauma, Application, Anaesthesia, Caesarean Section Women.

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## INTRODUCTION

Previous studies revealed that caesarean delivery is another method of delivery carried out in situations where vaginal delivery cannot be achieved or in high-risk pregnancy (Lawson & Bienstock, 2007; Joy & Contag, 2011). Caesarean delivery rate is 25.7% worldwide and 3.6% is carried out without a medical indication (WHO). It has also been established that in the caesarean deliveries performed with or without medical indication, death and serious complications were much

more common compared to spontaneous vaginal deliveries (Souza *et al.*, 2010). A caesarean section (C-section) is a surgical procedure in which a baby is delivered through incisions made in the abdominal wall and uterus of the mother. It is an essential intervention in modern obstetrics, particularly when vaginal delivery may endanger the life or health of the mother or fetus. According to the World Health Organization, cesarean sections are effective in reducing maternal and neonatal mortality when medically indicated (World Health Organization [WHO], 2015).

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Cesarean delivery may be classified as either elective or emergency, depending on the clinical circumstances surrounding the pregnancy and labor. Common indications include obstructed labor, fetal distress, abnormal fetal presentation, placenta previa, and a history of previous cesarean delivery (Cunningham *et al.*, 2022). Although the procedure can be life-saving, it is associated with potential risks such as infection, excessive bleeding, anesthesia complications, and prolonged recovery compared to vaginal birth (American College of Obstetricians and Gynecologists [ACOG], 2021). In recent decades, the global rate of cesarean section has risen significantly, sparking concerns about its overuse in some regions. While increased access to cesarean delivery has improved outcomes in high-risk pregnancies, unnecessary procedures may expose women and infants to avoidable health risks (Betrán *et al.*, 2016). Therefore, healthcare providers are encouraged to ensure that cesarean sections are performed based on clear medical indications to optimize maternal and neonatal health outcomes. There are several methods of delivery across the globe. Delivery is a component of reproductive process and it is the last stage of reproductive process. It is important to note that pregnancy outcome will determine choice of delivery. However, in developed countries, irrespective of pregnancy outcome, most women choose caesarean section (C/S) as their preferred method of delivery. In African culture, natural spontaneous vagina delivery is what the people believe and expect. Psychological trauma refers to the emotional and mental distress experienced by an individual following exposure to a deeply disturbing or life-threatening event. Such events may include natural disasters, serious accidents, violence, abuse, or the sudden loss of a loved one. Trauma can overwhelm a person's ability to cope, leading to lasting adverse effects on their emotional, cognitive, and behavioral functioning (American Psychiatric Association [APA], 2013). Psychological trauma often manifests through a range of symptoms, including anxiety, depression, intrusive memories, emotional numbness, and difficulty concentrating. In some cases, individuals may develop more severe conditions such as post-traumatic stress disorder

(PTSD), which is characterized by persistent re-experiencing of the traumatic event, avoidance of reminders, negative changes in mood, and heightened arousal (APA, 2013). The intensity and duration of trauma responses vary depending on factors such as the nature of the event, the individual's resilience, and the availability of social support (Briere & Scott, 2015). Trauma can have long-term impacts on physical health, relationships, and overall quality of life. Chronic exposure to traumatic stress has been linked to conditions such as cardiovascular disease, substance abuse, and impaired immune functioning (van der Kolk, 2014). Early intervention, including psychological therapies such as cognitive-behavioral therapy (CBT) and trauma-focused counseling, plays a crucial role in helping individuals process traumatic experiences and regain a sense of control and well-being (Briere & Scott, 2015).

## MATERIAL AND METHOD

This is a cross-sectional study involving 250 women who are within the age of 18 to 47 years and reside in the six (6) South-South States, in Nigeria. The study lasted for a period of 2 months. Consent was sorted from the participants before giving them the questionnaires. Questionnaires were given to the participants. Each participant had one questionnaire to fill appropriately and independently after instructions were given to them by the research Assistants. Data was obtained and analyzed using SPSS version 23 and P value < 0.05 was said to be significant.

## RESULTS

The results revealed that 28% of the participants were single, 56% married, 12% divorced, 4% widowed, 72% had tertiary level of education, 48% were civil servants, 76% have 1 child, 76 have undergone previous caesarean section, 80% agreed that they were not informed of the possible side effects of anaesthesia, 76% developed anxiety, 80% had fear, 80% had emotional stress, and 80% are uncomfortable during CS. The results revealed that majority of the participants experienced worry, fear, stress and pain each time they were booked for CS. See tables below.

**Table 1: Age Distribution of Participants**

Age Group	Frequency	Percentage (%)
18-22 years	10	4.00
23-27 years	40	16.00
28-32 years	150	60.00
33-37 years	50	20.00
38-42 years	Nil	0.00
43-47 years	Nil	0.00
<b>Total</b>	<b>250</b>	<b>100</b>

**Table 2: Marital Distribution of Respondents**

Sex	Frequency	Percentage (%)
Single	70	28.00
Married	140	56.00
Divorced	30	12.00
Widowed	10	4.00
<b>Total</b>	<b>250</b>	<b>100.00</b>

**Table 3: Educational Level of Participants**

Response	Frequency	Percentage (%)
No formal education	5	2.00
Primary education	15	6.00
Secondary education	15	6.00
Tertiary education	180	72.00
<b>Total</b>	<b>250</b>	<b>100.00</b>

**Table 4: Occupational Distribution**

Response	Frequency	Percentage (%)
civil servant	120	48.00
self-employed	30	12.00
trader	30	12.00
Housewife	30	12.00
<b>Total</b>	<b>250</b>	<b>100.00</b>

**Table 5: Participants who have undergone previous caesarian section**

Response	Frequency	Percentage (%)
Participants who have undergone previous caesarian section	190	76
Participants who have not undergone previous caesarian section	60	24
<b>Total</b>	<b>250</b>	<b>100.0</b>

**Table 6: Participant who showed anxiety before the administration of anaesthesia**

Response	Frequency	Percentage (%)
Participants who showed anxiety before the administration of anaesthesia	200	76.00
Participants who do not showed anxiety before the administration of anaesthesia	50	20.00
Not Sure	10	4.00
<b>Total</b>	<b>250</b>	<b>100.0</b>

**Table 7: Participants who experience fear during caesarean section procedure**

Response	Frequency	Percentage (%)
Participants who experience fear during caesarean section procedure	200	80.00
Participants who do not experience fear during caesarean section procedure	50	20.00
<b>Total</b>	<b>250</b>	<b>100.0</b>

**Table 8: Participants who still remember the experience of previous anaesthesia as distressing**

Response	Frequency	Percentage (%)
Participants who still remember the experience of previous anaesthesia as distressing	190	76.00
Participants who do not remember the experience of previous anaesthesia as distressing	60	24.00
<b>Total</b>	<b>250</b>	<b>100.0</b>

**Table 9: Participants who past experience causes emotional stress after CS**

Response	Frequency	Percentage (%)
Participants who past experience causes emotional stress after CS	200	80
Participants who past experience do not causes emotional stress after CS	50	20
<b>Total</b>	<b>250</b>	<b>100.0</b>

## DISCUSSION

A cesarean section (C-section) is a surgical procedure used to deliver a new born and may be elective or emergency, depending on the outcome of the pregnancy during clinical investigations.

Psychological trauma may affect any person as a result of failure of the expected desires to occur and this could ruin the person live. Psychological trauma from the application of anaesthesia during caesarean section among women in urban areas is an important maternal health and mental health issue, especially in settings where access to quality obstetric care varies widely. Psychological trauma from anaesthesia application during C-section is under-recognised but highly impactful. It arises not from the necessity of anaesthesia but from lack of control, unexpected pain, perceived violation, and feeling unheard. Prevention requires respectful communication, technical skill, and immediate postpartum validation. Treatment focuses on memory reprocessing and rebuilding trust in medical procedures. Psychological trauma in this setting refers to a distressing event during anaesthesia application that overwhelms a woman's coping capacity, leading to persistent negative psychological outcomes (e.g., postpartum PTSD, anxiety, depression).

The study revealed that majority of the participants had tertiary level of education and tertiary education can influence how women perceive and cope with cesarean delivery and its psychological effects. Educated women are more likely to seek information, ask questions, and access mental health support services when needed. This knowledge can reduce anxiety, improve coping strategies, and enhance overall childbirth experiences. However, the study revealed that majority of the participants are highly educated but entertain fears from 'cesarean section (CS) and this could be due to the experienced they have during previous CS. Again, most of the participants are civil servants and could afford to do CS but the psychological trauma they foreseen is a problem.

Also, majority (76%) of the participants have undergone previous caesarean section and might have passed through some degree of psychological trauma.

However, majority (80%) of the participants agreed that they were not properly informed of the possible side effects of anaesthesia before the surgery despite their level of education. This may be the cardinal reason why the participants allay fear and other psychological trauma. Also, the study revealed that majority of the participants experienced or passed through the following psychological trauma: anxiety, fear, emotional stress, and uncomfortable during CS, and helplessness and this trauma may arise from inadequate preparation of the participants (patients) and lack of adequate information about the cesarean section.

## CONCLUSION

Psychological trauma from anaesthesia during caesarean section is real, measurable, and preventable to some extent. Cesarean sections save lives, negative anaesthetic experiences especially complications or lack of awareness may lead to long-term psychological effects, particularly in urban healthcare systems where patient volume and system pressures may compromise care quality.

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