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# Full Length Research Paper

# Attitudes of antenatal patients at a tertiary hospital in Southern Nigeria towards caesarean section

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Accepted 3 November, 2011

Caesarean section has contributed immensely to improved obstetric care throughout the world. In developing countries especially the sub-Saharan Africa, there is a great aversion to caesarean section. This study aims to assess the attitudes of antenatal patients at the University of Port-Harcourt Teaching Hospital towards caesarean section. A cross-sectional study was conducted among 400 antenatal clients seen at the University of Port Harcourt Teaching Hospital between 1st and 31st September 2009. Information on their socio-demographic characteristics, knowledge, beliefs and attitudes were sought. The response rate was 100%. Data management was carried out with SPSS 15.0 statistical software. Chi-square tests were used to compare the groups as appropriate. P value of <0.05 was assumed to be statistically significant. Out of 400 women studied, 68.5% favoured caesarean section while 31.5% were averse to it. About 59% of them knew what caesarean section was. Increasing maternal level of education and age were associated with increased knowledge and support for caesarean section (X2 =11.8, P = 0.0006). Eighty percent of the women believed caesarean section is done for medical reasons. If caesarean section is indicated in the index pregnancy, 65% would accept that the procedure be done, 19% would want to discuss with their husbands while 7.5% would default. Of the 82 women who had previous caesarean section, 73.2% would readily accept to undergo a repeat caesarean section if necessary in the index pregnancy compared to 200 (62.9%) of 318 women who had not undergone caesarean section. The difference was not significant. ( $X^2 = 3.03$ , P = 0.08). There is a high level of knowledge and acceptance of caesarean section in this study. This acceptance is directly linked with the educational status of the women. However, one third of the women were still averse to caesarean section.

Key words: Caesarean section, attitudes, antenatal clients.

## INTRODUCTION

Caesarean section is the birth of a fetus through surgical incisions in the anterior abdominal wall and the uterine wall after the age of viability (Ebeigbe and Ilesanmi, 2003; Jaiyesimi and Ojo, 2003). The incidence in most teaching hospitals in Nigeria is 20 to 30% which is high (Ebeigbe and Ilesanmi, 2003). This increase may be attributed to better education and increasing safety of the operation (Chama et al., 2000; Ezechi et al., 2000; Ezechi et al., 2002). The incidence in the University of Port-Harcourt Teaching Hospital is 32 to 33% (Annual

report of Department of Obstetrics and Gynaecology, University of Port-Harcourt Teaching Hospital, 2004).

There is no doubt that caesarean section has contributed immensely to improve obstetric care throughout the world. However it carries a significantly higher maternal morbidity and mortality than vaginal delivery (Lee et al., 2004; Johanson and Newburn, 2001; Johanson and Lucking, 2001; Nuttall, 2000; Fabri and Murta, 2002; Nkwo and Onah, 2002). Approximately 585,000 women die each year from complications of pregnancy and delivery with another 17.5 million suffering significant birth injuries or humiliating painful disabilities (Etuk and Ekanem, 2001; World Health Organization, 1997). More than 98% of these deaths and disabilities occur in developing countries (Etuk and Ekanem, 2001; World

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Health Organization, 1997; Etuk et al., 1999). Nigeria has one of the highest maternal mortality rates in the world. It is between 1000 and 1500 per 100,000 births. Many of the women affected do not book for antenatal care and delivery in unorthodox delivery facilities contribute to this immense human tragedy (Etuk et al., 1999; Adekunle, 2002; WHO Expert Committee on Health Statistics, 1999).

In developing countries especially the sub-Saharan Africa, there is a great aversion to caesarean section (Oriji et al., 2003; Fasubaa et al., 2000; Sule-Odu et al., 1996; Lawson, 1967). In Nigeria, there is a high rate of default by pregnant women with previous caesarean section scars who are at high risk of subsequent uterine rupture (Ola and Olamijulo, 1998). Some women with previous history of caesarean section only report to hospital when a complication arises after a trial of labour at home (Boulvain et al, 1997; Etuk et al, 1999). In view of the place of this operation in present day obstetric practice, it is necessary to investigate the various factors leading to the unfavourable disposition to caesarean section by our women with the aim of achieving a wider acceptance of this operation whenever indicated. This study aims to assess the attitudes of antenatal patients at the University of Port-Harcourt Teaching Hospital towards caesarean section.

## **METHODOLOGY**

This was a cross-sectional study carried out among pregnant clients attending the antenatal clinic of the University of Port Harcourt Teaching Hospital, southern Nigeria. The required sample size was derived using the formula  $(n=z^2pq/d^2)$  where z is the standard normal deviate at 95% confidence level, p represents the prevalence of IPT use set at 50%, q is 1.0 - p and d is the margin of error tolerable (5%). This gave a sample size of 384. The participants were selected randomly and informed of the study and all agreed to participate. The antenatal clinic setting was chosen because of the opportunity it provided for educating the women on caesarean section.

A self administered structured questionnaire was distributed to the 400 women. Data was obtained on their socio-demographic characteristics, opinions about caesarean section, reasons for being in favour of or against caesarean section, and their possible responses if caesarean section became necessary for their care during pregnancy or labour. Data analysis was carried out with SPSS 15.0 statistical software and presented as percentages, means and standard deviations. Chi square tests were carried out where necessary. Cross tabulations and correlation analysis were performed to establish relationships among variables. Statistical significance was assumed at p values of  $\leq 0.05$ .

# **RESULTS**

The age range of the women was between 20 to 42 years. The mean age was 29.8 + 4.71 years. One hundred and eighty three (45.8%) were nulliparous, 207 (51.8%) were multiparous and grandmultiparous women were 10 (2.5%). Two hundred and sixty seven (66.8%)

had tertiary education, 122(30.5%) had secondary education while 6 (1.5%) had primary education.

Two hundred and thirty six (59%) had knowledge of caesarean section while 164 (41%) had no knowledge. Figure 1 illustrates the influence of education on knowledge of caesarean section amongst respondents. Of five women without formal education, 2 (40%) knew what caesarean section was, while all 6 women with primary education had incorrect knowledge of caesarean section. Fifty eight (47.5%) women with secondary education could correctly define caesarean section compared to 176 (65.9%) women with tertiary education. The difference was statistically significant (X  $^2$ =11.8, p = 0.0006).

The attitude of antenatal women towards caesarean section is shown in Figure 2. Two hundred and seventy four (68%) women were in favour of caesarean section while 126 (32%) were averse to it. Of those who were in favour of caesarean section, 268 (97.8%) were of the opinion that it is a safe mode of delivery when vaginal birth cannot be achieved while 6 (2.2%) were of the opinion that it is done to please the health workers.

Table 1 illustrates the reasons for opposing caesarean section. Forty five (36%) believed it was a denial of womanhood, 4 (3.2%) believed the will be mocked by other women, 30 (24%) were afraid of dying from the operation, 24 (19.2%) were afraid of pain during and following surgery, and 6 (4.8%) were worried about cost. Sixteen (12.8%) women that were averse to caesarean section believed that it was not God's will for them.

Figure 3 shows the potential response of the respondents should the need for a caesarean section arise in the index pregnancy. Two hundred and sixty (65%) women would accept, 74 (19%) would want to discuss with their husbands before accepting and 30 (7.5%) would decline.

Table 2 illustrates the influence of previous caesarean section on the response to a repeat caesarean section. Of 82 women who had previous caesarean section, 60 (73.2%) would readily accept, compared to 200 (62.9%) of 318 women with no previous caesarean section. The difference was not statistically significant. ( $X^2 = 3.03$ , P = 0.08).

#### DISCUSSION

The aversion of African and indeed Nigerian women to operative delivery has been reported by several workers (Ezechi et al., 2002; Etuk and Ekanem, 2001; Etuk et al., 1999; Orji et al., 2003). The attitude of these women to caesarean section is influenced by cultural and religious beliefs amongst other factors. Education is expected to positively influence their attitudes and translate to a better health seeking behaviour.

Among the women that participated in this study, majority (82.5%) were between 20 and 34 years. This is

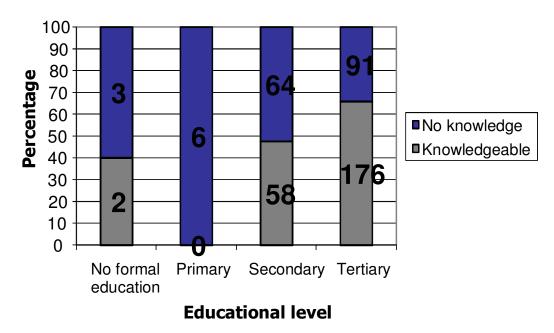
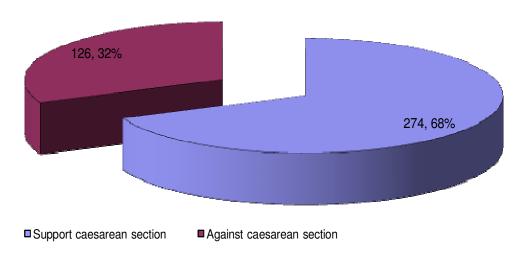


Figure 1. Relationship between education and knowledge of caesarean section.



**Figure 2.** Attitudes of antenatal women towards caesarean section at University of Port Harcourt Teaching Hospital.

expected as this is the reproductive age group mostly seen in antenatal clinics (Lee et al., 2004; Johanson and Newburn, 2001). Majority (98.7%) of the women had formal education with 267 (66.8%) having tertiary education. More women (65.9%) with tertiary education than those with secondary education (47.5%) could correctly define caesarean section. This is not surprising as the more educated a woman is, the more likely she is to be aware of and understand the reasons why caesarean section is sometimes necessary. Orji et al. (2003) also reported higher knowledge amongst pregnant women with tertiary education than those less educated in their llesa study (Orji et al., 2003). This clearly illustrates the

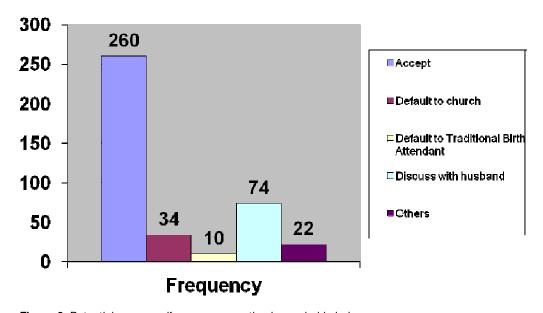
benefit of education and indicates the need to inform all women irrespective of their educational status.

Previous caesarean section expectedly conferred some knowledge on women who had undergone the procedure. Surprisingly, over 20% of these women did not know what it was. However, there was no significant difference in knowledge between those that were coun-seled before the operation and those who did not receive counseling. This suggests that they were not adequately informed before the operation.

Most of the women favour caesarean section because they considered it to be a safe mode of delivery when vaginal delivery was not feasible. This is similar to

Table 1. I	Heasons :	tor	opposing	caesarean	section.

Reason	{Number (%)}
It is a denial of womanhood	45 (35.7)
Possibility of being mocked by other women	4 (3.2)
Fear of dying from the operation	30 (23.8)
It is expensive	6 (4.8)
It is very painful	24 (19.1)
Others	17(13.4)



 $\textbf{Figure 3.} \ \ \textbf{Potential response if caesarean section is needed in index pregnancy}.$ 

Table 2. Influence of previous experience on response to repeat caesarean section.

	Womens' status			
Response to repeat C/S	Had previous caesarean section	No previous caesarean section	Total	
	{No. (%)}	{No. (%)}		
Accept	60 (73.2)	200 (62.9)	260	
Default to church or mosque to ensure vaginal delivery	4 (4.9)	22 (6.9)	26	
Default to Traditional Birth Attendant to ensure vaginal delivery	2 (2.4)	2 (0.6)	4	
Discuss with husband	10 (12.2)	66 (20.8)	76	
Pray against it	6 (7.3)	28 (8.8)	34	
Total	82	318	400	

the findings of the llesa study (Orji et al., 2003). The few who had negative views including accepting caesarean section to please health workers are a cause for concern and need to be enlightened.

One third of the women displayed a strong aversion towards caesarean section. Their reasons were mainly based on cultural and religious beliefs. This was not surprising as cultural beliefs have previously been demonstrated as a reason for refusing caesarean section among African women (Lawson, 1967). A few women believed caesarean section is done in the doctor's self interest. It is therefore necessary to educate the people and to always look at the indications for the operation so as to suggest alternative options where feasible (Harrison, 1997).

It is encouraging to note that two thirds of the women

would readily accept to undergo caesarean section should the need arise in the course of their pregnancy or labour. One fifth would only agree if their husbands gave consent. Only 7.5% of the women with the strongest aversion would default and patronise spiritualists, religious healers or traditional birth attendants to ensure vaginal delivery. A bit worrisome is the finding that having a successful previous caesarean section did not significantly improve acceptance of the procedure. This may be related to cultural beliefs which put the women pressure to deliver vaginally in order to prove their womanhood and not be a laughing stock for other women who have delivered vaginally.

Previous studies have shown that approximately 43.5% of women who obtain antenatal care in the University of Calabar Teaching Hospital, Nigeria, default and deliver in unorthodox delivery centres (Etuk and Ekanem, 2001). The preaching and prophecies from spiritual churches appear to create fear in the women and deter them from utilizing orthodox health facilities (Etuk et al., 1999). An explanation for the popularity of unorthodox health facilities in Nigeria is the poor economic status in the country. Women of high socioeconomic class are less likely to default to unorthodox delivery facilities which are cheaper than orthodox delivery centres (Etuk and Ekanem, 2001). The effect of these defaults is an increase in maternal and perinatal morbidity and mortality (Lawson, 1967; Etuk et al., 1999; Harrison, 1997).

#### Conclusion

There is a high level of knowledge and acceptance of caesarean section in this study. This acceptance is directly linked with the educational status of the women. However, one third of the women were still averse to caesarean section. Cultural and religious beliefs were the main reasons for their aversion towards caesarean section. Female education would o a long way to improve the acceptance caesarean section among our womenfolk.

Community health education about the benefits of caesarean section when indicated at primary care level is needed to reduce the number of women declining caesarean section and the morbidities and mortalities associated with such an action and improve the pregnancy outcome.

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