PERCEPTIONS OF MARRIED MEN AND WOMEN RELATING TO CAESAREAN SECTION IN IBADAN NORTH LOCAL GOVERNMENT AREA, OYO STATE, NIGERIA

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DEDICATION

This book is dedicated to God Almighty, the maker of all things, who makes everything beautiful at His own time, and to the memory of my late father Mr. David Afolabi Owolabi who in his lifetime ensured that all his children are well read.

ABSTRACT

Caesarean Section (CS) is an operative technique by which a fetus is delivered through an abdominal and uterine incision. In Nigeria many women regard CS as an indication of reproductive failure and so there is general aversion to it. However the perceptions of married men and women concerning CS have not been investigated. The main objective of this study was to assess the perceptions and attitude of married men and women relating to CS in Ibadan North Local Government Area, Nigeria.

Four hundred and forty two men and women were selected using a three – stage random sampling technique. Eight Focus Group Discussions (FDGs); four for men and four for women, were conducted. A validated questionnaire was used for the collection of quantitative data. The FGDs data were recorded on audio – tapes, transcribed and analyzed using the thematic approach while the quantitative data were analyzed using descriptive and Chi square statistics with the level of significance set at 0.05.

The mean age of the respondents was 39.9 ± 11.7 years (male 41.6 ± 11.7; female 38.5 ± 11.5), 57% of them had at least secondary education and almost half (46.0%) were traders. A significant proportion of respondents with at least secondary education (65.3%) would accept CS .Only 8.8% of female respondents had ever undergone CS. Mean number of children delivered by respondents who had ever undergone CS was 1.6 ± 0.2. Only 12.1% perceived CS as being an appropriate method. There was no significant difference in the proportion of females (52.5%) and males (47.5%) who perceived CS as a safe method of delivery. A significant proportion of respondents within 20 – 35 years age bracket (81.0%) expressed fear about CS. More females (51.1%) than males (48.9%) indicated fear of CS. Slightly more than half of the respondents (50.5%) were of the view that consent should be given by patients before CS. Majority of the respondents (82.1%), stated that husbands should always give consent for CS.s Most respondents (77.0%) would consent to CS if necessary. The perceived consequences of CS included death (32.1%), limited number of children (14.9%), complications (10.3%), and pain (8.0%).. Almost equal proportions of males (44.4%) and females (44.2%) were of the opinion that it is not proper for a woman to

request for elective CS in advance. The consensus of opinion among FGD participants was that CS was abnormal, the result of a curse and a practice that could lead to a dysfunctional sexual relationship among couples.

Most respondents perceived Caesarean Section as a safe method of delivery. However anxiety about problems associated with the method was common. Health education strategies such as public enlightenment and patient education are needed to address this concern.

Key words: Caesarean Section, safe delivery, perceived consequences.
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CERTIFICATION

I certify that this work was carried out by OSHILAJA Morenike Ronke in the Department of Health Promotion and Education, Faculty of Public Health, College of Medicine, University of Ibadan under my supervision.

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GLOSSARY OF ABBREVIATIONS

CS	-	Caesarean Section
CPD	-	Cephalopelvic Disproportion
HMIS	-	Health Management Information System
NCHS	-	National Center For Health Statistics
NDHS	-	National Demographic Health Survey
NHS	-	National Health Service
PPH	-	Postpartum Haemorrhage
UN	-	United Nations
UNFPA	-	United Nation Population Fund
UNICEF	-	United Nation International Children Education Fund
USAID	-	United State Agency for International Development
WHO	-	World Health Organization

OPERATIONAL DEFINITIONS

Caesarean Section: caesarean section or caesarean delivery (also referred to as c-section) is the delivery of a baby or babies accomplished by performing a surgical incision through the maternal abdomen and uterus.

Maternal Mortality: is the death of a woman while pregnant or within 42 days after termination of the pregnancy irrespective of the duration or site of the pregnancy from any cause related to or aggravated by the pregnancy itself or its management.

Elective Caesarean Section: Otherwise known as "planned" procedure is not urgent and may be scheduled well in advance, at a time when it is convenient for the obstetrician, neonatologist, anesthetist and the patient.

Emergency caesarean section: Is that in which the decision to do so is taken during labour or delivery, when there is danger to the mother, foetus or both.

CHAPTER ONE

INTRODUCTION

Background to the Study

Over half a million maternal deaths occur yearly worldwide and 99% of this occurs in developing countries where 85% of the population lives (WHO 2009). Maternal mortality has been described as the symptom of an underlying disease: the country's shambolic socio-economic and political systems, which result in very poor obstetric care (Harrison 2007). The global plans to correct this situation have not achieved any improvement (Fasubaa, Oguniyi, Ezechi, 2000; Audu , Ekele,2001). Some of the factors identified, apart from direct obstetric causes, as barriers to achieving this objective include poverty, illiteracy, access difficulties, culture and aversion to CS (Ezechi, Fasubaa, Dare 2000; Ezechi et al; 2002). Maternal mortality in developing countries and economically restrained settings is daunting and largely unmet global public health challenge. Progress however, has been slow and some countries with high maternal mortality are experiencing stagnation or even reversals (WHO, UNICEF, UNFPA 2004). Countries in sub-Saharan Africa are hardest hit by this epidemic. Countries with highest maternal mortality were: Sierra Leone (2,000), Niger (1,600), Rwanda (1,400), Mali (1,200), Somalia, , Chad, Central African Republic and Guinea Bissau (1,100), (WHO, UNICEF and UNFPA 2003). In Nigeria, the problem is particularly challenging. One in 5 pregnancies is unplanned each year; more than 36,000 die as a result of pregnancy or childbirth in a year (Pullitzercentre.org/dying-life, July 19, 2010).

It has been reported that for every 100,000 live births, about 800 women died in the process of child birth. In year 2008, the deplorable rate of death was very appalling. The figure stood between 1,100 and 1,500 for every 100,000 live births according to the United Nations (UN Special Committee Report, 2008). On its part, UNICEF in its 'state of the world children reports'(2009) stated that one out of nine global maternal deaths occurred in Nigeria. According to WHO, several of these deaths are traceable to undue delays in seeking medical help during pregnancy and the post partum period (all Africa.com.Nigeria). To

improve maternal health and reduce 1990 mortality rates by 75% by 2015 is a key goal among the United Nations' (UN) Millennium development goals (UNDP, 2005). In Nigeria, pregnant women just hours from giving birth travel unprotected on motorbikes instead of ambulances. Other women go around maternity wards begging for money to pay hospital bills (The Lancent2001).

Deaths from pregnancy related causes which usually occur around the time of childbirth are a critical issue. The biomedical causes of maternal mortality are well recognized (table 1). Three quarters of maternal mortalities result from the direct obstetric complications of haemorrhage, infection, obstructed labour, hypertensive disorders of pregnancy, and septic abortion. The remainders are due to other 'direct' obstetric causes such as pulmonary embolism or ectopic pregnancy, or 'indirect' causes that are aggravated by pregnancy, such as malaria, hepatitis, diabetes mellitus and heart disease. Worldwide the most common cause of maternal mortality is haemorrhage, but the proportion due to each cause varies between regions. It has been estimated that approximately 40% of women may suffer an acute problem in pregnancy, and 9-15% may experience a problem needing higher level care (www.maternityworldwide.Org.). More than 70 percent of maternal deaths in Nigeria are due to five major complications: hemorrhage, infection, unsafe abortion, hypertensive disease of pregnancy and obstructed labour (NDHS 2004). Post Partum Haemorrhage is a major cause of maternal mortality and nowhere is this reality more apparent than in developing countries where it accounts for 28% of maternal deaths (El-Hammy-Lynch 2005).

Table 1.1: Causes of Maternal Mortality

Cause	Percentage of Maternal Deaths
Haemorrhage	24%
Infection	15%
Unsafe Abortion	13%
Hypertensive disorders of pregnancy	12%
Obstructed Labour	8%
Other direct causes*	8%
Other indirect causes**	20%

*Other direct causes include ectopic pregnancy, embolism, anaesthesia-related causes etc.
** Indirect causes include anaemia, malaria, heart disease etc.

SOURCE: Maternal mortality worldwide.com

Also, poor access to and utilization of quality reproductive health services contribute significantly to the high maternal mortality level in Nigeria. According to the 2003 Nigeria Demographic and Health Survey, 30 percent of Nigerian women cited the problem of getting money for treatment, while 24 percent cited the problems of accessibility to health facilities and transportation (NPC, 2003; ORC, 2004). Again, 14 percent reported the problem of ignorance of where to go for treatment, while one in ten women complained of the bottlenecks in getting permission to visit hospitals (NDHS 2003). Almost all causes of maternal mortality are preventable. An estimated 74 percent of maternal deaths could be averted if all women had access to the interventions for preventing or treating pregnancy and birth complications, in particular emergency obstetric care.

Pregnant women in low resource countries such as Nigeria, Togo, Liberia and so on often incur catastrophic costs to obtain the care they need (Rosenfield, Caroline, Lynn, 2007) The caesarean section (CS) is ranked as the number one major surgical procedure performed in the industrialised world (Petrous, Henderson, Glazener2001). It is an important aspect of emergency obstetric care and a major tool for the reduction of maternal and perinatal morbidity and mortality (Swende, 2008). CS has become relatively very safe due to improved surgical technique, better anaesthesia, safe blood transfusion and the availability of highly effective antibiotics (Aziken , Omo-Aghoja , Okonofua, 2007) .

Recently, with better education and increasing safety of CS delivery, CS rate appears to be increasing in most Nigeria hospitals (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 however a widely held belief that women in the West African sub-regions have an aversion for surgical delivery (Awoyinka, Ayinde, Omigbodun, 2006). Also, there is a general aversion to operative deliveries amongst Nigeria pregnant women largely because of the belief among some of our women that CS deliveries represent reproductive failure whereas vaginal deliveries are a proof of womanhood (Ezechi,

Nwokoro, Kalu , 2002). The aversion to CS constitutes a very formidable obstacle to safe-motherhood. There is increasing acceptance of the view that improved access to emergency obstetrics (especially to caesarean section) for dealing with complications is the single most important service that can rapidly reduce the high rates of maternal mortality in developing countries (Fortney, 2001). However, in many developing countries with high rates of maternal mortality, the ideal level of caesarean section representing a deficit in either use or overuse of caesarean deliveries has hitherto not been known. Despite long-standing international commitments to reducing maternal mortality, so far progress has been disappointing (Starrs, 2005).

Essential obstetric care (EOC) is critical for reducing maternal deaths. Unfortunately, national level data on the availability and use of EOC facilities are not yet available for many countries. An indicator of whether EOC facilities are providing life-saving obstetric services is the rate of CS for deliveries, one of the procedures used to treat major obstetric complications. UNICEF, UNFPA and WHO estimated that a minimum of 5 percent of deliveries was likely to require a CS in order to preserve the life and health of the mother or infant (WHO, UNICEF, UNFPA 2001). It has been estimated that approximately 40% of women may suffer an acute problem in pregnancy and 9-15% may experience a needing higher level care. Caesarean sections performed appropriately and following an appropriate medical indication are positively life-saving procedures. In this context, the provision of timely and safe CS in high maternal mortality countries is a major challenge faced by local health systems (Ponsmans, Holtz, Stanton, 2006).

In seeking optimized use of caesarean section to improve maternal health in West Africa, there is a clear need to conduct a need assessment in specific communities to find out the specific factors that account for low rates of caesarean section (Lancet, 2001). Then a carefully structured programme should be implemented to correct the deficiencies identified. Free caesarean deliveries, as reported by Friday Okonofua in his Oct 20 commentary (Okonofua F, 2001) in the Rivers State of Nigeria, is a step in the right direction if it is to herald free maternity services. Among the measures that also ought to be considered is

community education so that women understand the importance of timely caesarean section under specific circumstances, the provision of emergency transportation and health sector reforms. Since it is impossible to predict all those women who may require CS, it is difficult to determine when information on caesarian should be given.

Problem Statement

Approximately 536,000 maternal deaths occur annually, of which over 95% occur in sub-Saharan Africa and Asia. The world average per 100,000 was 400; the average for developed regions was 20; and for developing regions, 440 (WHO, 2007). Africa has the highest burden of maternal mortality in the world and sub-Saharan Africa is largely responsible for the dismal maternal death figure for that region, contributing approximately 98% of the maternal deaths for the region (WHO, 2007). The lifetime risk of maternal death in sub-Saharan Africa is 1 in 22 mothers compared to 1 in 210 in Northern Africa, 1 in 62 for Oceania, 1 in 120 for Asia and; 1 in 290 for Latin America and the Caribbean (WHO, 2007). In 2003, the WHO, UNICEF and UNFPA produced a report with statistics gathered from 2000 survey. Nigeria is a leading contributor to the maternal death figure in sub-Saharan Africa not only because of the hugeness of her population but also because of her high maternal mortality ratio. Nigeria's maternal mortality ratio of 1,100 is higher than the regional average (Hill, Thomas, Abouzahr, Walker, Say, Inoue, Suzuki, 2007) with an estimated 59,000 maternal deaths. Nigeria which has approximately two percent of the world's population contributes almost 10% of the world's maternal deaths (FMOH, 2005).

The number of women dying due to complications during pregnancy and childbirth has decreased by 34% from an estimated 546, 000 in 1990; to 358 000 in 2008, according to a news report, "*Trends in maternal mortality"*, released by the World Health Organization (WHO), the United Nations Children's Fund (UNICEF), the United Nations Population Fund (UNFPA) and the World Bank. (WHO News Release 2010), the progress is notable, but the annual rate of decline is less than half of what is needed to achieve the Millennium Development Goal (MDG) target of reducing the maternal mortality ratio by 75% between

1990 and 2015. This will require an annual decline of 5.5%. The 34% decline since 1990 translates into an average annual decline of just 2.3%.

Globally, around 80 percent of maternal deaths is due to obstetric complications; mainly haemorrhage, sepsis, unsafe abortion, pre-eclampsia and eclampsia, and prolonged or obstructed labour. Complications of unsafe abortions account for 13 percent of maternal deaths world wide and 19 percent of maternal deaths in South America. Nigeria is solely responsible for close to 10% of that figure. Indeed, recent data published by UNFOA/UNICEF indicate that Nigeria now has the second highest maternal mortality in the developing world (Oludiran and Okonofua; 2007). In 2008, an estimated 358,000 women died due to complications developed during pregnancy and childbirth (WHO 2010).

According to a study carried out by Igberase et al (2009) the leading causes of deaths are haemorrhage (36%), infections (24%), severe pre eclampsia/eclampsia (24%), cardiac arrest (12%) and anaesthesia-related complication (4%).

As stated by the WHO in its 2005 World Health Report "Make Every Mother and Child Count", the major causes of maternal deaths are severe bleeding/hemorrhage (25%), infections (13%), unsafe abortions (13%), eclampsia (12%), obstructed labour (8%), other direct causes (8%), and indirect causes (20%). Indirect causes are illness such as malaria, anaemia, HIV/AIDS and cardiovascular disease complicate pregnancy or are aggravated by it. For every woman who dies, at least 20 more suffer injury, infection or disability from maternal causes – approximately seven million women every year (WHO 2005).

Africa has the highest maternal mortality ratio with an estimated average of 800 deaths per every 100,000 births (gender issues @ consultancyafrica.com). The maternal mortality rate in Nigeria however is estimated as 545 maternal deaths per 100,000 live births (NDHS 2008). This is comparable with what is obtained in other developing countries of the world India, 785 (Verma, Thomas, Sharma, Ohar, Bhambri; 2001), Kenya, 730 (Orero, Oyo, Ogattu, Ogumba, Ombake; 2003) and Zambia, 729 (Mazimba, 2003). When these high maternal mortality rates in the developing countries are compared with what obtained in

developed countries such as England 9/100,000 (1982-1984), it is obvious that maternal mortality in developing countries is a tragedy.

The United State Agency for International Development (USAID) indicates that most of the victims of maternal deaths are women between the ages of 15 and 45. Maternal mortality rate in Ibadan North in year 2008 was 147.3/100,000; 228/100,000 in year 2009 and 295/100,000 in year 2010. In Oyo State, the rates were 157/100,000 in 2008; 151/100,000 in year 2009 and 143/100,000 in 2010 (HMIS unit, 2010). Aziken et al (2007) in their study on perception and attitude of 413 consecutive pregnant women towards CS at University of Benin Teaching Hospital, Nigeria showed that though women had good knowledge of CS; however only 6.1% was willing to accept CS as a method of delivery, while 81% would accept CS if needed to save their lives and that of their babies. Up to 12.1% of women would not accept CS under any circumstances. In a retrospective study carried out by Josiah *et al* 2005 on patients in Jos Nigeria between January 1985 and December, 2002. Out of the total number of 41,470 deliveries, 6,557 were CSs giving a CS rate of 15.8%. Elective CSs were performed in 970 (14.8%) and emergency CSs in 5,587 (85.2%) of all the CS (Josiah, Mutehin, Patrick, Innocent, Ujah; 2005). In a study of caesarean delivery at the Olabisi Onabanjo University Teaching Hospital, Sagamu, Nigeria, the rate increased from10.3% in 1989-1991 to 23.1% in 2000-2003 (Oladapo *et al*, 2004). At the Korle - Bu Teaching Hospital in Accra, Ghana, the CS rate has increased from 10.9% twenty years ago to the current figure of about 21% (Kwawukume, 2002).

Simultaneously, maternal morbidity and mortality remain very high (Prual, Bouvier-colle, De-bernis, Breart 2000). Maternal mortality in developing countries and economically restrained settings remains a daunting and largely unmet global public health challenge. To improve maternal health and reduce 1990 mortality rates by 75% by 2015 is a key goal among the United Nations Millennium Development Goals (UNDP 2005). The optimum CS rate in a given population cannot be inferred from expected CS rates for maternal indication. To determine how many women need a CS, irrespective of indication, is not possible, since the balance between costs and benefits, and the one between maternal and fetal needs

depend on the context (Lancet, 2002). However, Dumont et al in their study reported that CS was indicated in about 3.6-6.5% of West African pregnant women, but only 1.3% was achieved by this method (Dumont et al, 2001).

High maternal mortality rates in most subs – Saharan African countries are currently a major source of concern to policy makers throughout the world. Africa alone contributes 235,000 to the yearly maternal deaths. In 1995, the global estimate of maternal mortality was reported to be 515, 000 with an MMR of 397/100, 000 live births (Hill, Abouzahr, Wardlaw, 2001). East and West Africa have one of the world s highest maternal mortality ratios, with a ratio of over 1000 per 100, 000 live births (Buekens, 2001). The direct causes are the major implicated factors for maternal deaths. These have been identified to occur in this order of decreasing frequency: obstetric haemorrhage, infections, toxemia of pregnancy, obstructed labour and anaemia (Okpere, 2004). Seventy-five percent of maternal deaths occurs during childbirth and the postpartum period, and the vast majority of maternal deaths and injuries are avoidable when women have access to health care before, during and after childbirth.

A study like this is needed in Nigeria where culture has been shown to be an important factor in relation to women access to available reproductive health facilities. Women are sometimes prevented from accessing health services in a timely manner, leading to deaths of unregistered women that constitute a large proportion of hospital maternal deaths in Nigeria. In view of the above problems and concerns, this study is aimed at accessing the level of caesarian section awareness, its utilization and identification of possible barriers to utilization among women in Ibadan North Local Government (IBNLG). It will also suggest ways of overcoming the identified barriers. Such a study is critical at this stage so as to have evidence-based information on the social and behavioural factors influencing such options for child birth. More importantly, the study will provide answers to the following important questions.

- What are the common reasons why women fear CS?
- How do people (women) react when it is obvious they have to undergo caesarean section?
- How prevalent is the occurrence of CS amongst women interviewed?
- What is the reaction of men and women towards CS?

The purpose of this study was to determine, among men and women, perceptions and attitudes towards CS as findings may be useful as an evidence for guiding the formulation of evidence-based policies towards promoting good health, participating health management that would include both providers and consumers of this health facilities in the light of increasing use in modern obstetric practice. Finally, this study will stimulate further studies in CS. Study in this respect is not only necessary but it is also important as data obtained may be used for reference purposes in the planning, development and establishment of similar policies to promote maternal health in the country.

Justification of Study

Marriage and family life are important universally acceptable practices within which procreation and upbringing of children takes place. Pregnancy and child bearing in the Africa setting helps in paving way for a better life for the family. Because women in developing countries have many pregnancies on average, their life time risk accurately reflects the overall burden of these women. Nigeria has a total fertility rate of 5.7 life time birth per woman (NDHS 2000).

Maternal deaths are the greatest health inequity of the 21st century (worldbank.org/health nutrition and population). In any African nation, creative and effective options for reducing maternal mortality rates must include the active participation of all primary stakeholders. Maternal health is a critical topic in global complications during pregnancy. Everyday 1,500 women die from pregnancy or child-related complications (WHO, 2007). There were estimated 536,000 maternal deaths worldwide. Most of these deaths, which were avoidable, occurred in developing countries (WHO, 2007). In 2008, an estimated 358,000 women died

due to complications developed during pregnancy and childbirth (WHO, 2010). Ninety-nine percent of maternal deaths occurs in developing countries. Pregnancy and childbirth are among the leading causes of death and disability for girls and women in developing countries (http://www.who.int/mediacentre/factsheets/fs334/en/index.htm). The chances of a woman dying in pregnancy or childbirth is one in 14 in Somalia and one in 31 in sub-Saharan Africa, compared with just one in 15,200 in Italy and one in 4,200 in Europe (Trends in maternal mortality, op. cit.) In addition to differences in mortality ratio between countries, there are also large disparities within countries between people with high and low income and between rural and urban populations. The high incidence of maternal death is one of the signs of major inequity spread throughout the world, reflecting the gap between the rich and the poor.

Improving maternal health is one of the eight millennium development goals adopted by the international community at the United Nation millennium summit in 2000.

Stella and Adesegun (2009) in their study found out that the level of utilization of orthodox health care facilities for maternal care among women in Nigeria was low. Indeed utilization of maternal health care services is lower in Nigeria than in many countries in sub-Saharan Africa. For example, whereas we found that 60.3% of Nigerian mothers utilized antenatal care services during their last birth, the comparative figures were 88.0% for Benin (2006 DHS), 72.8% for Burkina Faso (2007 DHS), 83.4% for Cameroon (2004 DHS), and 91.9% for Ghana (2003 DHS) (http://www.measuredhs.com/). Similarly, the indicators of skilled assistance during delivery and use of postnatal care are considerably lower in Nigeria than in most African countries. A recent UNICEF report (2007) shows that regarding skilled assisted delivery, only Burundi; Chad, Eritrea, Ethiopia, Niger and Somalia performed more poorly than Nigeria in sub-Saharan Africa.

Nigeria, the most populous country in Africa, has one of the highest maternal mortality rates in the world. Like in most countries in the developing world, maternal mortality rate in Nigeria is on the increase. In Ibadan North Local Government, most commonly reported cases of pregnancy-related problems are prolonged obstructed labour, cephalopelvic

disproportion and placenta praevia. Most patients that come for ante-natal clinic end up not delivering in the hospital. In 2010, the total ante-natal attendance was 38,947; total delivery 6,432 while those that delivered in facilities by trained health workers were 3,566 (HMIS unit, 2010).

In view of this, this study will access perceptions and attitudes of married men and women towards caesarean section in Ibadan North Local Government. Such a study is critical at this stage so as to have evidence-based information on the social and behavioural factors influencing such options for childbirth and the findings will therefore constitute important base line information for the planning, development and establishment of policies to promote maternal health services in the country.

Research Questions

1. What types of deliveries are the respondents aware of?
2. What are the reasons why women are operated upon (CS)?
3. How do married men and women perceive CS?
4. What are the attitudes of men and women in Ibadan North Local Government Area to CS?

Hypotheses

The following hypotheses were tested during data analysis:

1. There is no association between respondent's sex and willingness to accept CS.
2. There is no association between respondent's level of education and willingness to accept CS as a means of delivery.
3. There is no association between respondents' sex and perception of CS as a good method of baby delivery.
4. There is no association between respondents' religion and willingness to accept CS.

Objectives of the Study

Broad Objective

The broad objective of this study was to determine the perceptions of married men and women about CS in Ibadan North Local Government Area (IBNLGA), Oyo State with a view to making appropriate intervention.

Specific Objectives

The specific objectives were to:

1. Assess awareness and knowledge of CS,
2. Describe respondents' experiences on CS,
3. Determine respondents' perception of CS and,
4. Identify factors influencing respondents' adoption of CS as maternal choice of child delivery.

Limitations of the Study

This study focused on perception of married men and women on caesarean section. The sensitivity of the topic posed challenges as some respondents (female) who had undergone CS felt reluctant disclosing the circumstances surrounding it. However efforts were made to overcome this challenge by assuring the respondents of confidentiality of all information provided and ensuring participation was voluntary. Another challenge was that of getting people involved in the Focus Group Discussions as they claimed they could not leave their shops and business for discussions that would not fetch them money. Some even demanded for incentives. They were reassured that it would be brief and that the findings from the study would be beneficial to their community.

CHAPTER TWO

REVIEW OF LITERATURE

History of Caesarean Section

Growing popularity is often a sign of something new. But the C-section is actually one of the oldest surgeries on record. CS is ancient operation. The origin is not certain having been largely lost in antiquity and mythology (Makinde, 1987; Myers cough 1995). References to C-sections go back thousands of years. Caesarean section has been part of human culture since ancient times and there are tales in both Western and non-Western cultures of this procedure resulting in live mothers and offspring. Numerous references to caesarean section appear in ancient Hindu, Egyptian, Grecian, Roman, and other European folklore.

Yet, the early history of caesarean section remains shrouded in myth and is of dubious accuracy. Even the origin of "caesarean" has apparently been distorted over time. It is commonly believed to be derived from the surgical birth of Julius Caesar, however this seems unlikely since his mother Aurelia is reputed to have lived to hear of her son's invasion of Britain. At that time the procedure was performed only when the mother was dead or dying, as an attempt to save the child for a state wishing to increase its population. Roman law under Caesar decreed that all women who were so fated by childbirth must be cut open; hence, the term caesarean. Other possible Latin origins include the verb "caedare," meaning to cut, and the term "caesones" that was applied to infants born by postmortem operations. Ultimately, we cannot be sure of where or when the term caesarean was derived. Until the sixteenth and seventeenth centuries the procedure was known as caesarean operation. This began to change following the publication in 1598 of Jacques Guillimeau's book on midwifery in which he introduced the term "section". Increasingly thereafter "section" replaced "operation."

During its evolution caesarean section has meant different things to different people at different times. The indications for it have changed dramatically from ancient to modern times. Despite rare references to the operation on living women, the initial purpose was essentially to retrieve the infant from a dead or dying mother; this was conducted either in the rather vain hope of saving the baby's life, or as commonly required by religious edicts, so the infant might be buried separately from the mother. Above all it was a measure of last resort, and the operation was not intended to preserve the mother's life. It was not until the nineteenth century that such a possibility really came within the grasp of the medical profession.

There were, (though sporadic) early reports of heroic efforts to save women's lives. While the Middle Ages have been largely viewed as a period of stagnation in science and medicine, some of the stories of caesarean section actually helped to develop and sustain hopes that the operation could ultimately be accomplished. Perhaps the first written record we have of a mother and baby surviving a caesarean section comes from Switzerland in 1500 when a sow Gelder, Jacob Nufer, performed the operation on his wife. After several days in labour and help from thirteen midwives, the woman was unable to deliver her baby. Her desperate husband eventually gained permission from the local authorities to attempt a caesarean. The mother lived and subsequently gave birth normally to five children, including a set of twins. The caesarean baby lived to be 77 years old. Since this story was not recorded until 82 years later, historians question its accuracy. Similar scepticism might be applied to other early reports of abdominal delivery from those performed by women on themselves and births resulting from attacks by horned livestock, during which the peritoneal cavity was ripped open.

The history of caesarean section can be understood best in the broader context of the history of childbirth and general medicine from histories that also have been characterized by dramatic changes. Many of the earliest successful caesarean sections took place in remote rural areas lacking in medical staff and facilities. In the absence of strong medical communities, operations could be carried out without professional consultation. This meant

that caesareans could be undertaken at an earlier stage in failing labour when the mother was not near death and the foetus was less distressed. Under these circumstances the chances of one or both surviving were greater. These operations were performed on kitchen tables and beds, without access to hospital facilities, and this was probably an advantage until the late nineteenth century. Surgery in hospitals was bedevilled by infections passed between patients, often by the unclean hands of medical attendants. These factors may help to explain such successes as Jacob Nufer's.

For most of the time since the sixteenth century, the procedure had a high mortality. However, it was long considered an extreme measure, performed only when the mother was already dead or considered to be beyond help. However, it has evolved from being a post-mortem operation to becoming a life-saving procedure for both the mother and the baby. On March 5, 2000, Inés Ramírez performed a caesarean section on herself and survived, as did her son, Orlando Ruiz Ramírez. She is believed to be the only woman to have performed a successful Caesarean section on herself (Conis, 2006).

Prevalence of Caesarean Section

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 trend of acceptability and the rate of CS have been on the increase in the developed countries in the past two decades. The World Health Organization recommends the rate of CS at between 10% and 15% of all births in developed countries. Data have shown increases in rates of childbirth taking place in a medical context. Between 1990 and 2000, delivery in the presence of a skilled attendant increased from 41% to 57% in developing countries. All areas of the developing world demonstrated increases with the exception of sub-Sahara Africa. (http://unstats.un.org/unsd/mdg/default.aspx). Recent current estimates of caesarean birth rates indicate an overall caesarean rate of 12.4% in the developing world. (Stanton, Cyntheak, Holtz, Sara; 2006). Sub-Saharan Africa remains the only region in the developing world not to have reached the WHO’s suggested minimum caesarean rate of 5%.

In 2004, the caesarean rate was about 20% in the UK, Canada rate was 22.5% in 2001-2002 (CTV, 2004). In recent years the rate has risen to a record level of 46% in China and to levels of 25% and above in many Asian countries, Latin America, and the USA. In Italy the incidence of CS is particularly high, although it varies from region to region (Corriere della Sera, 2009). In Campania, 60% of 2008 births were reportedly delivered via CS (Pupia informazione Campania 2009). In the Rome region, the mean incidence is around 44% but can reach as high as 85% in some private clinics ("Cesarei, alla Mater Dei il record" 2009). In India , the CS increased from 2.9 percent of the childbirth in 1992-93 to 7.1 in 1991-99 and further to 10.2 percent in 2005-2006 (NFHS-111; 2006).

Yogev et al (2002) in their own study found out that the percentage of women who would choose planned CS if the presentation remained breech was significantly higher in 2001 (97%) than in 1995 (64.7%) with the conclusion that "attitude towards breech delivery has changed since 1995". Planned CS for breech presentation is the overwhelming choice of women in general, with a significant increase in 2001 compared with 1995.

In the United States the caesarean rate has risen to 48% since 1996 (NCHS, 2006) reaching a level of 31.8% in 2007 (NCHS, 2008). A 2008 report found that one-third of babies born in Massachusetts in 2006 was delivered by CS. Among developed countries, Brazil has one of the highest rates of CS in the world. In the public health network, the rate reaches 35%, while in private hospitals the rate approaches 86%. Studies have shown that continuity of care with a known carer may significantly decrease the rate of caesarean delivery (Homes, Davies, Brodie et al, 2001) but there is also research that appears to show that there is no significant difference in caesarean rates when comparing mid-wife continuity care to conventional fragmented care (Hodett, Hederson, Sonja, 2008).

Australia has an increase CS rate (28.5%) in 2003 compared with world standards (Sullivan &Laws, 2005). In the Netherlands, the CS rate is 9.2%. In the United Kingdom (UK) the rate for 2003-2004 was 22.7% (Department of Health, 2005) and New Zealand (NZ) has a CS rate of 22.7% (New Zealand Health Information Service, 2004). Prevalence of CS in

Western Australia was 30.9% (Gee & Green, 2004). In the United States, one in four women now has a CS of 27.5% (Martin et al 2005). The CS rate in Great Britain is currently 21% (Thomas J, 2001).

In Ghana, the proportion of CS among total deliveries increased steadily from 4.3% in 1999 to 5.8% in 2003 (Annual Report, 2003). Pakistan, a developing country like Nigeria, has a CS rate of 24.1% (Naymi, Rehan, 2000). Ghana CS rate was 10.9% (Kwawukume, 2000). In the United States, Healthy People (2010) established a goal of a 15% rate for CS, the ideal rate has not been established. As of 2004 (Old Sally et al, 2004) the average caesarian section rate was one out of every four births of approximately 26% of all births.

In a study at Jos University Teaching Hospital (Josiah, Patrick, Innocent O, 2005) the major findings were that the caesarian rate was 15.8%. In the year 1985, there was 1 elective CS to 6 emergency CSs. Mid ways in the study (1994), the ratio increased to about 1 in 7 and at the end of the study period (2002) it increased further to a ratio of about 1 in 3.The CS rate at Ebonyin state University Teaching Hospital was 16.6% (Sunday Adeoye and Kalu 2011); at Baptist Medical Centre, Eku the CS rate was 34.5% (Igberase et al, 2009). At the University of Maiduguri Teaching Hospital the caesarean section rate showed a steady increase over the years (7.20% in 2000; 13.95% in 2005), (Ado et al 2009). The overall incidence of caesarean section in Amaku General Hospital, Awka was 10.4%. (Ikeako, Nwajiaku , Ezegwui, 2009). This review was comparable to 13.6% recorded in Uyo by Umoh et al (2010) in an institution of similar level.

In a study carried out at the Usmanu Danfodiyo University Teaching Hospital, Sokoto, Nigeria; it was revealed that out of 2,562 total deliveries had within the study period, only 216 were from CS. From this, elective CS accounted for 42 (19.4%) and 174 (80.6%) respectively. The overall CS rate of 16.9% was recorded at The University of Ilorin Teaching Hospital (Jimoh and Nwosu, 2007).

In a study of caesarian delivery at the Olabisi Onabanjo University Teaching Hospital, Sagamu, Nigeria, the rate increased from 10.3% in 1989-1999 to 23.1% in 2000-2003 (Oladapo, Sotunsa, Sule-Odu; 2004). A study was carried out by Akinwuntan et al (2006), on CSs performed at the University College Hospital, Nigeria, over a 5-year period. The CS rate during the study period was 34.7%; 77.9% were emergency procedures while 22.1% were elective cases. The three commonest indications in the series were foetal distress (18.7%); one previous CS (12.0%) and ante partum haemorrhage (7.9%). The figure below shows the CS rates in seven Africa Countries: findings from a study carried out by Shah et al (2009) on Caesarean delivery outcomes from the WHO global survey on maternal and perinatal health in Africa.

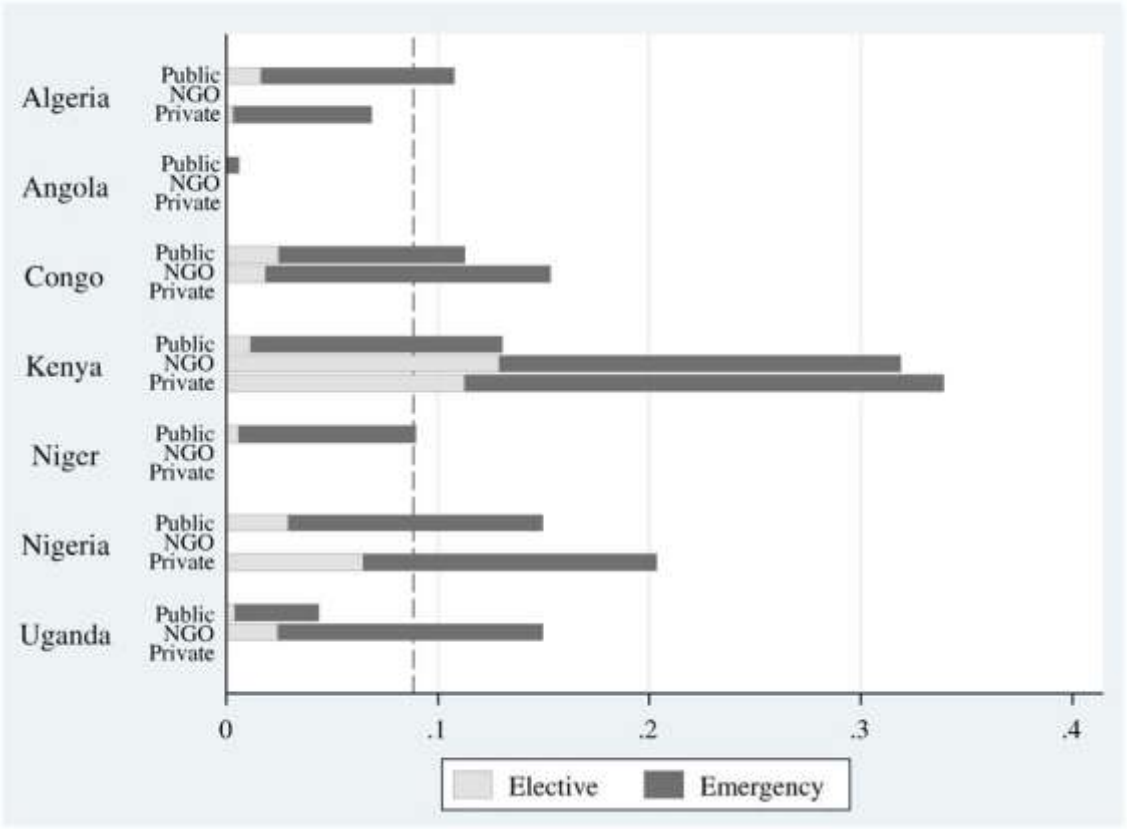

Fig.1.1: Proportion of elective and emergency caesarean deliveries (x-axis) according to ownership of facilities and countries (broken line denotes median caesarean delivery rate for all facilities).

Fig.1.1: summarizes the distribution of elective and emergency caesarean by ownership of facilities and country. Among facilities performing caesarean delivery, the overall median (10th–90th centiles) caesarean delivery rate was 13.4% (2.3%–27.3%). Median rates were 11.9% in Algeria, 1.1% in Angola, 18% in the Democratic Republic of Congo, 14.6% in Kenya, 11.7% in Niger, 14% in Nigeria, and 15.7% in Uganda. Caesarean deliveries were performed in only 95 (72.5%) of the 131 African facilities, which reported over 85% of births. Marked inter country differences were observed in caesarean delivery rates (1.1% to 18%).

Reported caesarean delivery rates in Sub-Saharan Africa have ranged from 5% to 21.8% [Dumont et al 2001]. With significant socioeconomic differences (Ronsmans, Holtz, Stanton, 2006). Higher rates observed in non public facilities in 4 countries further confirm differential access and utilization linked to resources. Elective caesarean deliveries were less common in public facilities as in other countries (Villar et al 2006; Sreevidya, Sathiyasekaran, 2000; Wanyonyi, Sequeira , Obura, 2000).

Indications for Caesarean Section

A caesarean section is usually performed when a vaginal delivery would put the baby's or mother's life or health at risk. Although in recent times it has been also performed upon request for child's births that could otherwise have been natural (Finger, 2003). Not all of the listed conditions represent a mandatory indication and in many cases the obstetrician must use discretions to decide whether a caesarean is necessary.

Shah A et al (2009) in their study in selected facilities in 7 African countries between September 2004 and March 2005, found out that Caesarean deliveries were performed mostly for cephalopelvic disproportion, dystocia, or failure to progress (median 30.9%); foetal distress (median 25%); previous caesarean (median 21.5%); and mal-presentations (median 13.5%) (Table 2). Laparotomy for uterine rupture was uncommon (median, 0.08%).

Table 2.1: Proportions of individual indications for caesarean delivery in the 95 facilities performing the procedure.

Indication	**Median incidence rate (10th–90th)**
Cephalopelvic disproportion, dystocia, failure to progress	30.9 (6.7–53.7)
Foetal distress	25.0 (4.8–50.0)
Previous caesarean	21.5 (0.0 -38.3)
Breech or other malpresentations	13.3 (0.0–25.0)
Other pregnancy complications	3.2 (0.0–12.5)
Pre-eclampsia or eclampsia	2.1 (0.0–10.0)
Failed induction	2.9 (0.0–9.5)
Other foetal indications	2.6 (0.0–13.3)
Other maternal medical complications	1.2 (0.0–11.6)
Tubal ligation or sterilization	1.5 (0.0–8.0)
Intrauterine growth restriction	1.0 (0.0–6.8)
Third trimester vaginal bleeding	5.4 (0.0–13.3)
Multiple pregnancy	2.9 (0.0–9.4)
Post-term (>42 weeks)	2.1 (0.0–10.0)
Genital herpes or extensive condyloma acuminates	0.0 (0.0–1.1)
Suspected or imminent uterine rupture	1.3 (0.0–9.4)
HIV positive	0.0 (0.0–3.8)
Maternal request without any other indication	0.0 (0.0–3.9)

Maternal indications were the most common reasons for caesarean delivery in their study (Shah et al, 2009), similar to other reports from Africa (Dumont et al, 2001) and Latin America (Villar et al, 2006). Rates for different indications ranged widely; cephalopelvic disproportion, dystocia, and failure to progress ranged from 6.7% to 53.7% and foetal distress ranged from 4.8% to 50%. Unlike Latin America (Villar et al, 2006), fewer caesarean deliveries were performed for women with a previous caesarean (median 21.5%). Foetal indications were relatively uncommon except for malpresentations (13.3%). Caesarean delivery for HIV positive cases, previously repaired fistula, and on maternal request alone was uncommon, as was laparotomy for uterine rupture.

In a study carried out by Onankpa et al (2009) the main indication for CS was cephalopelvic disproportion (39.8%). This is in keeping with previous findings from other centres within the country (Swendze, Agida, Jogo, 2007; Ezechi et al, 2005). Swendze (2008) in their own study on all patients delivered by caesarean section between January 2004 and December 2006 at the Federal Medical Centre Makurdi in north central Nigeria. The leading indication for emergency caesarean section was cephalopelvic disproportion, accounting for 138 (39.3%) cases, while ante partum haemorrhage and foetal distress followed in that order. Also according to a study on records of patients who had caesarean delivery over a ten year period in the Baptist Medical Center Eku, dystocia (27.1%) was the commonest indication for caesarean section (Igberase et al, 2009).

Complications of Caesarean Section

Risks for the mother

Previously, the mortality was almost 100% for the mother especially in developing countries with poor resources, the major causes being infections, haemorrhage and poor health care (Elvidi-Gasphrovic, Klepac-Pulanz, Peter, 2006). Improved health care delivery in terms of personnel and facilities has contributed to the dramatic decrease in mortality seen during the last century (Ezechi et al, 2005; Elvidi et al, 2006).

The mortality rates for both CS and vaginal birth, in the western world, continue to drop steadily. In 2002, the mortality rate for caesarean in the United States was 20 per 1,000,000 (Pai Madhukar, 2000). Studies have reported a 3-4 fold increased risk of maternal death from caesarean section as compared with vaginal delivery (Deneux-Tharau *et al*, 2006 & Devendra, Arulkumaran, 2003). The UK National Health Service gives the risk of CS-caused death for the mother as three times that of a vaginal birth (NHS Direct, 2006). However, it is misleading to directly compare the mortality rates of the vaginal and caesarean deliveries. Women with severe medical conditions, or higher risk pregnancies, often require a caesarean section which can distort the mortality figures. In Nigeria, the maternal deaths from CS are exceptionally high and result from avoidable causes such as haemorrhage, shock, sepsis and hypertensive disorders in pregnancy (Ozumba, Anya, 2002).

As with all types of abdominal surgery, a caesarean section is associated with risks of post-operative adhesions incisional hernias (which may require surgical correction) and wound infections (Pai Madlulker, 2000). Post-operative complications such as febrile morbidity, sepsis, haemorrhage (a major cause of maternal mortality, which accounts for 28% of maternal deaths in developing countries; El-Hammy; B-Lunch ,2005) and wound infection are higher with Caesarian delivery (Ncayiyana, 2005). CS wound infection is a major cause of prolonged hospital stay, high hospital bills, as well as other morbidities and mortalities (Ezechi, Fasubaa, Dare, 2000). Recovery from CS is more difficult for women who develop post operative wound infection.

If a caesarean is performed under emergency situations, the risk of surgery may be increased due to a number of factors. The patient's stomach may not be empty, increasing the anaesthesia risk (Gynaecworld, 2006). Other risks include severe blood loss (which may require a blood transfusion) and post spinal headaches (Pai Madhukar, 2000). The risk of placenta acreta, a potentially life threatening condition, is only 0.13% after two caesarean sections but increases to 2.13% after four and then to 6.7% after six or more surgeries. It is therefore crucial to ensure that the uterus is evacuated of all placenta and clot in order to prevent this common cause of Post Partum Hemorrhage (PPH) (Willams Obstetrics, 2005).

Along with this is a similar rise in the risk of emergency hysterectomies at delivery. The findings were based on outcomes from 30, 132 caesarean deliveries (Silver, Landon, Rouse et al, 2006). It is difficult to study the effects of caesarean sections because it can be difficult to separate out issues caused by the procedure itself versus issues caused by the conditions that require it. For example, a study published in February 2007 of the journal of *Obstetrics and Gynaecology* found that women who had just one previous caesarean section were more likely to have problems with their second birth. Women who delivered their first child by caesarean delivery had increased risks for malpresentation, placenta praevia, antepartum haemorrhage, placenta acreta, prolonged labour, uterine rupture, preterm birth, low birth weight and stillbirth in their second delivery. However, the authors concluded that some risks may be due to confounding factors related to the indication for the first caesarean, rather than due to the procedure itself (Kennare, Tucker, Heard, Chem, 2007).

Risks for the child

Foetal outcome after CS is of serious concern, especially if part of the reason for surgery was to salvage the foetus. This list covers the most commonly described risks to the child. Some risks are rare and as with most medical procedures the likelihood of any risk is highly dependent on individual factors such as whether other pregnancy complications exist, whether the operation is planned or done as an emergency measure, and how and where it is performed.

- **Neonatal depression**: Babies may have an adverse reaction to the anaesthesia given to the mother, causing a period of inactivity or sluggishness after delivery (Pai Madhulker, 2000). There is higher proportion of birth asphyxia in women who received general anaesthesia (Obinna,Humphrey, Adaobi, Jamike, 2011).
- **Foetal injury:** Injury may occur to the baby during uterine incision and extraction (Pai Madhulker, 2000)
- **Breathing problems:** Children delivered by elective CS have less frequent asphyxia and considerably less frequent resuscitation than the children delivered through emergency CS (Elvedi-Gasparovic, Klepac-Pulanic, Peter, 2006). A study carried out by

Ben Onankpa et al., (2007) reviewed a perinatal mortality of 11.1% and the main cause of death was severe birth asphyxia.

- **Breastfeeding problems:** Babies born through CS are less likely to successfully breastfeed than those delivered through vagina.
- **Potential for early delivery and complications**: One study found an increased risk of complications if a repeat elective CS is performed even a few days before the recommended 39 weeks.
- **Type 1 Diabetes:** A 2008 study found that children born by CS have 20% higher likelihood of developing Type 1 Diabetes in their lifetimes than babies born through vagina.
- **Respiratory Distress Syndrome-** The last few weeks of pregnancy are critical for lung development, including shifting lung cells from fluid producing cells to fluid absorbing cells (Lamaze Int, 2009).

Risk for both Mother and Child

Caesarean section poses greater physical and emotional risk to both mother and baby compared with vaginal birth (Creedy et al, 2000; Goer, 2001; Jukelevics, 2002; Armstrong et al 2004; Slaytor et al 2004). Due to extended hospital stays, both the mother and child are at risk of developing a hospital borne infections (Pai Madhulker, 2000). Studies have shown that mothers who have their babies by caesarean take longer to first interact with their children when compared with mothers who had their babies through vagina (Pai Madhulker, 2000).

Attitude towards CS

The birth of a new born brings joy many times to the mother and her relatives and is a universal event. This is mostly true of women in the developed countries of the world as they go through pregnancy and child birth that is largely uneventful. However, for women in the developing countries of the world, this is not so, as the journey is a perilous one with many maternal deaths (Aboyeji, Ijaiya, Fawole, 2007). Unlike other countries (Villar , Valladares, Wojdyla , Zavaleta , Carroli , Velazco et al 2006 ; WHO 2005) with worrying

increases in cesarean deliveries, there is apparent underutilization of a potentially lifesaving procedure in some African facilities

Whilst many women supported the principle of choice, they identified how, in practice their autonomy was limited by individual circumstance and available care provision. All women felt that concerns about their baby's or their own health should take precedence over personal preference. Moreover, expressing a preference for either vaginal or caesarean birth was inherently problematic as choice until the time of delivery was neither static nor final. Women did not have autonomous choice over their actual birth method, but neither did they necessarily want it. (Kingdon, Neilson, Singleton, Gyte, Hart, Gabbay, Lavender 2009). Good maternal and perinatal outcomes can be ensured through essential obstetric and newborn care provided by skilled attendants during pregnancy and childbirth (WHO 2000; WHO 2003; WHO 2006; WHO, 2007). In many resource-poor settings, access to skilled care and crucial interventions is limited. The ability of women to command resources and make independent decisions about their fertility, their health and healthcare also has an impact on maternal mortality. Where women are afforded a low status in society their health needs are often neglected, and existing health facilities may not be accessed by women in need. Additionally, lack of education and understanding around health related issues can contribute to delays in seeking care when it is needed or to the inappropriate management of life threatening pregnancy complications. Caesarean delivery is a marker for the availability and use of obstetric services in these situations (WHO, 2009).

In developing countries especially the sub-Saharan Africa, there is a great aversion to caesarean section (Orji et al., 2003). Unlike other countries with worrying increases in caesarean deliveries, there is apparent under-utilization of a potentially life-saving procedure in some African facilities. Emergency caesarean delivery may have been performed too late to prevent perinatal deaths and morbidity. 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). . Aziken et al (2007) showed that culturally biased misconceptions about CS were the main reason for a number of patients

refusing this procedure regardless of its necessity. 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. In a study carried out in Brazil (Hopkins & Kristine, 2000), it was found out that a woman's education and region of residence were associated with her choices of delivery via CS. Ezechi et al (2004) in their study found out that aversion to CS is deep rooted in the culture of the people. In their findings, a patient who had a previous CS recounted how her mate insulted her on cautioning her child on a wrong doing. She was informed that because she did not experience the pangs of labour pains that it is not surprising that she did not know how to take care of children and her not appreciating children was not her fault but that of caesarean delivery. Because of this she had vowed to deliver through the vagina even at the cost of her life. She did, she laboured for hours in a mission house, and was referred to the hospital with ruptured uterus. She was lucky to survive; however she lost her uterus and her baby. However there was a differing view from another study; when asked which mode of delivery they will prefer if cost for both the modes is similar, there was no change in women's favouring CS, whereas nine women (3.9%) favouring vaginal delivery changed their opinion towards CS (Saoji , Nayse, Kasturwar, Relwani 2011). Maternal mortality is considerably influenced by the social, economy and political context of the health-care system and the cultural and biological realities of the women seeking care (Elizabeth, Nancy 2002). This complex interplay may result in delay in women seeking skilled care during pregnancy and delivery. The delays may arise because women and their families may not recognize the warning signs of life-threatening complications of pregnancy (Phase I delay) or they may have difficulties in reaching health facilities (Phase II delay), and receive standard or slow care at health facilities (Phase III delay). Women who deliver by CS differ significantly from those who deliver through vagina regarding their childbirth experience. Those who deliver by CS are often less satisfied with their experience, and with themselves.

Emotionally women who have a caesarean report feeling negatively about their birth experience and may have trouble with initial bonding with their baby (Declerq ,Sakala , Corry 2002). They experience a feeling of resentment towards the physician, profound disappointment at the treatment expectation and loss of the happy moment of natural birth

leading to post partum depression (Al-Nuaim, 2004). A previous study (Aziken, Omo Aghoja, Okonofua, 2007) found out that majority of women were aware of CS as the alternative to vagina delivery. Chong and Mongelli (2003) also reported that 95% of the Asian women indicated a preference for vaginal delivery. The most common reasons given for such a preference were a wish for a natural process (23.8%), a fast recovery (22%) and safer mode of delivery (7.3%).

In a post partum survey (Hopkins & Kristine 2000) of "Brazilian women's attitude towards CS and vaginal delivery", eighty-four (91%) of women in the public and private hospitals agreed with the statements that "a woman recovers her figure quickly after a vaginal delivery and that the recovery after caesarean takes longer". Fifty-eight percent (58%) of the women who delivered in the public hospitals agreed with the statement that "the vagina remains "stretched" after a vaginal delivery", while only 16-20 percent of them believed that her or her husband's sexual pleasure was diminished as a result of vaginal delivery. Roughly two-thirds of women in public and private hospitals agreed that a caesarean was not painful during the operation, but about three-quarters said it was very painful afterwards. Overall about two-thirds also believed that a vaginal birth was more painful than a caesarean (Kristine, 2000).

While the operation is widely embraced and utilized in the developed world; aversion, miseries, misconception, fear, guilt and anger surround the operation in Nigeria (Fasubaa, Oguniyi , Dare , Isawunmi , Ezechi et al., 2000). Reasons for this include the morbidity and mortality from the operation, prolonged stay, and perceived high cost of bills (Fasubaa et al, 2000; Ezechi et al, 2000). Earlier studies conducted by Ezechi, Fasubaa and colleagues' in southwestern Nigeria showed that post-wound infection leading to prolonged hospital stay was a major cause of the wide spread aversion to CS in the region (Fasubaa et al.,2000; Ezechi et al., 2002; Ezechi et al., 2004). Because these women do not want relations and friends alike to know that they delivered through CS, any factor that will prolong their stay in the hospital is particularly frowned at. The majority of those preferring vaginal deliveries held the view that CSs were more difficult, dangerous, and painful.

For women who preferred CSs, both modes of delivery were believed to be equally safe. Similar findings were reported in a study by Angeja et al (2006) in which it was also found that these perceptions were the most important factors in determining women's decision to have a CS

Jeremiah et al (2011) in their study on Attitudes of Antenatal Patients at a tertiary hospital in Southern Nigeria towards caesarean section presented their findings on reasons for opposing caesarean section with the table below:

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)

The above table illustrates the women's reasons for opposing caesarean section. Forty five (36%) believed it was a denial of womanhood, 4 (3.2%) believed they would 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.

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. Female education would go a long way to improve the acceptance of caesarean section among our womenfolk. Community health education about the benefits of caesarean section when indicated at primary care level is also 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.

Perception of CS

The knowledge recipients of CS possess affects their ability to give informed consent to this procedure. Evidences show that patients who are knowledgeable about their conditions are able to actively participate in shared decision making (coulter, Parson, Askhen 2008). Patients who are well informed also are more likely to have a shorter and less complicated post-operative recovery period (Klein, Fedyshin, Burda, Epstein Lawrence 2005). The perceptions surrounding CS may have a significant role in the willingness to consent to such a procedure. These perceptions are driven by the information women receive from diverse sources, which may vary in their accuracy and reliability. Failure to ensure patients receive accurate information may result in some women refusing a CS, which may be necessary to prevent both maternal and fetal risks. Culture and beliefs can also significantly influence the attitude toward CS.

Healthcare professionals must consider that whilst women want to be informed and involved in the decision-making process surrounding birth method, it does not necessarily follow that they want the final say. For some women, the old adage of 'doctor knows best' still holds true. Whilst many women supported the principle of choice, they identified how, in practice their autonomy was limited by individual circumstance and available care provision. All women felt that concerns about their babies or their own health should take precedence over personal preference. Moreover, expressing a preference for either vaginal or caesarean birth was inherently problematic as choice until the time of delivery was neither static nor final. Women did not have autonomous choice over their actual birth method, but neither did they necessarily want it (Kingdon, Neilson, Singleton, Gyte, Hart, Gabbay, Lavender 2009). The perceptions surrounding CS may have a very significant role in the willingness to consent to such a procedure. These perceptions are driven by the information women receive from diverse sources which may vary in their accuracy and reliability. Failure to ensure patients receive accurate information may result in some women refusing a CS which may be necessary to prevent both maternal and foetal risks.

Gamble and Creedy (2000) in their study concluded that without the assurance that women are fully informed about the risks and benefits of CS; statements about their contribution or request for caesarean delivery are questionable. Choices of CS are also influenced by gender roles in society. Latzinger (2001) argues "the most vulnerable women are those who look to experts to tell them what to do". They do not feel happy about questioning authority. They are frightened that if they disobey, they will be punished or their babies will suffer. For them, the cultural feminine ideal is one of submissiveness or experience has taught them that resistance has dangerous consequences.

One factor that certainly favours the liberalization of CS in clinical practice has been the perception of CS as a generally safe procedure despite the increased cost associated with it. Safety; cost; women's right and wishes; maternal and progress satisfaction have been elements of debate about the appropriateness of CS (Béhague, Victora, Barros 2002; Villar et al 2006; Villar et al 2007;Lumbiganon et al 2010; Chong, Kwek 2010; Gibbons 2010; Christilaw 2006).

In developing countries, the change in CS rate has been less dramatic. This results from the negative perception of CS among women in the developing nations. CS is still being perceived as an abnormal means of delivery by some women in developing countries (Kerakumna 2001), hence the CS rate in some sub-Saharan African countries is as low as 2% (Buckas, Curtis, Alayin 2003). Recent evidence shows increasing demand for CS among young, educated women residing in urban areas (Lee, Wen and Walker 2003).

Among women in the developing countries, CS is still being perceived as a curse on an unfaithful woman and is the lot of weak women. In a study among Yoruba women of south-western Nigeria, CS was viewed with suspicion, aversion, misconception, fear, guilt, misery and anger (Orji Ogunniyi, Onwudiegwu2003). In developing countries, very few women elect to have CS on account of non-medical indications due to the negative perception of the procedure.

In Nigeria, as in most of Sub-Saharan African countries, it has been suggested that women accept CS reluctantly even in the face of obvious clinical indications (Belaque, 2002). Also, the negative view and perception of CS by women in the developing countries have led to gross under-utilization of the procedure compared to the large burden of obstetric morbidity requiring resolution by CS. A study documented the fear of CS as one of the commonest hindrances proffered by women for not utilizing formal maternity service (Okonufua, 2001). This offers an explanation why some of these women present late to the centre with complications resulting in an unacceptably high mortality rate. The procedure seems to be poorly accepted and in the long-term, it exposes women to an increased risk of uterine rupture during the next pregnancy, together with a higher incidence of infertility. According to a study by Adeoye and Kalu (2011), the major concern expressed by the respondents is the fear of death during the procedure. This is a geuine concern considering the high rate of maternal death associated with CS in South-eastern Nigeria (Ozumba, Anya, 2002).

The cultural perception of the individual communities is vital to the acceptance of the procedure because the observed trend is a great reluctance among women and their relations to accepting the procedure. This cultural perception may possibly and partly explain why the number of women who booked for antenatal care in the centre is significantly different from the actual number of those who delivered in the centre. For fear of CS, some clients may choose to deliver at home or with a maternity centre after receiving antenatal care in the centre.

The negative reception at home by family and community members of women who delivered by CS may negatively affects the clients' acceptance of a repeat CS in the index pregnancy and this may adversely affect maternal and perinatal outcome. If the unacceptably poor utilization of health for delivery is to improve, the concerns and fears expressed by clients should be addressed in addition to instituting mechanism to modify the perception of the local communities about CS.

Saen et al, (2011) in their study found out that women who preferred vaginal delivery generally felt that CS was more dangerous and painful while those who preferred Caesarean delivery felt that CS was safe and less painful. The findings that women with only one child were more likely to undergo a CS may reflect women's perceptions regarding the efficacy of the procedure as a means to ensure newborn survival and to avert the risks of birth complications or still birth (Surfang et al, 2007).

Also, perceptions surrounding CS may have a significant role in the decision making process which influenced by multiple complex factors like the reason for which the caesarean was performed, a woman's cultural values, her beliefs and anticipation of the birth, possible traumatic events in her life, available social support and her personal sense of control, are only a few (Jukelevis, 2001). Deber et al, (1996) in their study found that majority of patients wished physicians could do the "problem-solving tasks". This is worrisome because a lack of knowledge affects their ability to engage in informed discussions with their caregivers. Kitzinger (2001) argues "they are convinced that vaginal birth will distort and mutilate their bodies and leave them gaping and incontinent, or they are simply frightened about what doctors will do to them and believe that CS offers the safest birth for the baby and is a way of avoiding pain. They see vaginal birth as ugly, agonizing and a form of torture. Women in developing countries however, are often culturally conditioned that in order to preserve their womanhood, they must deliver vaginally and they are willing to do so even if it means placing their lives in jeopardy (Aisien; Orosaye 2004).

Adageba et al, (2008) in their study found out that majority of pregnant women attending the antennal clinic were aware of CS as the alternative to vaginal delivery. The overwhelming majority of the women interviewed preferred vaginal delivery to caesarean sections. Women in developing countries expressed desire for vaginal birth which they deem natural (Aziken, Omo-Aghoja, Okonofua 2007; Angeja et al 2006; Gamble; Creedy, 2001). The associated physical, emotional and economic costs of CS affect the community as a whole.

The Theory of Reasoned Action

Fishbein and Adjzen (1980) developed the theory of reasoned action. The theory emphasises the role of personal intention in determining whether a behaviour will occur. It implies that a person's intention to perform a particular action can be predicted from the combined effective norms concerning the action. The attitude towards performing a given behaviour is a function of both the person's "salient" beliefs that performing behaviour will lead to certain outcomes; and the evaluation of emphasis that subjective norms with respect to a given behaviour are a function of the person's belief about how significant others will react to one's performance of the behaviour and the persons motivation to comply with these referent.

The researcher in explaining men and women's perception of caesarean section adopted this framework (Fig 2). The actual adoption of caesarean section (CS) as a mode of delivery could be attributed to their belief that a particular mode of delivery is usually more effective than the other. Their choice of delivery mode could also be based on the evaluation of the particular method selected in the past for the management of delivery problem. If for instance the method had helped (saved) them, their friend(s) or relation(s) in the past, it is easier for the woman to go for same in the face of delivery problem. Also the influence of significant others like husbands, friends, relatives, parents, health workers etc can go a long way to encourage or discourage women in selecting the appropriate mode of delivery. The woman could be motivated by the past experiences of these significant others in handling delivery problems. The opinions of significant others could lead women aright or mislead them in the crucial task of deciding which method to select most especially for labour problems.

Conceptual Framework

Theory of Reasoned Action Applied to Delivery Methods for the Management of Labour problem(s)

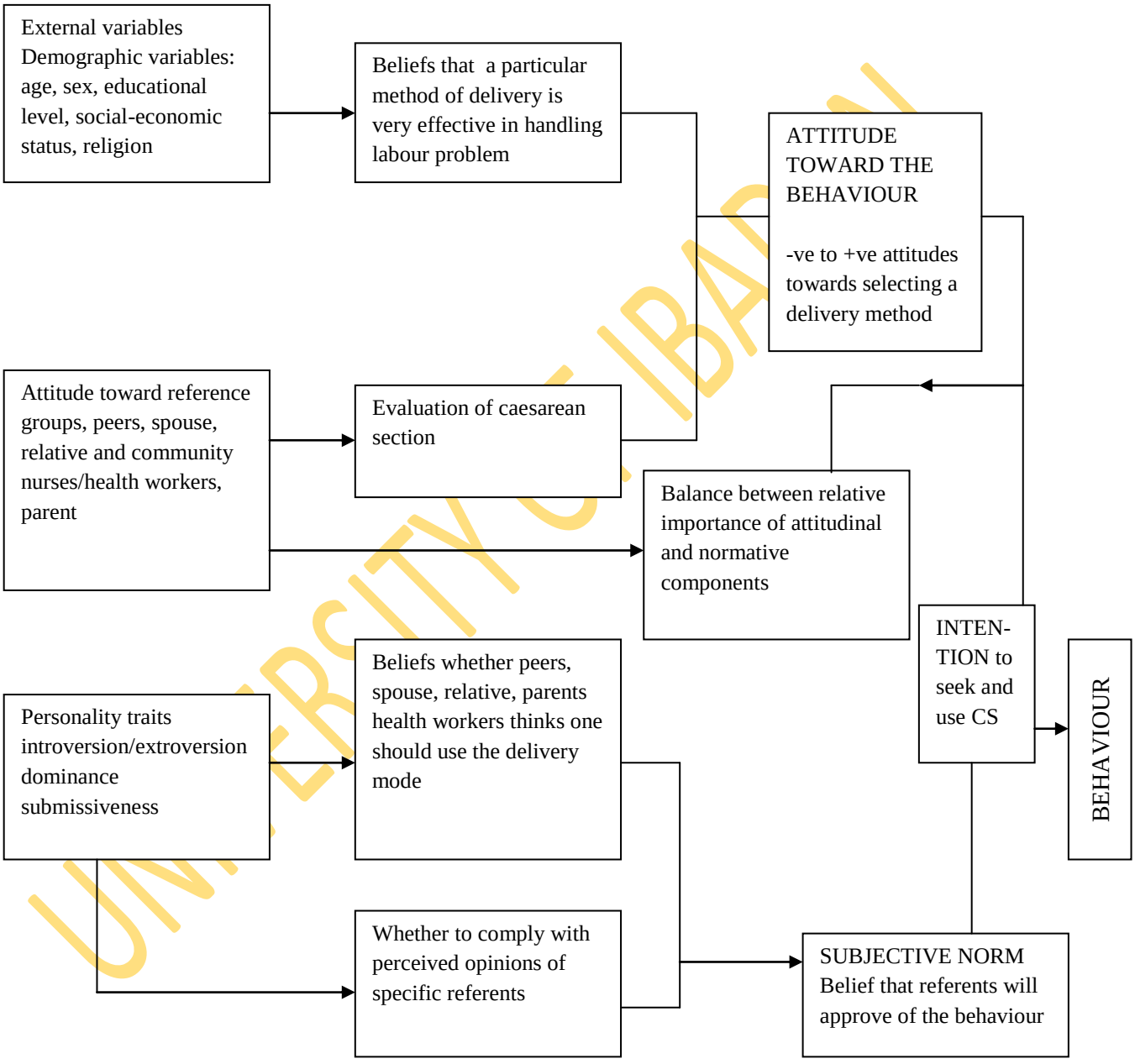

Fig 2.1: Theory of Reasoned Action applied to Delivery Methods for the Management of Labour Problem(s)

CHAPTER THREE

METHODOLOGY

This chapter describes the research methodology used to facilitate the conduct of this study.

Study Design and scope

This is a descriptive and cross sectional survey. The aim of the study was to identify the attitudes and perceptions of married men and women towards CS. It further examined the reasons why women fear CS. The study population comprised of married men and women in randomly selected communities in Ibadan North Local Government Area.

Description of the Study Site

The study was conducted in Ibadan North Local Government Area (IBNLGA); Ibadan, the second largest city in Africa, is the capital of Oyo state, Nigeria. The city was founded in 1829 at *Oja Oba* near *Mapo* hill. The name 'IBADAN' is derived from *Eba-odan* which means "beside grass land". In 2002, the population of Ibadan-metropolis was 1,835,300 (FMOH) but the conservative estimate is over two million. Ibadan North Local Government, one of the five LGAs in Ibadan metropolis, was created on 27th September 1991 out of the defunct Ibadan municipal Government by the Federal Military Government. The local government is heavily populated and covers a large expanse of land with an area of about 132.5sq metres with an estimated population of 316,612 (male=157,936; female=158,676), (NPC 2006). The headquarters or secretariat of the local government is Bodija. In the north, the LGA is bounded by Akinyele Local Government. It is bounded by Ibadan North East and Lagelu Local Governments in the east. In the west, it is bounded by Ido Local Government, Ibadan South West and Ibadan South East Local Government Area.

Ibadan North LGA is multi-ethnic and is dominated by the Yoruba. The Igbo, the Edo, the Urobo, the Itsekiri, the Ijaw, the Hausa, the Fulani and some foreigners who are from Europe, America, Asia and other parts of the world are also resident in the LGA. Majority of the people who live in the Local Government Area are in the private sector. They are

mainly traders and artisans. A good number of their workers are civil servants who live predominantly around Bodija Estate, Agbowo, Sango, Mokola, the University of Ibadan and the Polytechnic Ibadan. The notable tertiary institutions within the Local Government Area are the University of Ibadan, The Polytechnic, Ibadan, and University College Hospital, Ibadan.

In all a total of 1,560 health facilities are available in Oyo State. Ibadan North LG has the highest number of the health facilities, 179 health facilities by LG and private ownership (2007, Oyo State Health Facility Directory). These include 2 tertiary hospitals, 6 state (secondary) hospitals, 12 health facilities in the LGA and 158 privately owned health facilities. There are six major markets in the local government area namely: Bodija market (which is the largest food market in Ibadan), Mokola, Sabongeri, Agodi Gate, Ijokodo and Gbaremu markets. Thousands of people patronize these markets on daily basis from within and outside Ibadan.

This Local Government Area is not unique only because it attracts a large number of tourists but also because of the presence of recreational facilities. The prominent ones include the Zoological garden at the University of Ibadan, Trans-Amusement Park, Bower Tower at Oke-Are and Agodi Gardens located along Parliament Road, Ibadan (Abiola, 2001).

Sketch map of Ibadan North Local Government Area showing the major communities and neighbourhoods

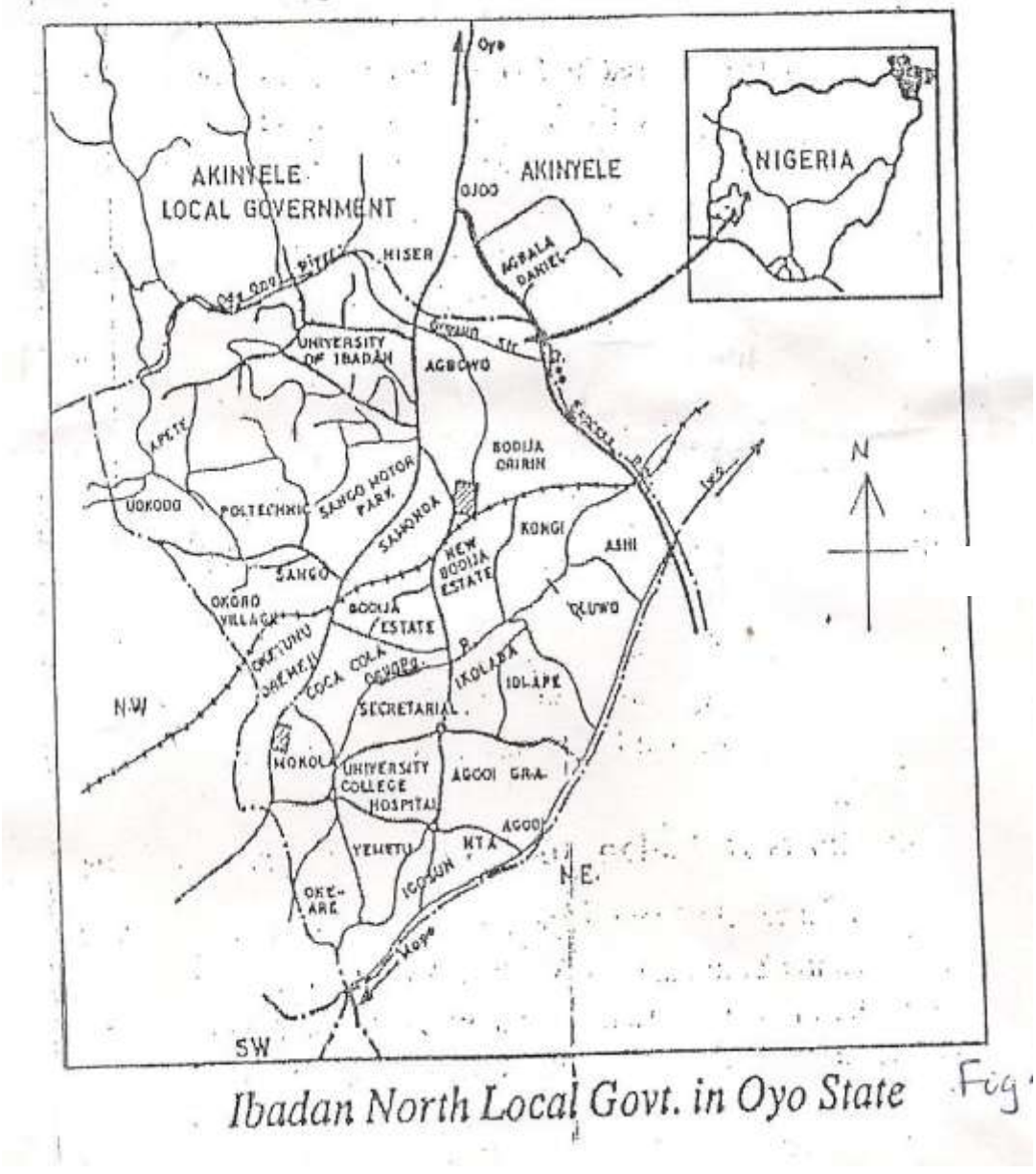

Fig 3.1. Sketch Map of Ibadan North Local Govt. Area

The LGA is governed by an elected Executive Chairman. The Executive Chairman is assisted by a vice Chairman, the secretary and the supervisory Councilors. The Councilors constitute the legislative arm of the local government while the administrative head is the Director of Personnel Management. The customary courts form the judiciary arm of the local government. Ibadan North Local Government Area (IBNLGA) comprises of 12 political wards (see table 3.1). The LGA can be stratified in to three developmental zones based on the characteristics, pattern of evolution and socio-economic status in accordance with the stratification model adapted by Osundare (1990). However, this has been modified by other researchers as development progresses. These are the inner core, transitional and peripheral zones (Table 3.2). Below are the tables of the wards and their classification.

Table 3.1: The 12 Wards in Ibadan North LGA and their Constituent Communities

Ward	Areas/ Neighbourhoods/ Communities
1	Beere, Kannike, Agbadagbudu, Oke Aare, and Odo Oye
2	Ode-Oolo, Inalende, Oniyanrin and Oke- Oloro
3	Adeoyo, Yemetu, Oke-Aremo, and Oke Alfa
4	Itutaba, Idi-Omo, Oje-Igosun, Kube, Oke-Apon, Abenla, Ali-Iwo/ Total garden, and NTA area
5	Basorun, Oluwo, Ashi, Akingbola, Ikolaba, and Gate
6	Sabo area
7	Oke-Itunu, Coca Cola, and Ore-Meji
8	Sango, Ijokodo
9	Mokola, Ago-Tapa, and Premier Hotel area
10	Bodija, Secretariat, Awolowo, Obasa and Sanusi
11	Samonda, Polytechnic and University of Ibadan
12	Agbowo, Bodija market, Oju-Irin, Barika, Iso-Pako, Lagos/ Ibadan Expressway

Table 3.2: Classification into Inner Core, Transitional and Peripheral Communities
Classification is subjective, based on the researcher's view of the communities.

Zones	Wards Covered
Inner core	1,2,3, & 4
Transitional	6,7,8, & 12
Peripheral	5, 9, 10 & 11

The communities that make up the wards are divisible into developmental regions according to their accessibility to basic amenities, socio-economic and cultural zones in the following ways:

- **Inner Core Areas:** Itutaba, Idi Omo, Oje, Igosun, Kube, Oke Apon, Ode Oolo, Inalende, Oniyanrin and Oke oloro form the old part of the Local Government Area, inhabited in most part by people with a low level of education. The areas are highly congested with a few poor roads, limited amenities and many public health problems.
- **Transitional Region:** Adeoyo, Yemetu, Oke-Aremo, IsaleAfa, Sabo, Basorun, Oluwo, Ashi, Akingbola- An interface between the inner core and elite areas.
- **Peripheral Region:** Bodija, Agbowo, U.I, Polytechnic, Sango, Mokola and Secretariat are described as the elite area, containing modern low-density residential estates occupied by professionals and other high income groups.

Study Variables

The dependent variables of the study included men /women's perception and attitude toward caesarean section, while the independent variables comprised of men/women's socio-demographic characteristics such as age, sex, marital status, level of education, religion and location.

Eligibility Criteria

All men and women who resided in Ibadan North Local Government Area that were eligible participated in the study.

Sampling Procedure

Sample Size Calculation

Sample size was calculated using the sample size equation

$$n = \frac{(Z_{\alpha} + Z_2\beta)^2 \, pq}{d^2}$$

Where;

n = minimum sample size

α = level of significance=5%

Z_{α} = Standard Normal deviation=1.96

Prevalence = 23.1% = 0.231 (prevalence of Caesarean Section reported in Shagamu by Oladapo et al., 2004)

p = 1- q = 0.5

d = absolute deviation = 6%

when α = 5% and =20%, power=80%

$(Z_{\alpha} + Z_2\beta)^2$ = 7.8

$$n = \frac{(7.8) \times 0.231 \times 0.769}{(0.06)^2}$$

$$n = \frac{1.3855842}{0.0036}$$

$$n = 384.9$$

Fifteen percent (15%) of this value was added for attrition, thus bringing the sample size to 442. A total of four hundred and forty two questionnaire copies were administered, in equal ratio to men and women in the local government area.

Sampling technique: A 3-stage sampling technique was used to select participants. In the first stage the list of all the wards and communities in the LGA was compiled. The 12 wards in LGA were stratified into three main zones namely the inner core area (INA), transitional area (TA) and peripheral area (PA). The constituting communities were affixed (Table 3).

In stage 2: (random sampling) balloting was used to select 2 wards in each zone and then 2 communities from each of the selected wards which yielded a total of 12 communities from which 442 respondents were randomly selected i.e 442~12=36 respondents per community.
Selection of respondents: A landmark such as school, church, mosque, health facility or a central point was identified in each community from where a bottle was spinned. All the houses in the direction which the mouth of the spinned bottle pointed to were visited .A participant was selected from each house. Balloting was then used to select a household in those houses where there were more than one households. Balloting was also used to determine whether a male or a female respondent would be selected first in each community. Subsequent selection was done by alternating gender based on whether a male or a female was first selected. Moreover, balloting was done to select one respondent in households where there are more than one participant.

Methods and Instrument for Data Collection

1. Qualitative: The qualitative method used was the Focus Group Discussion (FGD). The rationale for conducting FGDs was to document opinions or clarifies perceptions related to caesarean section
2. Quantitative: Semi-structured interview was the quantitative method used. A validated semi-structured questionnaire (See Appendix) prepared in English language was used to elicit responses from respondents of the study. The questionnaire was developed after a review of the literature. The results of the conducted FGDs were also used to fine tune or modify the questionnaire:

The Focus Group Discussion Guide (FGD): Focus group discussions were conducted among people with similar interest and characteristic. These discussants were brought together to discuss a topic of interest. A focus Group Discussion (FGD) guide was developed in consultation with the researcher's supervisor. The instrument in English language was translated into Yoruba (which is the local language of the target population) by a Yoruba language expert. Another Yoruba language expert translated it back to English language. This was done to ensure reliability and content validity. The guide was made up

of three parts: introduction, discussion topic and conclusion. It was designed to elicit responses about attitudes and perceptions from respondents. Discussion revolved round CS, their attitude and fears towards it.

Following the pretest on two groups (married men and women), corrections were made to the final guide from responses got during the pretest. It was noted that time management had to be improved as some of the respondents were talking out of point.

A total of eight focus group discussions (four for male and four for female), held in October 2003 for five days were conducted in IBNLGA with married men and women. Communities where the FGDs were held were: Beere (INA), Inalende (INA), Bodija (PA), Ashi (TA), Yemetu (TA), Basorun (TA), U.I (PA) and Gate (INA). Each focus group session, which lasted for almost one and a half hour, involved between 8 and 10 participants (male and female separately). A team of four persons consisting of a moderator, an observer, and two note takers were involved in each of the FGDs. The moderator was the principal investigator and the other three people were research assistants. The moderator welcomed all and explained the reason for the meeting in Yoruba language. All the participants were allowed to express themselves without interruptions. A tape recorder was also used to complement documentations by the note takers. Questions were asked using the FGD guide. Refreshments were served as the discussion progressed. At the end of the FGDs, the tapes were transcribed verbatim and the report of each was written.

The Questionnaire

This was the second instrument used to collect data. This instrument was developed in English language but since it was going to be administered, research assistants were trained on method of approach and use of language. It was developed based on information from the FGDs conducted and relevant literature materials. It consisted of a combination of open and close-ended questions. The questionnaire consisted of an introductory part in which the researcher explained the purpose of the research and solicited the consent of the respondent. The other questions in the instrument were categorized into three sections: the first section

was on demographic characteristics; the second section was on Information on knowledge and experience; while questions on attitude and perceptions formed the third section.

Questionnaire Administration

A total of 40 copies of draft questionnaire were pretested on married men and women at Ijokodo, a peripheral area (PA); Oke Are, an inner core area (INA), Polytechnic Road and Sango both of which were transitional Areas (TA). These four communities had similar characteristics to the study sites, but were purposively not included in the main study. The results from this exercise were used to modify the actual questionnaire.

Quantitative data were collected within two (2) weeks. The researcher together with the four trained male and female research assistants administered the questionnaire over a period of 14 days in the month of May, 2004. Data collection was done in the evenings when most of the household would have come back from their different places of work. They worked together in areas chosen in the Local Government Area. Each interview lasted for about 45 minutes, though some were self-administered where the respondents were literate and proficient in English language. The researcher monitored the progress of the interviews while daily reiew meetings were held. Daily challenges encountered by the research assistants were dealt with and ways to make the job easier were discussed at the meeting. For example, male assistants were refused entry into some houses in Sabo community, females had to be deployed. Also, some respondents felt reluctant in answering the questions because they felt the researchers were wasting their time and they had nothing to gain from the interview. Some respondents also asked for incentives. It was decided that the issues be properly explained to the respondents in a loving manner before proceeding on interviews and when respondents insisted on incentives, interviews should be stopped.

Validity of Instrument

In order to ensure that the instrument measured what it was intended to measure, both the FGD and questionnaire guides were first pre-tested. The pre-test was done to create opportunity to ascertain suitability and appropriateness to field situations. It also created

opportunity for the removal of irrelevant questions and those that were ambiguous. It also helped the investigator to determine whether the questions were clear and simple enough for respondents to understand and enabled the investigator to determine the length of time required to administer a questionnaire. Extensive literature review was also done to strengthen the validity of these instruments Ten pretest questionnaire copies were successfully administered in each area on married men and women. This represented 10% of the actual sample size for this study. These four communities, purposefully picked within IBNLGA, had similar characteristics to the study sites. For clarity and conciseness, the researcher's supervisors requested that questions about number of children, number of male and female be made as one question with sub-sections A and B. Questions with two options, for example Q18, were put in table format for easy understanding. Ability to understand the questions was ensured by changing the wordings of some questions and adding options. Content validity of the questionnaire was also ensured through the FGD sessions. The researcher served as a moderator by the assistance of a recorder for all the FGDs. Similarly a pre-test was also done for the two groups: one for married men and another for married women.

Reliability of Instruments

This is the accuracy or precision of a research instrument. Pretest approach was used to test the reliability of the questionnaire. With this method, the researcher was able to assess whether the same question posed to the same individual male/female yielded consistent result at different times. The questionnaire as an instrument for the study was drafted by the researcher and was reviewed by the statisticians and the researcher's supervisor. This made it possible to ascertain if the instrument demonstrated the exploration of the issues raised in the objectives and determine if it measured what it was supposed to measure, more so, that the questionnaire captured all the aspects of the study. Reliability was also ensured by asking the questions in an uncomplicated way with the permission to explain any difficult area for some respondents. The recruitment of only experienced male and female research assistants that had been working on this type of study also ensured reliability of the questionnaire. Male and female research assistants who spoke and read Yoruba language

very well were used because of the larger population being married male and female in communities in IBNLGA, a Yoruba-speaking community. Training was conducted for the four hired Research Assistants (RAs) to ensure that they had adequate understanding of the instrument prior to the commencement of data collection. The training focused on the objectives and importance of the study, sampling process, how to secure respondents' informed consent and ways to elicit information from the respondents. It also focused on basic interviewing skills and how to review questionnaire to ensure completeness. The research assistants were involved in the pretesting of the questionnaire in order to create an opportunity for them to acquire practical interviewing skills. The researcher checked the questionnaire copies administered daily and the problems discovered during data collection were resolved immediately.

Ethical Consideration

This study was conducted with utmost consideration for the dignity and respect of all respondents. The participants of this study were randomly selected from different communities in the LGA. The respondents were adequately informed of the study, the types of questions expected to be answered and the duration of the interview. The introductory part of the questionnaire was read by the investigators/research assistants to respondents in order to intimate them on the research topic. This was done to gain cooperation from respondents. Respondents were interviewed after oral informed consent was sought to protect their integrity and right. Participants were given the choice to withdraw their consent freely if they so chose at anytime. Confidentiality of information given by each respondent was highly maintained during the research and after the data collection. This was done in such a way that all the items on the questionnaire did not contain anything to identify the respondent and they were securely kept save in the custody of the researcher. Their names were not written out on the questionnaire copies administered on them neither was it tape recorded during the FGD. This was done to ensure confidentiality. Voluntary consents of respondents were sought before interviews began; they were assured that they could terminate the interview at any point they felt uncomfortable. Light refreshments were served at the end of each Focus Group Discussion to compensate for the use of respondents' time.

Data Collection Procedure

Out of the 450 questionnaire copies administered, 442 were completed and correctly filled and those were the ones analysed.

The questionnaire copies after collection were processed using the following steps.

- Sifting of questionnaire copies to identify and remove incomplete and wrongly filled ones. Some questionnaire copies were cancelled because they were incomplete as respondents declined to continue the interview because they felt some of the questions were too personal.
- Developing the questionnaire.
- Coding of questionnaire.
- Feeding the data codes into the computers
- Analysis of the data

Data Processing and Analysis:

The tape – recorded responses from FGDs were transcribed verbatim and used to update record's report. The FGD report was analyzed by the researcher manually to generate qualitative information. Content and context analysis using thematic approach that involved grouping together similar themes in each transcript and identifying emerging trends and differences found across the transcript was done for the FGDs after translating the Yoruba language recordings to English language in writing. A coding guide was developed for the questionnaire after collection and collations. To facilitate data entry, responses were assigned codes from the coding guide, and entered into a computer facilitated by the developed coding guide.

The data collected were analyzed using statistical package for social science (SPSS). Frequency and percentage tables were generated and Cross tabulations of some variables were done using Chi-square (x^2) test. The research hypotheses were tested to establish significant relationship between the independent and dependent variables. The chi-square was used to determine the level of relationships between variables at 5% probability level for rejecting the null hypotheses. Cross tabulation of dependent and independent variables was also done to establish relationship between the variables.

CHAPTER FOUR

RESULTS

The findings from the quantitative and qualitative surveys are presented in this chapter with the FGD findings blended with quantitative results. The findings are organized into the following sections:

- **S**ocio-demographic characteristics
- Awareness and Knowledge of Caesarean Section
- Perceptions of Caesarean Section
- Caesarean Section Experiences
- Factors Influencing Adoption of Caesarean Section

Socio-Demographic Characteristics of Respondents

The socio-demographic characteristics of the respondents are presented in table 4.1. More respondents, 225 (50.9%) were female while 217 (49.1%) were male. The mean age of the respondents was 41.5 years (Male) and 38.5 (Female). Respondents below 29 years were 17.7%. Most respondents (34.6%) were between 30 and 39 years. Most of the respondents, 249 (56.8%) were Christians, comprising of 112 (25.6%) male and 137 (31.3%) female while 42.9% were Muslims. Virtually all the respondents, 398 (90.2%) comprising of 201 (45.6%) males, 197 (44.6%) females were married. Majority (88.9%) of the respondents were *Yoruba*, thirty three (7.5%) respondents were Ibo.

The number of children per respondent ranged from one to eighteen. Most respondents, 167 (37.8%), had between three to four children, while 140 (31.6%) respondents had 1-2 children. Of the total number of respondents, only 39 (8.8%) had their children delivered by Caesarean Section (CS). Mean number of children delivered by CS was 1.62 (SD 0.15). Few of the respondents, thirty seven (8.4%) comprising of 12 (2.74%) males and 25 (5.7%) females had no formal education. More males (10.9%) than females (10.4%) had tertiary education. Most of the respondents (43.9%) had secondary education.

More respondents, 200 (46%), comprising of 178 males; and 22 females were traders while 131 (30.4%) comprising of 23 males and 108 females were civil servants (Table 4.1).

Table 4.1: **Socio Demographic Characteristics of the Respondents** **N=442**

Socio Demographic Variables		Frequency	Percentage (%)
Sex:	Female	225	50.9
	Male	217	49.1
Age Distribution (years):	20-29	78	17.7
	30-39	152	34.6
	40-49	128	29.1
	50-59	53	12.0
	60 and above	31	60.6
Marital Status:	Married	398	90.2
	Divorced	2	0.5
	Separated	22	5.0
	Widower	19	4.3
Ethnic Group:	Yoruba	393	88.9
	Ibo	33	7.5
	Hausa	8	1.8
	Others	8	1.8
Religion:	Christianity	249	56.8
	Muslim	188	42.9
	Traditional worshippers	5	0.3
Parity (no of children):	1-2	140	31.6
	3-4	167	37.8
	5-6	79	17.9
	7-8	50	11.3
	9 and above	6	1.4
Educational Qualification:	Tertiary	94	21.3
	Secondary	194	43.9
	Primary	116	26.3
	No formal education	38	8.5
Occupation:	Business	200	46.0
	Civil servants	131	30.4
	Farmer	95	22.0
	Housewife	2	0.2
	Artisan	14	1.4

***Mean age = 41.5 (male), (38.5) female**

**** Mean parity =3.47 ± 1.9**

Awareness and Knowledge on Types of Delivery

Respondents' Awareness on Types of Delivery: The most commonly mentioned type of delivery by majority; 430 (97.3%) comprising of 208 (95.8%) male and 222 (98.7%) female respondents was normal delivery. Three hundred and sixty (360) respondents comprising of 181 male and 179 female mentioned caesarean delivery. Others are shown in table 4.2. (multiple responses).

Discussants in all the FGDs were unanimous in their response to the different types of deliveries like their survey counterparts; most discussants had good knowledge of normal and caesarean deliveries while very few had fair knowledge of induction/augmentation.
Typical views which reflects discussants good knowledge of types of child delivery includes the following:

- *"You either deliver by yourself (normal delivery) or they (surgeons) help you deliver your baby using 'abẹ' (surgical blades/knives)" (male participant)*
- *"We all know that there is no other way than by self delivery (normal delivery) or they (medical team) assist you bring out the child through surgery" (female participant)*
- *"I laughed when you asked that question because we all know that it's either you deliver by yourself (normal delivery) or the doctors use their knives (caesarean delivery) to bring the baby out for you" (male)*
- *"Most women deliver by themselves (normal delivery), but when all efforts to deliver by self fails then, they will operate on such woman to help bring the baby out"*
- *"Don't let us beat about the bush, it's either normal or operation delivery"(male)*

On the other hand, few discussants had a fair knowledge of induction of labour as revealed in this statement;

- *"It's not all the time that they (medical team) use surgery when the normal way of delivery fails, sometimes they can force the labour to come (talking of induction of labour)" (female)*

Table 4.2: Respondents Awareness on Types of Deliveries

Total N=442

Types of delivery	**Frequency**		
	Sex		
	Male (217) (%)	**Female (225) (%)**	**Total (%)**
Normal delivery	208 (95.8)	222 (98.7)	430 (97.3)
Caesarean delivery	181 (83.4)	179 (79.6)	360(81.5)
Inductions/Augmentation	4 (1.9)	8 (3.6)	12(2.7)

*Multiple responses

Sources of Awareness about the Types of Delivery

Respondents were asked on how they learnt about types of delivery. The most common source of awareness about types of delivery was through personal experience (57.5%). One hundred and eighteen (26.7%) was through hospital workers (Multiple Response)(Table 4.3).

Majority of the discussants however, claimed they got to know about the types of deliveries through personal experience. Typical responses in this regard were as follows:

- *" At least all of us here are parents and had one way or the other passed through this experience before (male)*
- *"Abiamo ni gbogbo wa (meaning we are all mothers) and we had at one stage or the other gone through delivery experience"(female)*
- *"We women do share information among ourselves on issues like this" (female)*

Many discussants mentioned friends and relatives as their sources. Typical responses were:

- *"I got this information through friends at home or in my shop" (female)*
- *"I know at least five of my friends' wives that had their children delivered by operation (CS) and they told me" (male participant)*

Some discussants said they knew about the types of deliveries through hospital workers. Below are some of their responses:

- *"I learnt about the different types of deliveries through nurses and doctors during antenatal clinic" (female)*
- *"Nurses do give lectures on types of deliveries in antenatal clinics" (female)*

Table 4.3: Respondents Major Sources of Information about Types of Deliveries

N=442

Sources of information	Frequency	Percentages (%)
Hospital workers	118	26.7
Mass media	29	6.6
Friends and Relatives	213	48.2
Personal experience	254	57.5
Books	11	2.5

*Multiple responses

Respondents' Awareness about CS/ Source

Majority of respondents were aware of CS as the alternative to vaginal delivery. Almost all respondents 436 (98.7%), comprising of 215 (99%) males and 221(98.2%) females claimed to have heard about CS. More respondents, 213 (48.9 %) comprising of 103 (48.0%) males and 110 (49.8%) females claimed to have heard about CS from people. Other sources mentioned are hospital (33.2%) and personal experience (12.9%). Table 4.4.

Most of the discussants had also heard about CS and gave their sources of information as personal experience, friends and hospital workers. The media however, was not frequently mentioned.

Table 4.4: Respondents' Sources of Awareness of CS

N=436

Sources	Sex		Total (%)
	Male (%)	Female (%)	
Hospital	67 (31.2%)	77(17.7%)	144 (33.2%)
Personal Experience	31 (14.4%)	25 (5.8%)	56 (12.9%)
People	103 (47.9%)	110 (48.9%)	213 (48.9%)
Books	3 (1.4%)	3 (1.4%)	6 (1.4%)
Church Program me	0 (0.0%)	1 (0.5%)	1 (0.2%)
Media	8 (3.9%)	5 (2.3%)	13 (3.0%)

*Multiple responses

Respondents' Knowledge of Indications for CS

Respondents were asked what they knew could make a woman undergo CS. The reason mentioned most was labour problem (38.3%), followed by inadequate pelvis (23.2%), big babies (15.4%) and malpositioning (15.4%), others as shown in table 4.5.

Most discussants in all the FGDs like their survey counterparts had fair knowledge about the indications for CS. Typical news which reflects the discussants' limited knowledge includes the following:

- *"CS is done when there is labour problem generally" (male)*
- *"I know that when a woman is having problem with normal delivery then, she will be delivered by operation" (female)*
- *"It is only the doctors and nurses that understand their medical language, all I know is that CS is done when there is labour problem" (male participant)*
- *"I can't really say, I don't know" (male)*
- *"Even people you know that had undergone CS will not tell you the reason, so how do I know" (male)*
- *"People don't disclose issues like this, so how does one get to know the reason" (female)*

Some discussants in both groups mentioned prolonged labour as indication for CS. A female discussant said: *"CS is done when a woman has been in labour for a long time".* Another said: *"when a woman labours and the child is not forthcoming after a long time then, they will operate on her".*

Few discussants were however, able to state correctly the indications for CS. Their views on the indication for CS included the following:

- *"One main reason why CS is done is when the woman's pelvis is small (inadequate pelvis)" (female)*
- *"When the baby lies across the woman's womb, that is 'o dabu' (malpositioning)" (female)*

- *"When small girls get pregnant and their birth canal (pelvis) is small, it may not allow the child to be delivered easily, so she will be delivered through CS" (female)*

There were however some misconceptions among the discussants, for instance, some (more of male) of the groups erroneously believed that laziness on the woman's part could be an indication for CS. Typical news which reflect the discussants' misconceptions of indications for CS include the following:

- *"Ti obirin ba dara silę ju ninu oyun, olę-obirin" meaning (when a woman is too relaxed/lazy during pregnancy such would not be able to cope with labour and so will have to undergo CS" (male participant)*
- *"Women need to exercise very well during pregnancy so that she will be able to do well in labour" (female participant)*
- *"It is the lazy ones that usually request for CS because they know they cannot cope with labour" (male)*

Table 4.5: Respondents Knowledge of Indications for CS

N=436

Indications	**Sex**		
	Male (%)	**Female (%)**	**Total (%)**
Labour Problem	89 (41.5)	78 (35.3)	167 (38.3)
Inadequate Pelvis	36 (16.8)	65 (29.4)	101 (23.2)
Prolonged labour	32 (14.9)	51(23.1)	83 (19.1)
Young primipara	33 (15.4)	21 (9.5)	54 (12.4)
Big babies	22 (10.2)	34 (15.4)	56 (12.9)
Malpositioning	32 (14.9)	34 (15.4)	66 (15.1)
Elderly multipara	21 (9.8)	13 (5.9)	34 (7.8)
Fear of labour pain	3 (1.4)	15 (6.8)	18 (4.1)
Witchcraft attack	5 (2.3)	10 (4.5)	15 (3.4)
Obese women	5 (2.3)	3 (1.4)	8 (1.8)
Placenta previa	2 (0.9)	9 (4.1)	11 (2.5)
Still birth	1 (0.5)	2 (0.9)	3 (0.7)
Don't know	32 (14.9)	19 (8.6)	51 (11.7)

*Multiple responses

Respondents' Perceptions on CS

Respondents' Perceived Advantages and Disadvantages of CS

Respondents were asked what they perceived as advantages and disadvantages of CS. More respondents 242(55.5%) comprising of 133 males and 109 females were of the opinion that CS saved mother/child lives and reduces labour pain and stress (12.6% and 14.0% for male and female respectively) (*multiple response). Other advantages mentioned were as shown in Table 4.6. On the other hand, 209 (47.9%) of the respondents comprising of male (106) and female (103) perceived death, 22.3% of the respondents comprising of male (27.0%) and female (17.7%) perceived limit number of children, 19.3% of the respondents comprising of male (20.9%) and female (17.7%) perceived expensive/costly and 15.4% of the respondents comprising of male (20.9%) and female (17.7%) perceived complications as major disadvantages CS (Table 4.7).

Majority of the male and female discussants were unanimous in their views that the major advantage one could get from CS is that it saves life. Typical comments were as follows:

- *"The only advantage of operation is that it saves lives i.e is mother or child or both" (female)*
- *"What else is advantageous in CS than to prevent the woman from dying after a prolonged labour" (female)*
- *"One main advantage I know of is that it saves life" (male)*

Some female discussants were of the view that if the CS is planned for (in case of elective CS), it prevents labour pain and the stress associated with it as revealed in the following statements:

- *"If the operation is planned for, the woman will just be sedated and find her baby by her side when she wakes up, ęgbę lo ti ma ba omo ę" (female participant)*
- *"if the CS is agreed between the couple and the doctor well ahead, such woman will not even go through the stress of labour talk less of the labour pain" (female participant)*

One of the female discussant however was of the view that CS prevents vagina laxity. She said: *"I read through books that women who do not deliver by vagina, retains their vagina elasticity"*.

Most discussants perceived death as a major disadvantage of CS. Typical views that highlight this perception were:

- *"Anything operation (where one is put to sleep) can lead to death" (male participant)*
- *"It's fifty-fifty chance" (male participant)*
- *"If the woman is unfortunate that the CS is carried out by an in-experienced doctor, it may lead to death" (female participant)*

Some discussants however, were of the view that cost of restriction to having desired number of children and inability to freely enjoy sex after CS are also disadvantages. Below are some of their responses:

- *"It is much more expensive to deliver by CS" (female participant)*
- *"Money spent on operation (CS), its always much that there may not be enough for the naming ceremony" (female participant)*
- *"Due to the nature of the operation, the couple most times were advised to wait for two years or more before considering another conception" (male participant)*
- *"Woman that delivers through CS cannot have more than three children", "ti o ba ni ẹmi ẹ lo" (if she cherishes her life)*

Table 4.6: Respondents' Perceived Advantages of CS

N=436

Advantages	Male	Female	Total
Saves life	133 (61.8)	109 (49.3)	242 (55.5)
Reduces labour pain/stress	27 (12.6)	31 (14.0)	58 (13.3)
Prevents vagina laxity	3 (1.4)	1 (0.5)	4 (0.4)
To evacuate still birth	1 (0.5)	0 (0.0)	1 (0.2)

*Multiple Responses

Table 4.7: Respondents' Perceived Disadvantages of CS

N=436

Disadvantages	Male (%)	Female (%)	Total (%)
Death	106 (49.3)	103 (46.6)	209 (47.9)
Limit number of children	58 (27.0)	39 (17.7)	97 (22.3)
Expensive/costly	45 (20.9)	39 (17.7)	84 (19.3)
Complications	35 (16.3)	32 (14.5)	67 (15.4)
Pain	16 (7.5)	36 (16.3)	52 (11.9)
Risky	28 (13.3)	22 (10.0)	50 (11.5)
Can't engage in hectic work	17 (7.9)	17 (7.7)	34 (7.8)
Deprivation of joy (of normal labour)	2 (0.9)	2 (0.9)	4 (0.9)
Post Operative Scar	3 (1.9)	13 (5.9)	16 (3.7)

*Multiple Responses

Respondents Perception of Caesarean Section as Good or Bad Way to Deliver

Respondents were asked if they perceived CS as a good or bad way to deliver. Most respondents, 384 (88.1%), perceived it as not a good way to deliver babies. More female (88.2%), than male sample size (87.9%) perceived it as not a good way to deliver (Table 4.8). Reasons given included: risky (21.0%) not natural (15.2%), could lead to death (18.1%), expensive (12.7%), limit child bearing (10.0%) and painful (13.2%).

Like their survey counterparts, discussants in all the FGDs were unanimous in their perception of CS not being a bad way to delivery. Comments of discussants relating to CS not being a good way to deliver included:

- *"I do not believe CS is a good way to deliver. Just like my friend said, there is no good thing in operation (referring to CS)" (male participant*
- *"As far as I know, once it is not a natural way of child delivery then, it is not good" (male participant)*
- *"I don't think delivery a child by CS is a good thing" (male participant)*
- *"Let's not beat about the bush, ki won fi obẹ gbe omo jade (meaning using surgical knives to bring out a child) is not good" (male participant)*

Reasons mentioned by most discussants for CS not being a good way to deliver babies included:

- *"It is risky" (male participant)*
- *"It is not a natural way instituted by God" (female participant)*
- *"Women who deliver a child by CS do not feel happy like her counterparts who deliver through normal delivery" (female participant)*

Table 4.8: Respondents Perception of CS as a Good Way to Deliver Babies

N=436

In your own opinion, do you think CS is a good way to deliver a baby?	**Sex**		
	Male (%)	**Female (%)**	**Total (%)**
Yes	26 (12.1)	26 (11.8)	52 (11.9)
No	189 (87.9)	195 (88.2)	384 (88.1)
Total	215 (100.0)	221 (100.0)	436 (100.0)

Who Should Give Consents for CS

Majority of the respondents, 357 (82.0%), consisting of 79.5% males and 84.2% females population reported that the husband should give consent for CS (Table 4.9). The quantitative finding is similar to the qualitative report in which majority said the husband should give consent.

Majority of the discussants in both groups FGDs like their survey counterparts were of the view that the husband should give consent for CS. Typical responses in this regard are as follows:

- *"The husband should is the head of the wife, so he should give consent" (male participant)*
- *"The woman has no authority of her own, so the husband should give consent" (male participant)*
- *"After all, the husband impregnated her, so he should take full responsibility for her. He should give consent" (female participant)*
- *"The husband is superior to the wife, hence should give consent" (female participant)*

Few discussants however were of the opinion that the wife should give consent. Their views on the wife giving consent included the following:

- *"In a situation where the husband is not around, the wife should give consent" (female participant)*
- *"What if the man is not in support of the CS? Then, the woman should lose her life? The woman should give consent to save her life if the husband is not in agreement" (female participant)*

Some discussants were able to express the possibility of any of the couples' relation to give consent if the husband is not around.

Table 4.9: Respondents Perception On Who Should Give Consent for CS

N=436

Who should give consent for CS?	Male (%)	Female (%)	Total (%)
Wife	9 (4.2)	13 (5.9)	22 (5.0)
Husband	171 (79.5)	186 (84.2)	357 (82.0)
Wife's Relation	13 (6.1)	10 (4.5)	23 (5.2)
Husband's Relation	3 (1.4)	0 (0.0)	3 (0.7)
Any of the couple's Relation	19 (8.8)	12 (5.4)	31 (7.1)

***Multiple responses**

Requesting for CS in Advance

Respondents were asked if it was proper for a woman to request for CS (Elective CS) in advance. Few respondents (11.3%) of the total sample size comprising of 14.2% females and 7.8% males perceived it was proper while majority (88.7%) comprising of 92.2% male and 85.8% female did not support it. More female (14.2%) than male (7.8%) respondents perceived it was proper for women to request for CS (Table 4.10).

Majority of the discussants in both FGD groups were unanimous in their responses. There were however, some misconceptions among the discussants; for instance, majority of the groups erroneously believed that it was bad for women to deliberately intend or request to deliver by CS. Typical views which reflect the discussants' misconceptions of requesting for CS in advance include the following:

- *"One should always be positive, forecasting to deliver by CS is being negative in thinking" (female participant)*
- *"Why should a reasonable thinking person prefer to be operated on just for ordinary child delivery" (female)*
- *"It is only a lazy woman who do not want to undergo labour pain that will request for CS in advance" (male participant)*
- *"May be she has too much money to waste" (female participant)*

Table 4.10: Respondents Perception towards Requesting for CS in Advance

N=442

Is it proper to request for CS in advance as a means of delivery?	**Sex**		
	Male (%)	**Female (%)**	**Total (%)**
Yes	17 (7.8)	32 (14.2)	49 (11.3)
No	200 (92.2)	193 (85.8)	383 (88.7)
Total	217 (100.0)	225 (100.0)	442 (100.0)

When should consent for CS be given?

Respondents were asked when consent for CS should be given. About half (51.1%) of the total respondents, comprising of 46.5% males and 55.7% females said consent should be given as soon as indicated, 17.4% of the respondents comprising of 16.3% males and 18.5% females said consent should be given after much trial by normal labour and 15.6% of the respondents comprising of 17.2% males and 14.0% females said consent should be given when there is no other alternative way. Others are as shown in Table 4.11.

Many of the discussants were of the opinion that consent for CS should be given as soon as indicated as shown in the following quotes:

- *"I think consent for CS should be given as soon, even as fast as there is a need for it; ẹmi o laaro (meaning life has no duplicate)" (female participant)*
- *"Why the delay? They don't have to wait till when it is too late" (female participant)*
- *"It is even good there is room for CS; so what are they waiting for then, to give consent as soon as possible" (female participant)*
- *"Ah! If she does not give consent immediately and she died life goes on. It will not take the husband more than a month or two to get another wife" (female participant)*
- *"If he loves his wife then, the husband should give consent immediately" (male participant.*

Other news of the FGDs participants with regard to when consent for CS should be given included:

- *"CS may not be the only way out; there may be other alternative so consent should be given when there is no other alternative way" (male participant)*
- *"Let her try the labour way well and if after much trial and it does not work then, consent for CS can be given" (male participant)*
- *"I don't know oh. All I know is that ẹmi o gbodo sofo, meaning (life should not be wasted)" (male participant)*

Table 4.11: Respondents' Reaction on When Consent for CS should be given

N=436

At what time should consent for CS be given?	Male (%)	Female (%)	Total (%)
As soon as indicated	100 (46.5)	123 (55.7)	223 (51.1)
After much trial by normal labour	35 (16.3)	41 (18.5)	76 (17.4)
When there is no other alternative way to deliver	37 (17.2)	31 (14.0)	68 (15.6)
Do not know	43(20.0)	26 (11.8)	69 (15.9)
TOTAL	**215 (100.0)**	**221(100.0)**	**436 (100)**

Experience on CS

Respondents' Experience on CS

Respondents were asked how many people they knew had undergone CS before. Twenty-nine percent of the respondents said they knew one; others were as shown in Table 4.12. Interestingly, a reasonable percentage of the respondents (24.6%) said they did not know anyone who had undergone CS before. Reasons mostly mentioned by respondents on why they undergone CS was prolonged labour (24.7%). Others were as shown in table 4.12.

More discussants in the female group than male knew a lot of women around them (some of whom happened to be their family members) who had undergone CS. However, most men in the male group only knew few women that had undergone CS. Their responses are captured in the following responses:

- *"We men mind our business. All I need to hear is that a woman has put to bed, through which way is not my business" (male participant)*
- *"Well, except the couple is very, very close. If they don't tell me that their child was delivered by CS, how do I know?" (male participant)*

However, most of the female discussants who claimed to know people that had undergone CS mentioned reasons why they were operated on. Some responses were as follows:

- *"When the labour was getting too long and the child was in danger" (female participant)*
- *"They (the doctors) said: o ti rẹ omo ninu (meaning the child is weak)" (female participant)*
- *"Ko le gbin dada mo (meaning the woman in labour cannot push very well)" (female participant)*

Other responses were:

- *" omode ni (meaning the woman in labour was too young) and omo naa tobi ju (the baby is big)" (female participant)*
- *"Won ni omo dabu si ninu ni (meaning the child presentation was transverse)" (female participant)*
- *The one I knew was a teenage mother, "oun gan baby" (meaning even the pregnant girl was a baby) and cannot deliver the baby herself"*

Table 4.12: Number of Respondents Who Knew People that Had Undergone CS before and Reasons Why They Were Operated on

N=442

Number of people	Frequency	Percentage
1	128	29.0
2	113	25.6
3	76	17.2
4 and above	16	3.6
Don't know	109	24.6
Reasons		
Prolonged Labour	121	27.4
Sick/weak	66	14.9
Inability to push	45	10.2
Obesity	6	1.4
Big babies	48	10.9
Malpresentation	48	10.9
Inadequate pelvis	51	11.5
Intrapartum hemorrhage	5	1.1
Fibroid in pregnancy	3	0.7
Ante partum hemorrhage	10	2.3
Elderly multipara	12	2.7
Still birth	9	2.0
Placenta previa	8	1.8
Elective CS	21	4.8
Young primipara	12	2.7
Eclampsia	3	0.7

*Multiple Responses

Respondents Who Had Experienced CS Before

Very few of the female respondents interviewed 39 (17.3%), had undergone CS (Table 4.13). Mean number of children delivered through CS was 1.62, SD = 0.15. Reasons mentioned by most for undergoing CS were prolonged labour and big babies.Most discussants in the male group did not know of women who had delivered by CS in the past. One man in the male group said his two children were delivered by *CS*. When he was further probed on why the wife was delivered by CS he said: *"the first one was emergency i.e. the wife was very tired after being in labour for several hours,but the second one was done because the baby was big and the doctor said "ko le da bi" (meaning the woman cannot deliver normally).*

Among the female discussants, two claimed they had delivered by CS. One of them said: *"ki Olorun sanu wa ni (may God have mercy on us). Whatever will be would be. I tried as much as possible to deliver normally but as fate will have it I delivered through CS. I was told by the doctor that my pelvis was small for the baby to pass through"*.

Other female discussant after much probing said she delivered by CS because the baby laid across ("o dabu") her womb.

Table 4.13: Number of Children Delivered by Respondents Who Had Undergone CS in the Past.

N=39

No of child delivered by CS	Frequency	Percentage
1	25	64
2	6	15.4
3	6	15.4
4	2	5.2

Factors Influencing Respondents' Adoption of CS

Cultural belief(s): Respondents were asked if there was any cultural belief(s) that made people fear CS. Majority (95.9%) of the respondents said there were no cultural beliefs that made them fear CS (Table 4.14).

The opinion of the focus group discussants was explored in respect of whether they knew any cultural practices that made people fear CS. The reactions are captured in the following responses:

- "*I do not believe there is any cultural practices that will be against something to save lives" (male participant)*
- *"It is our health and we have a choice, so why would any culture create unnecessary fear in us, I don't even know one" (male participant).*

However, two female discussants had a different view. She said: "*cultural belief! Ah! The only one I know of is that people traditionally value and cherish women who deliver through normal labour than those by CS".* The other said *"yes, traditionally our people believe that it is a failure on the woman's part if she deliver by CS and as such is seen as 'ko da pe', (meaning an inappropriate woman)".*

Table 4.14: Respondents Opinion towards Cultural Beliefs on CS

N=442

Are there cultural belief(s) that make you fear CS	**Yes (%)**	**No (%)**	**Total (%)**
Male	12 (5.5)	205(94.5)	217 (100.0)
Female	6 (2.7)	219 (97.3)	225 (100.0)
Total	18 (4.1)	424 (95.9)	442 (100.0)

Giving of Nicknames to Mothers who repeatedly deliver by CS/ Children delivered by CS

Respondents were asked for nicknames given to women who delivered with repeated CS. Majority (70.9%) of the respondents said they did not know of such. However few respondents (9.6%) mentioned names like *Ayorunbo* (one who had tasted death). Other names were mentioned as seen in table 4.4.6. On the other hand more respondents (41.1%) said they did not know of names given to children delivered by mother with repeated CS. Others however mentioned names like Owolabi (33.7%), others were as seen in table 4.15.

Most of the discussants in both groups did not know of nicknames given to either mothers or children. Perceived nicknames mentioned by some discussants as being given to mothers who deliver by CS were as follows:

- "*sometimes they are called "Agbana" (meaning wealth devourer)" (female)*
- *"Others mentioned, Ole (lazy woman) and Ayorunbo (revived from death)"*

Nicknames given to the children included: "*Owolabi (Child born after much money has been spent), Oriyomi (God saved me) and Iyanu (miracle)" (female).*

4.15. Nicknames Given to Mothers Who Repeatedly Deliver by CS/ Children Delivered by CS

N=436

Child's Nickname	**Frequency**	**Percentage**
Owolabi (Money is born)	147	33.7
Iyanu (Miracle)	11	2.5
Oriyomi (Destiny saved me)	131	37.8
Abayomi (Should have been mocked)	15	3.4
Anuoluwa (God's mercy)	10	2.3
Iyanuoluwa (God's miracle)	15	3.4
Oluwasegun (God is victorious)	15	3.4
Don't know	179	41.1
Mother's Nickname		
Ole (Lazy)	9	2.1
Agbana (Wealth devourer)	26	5.9
Ayorunbo (Revived from death)	42	9.6
Oluwagbemi (God saved me)	12	2.8
Eniolorun o pa (Kept alive by God)	8	2.0
Oluwatobi (God is great)	50	11.5
Don't know	309	70.9

*Multiple Responses

Accepting CS when it is imminent as a way of delivery: Respondents were asked whether they would agree assuming they were pregnant and their doctors proffered CS as the only way out. Majority (75.8%) of the respondents said "yes" they would readily undergo the operation when indicated, while 24.2% said they would not (Table 4.16).

Most discussants expresed views that showed positive acceptability of CS if proffered as the only way to deliver baby. Below are some of the responses:

- *"Emi o laaro (meaning life has no duplicate) so why won't I accept at least to save my life" (female participant)*
- *Since God has given us a way out when normal labour fails, I will wholeheartedly accept it" (female participant)*
- *"I cannot waste my wife's live so I will accept" (male participant)*
- *"The way I look at it if it is safer option for me and the baby, I will accept" (female participant)*

A male discussant however, had a different view, he said *"it cannot just be the last resort; I will still try other means of delivery".*

Expressed Fear about CS: Majority (79.7%) of the respondents expressed being afraid of CS (Table 4.16). Most common reason mentioned by respondents was that it could lead to death (25.5%), fear of outcome of surgery (28.3%) and risky (14.4%).

Majority of discussants in the FGDs expressed fear of CS. Typical views which reflect the discussants fear include the following:

- *"Nobody can predict the outcome of operation (CS). It is fifty-fifty" (male participant)*
- *"Surgery will always have its implications" (male participant)*
- *"Some women may react to the anaesthesia and die" (female participant)*
- *"Going for operation, CS, is like embarking on a journey which nobody knows where it will lead to" (male participant)*
- *"Operation! You know there is no minor or major operation, I fear even the mere mentioning of it" (female participant).*

Table 4.16: Respondents Opinion towards Accepting CS as a Way of Delivery and Expressed Fear about CS

N=442

Assuming you are pregnant and have been told by a doctor that you'll need to undergo CS, will you agree?	**Yes (%)**	**No (%)**	
Male	167 (76.9)	50 (23.1)	217 (100.0)
Female	168 (74.7)	57 (25.3)	225 (100.0)
Total	335 (75.8)	107 (24.2)	442 (100.0)
Are you afraid of CS?			
Male	170 (78.3)	47 (21.7)	217 (100.0)
Female	182 (80.9)	43 (19.1)	225 (100.0)
Total	352 (79.7)	90 (20.3)	442 (100.0)

Safe Place to go in Labour/Delivery Emergency: Respondents were asked where they felt was safe to go in labour emergency. Most respondents (94.6%) mentioned hospital, others were as seen in table 4.17.

Many of the discussants were of the opinion that the safe place to go during labour problem was hospital as shown in the following quotes:

- *"I think the safest place to go is the hospital" (female participant)*
- *"Emi to ba mo inu ro ko ni ro ibi meji yato si hospital (meaning a reasonable thinking person will not think of another place than hospital) (female participant)*
- *"Where else if not the hospital" (male participant)*
- *"I guess there should be no playing of game, it is either the hospital or she loses her life" (male participant)*

Few discussants however, were of the view that mission house is the safe place to run to when there is labour problem. The reasons given include the following:

- "*It may not be ordinary (o le ma je oju lasan), so prayer may be the solution" (male participant)*
- *"Labour problem should not be taken lightly. It is something to be taken serious and spiritually" (female participant)*

Table 4.17: Safe Place to go in Labour/Delivery Emergency

Place	Frequency	Percentages
Mission	34	7.7
Hospital	418	94.6
Herbalist	1	0.2

*Multiple Responses

Places where Women Deliver: Respondents were asked where women usually delivered in their communities. Most (55.2%) respondents mentioned hospital; 26.6% mentioned mission houses while 16.6% mentioned home. Few (1.5%) respondents mentioned traditional birth attendants (multiple responses).

Among the discussants, contrary to the survey finding in which most respondent mentioned hospital as places where women in their community deliver children, more discussants in all FGDs mentioned mission as where their women delivered children. Other place mentioned by some participants was hospital. One discussant however mentioned traditional herbalist home as where people deliver children.

Duration of Labour before CS could be Proffered

Respondents were asked for how long a woman should labour before CS could be suggested. Durations given was 20 min- 12hours (35.1%); 13-24 hours (23.9%); 25-36 hours (1.9%); 37-48 hours (13.4%) and above 48 hours (25.6%)(Table 4.18)

The opinion or news of the discussants was explored in respesct of how long they think a woman should labour before CS could be suggested. The reactions are captured in the following responses:

- *"If after 12hours a woman find it difficult to deliver normally then, CS could be suggested so as not to endanger the life of the woman or child or both" (male participant)*
- *"Delay is dangerous o. if the woman did not deliver after twelve hours then there is problem somewhere; Cs at this stage is not bad" (female)*
- *"It depends on how strong the labour was. Some will nt be strong initially. So if after like 24hours of active labour there is no flow, then CS could be suggested" (male)*
- *"I don't know the ideal duration of labour but I know women differ from each other. But, to be realistic if you watch a woman labour for more than 12hours, you will agree it is not easy. So, I support after 12hours" (male)delay is dangerous, like 8 hours is okay" (female participant)*

Some discussants were of the view that 24hours was not bad. Their responses were: *"If you rush to do operation and later find out that she could have delivered normally if left further. Then, one will feel bad. So, I think if after 24hours there is no hope of normal delivery then, CS could be suggested" (female participants)*.

Table 4.18: Duration of labour before CS could be proffered

N=436

How long a woman should labour before CS could be proffered by the doctor?	Frequency	Percentage
20min-12hours	153	35.1
13-24hours	105	24.0
25-36hours	8	1.9
37-48hours	58	13.4
>48hours	112	25.6
Total	436	100

Respondents Opinion on Maximum Number of Children a Woman with Repeated CS Can Have

Twenty-five (5.7%) respondents mentioned one child, followed by 90 (20.6%) who mentioned two children. More than half, 256 (58.6%) of the respondents mentioned three children while thirty-three (7.5%) respondents mentioned four children. Those that mentioned above four children were 7.6%.

The opinion of the Focus Group Discussants was explored in respect to how many children they felt a woman with a repeated CS could have. Discussants in both groups were unanimous in their response that CS limits child-bearing capabilities. Other responses were:

- *"The maximum I think is three; after three it is risky" (male)*
- *"I read in a book somewhere that medically three was just okay" (male)*
- *"After two attempts, she should surrender. I mean two children" (male)*

There was a mixed reaction during one female FGD where a woman mentioned four children. Other female discussants felt it was inhuman to mention four children. Their typical responses were:

- *"It is not feasible to go through operation (CS) four times. What is such woman looking for?"*
- *"If she is fortunate to have three children then, she should be grateful. She is only looking for trouble after that three. Maximum is three"*
- *"Having four children is death sentence. Maximum of three children is what I think"*

Test of Hypotheses

Hypothesis I: There is no significant association between respondents' sex and willingness to accept CS.

The result of the association between sex of the respondents and willingness to accept CS is presented in table 4.19. It was observed that there was no statistically significant association (P>0.05). Almost equal proportion of the respondents, 77% males and 75% females respectively would accept CS if proffered as a means of delivery. On the contrary, 23% male and 25% female respondents respectively would not accept CS as a means of delivery.

Table 4.19: Relationship between Sex of Respondents and Willingness to Accept CS

Sex	Willingness to accept CS		
	Yes (%)	No (%)	Total (%)
Male	167 (76.9)	50 (23.1)	217 (100.0)
Female	168 (74.7)	57 (25.3)	225 (100.0)
TOTAL	335 (75.8)	107 (24.2)	442 (100.0)

Chi Square X^2= 0.316, df=1

P=0.574

Hypothesis II: There is no association between the level of education and willingness to accept CS as a means of delivery.

The result of the association between level of education of the respondents and willingness to accept CS as a means of delivery is presented in table 4.20. No statistical significance association was observed (P>0.05). However, educational level was found to be in higher acceptance of CS and this was foremost among those who did not complete secondary education (88%), followed by respondents with tertiary education (80%) and least among those who completed their secondary education (70%).

Table 4.20: Relationship between Level of Education and Willingness to Accept CS

Level of education	Willingness to accept CS		Total (%)
	Yes (%)	No (%)	
No formal education	27 (75.0)	9 (25.0)	36 (100.0)
Complete primary education	75 (76.5)	23 (23.5)	98 (100.0)
Did not complete primary education	11 (73.3)	4 (26.7)	15 (100.0)
Complete secondary education	112 (70.4)	47 (29.6)	159 (100.0)
Did not complete secondary education	28 (87.5)	4 (12.5)	32 (100.0)
Tertiary Institution	82 (80.4)	20 (19.6)	102 (100.0)
TOTAL	335 (75.8)	107 (24.2)	442 (100.0)

Chi Square X^2 =10.7145, df=5

P=0.057

Hypothesis III: There is no association between respondents' sex and perception of CS as a good way to deliver a baby

The result of the association between sex of the respondents and perception of CS is shows that there was no significant association as presented in table 4.21, (P=0.916). Similar proportions of females (88.2%) and males (87.9%) respondents did not perceived CS as a good way to deliver a baby.

Table 4.21: No Association between Respondents' Sex and Perception of CS as a Good Way to Deliver a Baby

Sex	In your own opinion do you think CS is a good way to deliver a baby		
	Yes (%)	No (%)	Total (%)
Male	26 (12.1)	189 (87.9)	215 (100.0)
Female	26 (11.8)	195 (88.2)	221 (100.0)
TOTAL	52 (11.9)	384 (88.1)	436 (100.0)

Chi Square X^2=0.0112, df=1

P>0.05

Hypothesis IV: There is no association between respondents' religion and willingness to accept CS as a means of delivery

The result of the association between level of education of the respondents and willingness to accept CS as a means of delivery is presented in table 4.22. No statistical significance association was observed (P>0.05). It was observed that the willingness to accept CS as a means of delivery is independent of a particular religion as majority of the respondents 335 out of 442 consented in agreement to CS. On the other hand, 107 out of 442 respondents declined to accept CS as a means of delivery irrespective of their religion.

Table 4.22: No Association between Respondents' Religion and Willingness to Accept CS as a Means of Delivery

Religion	**Willingness to accept CS**		
	Yes (%)	No (%)	Total (%)
Christianity	193 (57.6)	56 (52.3)	249 (56.3)
Islams	139 (41.5)	49 (45.8)	188 (42.6)
Traditional	3 (0.9)	2 (1.9)	5 (1.1)
Total	335 (100.0)	107 (100.0)	442 (100.0)

Chi Square X^2=1.4331,
P>0.488

CHAPTER FIVE

Discussion

Awareness and knowledge of caesarean section and sources of awareness

Respondents possessed average knowledge on caesarean section being aware that it is an alternative to vaginal delivery. This is consistent with the findings of a similar study conducted in an urban setting in Nigeria (Aziken et al 2007) which showed that women interviewed had good knowledge of CS. The findings were also similar to a study carried out in Ghana (Adageba et al 2008) with 96.0% having heard about CS. Also, Oliver et al (2004) in their study found that all respondents (6224) interviewed knew what CS is. From this study, people (including friends and in-laws) were listed as the most popular source of information about CS, followed by hospital workers. This buttresses the findings from other researchers such as Saoji et al (2011) and Mongrue et al (2010) disclosing that the commonest sources of information were from friends and relatives (54.7%) and (50%) respectively.

Knowledge of indications for Caesarean Section

Labour problem was cited as indication for caesarean section by 38.2% of respondents in this study while 11.7% did not know. This finding is similar to a study (Adageba et al 2008) in which of the 317 women interviewed, 304 (96%) had heard of the operation; only 43 (13.5%) could mention specific indications for it. However, the most common reason for CS mentioned by respondents interviewed in this study was inadequate pelvis (23.2%), followed by prolonged labour (19.1%) and malpositioning (15.1%). This correlates with the findings of a study (Ado et al, 2009), which gave the following as indications for CS, inadequate pelvis (15.5%), placenta previa (5.1%), prolonged labour (4.4%), foetal distress (9.6%) and malpositioning (2.7%). In a study by Sobande et al (2003), mal-presentation especially (breech presentation) was the reason for CS in about 14.2% of nullipara and 11.5% grand multipara; also the consensus in the developed world regarding the management of uncomplicated breech presentation at times favors CS (Hannah,Hewson, Hodnett, Saigal and Wilan 2000). In another study (Aboyeji et al 2004) the commonest indication for CS was cephalopelvic disproportion which was attributed to early/childhood

marriage. From the FGD, most discussants could not say precisely reasons why women had to undergo CS. However there was misconception about the indications for CS as some discussants believed that laziness on the women's part is an indication for CS.

Respondents' knowledge of CS was however low in some areas. A typical example is in respect of the indications for CS. Many respondents could not mention specifically the indications for CS. This might be due to defective nature of antenatal clinic in Nigeria in that majority of the patients who had received antenatal in previous delivery were not aware of indications and reasons for performing caesarean section (Ezechi et al; 2002). The information that they did acquire was sourced mainly from friends and relations. It appears that not only are women deprived of information, but also the information accessed is not from a reliable and evidence-based source (Mungrue et al 2010).

Majority of the patients who have received antenatal in previous deliveries are not aware of indications and reasons for performing CS. This suggests the need for health workers in antenatal clinic to endeavor to tell patients clearly the indications for the procedure and be willing to answer any questions they may have to improve the acceptability of the CS.

Respondents' Perception of CS

From this study, most respondents perceived advantages of CS were that it saves mother/child or both lives, reduces labour pain and stress. This is similar to the finding in Australia in which some of the women thought caesarean section was safer for their babies (Gamble & Creedy, 2001). This finding also concurs with those of a Chilean study where, women desiring caesarean delivery felt strongly that their health and the health of their baby were important contributors to their decision (Angeja , Washington , Vargas , Gomez, Rojas, Caughey 2006). On the other hand, the major perceived disadvantage expressed by respondents in this study was the fear of death of mother. This finding is similar to that of a study carried out in Nigeria which revealed that majority of the respondents major concern was the fear of death of the mother (Adeoye and Kalu 2001).Majority of the respondents' did not see CS as a good way of child delivery. The most common reasons mentioned during this study for considering CS as being bad were "it is risky", "can lead to death", "it

is not a natural way of child delivery" and "painful". This finding is similar to a study by Adageba et al (2008) which showed that a little over half of the women considered CS as being dangerous and a bad way of delivering babies. The reason given for this perception was death of the mother. This finding is also consistent with a study (Kwawukume 2011) which revealed that CS is still being perceived as an abnormal means of delivery. In another study, (Adeoye and Kalu 2001), the perception of fear of complications and post- operative pain were amongst other concerns of the respondents.

Majority of the respondents, 357 (82.0%), consisting of 79.5% males and 84.2% females population reported that the husband should give consent for CS with the FGD findings reflecting majority supporting this viewpoint.Previous studies conducted in Nigeria (Awoyinka et al; 2006) reported that though the acceptability of the operation was found to be 85% , majority of the women in that study said they would seek further approval from relatives, especially their husbands before consenting. Findings attested to the influencing factors of men on maternal issues. In their study (Lawoyin et al, 2007) on "men's Perception of Maternal Mortality in Nigeria", men are expected to promote maternal health and prevent maternal death in their partners, yet research has not established a strong link between their behaviors and maternal mortality particularly in developing countries.

Though knowledge is a key behavioural antecedent (Green & Kruter, 1991), findings from this study seem to indicate that awareness of this procedure does not translate to its adoption as a means of delivery. Majority (88.7%) of the respondents comprising of 92.2% male and 85.8% female did not support requesting for CS in advance as a means of delivery. Adageba et al (2008) reported that only 11 (3.5%) of respondents preferred planned caesarean delivery Similar to this finding is that of a report at the Federal Medical Centre Makurdi in north central Nigeria with a decreasing trend relative to elective caesarean sections (Swende 2008). Discussants in the FGDs shared the same view with their survey counterpart. In majority of the groups, the perception towards requesting for CS was low and the reason adduced for this was the high level of the desire of the women to have vaginal birth which they deem natural. Indeed, this desire for vaginal birth has been expressed by women in

developing and developed countries (Aziken et al 2007; Angeja et al. 2006; Gamble and Creedy. 2001; Aali and Montamedi 2005; Chong and, Mongelli 2003). According to a survey carried out in China (Sufang et al 2007), women were asked whether they had requested a caesarean delivery, Contrary to this desire for vaginal birth and consequent aversion to CS, 50.7% responded in the affirmative. This compares with an overall figure of 44.7% for the decade preceding the survey. Data showed a huge demand for the procedure across urban and rural areas of China. Undergoing a caesarean section may reflect women's perceptions regarding the efficacy of the procedure as a means to ensure newborn survival and to avert the risks of birth complications or stillbirth. Similar to this is that of another study (Kitzinger, 2001) in which some women saw vaginal birth as ugly, agonizing and a form of torture, and were convinced that vaginal birth would distort and mutilate their bodies and leave them gaping and incontinent. They believed that CS offered the safest birth for the baby.

The attitudes of the FGD participants to CS could be gleaned from their responses. Many of the participants believed that CS was for lazy women alone. Few of them were of the view that CS might not be necessary if the woman could take it up spiritually. Furthermore, some participants in the FGD and survey group (24.2%) when asked if they would accept CS if indicated as a means of delivery said they would not accept. This is consistent with findings of some other studies which revealed that up to 12.1% of the women in a study on knowledge and attitudes towards modes of delivery in Iran, said they would not accept caesarean section under any circumstances (Aali and Motamedi 2005). In another study, (Adageba et al 2008) 6% would refuse it even when indicated. These responses are indicative of a negative attitude to CS. Design of programmes should therefore take this negative attitudinal predisposition into consideration.

Caesarean Section Experiences

From this study, only 39 (17.3%) of the female respondents had undergone CS . Majority of both male and female respondents knew of people around them that had also undergone CS. The indications for undergoing CS mostly mentioned by women who had CS experience were prolonged labour and big babies. These responses indicate that respondents that even had CS experience did not have detailed knowledge about the indications for undergoing the operation. Saoji et al (2011) in their study observed that due to women's ignorance about childbirth, they just submissively do what their provider tells them to. Therefore, they cannot effectively talk about birth interventions with their providers, and agree for caesarean delivery for medical and even for non medical reasons. These findings suggest the need to create awareness about CS to increase knowledge among pregnant women about the different methods of delivery and thereby empowering men and women to make informed choices.

From the FGD conducted, it could be inferred from the majority of the discussants (both male and female) contributions that "people rejoice more when a woman delivers normally than when she delivers by CS". The reason they gave was that women that delivered by CS were seen an "incomplete" (*ko da pe*).

Perceived Factors Militating Against Adoption of CS

Findings from this study reveal that not all respondents (24.2%) would agree to undergo CS if proffered as the means of delivery. The result of a study conducted in a tertiary centre in the South –East Nigeria which revealed that 11.6% of their clients rejected CS also confirms this finding and is also similar to the 12.1% of women who would not accept CS under any circumstance in South-South Nigeria (Orji; Ogunniyi; Onwudiegwu 2003) . This is also consistent with the findings of a study carried out in Ghana (Adageba et al 2008) in which 6% would refuse the operation even when indicated. Majority (79.7%) of the respondents expressed their fear for CS. Most common reason mentioned by respondents was that it could lead to death (25.5%). Slightly above twenty-eight percent (28.3%) expressed their fear for the outcome of surgery while 14.4% indicated that CS was risky. Similar to this was

the finding of a study (Ezechi et al 2004) in which fear of operation and post operative pain was amongst the reasons for rejecting CS. The expressed fear is consistent with the findings of a study carried out in Trinidad (Mungrue et al 2010) in which majority of those preferring vaginal deliveries held the view that CSs were more difficult, dangerous, and painful. Similar findings were reported in a study by Angeja et al (2006) in which it was found that these perceptions were the most important factors in determining women's decision to have a CS. These findings emphasize the need for health professionals to educate patients as to the actual risks that are associated with either mode of delivery because some clients may choose to deliver at home or maternity centre after receiving antenatal care in the health centre for fear of CS.

The cultural perceptions of the individual communities are vital to the acceptance of the procedure because the observed trend is a great reluctance among women and their relations to accept the procedure. These cultural perceptions may possibly and partially explain why the number of women who booked for antenatal care significantly differs from the actual number of those who deliver in health centers. The reported aversion of women to caesarean section in Sub-Saharan Africa may not be associated with fear of the operation per se, but a reflection of the desire of the women to have vaginal birth which they deem natural. Indeed, this desire for vaginal birth has been expressed by women in developing and developed countries (Aziken *et al*, 2007; Angeja & Washington, 2006; Gamble & Creedy, 2001; Aali & Motamedi, 2005; Chong & Mongelli 2003). Majority (95.9%) of the respondents in this study said there were no cultural beliefs that made them fear CS. The finding is consistent with a study (Adeoye and Kalu, 2011) in which it was found out that a significant proportion of the respondents (34%) indicated that the cultural perception of their communities about CS was negative. It has been reported that in some cases, people's overall knowledge about the nature of CS could be low despite their high level of awareness of the operation (Adageba et al 2008; Aziken et el 2007; Mungrue et al 2010). Such a situation was also noted in this study. Majority of the FGD discussants in this study prefer vaginal delivery even though they had high awareness of caesarean section as an alternative to vagina delivery. Many of them would not agree to CS when indicated. Contributions

made by several of them showed that untested information about the risks of caesarean delivery may scare discussants from the operation when it is actually indicated since majority of the participants considered CS to be dangerous to the mother and baby and some would refuse it even when indicated.

Implications of findings for Health Education

The findings of this study have reiterated the fact that utilization of CS as a means of delivery is inadequate and this may be due to misconceptions about CS. Information about CS was mostly from friends and relatives which is not a reliable source and can be biased. Information and services relating to CS made available in hospitals and antenatal clinics are not accessible to all women. Majority of women that had undergone CS could not specifically tell the reasons why they had to be delivered through that means.

Considering that women are prone to a lot of risks through childbirth which in return leads to increase in mortality rate, there is urgent need to intensify CS education. The implementations of CS services tailored to assist labour difficulty in antenatal clinics and through the media are particularly advocated. Health education is a combination of learning experiences designed to facilitate voluntary adaptation of behaviour conducive to health (Green, Krenter, Deeds and Patridge 1980). It is concerned with reinforcing and changing knowledge, attitudes and behaviour of people through effective communication of factual information, with the aim of helping them to ensure an optimum well-being. Health education can therefore be used to bridge the gap between health information on awareness and negative perceptions and attitude within the context of CS. Health professionals need to ensure that adequate information is given to women on types of deliveries. Also information on the need for CS must be accurate and imparted at a level that is appropriate to the women concerned. In our setting this can be easily done at the first booking and supported by other forms of communications. This will empower women to participate in decision-making and enable them to participate meaningfully in the birth of their babies.

Negative attitude and perception is also a major challenge in the fight to reduce the difficulties associated with labour and maternal death. Despite being aware of circumstances that could necessitate the need for CS, some of the respondents maintained that they would not accept it. Results from past studies show that inaccurate cultural perceptions of labour and caesarean section in the cohort of women were most likely to be associated with women's non-acceptance of indicated caesarean section. This feeling of invulnerability could hinder commitment to behaviour change. Caesarean section programmes should not only focus on its indications and advantages but also on changing negative perception. Well designed public enlightenment programmes and effective antenatal education in which the expectant father is also involved could be used to address the problem of negative attitude and perception. There is need for programmes to increase women's and community understanding and perceptions of CS as a method of delivery. Previous study suggests that since it is impossible to predict all those women who may require CS, it is difficult to determine when information on CS should be given. Both male and female respondents concluded that the information concerning CS should be given to all patients irrespective of whether or not a CS is actually planned.

Studies have shown that an appropriate perception of risk is insufficient to guarantee the adoption of protective behaviour (Adedimeji, 2005; Blum, McNeely and Nonnemaker 2002). The successful reduction of problems associated with child deliveries among women in Oyo state, especially in Ibadan North Local Government, depends on the extent to which programme and policy interventions address peculiar cultural and environmental circumstances compelling women to engage in risky child delivery practices. The implication is that the reduction of maternal mortality resulting from aversion to caesarean section requires a holistic approach.

The findings of this study have revealed that only half of the respondents interviewed said consent for CS should be given as soon as indicated. Some were of the opinion that consent should be given after much trial of labour and when there is no other alternative way. To this end, women go extra miles seeking the services of alternative practitioners and faith healers for a way out. All these options could further endanger the life of the patient hence

there is a need for orientation and re-orientation training for men and women on CS during ante-natal clinics and in the community. It is only when they are properly trained that they will become more empowered to make right decisions and choices prior or during delivery Interventions such as giving routine health information and counselling (involving the expectant father) in the clinics and communities on this are useful health promotion and education strategies that could be used.

The major concern expressed by respondents and FGDs participants in this study of being afraid of CS as a means of delivery was the fear of death during the procedure. The other concerns include fear of outcome of surgery and post-operative pain. These findings emphasize the need for health professionals to educate patients as to the actual risks that are associated with either mode of delivery. One of the priorities is to direct attention at the women at booking time in the antenatal clinics. Also a conscious health education on safety and indications for the operation is needed either as a pre-pregnancy counseling or during antenatal care services to sensitize women and to answer any question they may have before surgery to improve the acceptability of the operation. Though CS is a surgical intervention done when vaginal deliveries fails, the findings of this study reveal that most respondents felt requesting for CS in advance is outrageous and irrational. This is a very important finding. Therefore practitioners should endeavour to inform patients about the indication for elective caesarean section to improve the acceptability of the operation. There should also be women empowerment through non-discriminatory effective community education, so that women understand the importance of timely caesarean section under specific circumstances.

Men, women and the community as a whole have crucial roles to play in eradicating aversion to caesarean section and thereby reducing maternal mortality rate of which labour problems is one of the major causes. A strategic principle that should be employed is to examine more carefully the role of health education in dis-abusing the mind of women of this belief and also to increase women and community's understanding and correct their perceptions of CS as a good method of delivery.

Conclusion

- In conclusion, majority of the respondents in this study had high awareness of Caesarean Section. The attitude towards caesarean section is positive if the operation is indicated. This demonstrates that women would not rigidly adhere to a preferred method of delivery. In view of the fact that a reasonable number of the respondents had no knowledge of indications of caesarean section appropriate content education about the operation should be considered routine at the antenatal clinic. Clinicians should endeavour to tell patients clearly about modes of deliveries, the indications, advantages and adverse consequences for caesarean section and be ready to answer any question they may have to improve the acceptability of the operation and will enable them to make an informed decision.

- This study has also shown that the information obtained was from an unreliable source, emphasizing the need for information on CS to form a component of a structured antenatal education programme.

Also, It was observed that influence of the significant others, such as respondents husbands in consenting to caesarean section was validated in this study. This shows that men should be actively involved in the educative programmes.

The findings of this study could be used as a training needs assessment for the design and development of a training curriculum and educational programme for upgrading the awareness and knowledge of women of reproductive age relating to the knowledge, perception, acceptance and willingness to use of caesarean section as alternative means of delivery.

Based on the findings of this study and the review of literature, a training curriculum has been designed by the investigator and presented in appendix 6. It highlights the objectives, content elements methods, materials and mode of assessing the training effort.

Recommendations

Based on the findings from this study, the following recommendations are offered:

1. Public enlightenment must be intensified to educate the populace on the need and reason for CS. This enlightenment should be community based to have a more lasting effect.
2. Antenatal clinic should be more effective and informative; caesarean section to be included in antenatal health education topics.
3. In order to improve the poor utilization of Caesarean Section for delivery, the concerns and fears expressed by clients should be addressed and also mechanisms should be instituted to modify the negative perception of the local communities about CS.
4. Client education is necessary to address some concerns on safety of the operation
5. A structured antenatal education programme for childbirth and parenthood is strongly recommended for pregnant women and their partner
6. Enlightenment in various maternity clinics can influence perception of caesarean section.

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APPENDIX I

PERCEPTIONS AND ATTITUDE OF MARRIED MEN AND WOMEN TOWARDS CAESAREAN SECTION IN IBADAN NORTH LOCAL GOVERNMENT AREA OF OYO STATE, NIGERIA

INTRODUCTION

Dear Sir/Ma,

My name is Oshilaja Ronke. I am a student of the department of Health Promotion and Education, College of Medicine, UCH, Ibadan. I am in this community to learn from men and women their perception and attitude towards caesarean section. The findings of this study will serve as a basis for understanding the men and women's view on this issue and the information derived will be used to educate relevant health workers and community members.

All information supplied will be used only for the purpose of the study and will be kept strictly confidential. For the avoidance of doubt, your name will not be written down.

Your cooperation in answering all the questions truthfully will be highly appreciated.

Thank you.

Demographic characteristics

1. Age …… (in years Last birthday)
2. Sex (1) Male (2) Female
3. Marital Status
   a. Single [ ] b. Married [ ] c. Divorced [ ]
   d. Separated [ ] e. Widower [ ] f. Others (Specify) [ ]
4. Number of Children ……...
5. Religion
   a. Christianity [ ] c. Traditional [ ]
   b. Islam [ ] d. Others [specify]…….....
6. Ethnic group
   a. Yoruba [ ] c. Hausa [ ]
   b. Ibo [ ] d. Others (specify) [ ]
7. Occupation (women)
   a. Housewife [ ] c. Civil Servant [ ]
   b. Business [ ] d. Farming [ ]
   e. Others (specify)……

8. Occupation (men)
   a. Farming [ ] c. Civil Servant [ ]
   b. Business [ ] d. Others (specify)…….
9. What is your highest level of education?
   a. No formal education
   b. Complete primary education
   c. Did not complete primary education
   d. Complete secondary education
   e. Did not complete secondary education
   f. Tertiary institution
10. A. What are the types of deliveries you know?
   i. ……... ii ……. iii ……
   B. How did you learn about each of them?
   i ……. ii ……. iii ……..,...
11. A. Have you heard about caesarean section Yes ( ) No ( )
   B. If yes what are the sources of information (indicate the source of information)
   ……
   ……
12. What type of women go for caesarean section?
   a. …… b. ……
   c. …… d …….

13. A. How many of the children were delivered by caesarean section?
   B. How long ago was the last delivery by caesarean section?
14. What are the advantages and disadvantages of caesarean section

Advantages	Disadvantages
a. ……	a. ……
b ……	b. ……
c ……	c. ……
d ……	d ……

15. For how long should a woman be allowed to labour before caesarean section could be suggested……
16. What is the maximum number of children that a woman can have by caesarean section before ……..
17. A. How many people do you know that have undergone caesarean section before?
   .....

B. What led to each of them undergoing caesarean section and what were the outcomes of their caesarean section?

No	Reasons why they were operated upon	Outcome Whether successful or not successful.

C. How many of your family members have had caesarean section done before? .....

PERCEPTION

18. How do people view child birth in this community?.....
19. When do women usually deliver their babies in this community?
    a. …… b. ……..
    c. …… d. ……..
20. Which is the safe place to run to when there is problem with delivery?
    a. …… b. ……..
    c. …… d. ……..
21. In your own opinion, do you think C/S is a good way to deliver babies?
    Yes ( ) No ( )
22. Give reasons for your answer

Good	Bad
a. ……	a. ……
b. ……	b. …….....

23. A. Do you think that caesarean section is a safe procedure Yes ( ) No ( )
    B. Give reasons for your answer?

Safe	Unsafe
a……	c. ……
b. ……	b. ……

24. What names are given to children delivered by Caesarean section
    a. ……. b. …….. c. …… d. ……

25. What name(s) are given to women who deliver by caesarean section? (more than one caesarean section)
    a. ……. b. …….. c. …… d. ……..
26. A. Assuming you are pregnant and have been told by health worker that you will need to undergo caesarean section will you agree? Yes ( ) No ( )
    B. Give reasons for your answer……
27. A. Are you afraid of caesarean section? Yes ( ) No ( )
    B. Give reasons for your answer……
28. A. Are there cultural belief that make you fear caesarean section? Yes ( ) No ( )
    B. If yes, state them i ……... ii…… iii. ……
29. Who should give consent for caesarean section? ……
30. At what time should consent for caesarean section be given? …….
31. Is it proper for a woman to request for caesarean section (elective) as a means of delivery? Yes ( ) No ( )
32. Please, if you have any other comment or recommendation, please include them here
    ……
    ……
    ……
    ……

Thank you very much for your time in completing this questionnaire.

APPENDIX II

FOCUS GROUP DISCUSSION GUIDE

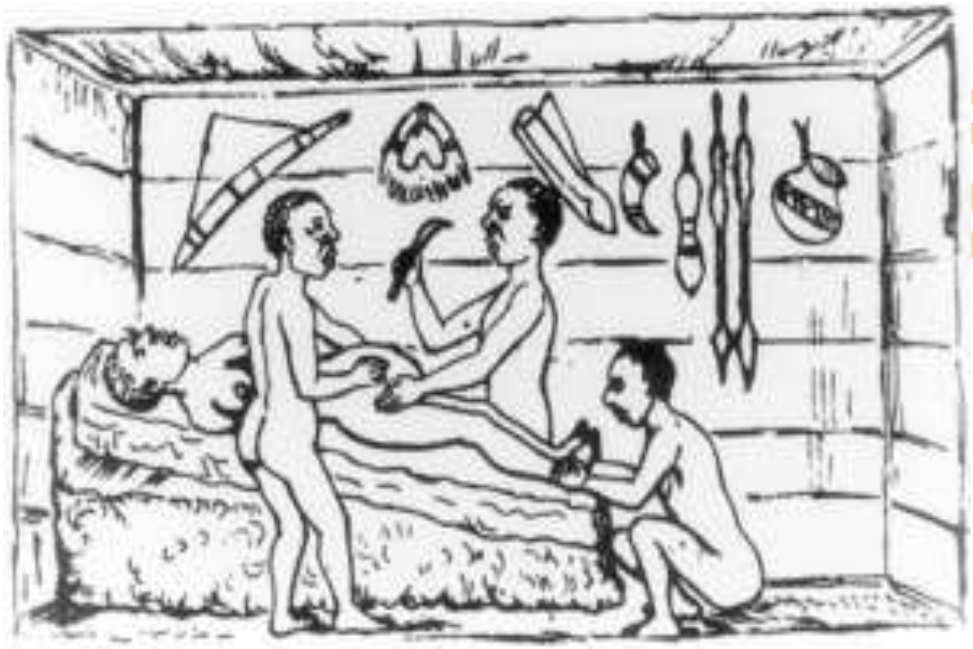
Introduction: Good day sir/ma, we are from the department of health Promotion and education, University of Ibadan. We would like to discuss about the opinions of married men and women towards caesarean section with you. Kindly feel free to express your opinion. Your comment will be kept confidential by everyone in this meeting. Your active participation would help us to make appropriate recommendations on this issue. We seek your permission for the use of tape recorder for clarity purpose in writing our report. Thank you for your cooperation.

1. How do people in this community view childbirth?
2. How do people receive pregnant women who give birth to children easily and those why have problem when giving birth.
3. Whose life should be more cherished when there is difficulty in normal delivery? The baby or the mother?
4. If the baby why?
   If mother why?
5. What are the different types of deliveries you know?
6. How did you learnt about this
7. What names are given to childbirth through the use of surgical knives and other equipments by doctors and authorized health care practitioners.
8. What is our understanding of the term Caesarean Section do we know (probe for how it is carried out where, who?).
9. What different types of caesarean section do we know (probe for how it is carried out where, who.
10. What is the belief of the people in this community about caesarean section?
11. How do people perceive women who deliver their children through caesarean section and those that delivered normally (probe for perception of husbands, mother – in – laws, fathers – in – law; other children of the woman.

12. How common is it for pregnant women are undergoing Caesarean section in this community. (Probe for number of pregnant women out of hundred that participants know who had delivered their babies through caesarean section).
13. In what situation should pregnant women undergoes caesarean section.
14. What the advantages and disadvantages and disadvantages of caesarean section.
15. When is it appropriate to give consent for caesarean section?
16. Who is the dominant decision maker when a woman is to undergo caesarean section?
17. In a situation where the husband is not around who decides?
18. What advice do people give to women-needing to/going for caesarean section?
19. What suggestion do you have for pregnant women who have been told by health care workers that they need to undergo caesarean section?

APPENDIX III

Successful Caesarean section performed by indigenous healers in Kahura, Uganda. As observed by R. W. Felkin in 1879.

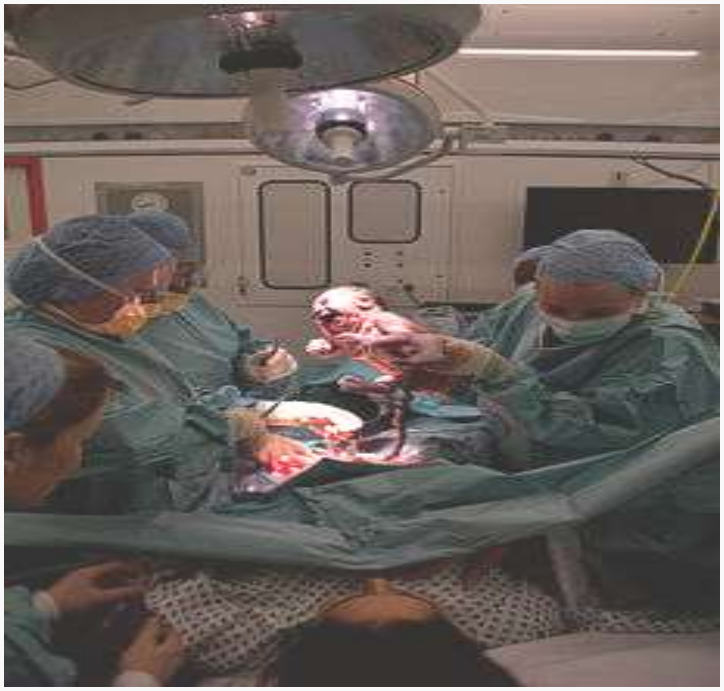


APPENDIX IV

A team of obstetricians performing a Caesarean section in a modern hospital.

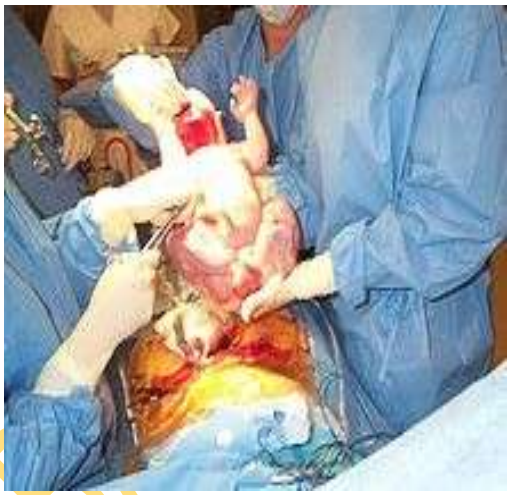
Caesarean section

Intervention



APPENDIX V

A Caesarean section in progress



Pulling out the baby

Suturing of the uterus after extraction

Closed Incision for low transverse abdominal incision after stapling has been completed.

An Overview of Caesarean Operation

Source: Downloaded from Wikipedia encyclopedia

APPENDIX VI

A curriculum for enhancing the capacity of women stakeholder in caesarean section awareness, knowledge and acceptance in Ibadan North local government.

OBJECTIVES	CONTENT ELEMENT	METHODS	MATERIALS	MODE OF ASSESSMENT.
To increase participant 's level of awareness relating to what CS is and why it is done in some Cases.	What CS means -Why do some women had to deliver child through CS -Of what benefit is CS in situations where normal delivery fails and myths.	Lectures and Demonstrations	Flips Charts, visual aids and flyers.	Pre and post test.
To integrate men and women leaders about factors which will promote adoption and use of CS.	Cultural beliefs about CS, concept of aversion, attitude and perceptions relating to CS. -Rights and responsibilities of women towards safe delivery.	Lectures, brainstorming and discussion	Flip Charts, visual aids and Flyers.	Pre and Post test
To upgrade men, women, women leaders and community leaders about mortality arising from labour problems and rights of women towards safe delivery.	When should consent be given when CS is indicated? -How husbands can support women undergoing CS. - Programme updates in the community on mortality arising from child delivery	Lectures and Analysis of case studies.	Flipcharts, visual aids and multimedia projector	Pre and Post test.
To upgrade women stakeholders knowledge and skills relating to the formulation of CS policies in the community.	Communication and development of community policy on CS, issues regarding aversion of CS confidentiality, care and support.	Lectures and discussions.	Flipcharts and visual aids.	Pre and post test.