GUTTMACHER INSTITUTE

Unwanted Pregnancy And Induced Abortion In Nigeria

CAUSES AND CONSEQUENCES

Unwanted Pregnancy And Induced Abortion In Nigeria: Causes And Consequences

Akinrinola Bankole
Boniface A. Oye-Adeniran
Susheela Singh
Isaac F. Adewole
Deirdre Wulf
Gilda Sedgh
Rubina Hussain

Acknowledgments

Unwanted Pregnancy and Induced Abortion in Nigeria: Causes and Consequences was written by Akinrinola Bankole, Susheela Singh, Gilda Sedgh and Rubina Hussain, all of the Guttmacher Institute; Boniface A. Oye-Adeniran, University of Lagos and The Campaign Against Unwanted Pregnancy (CAUP); Isaac F. Adewole, University of Ibadan and CAUP; and Deirdre Wulf, independent consultant. The report was edited by Susan London, independent consultant. Kathleen Randall, Michael Greelish and Judith Rothman, of the Guttmacher Institute, were responsible for layout and production.

The following Guttmacher Institute colleagues provided assistance and advice at various stages of the report's preparation: Melanie Croce-Galis, Patricia Donovan, Beth Fredrick, Stanley K. Henshaw, Dore Hollander, Ann Moore, Jennifer Nadeau, Kate Patterson, Sandhya Ramashwar and Junhow Wei.

Assistance from the following colleagues facilitated the successful development and implementation of the surveys that are the basis for this report: Oluyemi Abodunrin, CAUP; Alfred A. Adewuyi, Francis A. Adesina and the staff of the Center for Research, Evaluation Resources and Development; Oyindamola Badru, University of Ibadan; Ekanem E. Ekanem, University of Lagos; Abidoye Gbadegesin, Lagos State University Teaching Hospital; Ngozi Iwere, CAUP; Pat Mahmoud, CAUP; Paulina Makinwa-Adebusoye, Nigerian Institute of Social and Economic Research; Adesina Oladokun, University of Ibadan; and Muyiwa Oladosu, Mira Monitor International Consultants.

The surveys could not have been fielded successfully without the participation and hard work of the field supervisors and interviewers, who are listed on the inside back cover.

An early draft of the report benefited from input from Elizabeth Aahman, World Health Organization; Tamara Fetters, Ipas; Don Lauro, Packard Foundation; Paulina Makinwa-Adebusoye; Clifford Odimegwu, University of Witwatersrand; Bomi Ogedengbe, University of Lagos; Friday Okonofua, Women's Health and Action Resource Centre; Elisha Renne, University of Michigan; and Augustine V. Umoh, University of Uyo Teaching Hospital.

This report was made possible by funding from The David and Lucile Packard Foundation and The John D. and Catherine T. MacArthur Foundation.

Table of Contents

Executive Summary 4

Chapter 1: Introduction 6

Chapter 2: Unwanted Pregnancy: The Root Cause of Induced Abortion 10

Chapter 3: Prevalence and Patterns of Induced Abortion 14

Chapter 4: The Practice of Abortion 18

Chapter 5: The Health Consequences of Unsafe Abortion 21

Chapter 6: Conclusions and Recommendations 25

Data Sources 8

Definitions and Limitations 9

References 29

Appendix Table 32

Executive Summary

Each year in Nigeria, hundreds of thousands of women become pregnant without wanting to, and many women with unwanted pregnancies decide to end them by abortion. Because abortion is legal only to save a woman's life, most procedures are clandestine, and many are carried out in unsafe circumstances. Unsafe abortions can endanger women's reproductive health and lead to serious, often life-threatening complications. Furthermore, unsafe abortions impose a heavy burden on women and society by virtue of the serious health consequences that often ensue: Treating these health problems is costly and consumes scarce resources at both public (government) and private health institutions. Because abortion is largely illegal, information on the procedure is difficult to obtain. However, a general picture emerges from new research findings that shed light on the causes, level and consequences of abortion in Nigeria.

Unwanted pregnancy is common in Nigeria, for a number of reasons

- Nearly one-third (28%) of women of reproductive age have had an unwanted pregnancy at some point in their lives.
- An estimated one in five pregnancies in Nigeria are unplanned.
- Many factors contribute to unwanted pregnancy. In addition to low levels of contraceptive use, the desire for smaller families is fundamental. Growing urbanization, the increasing participation of women in the paid labor force and the diminishing ability of families to support many children (partly because of the costs of educating them) all contribute to the desire to limit family size.
- To have only the number of children she wants, the typical Nigerian woman must spend 10 years between the ages of 20 and 45 using effective contraceptive methods.
- However, more than one-quarter (27%) of all Nigerian women aged 15–49 need effective contraception—that is, they are able to become pregnant, are sexually active, do not want a child soon or ever, but are not using any method of contraception (22%) or are using traditional methods (5%), which have high failure rates.
- Six in 10 women (61%) who have ended an unwanted pregnancy by abortion were not using any method of family planning when they conceived; 33% were using a modern method, and 6% a traditional one.
- Among the nonusers, 38% did not know about family planning, 19% believed that they would not get pregnant, 17% feared the side effects of contraceptives and 6% each lacked access to family planning and had partners or other family members who objected to contraceptive use.

Induced abortion is widespread, and its practice takes many forms

- Among Nigerian women of reproductive age, one in seven (14%) have tried to have an abortion, and one in 10 (10%) have actually ended an unwanted pregnancy.
- An estimated 760,000 induced abortions occur annually.
- The reasons women give for terminating a pregnancy suggest that two broad groups of women have abortions: young, unmarried, childless women, and married women with children who want to postpone or stop another birth.

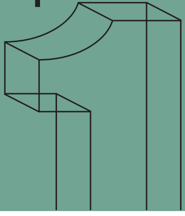
- The majority of abortions obtained in recent years—almost six in 10—were carried out in hospitals or clinics, most of them privately owned facilities, but some of them public facilities. Another 22% were initiated through chemists. The remaining 20% were performed by a traditional provider, a friend or the woman herself.
- But in the North, 29% of abortions are performed by a traditional healer, a friend or the woman herself, compared with 12% in the South.
- Nearly half (48%) of women who end their pregnancies have a surgical abortion (either a dilation and curettage or a manual vacuum aspiration) performed in a clinic, hospital or doctor's private office. One-fifth ingest tablets, and one-seventh each obtain an injection, and use traditional methods or induce the abortion themselves.
- However, 29% of poor women have a surgical procedure performed by a medically trained professional, compared with 59% of nonpoor women.

Unsafe abortions often put women's life and health in jeopardy

- Overall, 25% of women obtaining abortions experience serious complications. The level is above average among women using a traditional healer or a friend or terminating the pregnancy on their own (36%), and below average among those taking tablets (19%) or obtaining an injection (10%).
- One-fourth of women whose pregnancies are ended through the use of dilation and curettage or manual vacuum aspiration report serious complications—an unnecessarily high proportion for procedures that, if properly carried out, are very safe.
- Only one-third of women with such complications (9% of all women having abortions) seek treatment. Among women who perform the procedure themselves or use traditional methods, 16% seek care for complications.
- The most common complications reported by hospitalized women themselves are excessive pain (68%), bleeding (62%) and fever (21%). Physicians report that women are treated for retained products of conception, hemorrhage, fever, sepsis and instrumental injury, among other complications.
- Slightly more than three in four patients with complications require emergency evacuation of the uterus. In addition, about one in 10 require abdominal surgery.
- The cost to patients for care in hospitals related to complications from an induced abortion is about US$91 (or 10,933 naira), on average—a substantial expense in a country where the per capita gross national income (purchasing power parity) is roughly $930.

Action on many fronts is needed to reduce levels of unwanted pregnancy and unsafe abortion in Nigeria

- In terms of abortion care, Nigeria's health care system seems to be almost evenly split into two provider systems. In one system, better-off women can typically obtain relatively safe abortions; in the other, poor women largely resort to unsafe abortions.
- Improving knowledge about, access to and use of effective contraceptives would lower levels of unwanted pregnancy and induced abortion. Information and services are especially needed among women who have no schooling, who are older and who live in the North.
- To reduce the grave health consequences and costs of unsafe abortions, resources should be directed to improving the quality and coverage of postabortion care for women with complications.
- Because abortion is legal in Nigeria to save a woman's life, it would be reasonable to require that medical students and medical practitioners be trained to perform safe pregnancy terminations using manual vacuum aspiration. Such training would also be helpful for doctors and nurses involved in postabortion care.
- Public education carried out by popular figures in society and by the mass media is also needed to emphasize the health and societal benefits of family planning.



Introduction

Ideally, pregnancy would always be a wanted and happy event for women, their partners and their families. Unfortunately, this is not so. In most countries, large numbers of women every year become pregnant without planning or wanting to have a child at that time in their lives, and some may be more distressed than joyful under these circumstances. This is the case in Nigeria, where hundreds of thousands of women every year become pregnant without wanting to, and where many women with unwanted pregnancies decide to end them by abortion.

The reasons Nigerian women give for not wanting a pregnancy vary with their life circumstances: The women are too young; they would have to end or postpone their education; they are single; they are married but already have all the children they want or can support; they wish to delay their next birth; or they and their partner are having problems.[1] Thus, women and couples often feel a desperate need to avoid having a child.

Unwanted pregnancy reflects the broader context of Nigerian society and women's lives. Sexual activity outside of marriage has increased as women stay in school longer and marry later, heightening the risk of out-of-wedlock pregnancies, many of which are unwanted.[2] Growing urbanization, the increasing participation of women in the paid labor force and the diminishing ability of families to support many children (partly because of the costs of educating them) all lead to a desire for somewhat smaller families.[3] And in the absence of contraception, the fewer children couples desire, the higher the proportion of pregnancies that are unwanted. At the same time, the practices that Nigerian women traditionally have used to space births (postpartum abstinence and long-term exclusive breast-feeding) are in decline, especially among more educated women, while use of effective, modern contraceptives is very low[4]—a factor that virtually ensures a high level of unplanned pregnancy.

Because abortion is officially permitted in Nigeria only to save a woman's life, it is often performed under clandestine conditions. Official statistics on its occurrence and outcomes are therefore lacking. However, hundreds of thousands of abortions are performed each year by doctors and nurses working mostly in private hospitals or clinics, and many others are performed by untrained practitioners or women themselves under risky conditions.[5]

Unsafe abortions can have dire consequences for women, their families and society as a whole. Such procedures can endanger women's reproductive health and lead to serious, often life-threatening complications.[6] The number of Nigerian women who die each year from unsafe procedures is not known. But in West Africa overall, unsafe abortion accounts for about 10% of all maternal deaths in any given year.[7] One consequence of high maternal mortality is that it leaves many children motherless.

Induced abortion, whether performed under safe or unsafe conditions, absorbs scarce monetary resources. At the individual level, the cost for an abortion performed by a medically trained practitioner is typically unaffordable for many women.[8] Among those who obtain cheaper abortion services from untrained providers, treatment of serious complications often requires expensive hospital services. Women who cannot pay for safe procedures or treatment for complications run the risk of long-term—and often dangerous and more costly—consequences to their health. At the national level, unsafe abortion creates a drain on the country's already impoverished hospital infrastructure because hospitals must allocate scarce medical resources and personnel to care for women with complications.

The relevance of…differing social and demographic contexts for women's sexual and childbearing lives is far-reaching, because women do not make their reproductive decisions in a social or cultural void.

Women's reproductive options are largely shaped by their environment

Unwanted pregnancy can and does occur among women from every social, demographic and economic background in Nigeria. Nevertheless, the circumstances of women's lives that contribute to unwanted pregnancy—and that determine the resources at their disposal if they want to end an unwanted pregnancy or seek treatment for abortion-related complications—vary with communities' prevailing sociocultural values and level of development.

Roughly 125 million people, representing more than 250 ethnic groups, live in Nigeria, making it the most populous country in Sub-Saharan Africa. Per capita income (or purchasing power parity) is low—$930 a year.[9] The population is growing at the rapid rate of 2.8% a year, which means that it doubles every 25 years. Two-thirds of Nigerians live in rural areas. And while development is occurring, the pace is uneven between the South and the North, particularly in terms of women's educational attainment.[10]

A variety of social and demographic factors shape the context in which Nigerian women have sexual relationships, marry, become pregnant and bear children. Many of these factors vary widely according to where women live.[11] Poverty, early marriage and early childbearing are more common among women in the northern regions than among those in southern areas, as are adherence to Islam, a low level of education, and large desired and actual families. On the other hand, prenatal care and delivery care by a trained professional are more prevalent in the South than in the North. In addition, women living in the southern regions more often use modern contraceptives, live in urban settings, are Christian, are subjected to genital cutting and are regularly exposed to radio, television and the print media.

The relevance of these differing social and demographic contexts for women's sexual and childbearing lives is far-reaching, because women do not make their reproductive decisions in a social or cultural void. In every part of the developing world, patterns in women's and couples' sexual and childbearing behavior are deeply influenced by such factors as female education, the pace of modernization, women's participation in the paid labor force, their preference for secular lifestyles, their exposure to modern media, and the availability and use of contraceptive services.

A guide to the report

This report has two main goals. The first is to present new information on unwanted pregnancy and induced abortion in Nigeria, including two new surveys that provide new and comprehensive information on these topics (see page 8). The second goal is to make this new information available to a wide audience—policymakers, health planners, health professionals, educators, women's advocates and concerned citizens—with a view to encouraging informed and open discussion about the issues surrounding unwanted pregnancy and induced abortion in Nigeria today.

Chapter 2 discusses levels and determinants of unwanted pregnancy in Nigeria. Chapter 3 examines the prevalence of and patterns of abortion. Chapter 4 discusses the practice of induced abortion in Nigeria, mainly from women's perspective. Chapter 5 presents findings on abortion-related complications and their treatment, based on data from both women and their health care providers. Chapter 6 discusses policies and programs that could help reduce high levels of unwanted pregnancy and improve the safety of induced abortion performed under the law, as well as availability of appropriate postabortion care.

Data Sources

DATA SOURCES

This report is largely based on data from three surveys. Two of these surveys were conducted in 2002–2003 by the Guttmacher Institute (formerly The Alan Guttmacher Institute) and its Nigerian partner organization, The Campaign Against Unwanted Pregnancy. These two surveys were designed to capture perspectives on abortion of three very different constituent groups: women of reproductive age in the community, and hospitalized women who have experienced pregnancy loss and the medical providers who cared for them. Both surveys were conducted in eight of Nigeria's 36 states—Ekiti, Gombe, Imo, Kaduna, Kano, Kogi, Lagos and Rivers. Specifically, two states (the most urban and the most rural) were sampled from each of the four former health zones (Northeast, Northwest, Southeast and Southwest). The other survey used in this report is the 2003 Nigeria Demographic and Health Survey (DHS).

Community-based survey. A household-based survey of 2,972 Nigerian women aged 15–49 was conducted using structured face-to-face interviews. In this cross-sectional survey, women were asked to provide detailed reports of their experience with unwanted pregnancy and induced abortion; some information was also collected on socioeconomic and demographic characteristics, actual and desired fertility, contraceptive use, sexual and marital behavior, knowledge about abortion laws and attitudes toward induced abortion.[1]

Although the states in which the survey took place were distributed across the country, the survey is not nationally representative. In addition, urban residents were overrepresented as a result of the sample design. Comparison with the sample used in the 2003 DHS showed that respondents in the community-based survey were also more educated, most likely because of the overrepresentation of urban dwellers. Therefore, on the basis of the 2003 DHS, a weight factor was developed to adjust the sample to better represent the national female population aged 15–49 years with respect to urban-rural residence, education and region. All results presented here are weighted. Many of the results are based on 819 women who had had an unwanted pregnancy, and on 252 women who reported on their most recent induced abortion during the years 1990–2003; about 75% of these abortions occurred during the five years before the interview.

Hospital-based survey. The hospital-based survey was conducted in 33 hospitals located in the same eight states. In general, four hospitals, two public and two private, including missionary hospitals when possible, were selected in each state. The hospitals covered the four major types of urban medical facilities involved in providing postabortion treatment. Specifically, the sample consisted of seven federally funded tertiary (teaching) hospitals, 10 state-run secondary hospitals, 14 for-profit private hospitals and two not-for-profit missionary hospitals. The hospitals were selected to have high numbers of patients seeking abortion-related treatment to ensure an adequate number of interviews within the time available. All were located in urban areas.[2]

A total of 2,330 women were interviewed. These included women admitted to a hospital for treatment of pregnancy loss (spontaneous abortion, or miscarriage) and related complications, women who were treated for complications of induced abortions obtained elsewhere and women who obtained abortions at the hospital. In addition, the primary medical provider for each patient was interviewed separately.

All interviews were conducted face-to-face with structured questionnaires. The women were asked about their social and demographic characteristics, contraceptive and pregnancy histories and unwanted pregnancy. Those who had abortions were also asked detailed questions about abortion decision making, reasons for obtaining abortions, the abortion-seeking process, conditions under which abortions were obtained, complications associated with abortions and costs of treatment (the out-of-pocket cost of each procedure and of any treatments obtained before coming to the hospital). The providers were asked about details of medical treatment and surgical procedures, as well as the total hospital charge to the woman and any additional expenses that women paid in each of three categories (additional payments to the doctor, supplies used in the hospital and medications).

Of the 2,330 women interviewed, 237 were omitted from the analyses—112 women who had ectopic pregnancies, 71 who were seeking pregnancy termination and were turned away or referred, 36 who were treated for pregnancy complications other than abortion, 15 whose provider was not interviewed and three who were not pregnant. The remaining 2,093 women were classified into four groups: those who had attempted to end the pregnancy before coming to the hospital (35%), who were further divided into those who arrived at the hospital with complications (24%) and those who did not have major complications but were still pregnant and obtained an abortion at the hospital (12%); those who had not made a prior attempt but who obtained an induced abortion at the facility (33%); and those who were treated for complications from a spontaneous abortion (32%).

The distinction between induced and spontaneous abortion was based primarily on the physician's final diagnosis. In addition, an abortion was considered induced if the patient had made an abortion attempt prior to coming to the facility or if she came to the hospital seeking an abortion. Patients were considered to have attempted to end their pregnancy if they reported in their interview that they had done so or if the physician indicated that either the patient or someone else had said that an attempt had been made. Of the women who were considered to have made an attempt, 92% reported this to the interviewer. This, together with the high ratio of induced to spontaneous abortions, suggests that women were fairly open about discussing their abortion attempts and that the proportion of induced abortions misclassified as spontaneous was not large.

Results presented are based on various subgroups: 496 women who had attempted an abortion and had evidence of complications at the time of admission; 248 women who had attempted an abortion and did not have signs of complications at the time of admission; and 682 women who came to the facilities to obtain an abortion.

DHS. The 2003 survey was conducted by the National Population Commission, Nigeria, and ORC Macro, United States. These surveys are part of a worldwide project designed to collect and disseminate data on fertility, family planning, maternal and child health, and HIV/AIDS; they are sponsored mainly by the U.S. Agency for International Development. The samples are nationally representative and are large enough to permit estimates for the country's current six regions. The survey interviewed 7,620 women aged 15–49.

Definitions and Limitations

DEFINITIONS

The household wealth index (poverty measure) was constructed using the approach developed by Filmer and Pritchett.[1] Extensive information on women's household assets, similar to that usually collected in DHS, was collected in both the community-based survey and the hospital-based survey. Household assets included were radio, television, refrigerator, telephone, air conditioner, fan, computer, generator, microwave, cable television, bicycle, motorcycle, car, donkey or camel, horse, canoe or boat, electricity and the material used for the roof. This information and factor analysis were used to construct the wealth index, and respondents were classified into tertiles of wealth.[2] The analyses in this report use a dichotomous variable, whereby women in the lowest tertile of wealth were defined as poor, and women in the other two tertiles were collectively defined as nonpoor.

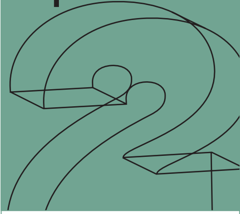
DATA LIMITATIONS

In both the community-based survey and the hospital-based survey, interviewers asked women about unwanted pregnancies before they asked more direct questions on abortion, in order to approach the topic of abortion more subtly and to minimize underreporting; however, as in any direct interview, women most likely underreported their abortion experiences because of its associated stigma.

As a population-based survey, the community-based survey produces an estimate of abortion prevalence, but this is an underestimate, and the difference between the reported and actual levels of induced abortion is not known. Also, because women in the community-based survey were asked about abortions that took place in the past, they may have had difficulty recalling the details of these events correctly. This problem is minimized because the report focuses mostly on women's most recent abortion experience, but it remains an important potential limitation because some of the procedures may have occurred several years before the survey.

In the case of the hospital-based survey, some women who came to the hospital because of complications from induced abortion may have reported that the abortion was spontaneous. To reduce this bias, women's responses were checked against their medical provider's diagnoses as well as the women's own responses to related questions, as described above. Despite these checks, some induced abortions probably were classified incorrectly as spontaneous abortions.

The weighted results from the community-based survey should approximate the national situation (with the remaining caveat that the survey was conducted in only eight of the country's 36 states). The results from the hospital-based survey unavoidably reflect primarily the situation of urban women, because the sampled hospitals were all located in urban areas, as are most hospitals in the country.



Unwanted Pregnancy: The Root Cause Of Induced Abortion

The underlying cause of induced abortion is unwanted pregnancy, a phenomenon that often reflects the difficulties many women—especially those who are poor and uneducated—face in regulating their childbearing. But educated women in Nigeria can also face the difficult decision of whether to have many children, because large families need care, and meeting those needs reduces the mother's opportunity to work and earn money to support the family. So, high levels of unwanted pregnancy are at the very heart of why large numbers of both disadvantaged and advantaged women seek induced abortions each year.

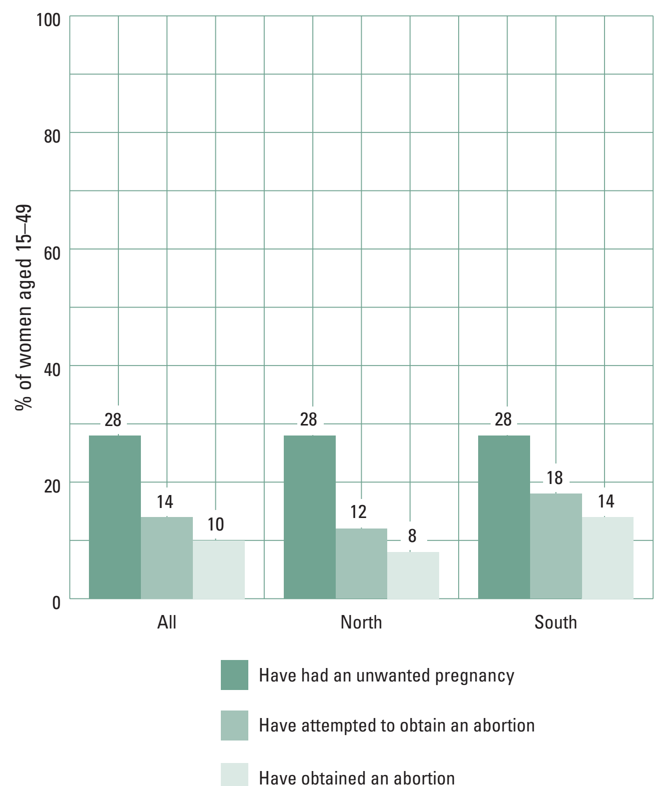
Almost one-third of Nigerian women of child-bearing age have had an unwanted pregnancy

Although Nigerian women and men still want large or mid-size families, almost one-third (28%) of women of child-bearing age say they have had an unwanted pregnancy (Figure 2.1).[1] The proportion is the same in the North and the South, but it is higher among rural women than among their urban counterparts (30% vs. 24%—not shown). The proportion is also higher among women with at least four children than among their childless counterparts (29% vs. 23%). This difference largely reflects that women with more children are generally older, which means that they have been exposed to the risk of unwanted pregnancy for a longer time. Unwanted pregnancy is somewhat less prevalent among women with no education than among those who have had some or even a great deal of schooling (22% vs. 30–31%).

A 1997 study in northern Nigeria also found a positive link between women's lengthier education and their increased likelihood of having an unwanted pregnancy.[2] Smaller proportions of more educated women in this part of the

FIGURE 2.1

One in three Nigerian women aged 15–49 have had an unwanted pregnancy, and one in 10 have had an abortion.



Source Reference 1.

country than of their less educated counterparts relied on traditional birth-spacing practices (postpartum abstinence and long-term breast-feeding). As a result, their risk of unplanned pregnancy increased if they did not adopt modern methods of family planning. Furthermore, better educated women in general are more likely to want to end a pregnancy that might interfere with their desire to complete their schooling and join the workforce.[3] And Nigerian women with more schooling want smaller families than do uneducated women. It is also possible that some less educated women "regard unwanted pregnancy as a new and somewhat strange idea" and therefore had difficulty answering a survey question using this term.[4]

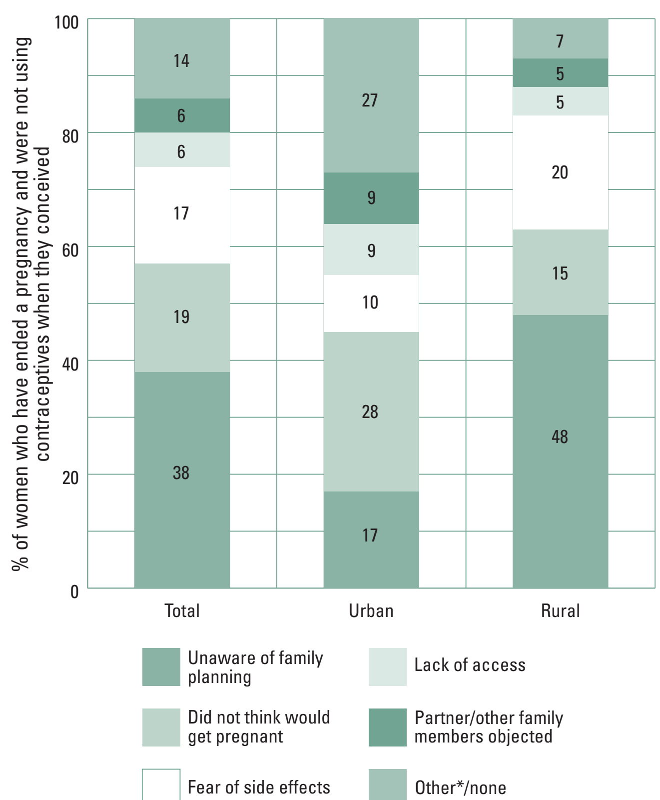
A somewhat startling paradox is the finding that unwanted pregnancy is more common among women currently using a modern contraceptive method than among those using no method (49% vs. 24%).[5] But this is less surprising when one considers that the small proportion of Nigerian women using modern methods are strongly motivated not to have a child—and thus may be more likely than other women to characterize a pregnancy as unwanted. Furthermore, some of these women may well have started using such methods after an earlier unwanted pregnancy. In addition, this finding suggests that many users of a modern method are using their method incorrectly or inconsistently.

Many women who have an unwanted pregnancy were not practicing family planning when they conceived

Six in 10 (61%) who have ended a pregnancy by abortion were not using any method of family planning when they became pregnant; 33% were using a modern method, and 6% a traditional one.[6]

FIGURE 2.2

Lack of awareness of family planning is the leading reason women give for not having used a contraceptive before an unwanted pregnancy.

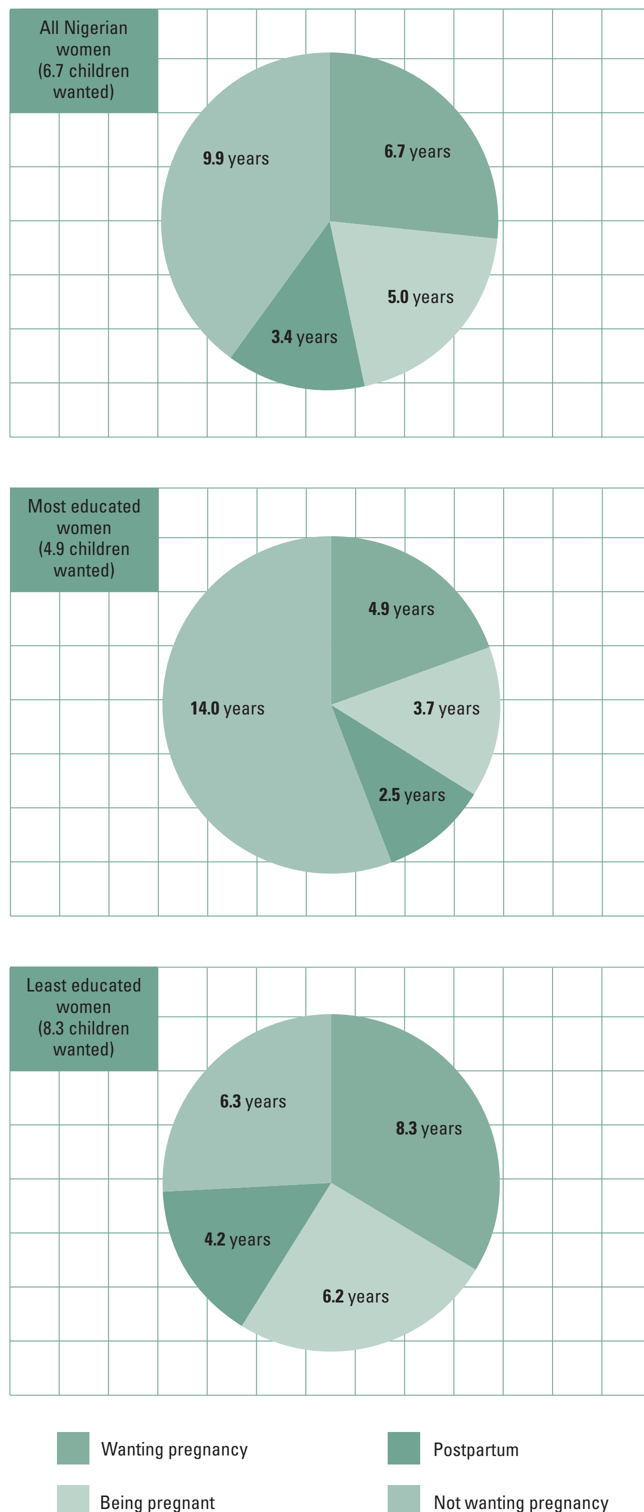


*Includes religious reasons or possibly wanting another child.

Source Reference 8.

FIGURE 2.3

The more educated women are, the fewer children they want and the more years they need protection against unwanted pregnancy.



Note Distributions assume that women marry at age 20 and remain sexually active between ages 20 and 45.
Source Reference 14.

The highest levels of nonuse were among poor women (80% of those having abortions), women with no schooling (78%), women younger than age 20 (72%) and those living in the North (71%). The proportions of women having abortions who were using a modern method at the time they conceived were highest among nonpoor women (44%), those in their early 20s (43%) and those with some university education (41%).[7]

Nonuse of family planning stems from a variety of reasons

Among women who have had an abortion and were not using contraceptives when they became pregnant, a high proportion—38%—say that they were unaware of family planning (Figure 2.2, page 11).[8] Others were not practicing family planning because they believed that they would not get pregnant (19%), feared the side effects of contraceptives (17%) or lacked access to them (6%), or had partners or other family members who objected to contraceptive use (6%). Lack of awareness of family planning was notably above average among adolescents (54%), uneducated women (56%) and rural residents (48%—not shown).[9]

The high proportion of women having abortions who did not know about family planning is perplexing, given well-publicized national campaigns to improve awareness of this subject.[10] This finding may reflect the nature of the survey: Their responses were not probed, meaning that they were not asked about each contraceptive method that they did not spontaneously mention by name. In the 2003 Demographic and Health Survey, which did probe in this fashion, 21% of women aged 15–49 did not know of any method.[11]

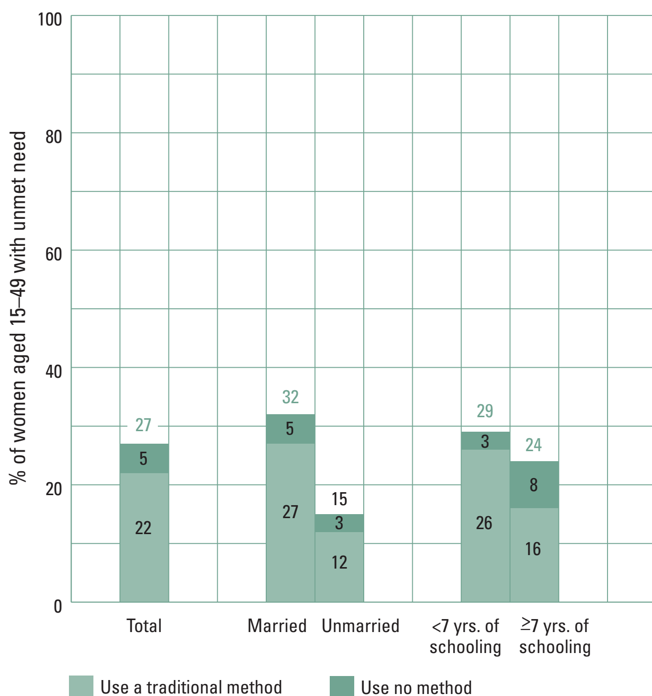
Another possible explanation for the low level of awareness of family planning among women obtaining abortions is that they may not be typical of all Nigerian women of child-bearing age. Instead, they are selective of young, childless and unmarried women, most of whom have had no sex education in school, or of married women with many children, who are largely poor and living in rural areas. Both groups probably are relatively unlikely to have been reached by federal or state health services providing information about family planning and access to programs.

Nigerian women spend many years at risk of an unwanted pregnancy

On average, women in Nigeria become sexually active at 17.3 years of age—more than a year before they marry, at 18.5 years.[12] During this time, unless they use an effective contraceptive method, they are at risk of unwanted pregnancy because most unmarried women do not want and cannot provide for a child. Women with more than a secondary education spend an even longer period—five years—between the time of sexual initiation (at about age 20.1) and marriage (at roughly age 24.8).[13]

FIGURE 2.4

One in four Nigerian women of childbearing age are in need of family planning.



Source Reference 16.

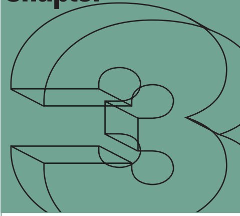
Perhaps even more importantly, although Nigerian women want large families (6.7 children, on average), they in fact spend many of their childbearing years not wanting to be pregnant (Figure 2.3).*[14] Of the 25 years between the ages of 20 and 45, women spend about seven years trying to get pregnant, five years being pregnant and three years after giving birth not at risk of another pregnancy because they are breast-feeding exclusively or not having intercourse with their partners, as traditional custom often dictates. That leaves nearly 10 years during which they want to postpone or completely avoid a birth. In other words, women must use effective contraception for 40% of their childbearing years to avoid unwanted pregnancies. Women with more than a secondary education, who on average want only 4.9 children, spend an even longer time—14 years—trying to avoid pregnancy, while women with no schooling, who want an average of 8.3 children, spend roughly six years seeking to avoid pregnancy. These estimates may partly explain why the level of abortion is higher among women with more schooling. They may also help clarify why the level is higher in the South than in the North, as larger proportions of women residing in the southern regions than in the northern regions have smaller families and more schooling.[15]

One-quarter of Nigerian women have an unmet need for family planning

High levels of unwanted pregnancy are often due to low levels of contraceptive use. Twenty-seven percent of Nigerian women aged 15–49 are sexually active and able to become pregnant, do not want a child soon or ever, but either are not using any method of contraception (22%) or are using traditional methods (5%), which have high failure rates (Figure 2.4).[16] Unmet need is higher among married women (32%) than among their unmarried counterparts (15%), and among women with less than seven years of schooling (29%) than among those with more (24%).

The level of unmet need is above average among women aged 40 or older (38–40%). It is below average (16%) among teenage women, mainly because a substantial proportion of this group are not sexually active.[17]

*The concept underlying this analysis was suggested by Jane Menken, now at the University of Colorado. These are hypothetical estimates, based on the assumption that it takes a woman one year to become pregnant (see Bongaarts J and Potter RG, *Fertility, Biology and Behavior,* New York: Academic Press, 1983), that each pregnancy lasts nine months and that in the absence of lengthy breast-feeding or post-partum abstinence, a woman is unable to conceive for six months following each birth.



Prevalence and Patterns Of Induced Abortion

Abortion is illegal in Nigeria under most circumstances. As a consequence, its practice is usually clandestine, which explains why official statistics on induced abortion are not available. Information about the prevalence and patterns of abortion is needed, however, for identifying women and couples most in need of family planning. Furthermore, such information helps to assess the risks associated with clandestine abortion and the health, social and economic consequences of the procedure. In the absence of official data, a broad picture of the situation can be obtained by asking women in the general community about their experiences.

One in 10 Nigerian women of childbearing age have obtained an abortion

Fourteen percent of 15–49-year-old Nigerian women report that they have attempted to obtain an abortion at some time, a proportion representing half of those who have had an unwanted pregnancy (Figure 2.1, page 10).[1] Overall, 10% have obtained an abortion. Women who fail in their attempt to end a pregnancy differ from their successful counterparts in some noteworthy respects (see box). Repeat abortions are not uncommon in Nigeria: Among women who have had an abortion, four in 10 have had at least two.[2] While these data indicate that substantial proportions of Nigerian women are having one or more abortions, the true levels are likely to be even higher, since the sensitivity of the issue discourages some women from reporting their abortions.

Equal proportions of women living in the North and in the South have had an unwanted pregnancy (28% in each region). However, a lower proportion of northern residents than of southern women have tried to end a pregnancy (12% vs. 18%) or have succeeded in doing so (8% vs. 14%).[3]

Although 10% of women overall have obtained an abortion, the proportion varies among different population groups. It is highest among the following groups:[4]

- Catholic women (19%, compared with 11% for Protestants and 5% for Muslims);
- women with some university education (18%, compared with 5% for those with no schooling);
- unmarried women (16%, compared with 9% for married women);
- nonpoor women (15%, compared with 8% for poor women); and
- childless women (14%, compared with 7% for those with three or more children).

The prevalence of abortion is almost four times as high among women who have used modern contraceptives as among those who have never used them (23% vs. 6%).[5] The strong link between the use of a modern method and the level of induced abortion—also found in an earlier study in Jos and Ile-Ife[6]—reflects the determination of many Nigerian women to have the number of children they want when they want them. They do this first by practicing family planning and then, if their contraceptive fails, by resorting to abortion. It is also possible that women who have had an abortion are more strongly motivated to use contraceptives thereafter.

An estimated 760,000 abortions occur each year in Nigeria

A landmark national study, based on interviews with physicians in hospitals where abortion-related complications are treated, estimated that the abortion rate in

Nigeria in 1996 was 25 abortions per 1,000 women aged 15–44. In addition, the study concluded that the rate was 2–3 times as high in the South as in the North.[7]

Assuming that the abortion rate will remain the same between 1996 and 2006, but taking into account population growth and the increase in the number of Nigerian women of childbearing age during that time (based on United Nations estimates), the number of abortions occurring in 2006 will be approximately 760,000—about 150,000 more than in 1996. This estimate cannot be construed as definitive. It assumes, in the absence of recent information, that women's motivation and ability to obtain abortions have remained about the same as they were in the mid-1990s. Several indicators support this assumption. For example, contraceptive use has increased only marginally over time, and on average, women wanted slightly fewer children in 2003 than in the early 1990s.[8] Therefore, 760,000 abortions in 2006 is a best, but likely conservative, estimate, given the data that are available.

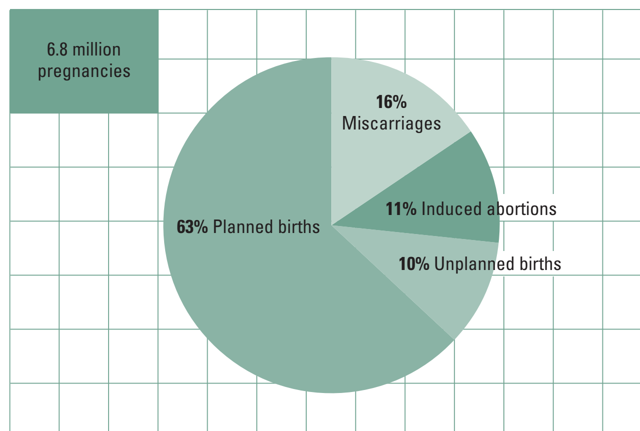
Slightly more than half of all unplanned pregnancies end in abortion

A different estimate of abortion confirms the major role that unwanted pregnancy plays in contributing to levels of induced abortion. According to the median estimate by the United Nations, 4.98 million live births will occur in Nigeria in 2006.[9] Adding this number to the estimate of 760,000 abortions yields a new estimate of the number of pregnancies in that year. However, if pregnancies that resulted in miscarriages (approximately 1.1 million) are counted,* a fuller picture of all pregnancies in Nigeria in 2006, and of their differing outcomes, emerges. It is also known that not all births are intended; therefore, the births that occur can be split into those that were planned (86%) and those that were not (14%).[10]

Putting all this information together reveals that of the approximately 6.8 million pregnancies that occur each year in Nigeria,† 16% end in miscarriage, 11% in induced abortion, 10% in births that were unplanned (either occurring sooner than wanted or not wanted at all) and 63% in births that were planned (Figure 3.1).[11] Thus, an estimated one in five pregnancies each year in Nigeria (or approximately 1.4 million) are unplanned, and half of these end in abortion.

FIGURE 3.1

One in five pregnancies each year end in an induced abortion or an unplanned birth.



Source Reference 11.

Abortion is most common among women who are young, unmarried and childless

As has been shown, considerable proportions of women of all backgrounds have had an abortion. Yet young, single women who have not yet started their families tend to predominate in this picture. The majority of women who have ended a pregnancy were younger than 25 (55%), never in union (63%) and childless (60%) at the time (Figure 3.2).[12]

However, the practice of induced abortion is not limited to women with these characteristics: Forty-five percent of women who ended their pregnancy were aged 25 or older at the time, 37% were or had ever been married and 40%

Women who fail to end an unwanted pregnancy differ from those who succeed

Three in 10 women who try to end an unwanted pregnancy fail in their attempt. These women differ in important ways from women whose attempts are successful. Higher proportions of women who have failed than of their counterparts who have successfully ended a pregnancy have gone to an untrained provider (93% vs. 42%), have ingested a remedy or inserted a foreign object into their uterus (56% vs. 15%) and have tried more than one method to end their pregnancy (38% vs. 10%).[1]

In addition, greater proportions of women whose efforts have failed were 12 or more weeks pregnant at the time (40% vs. 13%), had not discussed their decision to have an abortion with anyone (45% vs. 34%) and are poor (52% vs. 37%). And women failing in their attempt less often had their husband's or partner's approval (49% vs. 62%).[2]

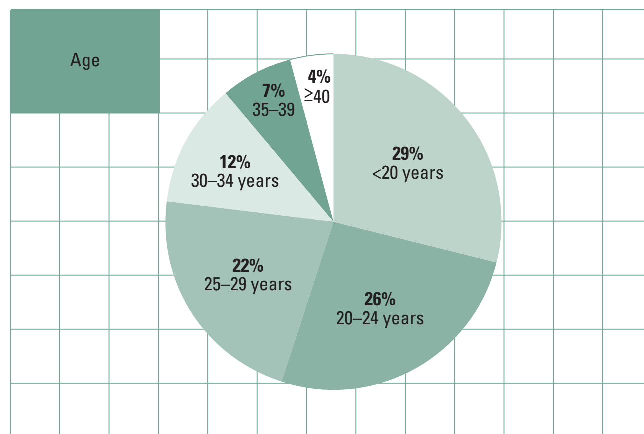
Women who try to end an unwanted pregnancy may suffer serious complications whether or not the abortion attempt succeeds. Bleeding is slightly less common, and fever more common, among women whose attempts fail than among women whose attempts succeed, but both groups have similar experiences with pain and of injury. Given that almost six in 10 women whose attempts have failed (and almost eight in 10 among poor women with failed attempts) ingested traditional remedies or inserted an object into their uterus, these findings are not surprising.[3]

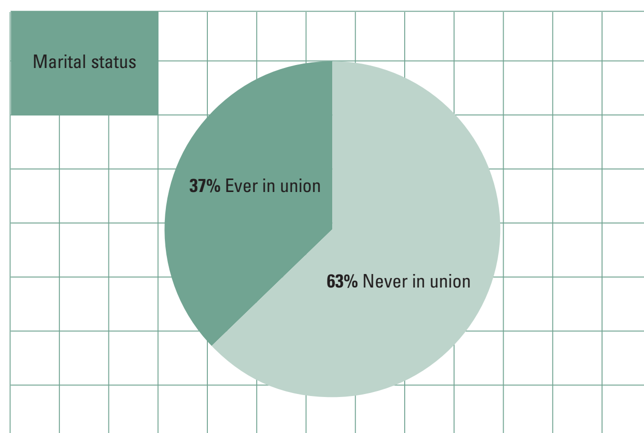
*Based on the assumption that miscarriage occurs at a level equivalent to 20% of all live births and 10% of all abortions (see Bongaarts J and Potter RG, *Fertility, Biology and Behavior: An Analysis of the Proximate Determinants*, New York: Academic Press, 1983).

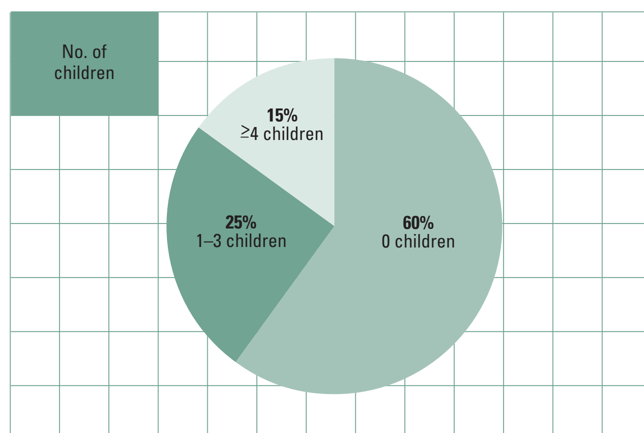
†Reflects 1.1 million pregnancies that end in miscarriages, 760,000 that end in abortions, 697,000 that end in unplanned births and 4,282,000 that end in wanted births.

FIGURE 3.2

The majority of women having an abortion are young, unmarried and childless at the time.







Source Reference 12.

had at least one living child.[13] These findings point to a second group likely to turn to abortion to meet their child-bearing goals: married women with children who want to postpone their next birth, or who already have as many children as they want or can support.

Most women have abortions early in pregnancy, and many discuss the decision in advance with partners and friends

Almost nine in 10 Nigerian women who have ended an unwanted pregnancy (87%) did so before 12 weeks of gestation. Women living in the North, rural women and poor women typically have had induced abortions at a somewhat later gestational age than women in the South, urban women and those who are not poor.[14] Because the procedure becomes less safe as pregnancy progresses, the finding of later gestation among disadvantaged women suggests that this group may have a higher risk of complications.

About six in 10 women who have obtained an abortion did so with the approval of their partner, indicating a quite high level of male involvement in the decision-making process. Two-thirds discussed the decision with their partner or a friend or, to a much lesser degree, with their mother or sister. Discussion with partners or others is more common among women who live in the South (82%), reside in urban settings (74%) and are not poor (77%) than among their counterparts who live in the North (48%), reside in rural settings (61%) and are poor (47%).[15]

Kudi already has nine children

Kudi is 40 years old and has nine children. She became pregnant because she thought she and her husband would not have sex while she was still breast-feeding her youngest infant, and so was not using a contraceptive. She and her husband decided together that they could not afford another child.

(Anonymous report from the 2002–2003 survey of women.)

Women's reasons for having an abortion vary with their age and marital status

The primary reasons Nigerian women give for having ended an unwanted pregnancy are closely associated with their age and marital status. They are the following:[16]

- The women were not married (27% overall, but 35% in the North and 20% in the South).
- They were still in school or too young (19% overall, but 16% in the North and 22% in the South).
- They wanted to space the next birth or did not want to have any more children (17% overall, but 20% in the North and 14% in the South).

- Their partner did not want the child, claimed he was not the father or had abandoned them (19% overall, but 10% in the North and 26% in the South).

The characteristic most likely to influence a woman's main reason for ending an unwanted pregnancy is her age (Figure 3.3).[17] Among women who were younger than 20 at the time of the abortion, one-third say they ended the pregnancy because they were too young to have a child, or would have had to leave school if they had one. Another one-third say the major reason for their decision was being unmarried. In contrast, among women in their 30s and 40s at the time, the desire to stop having children or to space their next birth was the major reason.

Therefore, given the major reasons for deciding to end a pregnancy, women obtaining abortions fall largely into two groups: One consists of women who are young and unmarried, and do not wish to drop out of school to be mothers or anticipate the difficulties of an out-of-wedlock pregnancy; the other comprises women who are married with children and want to postpone or avoid the birth of another child.

Grace ended her pregnancy so that she could stay in school and avoid shame

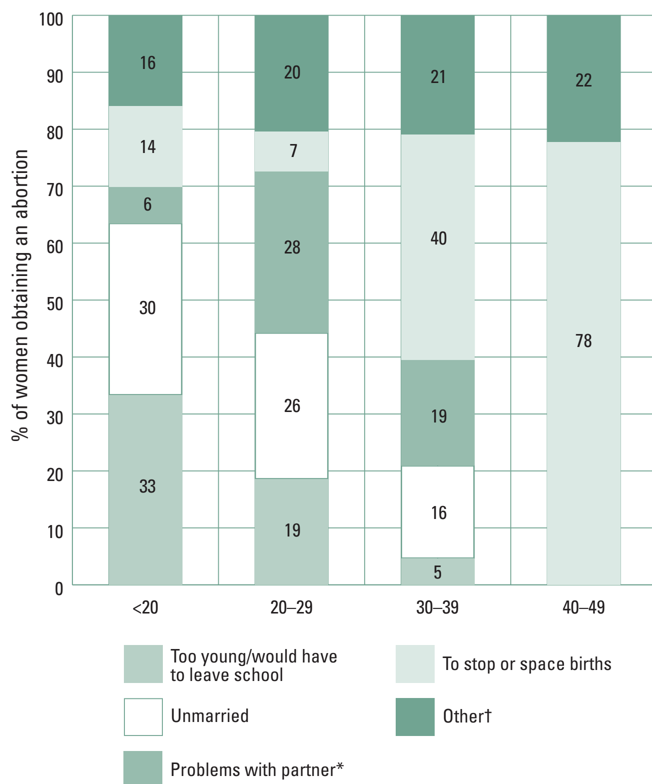
Grace is single, 22, lives in a city and is enrolled in college. She first had sex when she was 15, but never used a contraceptive, because she didn't think she would get pregnant, it was against her religious beliefs and she feared side effects. She became pregnant at 18 and decided to have an abortion for two major reasons: She did not want to drop out of school, and she was afraid of the shame it would cause her parents and the man who made her pregnant. She was also worried about being unmarried and too young to raise a child.

(Anonymous report from the 2002–2003 survey of women.)

Chapter 3

FIGURE 3.3

Women's main reason for ending an unwanted pregnancy changes as they get older.



*Partner left, does not want a child or says he was not involved in the pregnancy.
†Includes economic and health reasons and rape.

Source Reference 17.

The Practice of Abortion

The practice of induced abortion in Nigeria takes many forms, depending on the provider, the setting and the method used. Abortion provision ranges from use of safe surgical procedures performed in medical facilities by trained professionals to highly dangerous techniques performed in unhygienic settings by untrained practitioners or women themselves.[1] While the evidence is based on studies conducted in the mid-1990s, there is no reason to believe that the situation has changed significantly, since abortion remains illegal and largely clandestine. The type of abortion women obtain depends on many factors, but their ability to pay for a safe procedure is probably a key factor.

A wide range of providers perform abortions in Nigeria, and the techniques used vary greatly

Many Nigerian women seeking an abortion go to a doctor's private clinic or office, or to a nurse-run clinic, and a small proportion go directly to a public hospital. At these facilities, the physician or nurse might perform a surgical abortion using either dilation and curettage (D&C) or manual vacuum aspiration (MVA).[2]

Other women go to chemists, who are frequently called chemist shop operators and are often the proprietors of stores dispensing registered patent medicines.[3] While some of them have medical training, such as nursing or midwifery, or pharmaceutical training, others have little or no training in the appropriate use of medications.[4] To induce abortion, these practitioners might provide oral concoctions, dispense tablets or give injections.

Some women who do not live near a hospital, clinic or doctor's office, or who cannot afford to pay a doctor, nurse or chemist, go to untrained health providers (commonly known as quacks), traditional healers or even friends. This group of providers might resort to a range of methods, some similar to those used by doctors or chemists, others more harmful (e.g., insertion of objects into the uterus or provision of mixtures to drink). Many of these methods are dangerous and may still prove ineffective.

Nine in 10 women whose abortions end their unwanted pregnancy are successful in their initial attempt to achieve this result.[5] Among the minority of women whose first attempt is unsuccessful, those still determined to end their pregnancy are forced to adopt another strategy. This might involve going to a different provider or going to a hospital for the treatment of an incomplete abortion. Some women try multiple strategies until they succeed. Others take no further steps and continue with their unwanted pregnancy.

Victoria made several unsuccessful attempts before she ended her pregnancy

Victoria lives in the South. She is 40 and already has five children. She became pregnant by a man who was not her husband and wanted to end her pregnancy because she was afraid that her husband would abandon her. Victoria was two months pregnant when she made the decision on her own to end the pregnancy. She first drank some native herbs in her home but did not get any results. She then consulted a traditional healer, who inserted leaves into her vagina, causing moderate pain and injuries. However, she was still pregnant so she went to a chemist, who gave her pills. She experienced mild bleeding, and her pain and injuries persisted. Finally, she went to a nurse in a private clinic, where she received a D&C, which ended her pregnancy.

(Anonymous report from the 2002–2003 survey of women.)

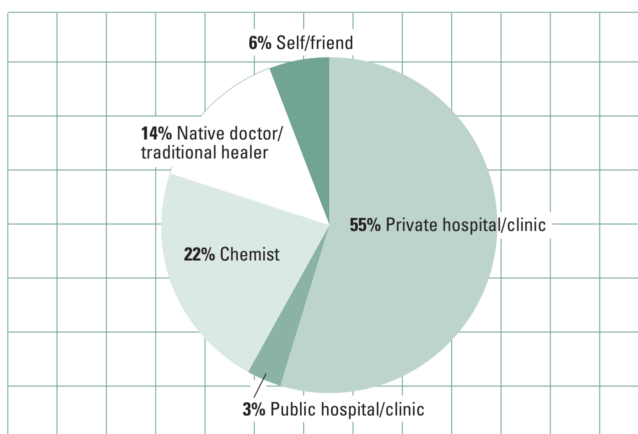
The majority of abortions are performed in clinics or hospitals

Even though induced abortion is legal only to save the woman's life, almost six in 10 abortions are carried out by medical professionals in hospitals or clinics—55% in private ones and 3% in public ones (Figure 4.1).[6] The remainder are done under much less safe conditions and by methods that are much more likely to result in health complications: Twenty-two percent of all abortions are initiated through medications or treatment given by chemists, 14% are performed by a traditional provider and 6% by a friend or the woman herself.

However, this pattern varies by region. Sixty-six percent of abortions in the South take place in medical facilities, compared with 48% in the North. On the other hand, 29% in the North are performed by a traditional healer, a friend or the woman herself, compared with 12% in the South. These patterns point to relatively greater risks from abortion among women living in the North.[7]

FIGURE 4.1

The majority of abortions are performed in private hospitals or clinics.



Source Reference 6.

Almost half of all abortions are performed surgically

Nearly half (48%) of women who have an abortion undergo a surgical procedure (D&C or MVA) performed in a clinic, hospital or doctor's private office. (These two techniques are grouped together because women's responses suggested they did not know precisely which of these methods was used.*) A very small group (1%) undergo a D&C performed by a chemist, friend or traditional provider.[8]

An additional one-fifth (20%) of women take tablets obtained from various sources (mainly chemists). It is hard to know precisely what these tablets contain, but at the time of the survey, they were unlikely to have been misoprostol (Cytotec).[9] One-seventh (15%) have an abortion induced by an injection (or possibly an infusion)—half given in a private clinic or hospital, and most of the rest given by a chemist. Another one-seventh (16%) of women use a traditional method (e.g., drinking a native herbal concoction prepared by a quack or having an object inserted into their uterus), or induce the abortion themselves (e.g., by drinking a mix of dry gin and aspirin, or potash and chemical lime dissolved in water), with or without the help of a friend.[10]

Women's economic status plays an important role in determining the kind of abortion they obtain (Figure 4.2, page 20).[11] Only 29% of poor women have a surgical procedure performed by a medically trained professional, compared with 59% of nonpoor women. And while 30% of poor women use traditional methods of abortion or self-induce, only 8% of their nonpoor counterparts do so. These findings point to the much greater health risks to poor women if they decide to end an unwanted pregnancy.

Abortion fees vary by method and the type of provider

The average cost of any abortion performed between 1990 and 2003, as reported by women in the community, was 1,805 naira (US$15).† However, the fee for the procedure in a private hospital or clinic averaged 2,157 naira, while that for one carried out by a chemist averaged 1,377 naira. When women performed the abortion on their own or relied on a friend, the average cost was 491 naira.[12]

On average, the cost for a D&C was reported to be 2,431 naira, while that for tablets was 1,559 naira. The cost of an abortion carried out by a traditional healer was almost identical to that of one obtained through a chemist's ser-

Elizabeth first went to a traditional healer and then to a doctor

Elizabeth is 31, poor and married. She lives in a rural village. She has finished primary school and does not work. Elizabeth was due to be married about the time she had an unwanted pregnancy, and didn't tell her partner because she loved him and feared the consequences. She was four months pregnant before she went to a traditional healer, who gave her a mixture to drink, for which he charged her 500 naira (about US$4). It caused her pain and fever as well as severe bleeding. She then visited a doctor in a private clinic, who referred her to the general hospital. By this time, her fever had worsened and she continued to bleed. At the hospital, she saw a doctor who performed a D&C and gave her a blood transfusion and charged her 1,800 naira (about US$15).

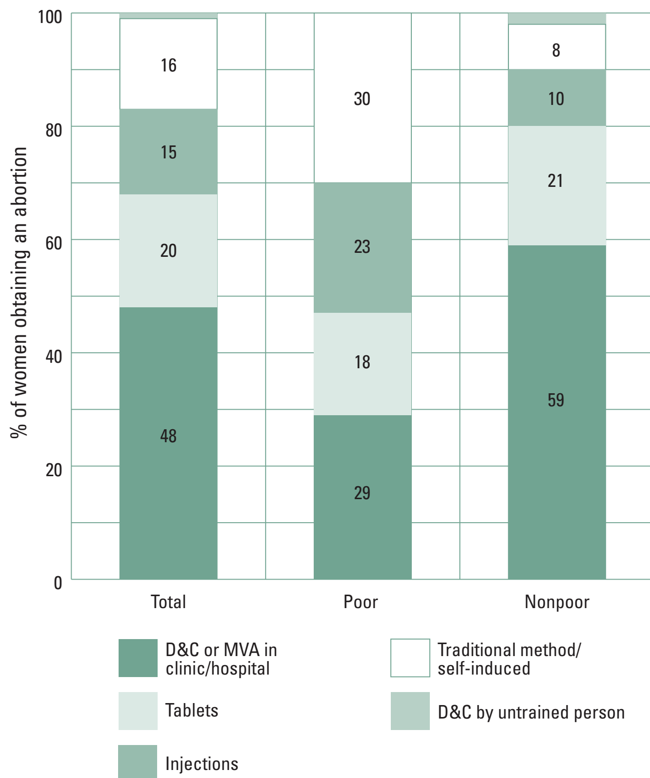
(Anonymous report from the 2002–2003 survey of women.)

*Of the two, MVA is the more appropriate method when gestation is less than 12 weeks. And while both have low complication rates when performed by qualified providers under hygienic conditions, MVA has an even lower rate than D&C.

†Calculated at the rate of 120 naira to US$1, although because of a devaluation of the currency, this rate changed during the years covered by the survey. For this reason, the actual dollar equivalents may well be more than those shown.

FIGURE 4.2

A greater proportion of poor women obtaining abortions than of their nonpoor counterparts use unsafe methods.



Source Reference 11.

vices—about 1,380 naira. Overall, costs were lower if the abortion was performed before 12 weeks of gestation (1,748 naira) than if it was performed later in the pregnancy (2,315 naira).[13] Given rapid increases in the cost of living in Nigeria and recent currency devaluations, it is likely the costs for abortions, especially those performed by medically trained practitioners, are much greater now than the costs reported here, which are based on women's abortion experiences between 1998 and 2002.[14]

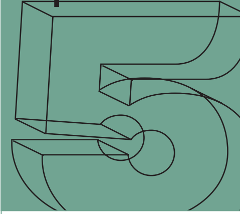
Of note, the fees that women said they paid refer only to the costs incurred in obtaining the abortion. They do not include subsequent costs—both to the woman and to the medical facilities—if a woman seeks treatment for complications from an abortion. These are discussed in the next chapter.

Women who go directly to a hospital for an abortion are more educated than the average woman

Women who go directly to a hospital for an abortion differ from the typical woman in Nigeria in one important way: Forty-one percent of women in this group have more than a high school education, compared with 16% of all women in the community who had an abortion.[15]

Two-thirds of women going directly to an urban hospital to obtain an abortion are less than eight weeks pregnant; this compares with four in 10 women who had an abortion in the community in general.[16] This pattern suggests that women seeking abortions at urban hospitals may recognize their pregnancies earlier and have a better understanding that the earlier the abortion, the safer it will be.

Two-thirds of abortions in urban hospitals are performed by MVA, and one-third by D&C. The average cost is high—3,466 naira.[17] Because these cases involve safe surgical abortions obtained by mainly urban, more educated women, they are not typical of the way in which the vast majority of Nigerian women obtain abortions.



The Consequences Of Unsafe Abortion

In every part of the world, clandestine abortion often entails considerable medical risk for the women involved. Some of the factors contributing to the occurrence of serious health complications are the use of unhygienic techniques and practices, limited skill of the provider, women's preexisting poor health, late gestation and the presence of gonorrhea or other pelvic infections.[1]

Women who develop complications after an unsafe abortion may experience a variety of symptoms: vaginal bleeding, fever, abdominal pain, cramping and foul-smelling vaginal discharge. Complications of abortion can include retained pregnancy tissue, infection, hemorrhage, septic shock, anemia, intra-abdominal injury (including perforation of the uterus), cervical or bowel damage, and reactions to the chemicals or drugs used to induce abortion.[2] If untreated, these complications may lead to long-term medical problems such as chronic pelvic pain or pelvic inflammatory disease, which increases the risk of ectopic pregnancy and infertility.[3]

One in four women obtaining abortions experience serious complications

Twenty-five percent of all women having abortions report serious complications (defined here as severe bleeding, severe pain, moderate or high fever, or any injury). The proportion experiencing serious complications is larger among women who have the procedure after 12 weeks of gestation (58%) than among their counterparts who obtain it earlier in the pregnancy (20%). Severe pain is the most commonly cited serious complication, followed by injury and fever; heavy bleeding is reported much less often.[4]

The proportion of women with any serious complication is roughly similar among urban and rural residents (22% and 26%), but it is higher in the North (31%) than in the South (20%). In addition, 30% of poor women experience such complications, compared with 21% of their nonpoor counterparts.[5] These differences are consistent with evidence already noted that disadvantaged women more frequently go to providers who are not medically trained or induce the abortion on their own.

The less skilled the abortion provider, the greater the risk of serious complications

The level of serious abortion-related complications varies with the provider and the method they used (Figure 5.1, page 22).[6] It is highest among women who use a remedy with a traditional healer, with a friend or on their own (36%), and lowest among those obtaining an injection (10%) or taking tablets (19%).

One in four women (25%) undergoing a surgical procedure (a D&C or MVA) report serious complications—a surprisingly high proportion for methods that are generally safe, and an especially troubling finding given that these are by far the most common methods being used in Nigeria today. D&C procedures likely account for most of these

Onome had to be treated for complications in a hospital far from her home

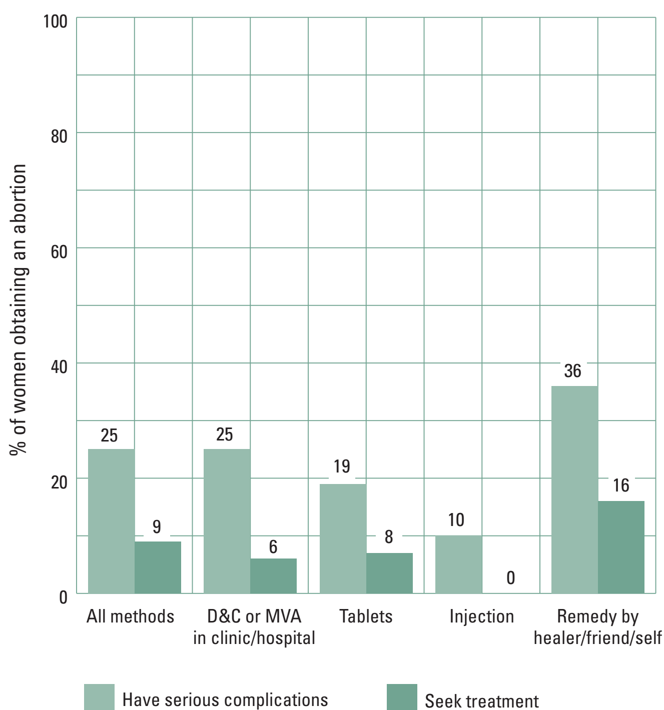
Onome first went to a traditional healer for an abortion, She experienced bleeding and pain, but no other symptoms. Onome was then told by a local nurse to take herself to a hospital. Getting there cost her another 300 naira. Onome's pain and bleeding had worsened by the time she reached the hospital, and she had developed a fever. Once admitted, a doctor performed a D&C, which cost 8,500 Naira (or about $70), fare more than the original 500 naira she had paid the traditional healer.

(Anonymous report from the 2002–2003 survey of women.)

Surprisingly, similar proportions of women living in rural areas and of their urban counterparts seek treatment, or seek it from a hospital.

FIGURE 5.1

The risk of serious complications varies with the provider and the method used.



Source Reference 6.

complications. Some doctors and nurses performing D&C procedures, despite their medical qualifications, likely lack experience, proper training and appropriate equipment. Others may be performing the procedures in unsanitary conditions or without sufficient anesthesia. And some women undergoing D&C may not understand that a certain amount of pain and bleeding is normal.

Only one-third of women with serious complications seek treatment

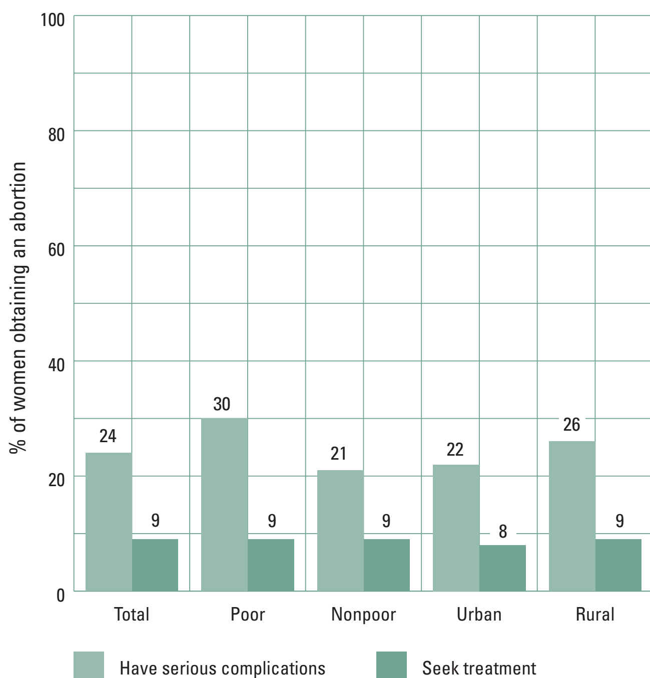
Although 25% of women having abortions report serious complications, only 9% (about one-third of those with such complications) seek treatment (Figure 5.2).[7] Five percent seek care in a hospital, 4% elsewhere (not shown).

The degree to which women seek treatment for complications also varies with the method used to end the pregnancy. As Figure 5.1 shows, only 6% of women whose pregnancy is ended by D&C or MVA seek treatment for serious complications. But among women who induce their own abortion or use remedies with the help of a traditional healer or friend, 16% seek care. None of the women who have an injection to end a pregnancy seek care, which suggests that the chance that users of this method will experience serious complications is very low,[8] although this result is based on a relatively small number of women.

Among both poor and nonpoor women having abortions, one in 10 seek treatment for complications. However, a smaller proportion of poor women with complications than of their nonpoor counterparts obtain care—30% vs. 43% — Figure 5.2.[9] This difference indicates another way in which poor women are exposed to higher abortion-related health risks than their better-off counterparts. Surpris-

FIGURE 5.2

Only a fraction of women who have complications following abortion receive treatment for them.



Source Reference 7.

ingly, similar proportions of women living in rural areas and of their urban counterparts seek treatment, or seek it from a hospital.

The abortion experience of women treated for abortion complications in hospitals is similar to that of all women obtaining abortions

Women treated in hospitals for complications resulting from abortions performed outside those hospitals used the same range of providers, and at similar levels, as women obtaining abortions in the community—doctors (41%); chemists (35%); nurse-midwives (13%); partners, friends or relatives (11%); native doctors; and traditional healers (6%)—or had induced the abortion themselves (13%).*[10]

In addition, the hospitalized women had used abortion methods similar to those reported by women in the community survey: D&C or MVA (50%), tablets (37%), injections (22%), objects inserted into the uterus (8%), traditional herbs and remedies (8%), and other methods (10%).†[11]

*These percentages sum to more than 100% because a woman may have used more than one method if she had made multiple attempts.

†These percentages sum to more than 100% because a woman may have used more than one provider if she had made multiple attempts.

The most common complications the hospitalized women experienced were pain (68%), bleeding (62%) and fever (21%). The proportions of women reporting pain and bleeding were higher (86% for both) among those who had had a D&C than among those who had used other methods; they were lower (36% for pain and 24% for bleeding) among women who had taken tablets than among their counterparts using other methods.[12]

Complications are often life-threatening

The women who had complications when they arrived at the hospital were treated for a wide range of complications—retained pregnancy tissue (50%), hemorrhage (34%), fever (35%), sepsis (24%), pelvic infection (22%), instrumental injury (11%) and shock (4%).[13] Among the treated women who were interviewed, 3% (13 women) subsequently died from their complications. Other women may have died before they could be interviewed. A recent hospital-based study in Ogun State found that women who died from abortion-related causes had waited an average of 11 days after the abortion attempt before going to the hospital.[14]

Slightly more than three-fourths of women with complications were treated by emergency evacuation of the uterus: the majority (69%) by means of MVA, some (23%) by D&C and the rest (8%) by induction of labor. In addition, about one in 10 women required abdominal surgery. Among all women treated for abortion-related complications, half received intravenous antibiotics, and one-quarter were given blood transfusions. Understandably, in light of the more intensive nature of some of these treatments, nearly 30% of treated women had to spend at least three nights in the hospital. Six percent had to stay 10 or more nights.[15]

The burden of unsafe abortion on government-funded facilities is made clear by the finding that more than half (52%) of women treated for complications of abortions in

Mary experienced fever, pain and mild injury

Mary's first attempt at ending an unwanted pregnancy involved a visit to a traditional healer, who gave her a concoction to drink, which brought on mild bleeding. She next visited a chemist, who gave her tablets to take. These only caused more bleeding. Finally, she went to a nurse, who inserted an object into her cervix and then extracted it. This ended the pregnancy, but brought about moderate fever, severe pain and mild injuries.

(Anonymous report from the 2002–2003 survey of women.)

hospitals were treated in state-run secondary hospitals and federally funded tertiary hospitals. The remainder were treated in private hospitals (27%) or missionary hospitals (21%).[16]

Costs for the treatment of complications are high

The costs to women treated for abortion-related complications in these hospitals are not negligible—on average, women paid the equivalent of 10,933 naira for their hospital care. The biggest part of this high cost was for the hospital stay (about 7,840 naira), followed by the cost of medications (1,864 naira) and supplies (1,149 naira).[17] These are all large sums in a country where average per capita gross national income was $930 in 2004.[18] Moreover, these women had already spent an average of 2,886 naira in their attempts to end their pregnancy before getting to the hospital.[19]

The amount women paid for their hospital care for abortion complications was highest in government hospitals: 16,286 naira in secondary hospitals and 13,773 naira in tertiary hospitals, compared with an average cost of about 4,875 naira in private hospitals.[20] These differences probably reflect that federal and state hospitals tend to treat women with more serious complications, offer higher quality medical care and are therefore more likely than private hospitals to perform sophisticated and costly medical tests.

Women who obtain treatment are more fortunate than those who do not; however, both groups bear a heavy burden. The women receiving care must pay enormous costs for their treatment relative to their income (and consume scarce health care resources in hospitals at the same time). Their counterparts who do not receive any care may well go on to experience long-term complications that are even more damaging for them than the initial ones (such as infertility) and that may result in even more costly complications (such as ectopic pregnancy) at a later time. Some will die.

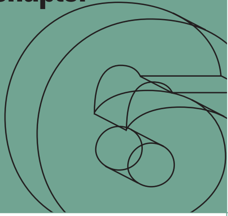
Abortion may be safer now than it was 10–15 years ago

New evidence suggests that the occurrence of complications of abortion may be falling. In 1996, the estimated proportion of women having abortions who were hospitalized because of complications, based on evidence provided by health professionals, was one in five.[21] By 2002–2003, the proportion was about one in 10.[22] Despite differences in the methodologies of the two studies, the downward trend suggests that abortion in Nigeria may have become safer over the past decade.

However, not all experts share this view. Some believe that as the demand for abortion has grown in Nigeria, as economic hardship has spread and as more untrained and unskilled practitioners offering relatively inexpensive pregnancy termination have entered the field, the likelihood that women go to providers of unsafe abortions has increased.[23]

If verified, an overall improvement in the safety of abortion in Nigeria could be attributed to various developments. These include the wider involvement of medically trained practitioners, the improved skill of these practitioners, the increased use of MVA,* the declining use of unsafe methods and the increasingly routine use of antibiotics by abortion providers.

*The provision of MVA equipment and training in this method for doctors and nurses are part of a large international project to improve postabortion care; the project began in the early 1990s and is supported by developed countries (see Salter C, Johnston HB and Hengen N, Care for abortion complications: saving women's lives, *Population Reports,* 1997, Series L, No. 10). However, it is difficult to estimate the proportion of Nigerian medical practitioners working in the areas of obstetrics and maternal health in either public or private health facilities who have received such training.



Chapter 6

Conclusions and Recommendations

One in seven Nigerian women of reproductive age have attempted to end an unwanted pregnancy at some point in their lives. This is a minimum estimate, given women's frequent reluctance to report that they have had an abortion. In addition, given that most of these women have many fertile years ahead of them, a much higher proportion are likely to have sought an abortion by the time they reach the end of their reproductive years. One-third of women who try to obtain an abortion fail and have a child whose birth they had tried to prevent.

Strikingly, but not surprisingly, among women who end a pregnancy, large majorities of adolescents, uneducated women, poor women and women living in the North were not using any method of family planning when they became pregnant.

The broader picture presented in this report reflects some widely divergent, and sometimes contradictory, sets of circumstances. The divergence results from the evident gap between safe and unsafe abortion as practiced in Nigeria today. A paradox stems from the fact that while abortion is legal under only limited circumstances, its practice is widespread.

Poor women are much less able than others to afford a safe abortion

As in many countries where abortion is highly restricted, access to safe medical services in Nigeria is often a matter of resources. Educated and gainfully employed Nigerian women are better able to access safe abortion than their uneducated and poor counterparts.[1] In fact, where abortion is concerned, Nigeria's health care system seems to be almost evenly split into two provider systems: In one system, better-off women can typically obtain relatively safe abortions in hospitals and clinics, or obtain abortifacient injections or tablets from chemists; in the other, poor women mainly go to quacks and traditional healers, or try to induce an abortion on their own.

Women who are better off are likely to go to private health facilities, in which doctors and nurses perform D&Cs. But even in these facilities, quality of care and professional skills are often lacking. As a result, unacceptably high proportions of women having surgical abortions experience complications.

On the other hand, poor women often turn to practitioners who use the least expensive and least effective methods; abortions often are provided in unhygienic conditions and, therefore, are the most dangerous for women. Thus, relatively high proportions of poor women fail in their attempt to end an unwanted pregnancy and experience serious health complications.

Caring for women who fare poorly in either system places a heavy burden on government hospitals, which are the major providers of treatment for life-threatening abortion-related complications. Some 25% of women having abortions report serious complications; about one-third of these women seek treatment. Complications and resulting treatment not only represent unnecessary pain and suffering (and sometimes death) for individual women, they also often represent the allocation of scarce and costly hospital resources (beds, blood supplies and operating room time) and personnel (highly trained surgeons and nurses) to care for them.

Added to this scenario, each year, many thousands of Nigerian women with abortion-related complications do not obtain care. Many of them are poor, and thus unable to pay hospital fees, or live in rural areas, where hospital care is not easily accessible. When complications such as

hemorrhage, sepsis and pelvic injury go untreated, the long-term health consequences can be extremely serious, and likely place an additional burden on women and government hospitals later on. A large portion of the costs of medical services to treat these delayed complications have to be paid for by individuals and families with limited incomes.

However, on a more positive note, many Nigerian women, especially in urban areas, end their pregnancies before 12 weeks' gestation, when the procedure is safest. And about half of all women who end unwanted pregnancies undergo surgical procedures. If these are performed by skilled and well-trained practitioners under sanitary conditions, they would have low risks of complication. In fact, when these requirements are met, the rate of medical complications is about one in 200 procedures for MVA and one in 100 for D&C.[2]

In addition, the practice of abortion in Nigeria apparently is becoming safer. Although MVA is not nearly as widespread as it should be (especially in a country where most abortions are carried out early in the first trimester), there are indications that use of this method is increasing, especially in urban areas. In 2002, nearly 70% of women who were treated for abortion complications or who obtained abortions in urban hospitals underwent an MVA procedure. Additionally, some evidence suggests that since at least 2003, first-trimester medical abortion (using mifepristone and misoprostol) has been introduced in Nigeria.[3]

More effective prevention of unwanted pregnancy is urgently needed

Every concerned professional involved in public health in Nigeria understands that solutions to unsafe abortion are within reach. The most important approach involves reducing the proportion of women who do not want to get pregnant but are not using an effective contraceptive method. Meeting the need for family planning would lower the incidence of unwanted pregnancy and thus the motivation for induced abortion, the number of women having unsafe abortions and the number needing hospitalization afterward—all important and much needed public health outcomes. Clearly then, the simple and rational response to high levels of unwanted pregnancy in Nigeria is improved access to contraceptive information and services for all women of childbearing age. The lack of information and services is notably greater among women in the North than among those in the South, and among women with no schooling, who are likely to be older, than among those with at least some education. Programs should concentrate particularly on reaching these groups.

During the late 1980s and early 1990s, following the issuance of a new population policy, some well-publicized efforts were undertaken to expand Nigerian women's and men's knowledge and use of modern contraceptive methods. National television carried a documentary film about the country's rate of population growth and spelled out the adverse social and economic implications of unbridled population growth.[4] Between 1988 and 1990, a number of daytime soap operas to promote family planning were broadcast on radio and television. And about that time, a campaign based on two music videos featuring popular Nigerian artists disseminated similar messages about the benefits of family planning.[5]

However, according to the 2003 Demographic and Health Survey, more than half—56%—of all Nigerian women aged 15–49 had never heard a message about family planning.[6] The proportion was particularly high among the poorest women (78%), women living in the North East region (77%) and those with no schooling (72%). It is somewhat surprising that past efforts seem to have had little impact in increasing knowledge of family planning and the use of contraceptives in Nigeria. The campaigns appear to have achieved more success in reaching urban women, who are likely to have access to radio and television—60% have heard a public family planning message compared with 35% of rural women.[7] Indeed, for this and other reasons, modern contraceptive use is highest in urban areas.

Recommendations

Reduce unwanted pregnancy. There are various possible approaches to improving contraceptive use in Nigeria. For example, about one in six women who have had abortions and were not using a contraceptive method before they became pregnant say this was because they feared side effects. Health professionals involved in reproductive health programs in Nigeria should introduce educational and service initiatives designed to overcome the fear that all modern methods have dangerous or persistent adverse effects, and to provide a wide range of methods for women and couples to choose from.

One-third of Nigerian women who have had abortions report that they were using a modern method when they became pregnant—evidence of an unacceptably high contraceptive failure rate among this group. Many women using such methods likely are not using them correctly or consistently. This finding also suggests a poor quality of existing family planning services, including a lack of regular contraceptive supplies. It may also reflect that many women buy their contraceptive supplies at a chemist shop or other kind of shop, and are not taught how to use them correctly.

Increased levels of effective contraceptive use would go a long way toward reducing unwanted pregnancy in Nigeria. However, health planners should shy away from setting numerical targets as a means of achieving this goal. Rather, they should consider what contraceptive methods are appropriate for women living in widely differing circumstances.

Adolescents, for example, who may have short-term and sporadic relationships, as well as women living in settings with high levels of HIV infection, need condoms. Very

young sexually active women who do not want to start childbearing until they are married or better established might best be served by hormonal methods such as the injectable or the pill. For married women who want to postpone their next child for two or more years, the IUD or the pill might be an appropriate contraceptive. Women living in remote rural areas with no existing health infrastructure might find injectables a convenient method. And women who have had all the children they want might consider female or male sterilization. Program planners should design community-based programs to educate women about the wide range of contraceptive methods that exist, help them decide which would be best for them and then set up the services and supply systems necessary to make each method consistently available. Counseling of women choosing a contraceptive method should emphasize the long-term safety of modern methods.

In addition to these logistical approaches, new policy, program and public education initiatives are necessary to promote the concept of family planning and to broaden knowledge of its health and societal benefits. This would especially help inform women having unwanted pregnancies because they are not using a method and those who do not know about contraception or sources of services. High-level members of the government, religious leaders, pop stars and local officials must be enlisted to state publicly, loudly and often that the use of contraceptives to prevent unwanted pregnancy is good—for women, children, families and society. Example and leadership are all-important in any campaign to persuade Nigerian couples of the huge benefits of family planning.

Improve postabortion services. Women being treated for abortion-related complications in government and private hospitals deserve higher quality postabortion care than they now receive. Above all, as the World Health Organization strongly advises, no health facility that attends to women seeking care for incomplete abortions should be without the equipment and the trained staff needed to ensure that MVA is consistently used when medically appropriate and provided at a cost that is not prohibitive for poor women.[8]

National policies should be established to ensure that all postabortion services include mandatory contraceptive counseling for women on how to prevent future unwanted pregnancies. This should include both one-on-one counseling that emphasizes the relative safety of modern methods and information about possible side effects, and the provision of a contraceptive method to women who would like to use one.

Make abortion care safer. Four in 10 women treated for abortion-related complications in hospitals say that their abortion was performed by a physician.[9] And about one-quarter of abortions performed in private hospitals and clinics result in complications.[10] These findings show that substantial proportions of abortions performed by doctors and nurses are being done improperly or under unsafe conditions. In addition, nearly half of women who obtain abortions do so from providers other than physicians and have a high likelihood of suffering complications. Because abortion is legally prohibited under most circumstances, it is difficult to develop public policies requiring expanded and improved training in safer abortion techniques.

However, abortion is legal in Nigeria to save a woman's life, and public health standards require provision of medically appropriate care to women who are treated for complications of pregnancy loss and abortion. Therefore, all medical students and all medical practitioners working in hospitals should be trained to meet this need through the correct use of MVA[11]—a technique with a very low risk of complications when properly used. In addition, MVA is the best method to use in treating first-trimester pregnancy losses, whether from miscarriage or from unsafe abortion, so helping practitioners become skilled in this technique would be of double public health value.

The use of MVA, though increasing, is clearly still not sufficiently widespread. In urban hospitals, seven in 10 women being treated for abortion complications benefit from this method. In contrast, a study found that in one small city, fewer than one in five medical professionals who treat women for abortion-related complications in their private clinics use MVA to manage their patients' abortion complications.[12]

Address barriers to reducing unwanted pregnancy. Although massive and effective promotion of family planning and improved access to contraception should be the major focus, policymakers and programs planners in Nigeria also must address barriers to reducing high levels of unwanted pregnancy. Many determinants of unprotected sexual intercourse and low contraceptive use in Nigeria are complex and—as revealed in this report—attributable to social and cultural values and patterns of behavior that are deeply rooted within Nigerian society.

Awareness of family planning is particularly low among youth, who are mostly unmarried and who have a large proportion of all abortions. This group clearly deserves increased attention by educators and health professionals. Where there is resistance on moral or religious grounds to providing contraceptive information and services to adolescents, efforts must be made to persuade critics of the serious consequences associated with neglecting the needs of sexually active adolescent women.[13]

Almost two-thirds of women who have had an abortion have started or completed high school, compared with only about a third of all Nigerian women aged 15–49. Thus, young women with more schooling are disproportionately represented among women having abortions.

The more educated a young woman is, the more strongly motivated she probably is not to jeopardize her prospects for schooling and employment by having a child before she is ready; this, in turn, more strongly motivates her to use a contraceptive and, if it fails, to seek an abortion. This pattern of behavior points to an even more urgent need to incorporate sex education and contraceptive information into the regular curriculum of all high schools and to make contraceptive services more accessible.

Reproductive health education in schools is a highly controversial issue in Nigeria. For example, a family life and HIV education curriculum for secondary schools is gaining ground in some states, but it does not mention contraception.[14] In addition, a 2004 report from a meeting of religious leaders debating the curriculum specifically discourages promotion of the use of condoms or the use of the terms "unprotected sex" and "safer sex."[15] This curriculum has also been condemned by the Catholic Bishops' Conference in Nigeria.[16]

About one in five women who have had an abortion—married and unmarried—decided to end the pregnancy primarily because their partner did not want the child, claimed he was not the father or had left them. This finding suggests that many women seek abortions because they are in unstable sexual or marital unions over which they have little control. Again, massive public education efforts are needed to make men aware of the possibly harmful consequences for women of certain sexual, marital and fathering behaviors.

Half of women living in the North who have an abortion, compared with fewer than one-fifth of their counterparts in the South, end an unwanted pregnancy without discussing their decision with another person. Nigerian men, and especially male community leaders, should be helped to learn (and to teach other men) about the risks their wives, partners and daughters face if they try to end an unwanted pregnancy without appropriate medical care. They should also be encouraged to discuss with these women the important topics of family size preferences and contraceptive use.

Act on many fronts. Policymakers and program planners are aware that women's poverty and powerlessness often limit their ability to have the number of children they want when they want them. Policies should be put in place, or reinforced, to ensure gender equity in school attendance, employment and access to resources for women. Furthermore, programs should be designed to educate men about the sexual and reproductive health needs of their wives, partners and daughters, and to involve them more fully in decision making about family size and family planning. The mass media and advertising companies should be encouraged to disseminate to every corner of the country, particularly in rural areas, strong and clear messages about the need to prevent unwanted pregnancies and unsafe abortion.

Engage a broad array of experts. Policies and programs to improve access to contraceptive services and reduce unplanned pregnancy and unsafe abortion, and to provide greater access to safe abortion under the law, would help protect the health and save the lives of Nigerian women. They would also bring significant social and economic benefits for women and families, by enabling young women to complete their education and women of all ages to avoid having children they cannot adequately provide for. Any national effort to reach these goals requires the participation of experts engaged in a wide range of activities: creation of informed public policy, strengthening of public advocacy backed by solid research, capacity building and provision of high-quality medical care at all levels, and public education. Thousands of capable and responsible Nigerian professionals—politicians, teachers, doctors, medical school professors, researchers, journalists, advocates, community leaders, influential religious voices, members of women's groups and pop stars—can and should be enlisted in fighting for this important and worthy goal.

References

Chapter 1: Introduction

1. The Alan Guttmacher Institute (AGI) and The Campaign Against Unwanted Pregnancy (CAUP), 2002–2003 community-based survey.

2. Hussain R et al., Reducing unintended pregnancy in Nigeria, *Research in Brief*, New York: AGI, 2005.

3. Feyisetan BJ and Bankole A, Fertility transition in Nigeria: trends and prospects, paper presented at the Expert Group Meeting on Completing the Fertility Transition, United Nations, New York, Mar. 11–14, 2002, <http://www.un.org/esa/population/publications/completingfertility/RevisedBANKOLEpaper.PDF>, accessed Oct. 19, 2005.

4. National Population Commission (NPC), Federal Republic of Nigeria, and ORC Macro, *Nigeria Demographic and Health Survey 2003*, Calverton, MD, USA: NPC and ORC Macro, 2004; and Appendix Table 1.

5. Makinwa-Adebusoye P, Singh S and Audam S, Nigerian health professionals' perceptions about abortion practice, *International Family Planning Perspectives*, 1997, 24(4):155–161; Henshaw SK et al., The incidence of induced abortion in Nigeria, *International Family Planning Perspectives*, 1998, 24(4):156–164; Okonofua FE et al., Assessing the prevalence and determinants of unwanted pregnancy and induced abortion in Nigeria, *Studies in Family Planning*, 1999, 30(1):67–77; Population Council, *Women's Experiences of Unwanted Pregnancy and Induced Abortion in Nigeria: Critical Issues in Reproductive Health*, New York: Population Council, 1996; and Sule-Odu AO, Olatunji AO and Akindele RA, Complicated induced abortion in Sagamu, Nigeria, *Journal of Obstetrics and Gynaecology*, 2002, 22(1):58–61.

6. Mitsunaga TM, Larsen UM and Okonofua FE, Risk factors for complications of induced abortions in Nigeria, *Journal of Women's Health*, 2005, 14(6):515–528.

7. World Health Organization (WHO), *Unsafe Abortion: Global and Regional Estimates of the Incidence of Unsafe Abortion and Associated Mortality in 2000*, fourth ed., Geneva: WHO, 2004.

8. Adewole IF et al., Terminating an unwanted pregnancy—the economic implications in Nigeria, *Journal of Obstetrics and Gynaecology*, 2002, 22(4):436–437.

9. World Bank, GNI per capita 2004, Atlas method and PPP, July 15, 2005, <http://siteresources.worldbank.org/DATASTATISTICS/Resources/GNIPC.pdf>, accessed Oct. 15, 2005.

10. Appendix Table.

11. Ibid.

Box: Data Sources

1. Bankole A et al., Abortion seeking behavior among Nigerian women, paper presented at the annual meeting of the Population Association of America, Boston, MA, USA, Apr. 1–3, 2004.

2. Henshaw SK, Characteristics of women seeking abortion services and postabortion care in Nigerian hospitals, paper presented at the 25th meeting of the International Union for the Scientific Study of Population, Tours, France, July 18–23, 2005.

Box: Definitions and Limitations

1. Filmer D and Pritchett LH, Estimating wealth effects without expenditure data—or tears: an application to educational enrollments in states of India, *Demography*, 2001, 38(1): 115–132.

2. Rutstein SO and Johnson K, The DHS wealth index, *DHS Comparative Reports*, Calverton, MD, USA: ORC Macro, 2004, No. 6.

Chapter 2: Unwanted Pregnancy: The Root Cause of Induced Abortion

1. The Alan Guttmacher Institute (AGI) and The Campaign Against Unwanted Pregnancy (CAUP), 2002–2003 community-based survey.

2. Renne EP, *Changing Patterns of Child-Spacing and Abortion in a Northern Nigerian Town*, Working Paper, Princeton, NJ, USA: Office of Population Research, Princeton University, 1997, No. 97-1.

3. Oye-Adeniran BA et al., Characteristics of abortion care seeking in South-Western Nigeria, *African Journal of Reproductive Health*, 2004, 8(3):81–91.

4. Oye-Adeniran BA et al., Community-based survey of unwanted pregnancy in southwestern Nigeria, *African Journal of Reproductive Health*, 2005, 9(1):133–141.

5. AGI and CAUP, 2002–2003 community-based survey.

6. Ibid.

7. Ibid.

8. Ibid.

9. Ibid.

10. Bankole A, Rodríguez G and Westoff CF, Mass media messages and reproductive behaviour in Nigeria, *Journal of Biosocial Science*, 1996, 28(2):227–239.

11. National Population Commission (NPC), Federal Republic of Nigeria, and ORC Macro, *Nigeria Demographic and Health Survey 2003*, Calverton, MD, USA: NPC and ORC Macro, 2004.

12. Appendix Table.

13. Unpublished tabulations of the 2003 Nigeria Demographic and Health Survey.

14. Ibid.

15. Appendix Table.

16. NPC and ORC Macro, 2004, op. cit. (see reference 11).

17. Ibid.

Chapter 3: Prevalence and Patterns of Induced Abortion

1. The Alan Guttmacher Institute (AGI) and The Campaign Against Unwanted Pregnancy (CAUP), 2002–2003 community-based survey.

2. Ibid.

3. Ibid.

4. Ibid.

5. Ibid.

6. Okonofua FE et al., Assessing the prevalence and determinants of unwanted pregnancy and induced abortion in northern Nigeria, *Studies in Family Planning*, 1999, 17(3):229–233; and Population Council, *Women's Experiences of Unwanted Pregnancy and Induced Abortion in Nigeria: Critical Issues in Reproductive Health*, New York: Population Council, 1996.

7. Henshaw SK et al., The incidence of induced abortion in Nigeria, *International Family Planning Perspectives*, 1998, 24(4):156–164, Table 1.

8. Hussain R et al., Reducing unintended pregnancy in Nigeria, *Research in Brief*, New York: AGI, 2005.

9. United Nations (UN), *World Population Prospects: The 2002 Revision*, New York: UN, 2003.

10. National Population Commission (NPC), Federal Republic of Nigeria (NPC), and ORC Macro, *Nigeria Demographic and Health Survey 2003*, Calverton, MD, USA: NPC and ORC Macro, 2004.

11. Ibid.; UN, 2003, op. cit. (see reference 9); and Henshaw SK et al., 1998, op. cit. (see reference 7).

12. AGI and CAUP, 2002–2003 community-based survey.

13. Ibid.

14. Ibid.; and Oye-Adeniran BA et al., Characteristics of abortion care seeking in South-Western Nigeria, *African Journal of Reproductive Health*, 2004, 8(3):81–91.

15. Akinyemi AI and Adewuyi A, Male partners and abortion decision-making in south-western Nigeria, paper presented at the 25th meeting of the International Union for the Scientific Study of Population, Tours, France, July 18–23, 2005.

16. AGI and CAUP, 2002–2003 community-based survey.

17. Ibid.

Box: Women Who Fail to End an Unwanted Pregnancy Differ from Those Who Succeed

1. The Alan Guttmacher Institute (AGI) and The Campaign Against Unwanted Pregnancy (CAUP), 2002–2003 community-based survey.

2. Ibid.

3. Ibid.

Chapter 4: The Practice of Abortion

1. Oye-Adeniran BA et al., Community-based survey of unwanted pregnancy in southwestern Nigeria, *African Journal of Reproductive Health*, 2004, 8(3):103–115; Henshaw SK et al., The incidence of induced abortion in Nigeria, *International Family Planning Perspectives*, 1998, 24(4):156–164; and Makinwa-Adebusoye P, Singh S and Audam S, Nigerian health professionals' perception about abortion practice, *International Family Planning Perspectives*, 1997, 23(4):155–161.

2. The Alan Guttmacher Institute (AGI) and The Campaign Against Unwanted Pregnancy (CAUP), 2002–2003 community based survey.

3. Oye-Adeniran BA et al., 2004, op. cit. (see reference 1); Henshaw SK et al, 1998, op. cit. (see reference 1); and Makinwa-Adebusoye P, Singh S and Audam S, 1997, op. cit. (see reference 1).

4. Brieger WR et al., Interactions between patent medicine vendors and customers in urban and rural Nigeria, *Health Policy and Planning*, 2004, 19(3):177–182.

5. AGI and CAUP, 2002–2003 community-based survey.

6. Ibid.

7. Ibid.

8. Ibid.

9. Oladokun A, College of Medicine, University of Ibadan, personal communication, Oct. 3, 2005.

10. AGI and CAUP, 2002–2003 community-based survey.

11. Ibid.

12. Ibid.

13. Ibid.

14. Umoh AV, University of Uyo Teaching Hospital, and Okonofua FE, Women's Health and Action Resource Centre, personal communications, Oct. 11, 2005.

15. AGI and CAUP, 2002–2003 community-based survey; and AGI and CAUP, 2002–2003 hospital-based survey.

16. Ibid.

17. AGI and CAUP, 2002–2003 hospital-based survey.

Chapter 5: The Health Consequences of Unsafe Abortion

1. World Health Organization (WHO), *Unsafe Abortion: Global and Regional Estimates of Incidence of Mortality Due to Unsafe Abortion with a Listing of Available Country Data*, third ed., Geneva: WHO, 1997, chapter 2, <http://www.who.int/reproductive-health/publications/MSM_97_16/MSM_97_16_chapter2.en.html>, accessed June 25, 2005.

2. Ibid.

3. Anorlu RI et al., Risk factors for ectopic pregnancy in Lagos, Nigeria, *Acta Obstetrica et Gynecologica Scandinavica*, 2005, 84(2):184–188; Gharoro EP and Igbafe AA, Ectopic pregnancy revisited in Benin City, Nigeria: analysis of 152 cases, *Acta Obstetrica et Gynecologica Scandinavica*, 2002, 81(12):1139–1143; and Olatunji AO and Sule-Odu AO, The pattern of infertility cases at a university hospital, *West African Journal of Medicine*, 2003, 22(3):205–207.

4. The Alan Guttmacher Institute (AGI) and The Campaign Against Unwanted Pregnancy (CAUP), 2002–2003 community-based survey.

5. Ibid.

6. Ibid.

7. Ibid.

8. Ibid.

9. Ibid.

10. AGI and CAUP, 2002–2003 hospital-based survey.

11. Ibid.

12. Ibid.

13. Ibid.

14. Sule-Odu AO, Olatunji AO and Akindele RA,

Complicated induced abortion in Sagamu, Nigeria, *Journal of Obstetrics and Gynaecology*, 2002, 22(1):58–61.

15. AGI and CAUP, 2002–2003 hospital-based survey.

16. Ibid.

17. Ibid.

18. World Bank, GNI per capita 2004, Atlas method and PPP, July 15, 2005, <http://siteresources.worldbank.org/DATASTATISTICS/Resources/GNIPC.pdf>, accessed Oct. 15, 2005.

19. AGI and CAUP, 2002–2003 hospital-based survey.

20. Ibid.

21. Makinwa-Adebusoye P, Singh S and Audam S 1997, Nigerian health professionals' perception about abortion practice, *International Family Planning Perspectives*, 1997, 23(4):155–161.

22. AGI and CAUP, 2002–2003 community-based survey.

23. Oladokun A and Oye-Adeniran BA, personal communications, Oct. 11, 2005.

Chapter 6: Conclusions and Recommendations

1. Ojengbede OA, Review of abortion services in Nigeria and possible alternatives in service delivery system, in: Okonofua FE and Ilumoka T, eds., *Prevention of Morbidity and Mortality from Induced and Unsafe Abortion in Nigeria*, New York: Population Council, 1991.

2. Lawson PHW, Abortion mortality, United States, 1972–1987, *American Journal of Obstetrics and Gynecology*, 1994, 171(5):1365–1372.

3. Okonofua FE, Women's Health and Action Resource Centre, personal communication, Oct. 11, 2005.

4. Population Communication Services, *Nigeria Family Health Services Project, Information, Education and Communication Component. Two-Year Activities April 1989 to March 1990*, Baltimore, MD, USA: Johns Hopkins University, 1990.

5. Ibid.

6. National Population Commission (NPC), Federal Republic of Nigeria, and ORC Macro, *Nigeria Demographic and Health Survey 2003*, Calverton, MD, USA: NPC and ORC Macro, 2004, Table 5.14.1.

7. Bankole A, Rodríguez G and Westoff C, Mass media messages and reproductive behavior in Nigeria, *Journal of Biosocial Science*, 1996, 28(2):227–239.

8. World Health Organization (WHO), *Safe Abortion: Technical and Policy Guidance for Health Systems*, Geneva: WHO, 2003.

9. The Alan Guttmacher Institute (AGI) and The Campaign Against Unintended Pregnancy (CAUP), 2002–2003 hospital-based survey.

10. AGI and CAUP, 2002–2003 community-based survey.

11. Oye-Adeniran B, Promoting sexual and reproductive health rights in Nigeria through change in medical school curriculum, *African Journal of Reproductive Health*, 2004, 8(1):85–91.

12. Etuk SJ, Ebong IF and Okonofua FE, Knowledge, attitude and practice of private medical practitioners in Calabar towards post-abortion care, *African Journal of Reproductive Health*, 2003, 7(3):55–64.

13. Mohammed I, Issues relating to abortions are complicated in Nigeria, letter, *British Medical Journal*, 2003, 326(7382):225.

14. Nigerian Educational Research and Development Council, *National Family Life and HIV Education Curriculum for Junior Secondary School in Nigeria*, Abuja, Nigeria: Nigerian Educational Research and Development Council, 2003.

15. *Building Consensus for Family Life & HIV/AIDS Education in Schools: Faithbased Dialogue. Report of the National Consultative Forum with Religious Leaders on Response to Adolescent Sexual and Reproductive Health and Rights*, Kaduna, Nigeria, Mar. 9–10, 2004, <http://www.actionhealthinc.org/publications/downloads/building_consensus.pdf>, accessed Oct. 12, 2005.

16. Umoh AV, University of Uyo Teaching Hospital, personal communication, Oct. 11, 2005.

APPENDIX TABLE

Social, demographic and reproductive characteristics of women, by region, subregion and residence, Nigeria, 2003

Characteristic*	Total	Region		Subregion						Residence	
		North	South	North Central	North East	North West	South East	South South	South West	Urban	Rural
SOCIAL AND DEMOGRAPHIC											
Percentages											
Religion											
Muslim	50.7	76.5	11.9	34.7	82.6	94.8	0.4	1.2	35.7	47.9	52.2
Catholic	13.1	5.8	24.2	17.8	2.1	1.8	57.6	18.7	6.2	13.9	12.7
Protestant	15.2	12.4	19.6	33.1	11.2	2.1	24.3	20.4	14.8	14.2	15.8
Other Christian	19.6	4.3	42.7	12.5	2.7	1.0	15.4	58.0	42.3	23.5	17.6
Other	1.3	1.0	1.6	1.9	1.5	0.3	2.3	1.7	1.0	0.6	1.7
Live in urban areas	65.5	27.1	45.7	25.1	27.5	27.8	40.4	29.1	73.2	100.0	0.0
Have any exposure to media	78.2	71.3	88.7	71.4	55.3	81.7	92.8	82.8	93.8	91.2	71.4
Have any education	58.4	36.7	91.1	64.0	32.2	25.0	92.3	91.9	89.2	75.1	49.6
Live in a poor household	33.3	43.0	18.8	32.9	53.8	41.3	13.6	24.9	14.3	7.0	47.2
REPRODUCTIVE											
Percentages											
Want a child later	53.1	48.0	60.7	56.0	48.4	43.4	55.2	62.3	62.5	55.6	51.7
Want no more children	14.5	11.7	18.8	17.8	14.9	6.2	18.4	19.0	18.7	15.7	13.9
Use modern contraceptive†	8.0	3.6	14.5	8.8	2.1	1.8	10.6	13.9	18.4	12.6	5.5
Aged 15–19 who have begun childbearing	21.0	31.5	7.8	13.7	38.1	36.9	5.6	11.3	4.1	13.6	24.7
Had prenatal care at last pregnancy	63.0	51.6	91.0	74.7	52.9	41.0	99.1	83.2	97.8	84.9	54.0
Had trained attendant at last birth	36.1	22.9	68.7	49.1	20.4	13.1	87.2	55.8	76.8	56.9	26.4
Have undergone genital cutting	19.0	2.9	43.2	9.6	1.3	0.4	40.7	34.7	56.9	28.3	14.1
Means											
No. of births‡	5.7	6.6	4.2	5.7	7.0	6.7	4.1	4.6	4.1	4.9	6.1
No. of children desired	6.7	7.7	5.2	6.2	7.8	8.6	5.3	5.5	4.8	6.0	7.0
Medians§											
Age at first sex	17.3	15.8	18.6	18.3	15.9	15.2	18.9	18.1	19.9	18.7	16.4
Age at first marriage	18.5	16.0	22.7	18.9	15.9	15.1	23.8	21.4	22.7	21.1	17.0
Age at first birth	20.3	18.6	23.6	20.4	18.1	18.3	22.5**	22.2	23.7	22.1	19.3

*Among women aged 15–49 unless otherwise indicated.
†Includes condom, diaphragm, emergency contraceptive, injectables, IUD, pill and sterilization.
‡Total fertility rate.
§Among women aged 25–29.
**Among women aged 30–34.
Source: National Population Commission (NPC), Federal Republic of Nigeria, and ORC Macro, *Nigeria Demographic and Health Survey (NDHS) 2003,* Calverton, MD, USA: NPC and ORC Macro, 2004; and Guttmacher Institute, special tabulations of 2003 NDHS.

Survey Supervisors and Interviewers

EKITI STATE

Supevisors:
Dr. Clement Ayeni
Dr. Adeline Olufunmilayo Olaosebikan

Interviewers:
Dr. Joseph Olufemi Abegunde
Dr. David Kolawole Aina
Mrs. Olusola I. Alayande
Mrs. Toyin A. Badegboyega
Mrs. Victoria Titilola Laniyan
Dr. Kayode Ogunjobi
Mrs. Mary Ogunkorede
Dr. Adebamij Sunday Ogunleye

IMO STATE

Supevisors:
Dr. Emmanuel Ibeneme
Dr. Victoria N. Onyenekwu

Interviewers:
Dr. Obiageli O. Anozie
Dr. Victoria Dike
Dr. Martin Iwuoha
Dr. Sheila N. Nwokeji
Dr. Chris Ogoke
Dr. Julia Ogwunga
Dr. Ngozi E. Soribe

KOGI STATE

Supevisors:
Dr. David Aimila
Dr. Ebi Q. Akoge

Interviewers:
Dr. Samuel Dare Alori
Dr. Adeyinka Amusan
Mrs. Rebecca Audu
Dr. Temitope Ewegbemi
Dr. Karimu Asuva Fache
Dr. Grace Ogoke
Mrs. Adizat O. Yusuf

LAGOS STATE

Supervisors:
Mrs. Grace Ekanem
Dr. Abidoye Gbadegesin

Interviewers:
Dr. Memunat A. Adegbesan
Mrs. Elizabeth O. Adeleke
Dr. Femi Aina
Dr. Oyin Oduyebo
Dr. Ibrahim A. Olaifa
Dr. Sunday Omisakin
Dr. Augustine Umoh

RIVERS STATE

Supervisors:
Dr. Chris Akani
Dr. Gladys Horsfall-Okeafor

Interviewers:
Dr. Precious Gbeneol
Dr. Solomon E. Ikhide
Dr. Egwu E. Nkama
Dr. Anthony O. U. Okpani
Dr. Ihunnaya C. Okpara
Dr. Ngozi C. Orazulike
Dr. Bolaji I. Otike-Odibi
Dr. Ganiyat K. Oyeleke

GOMBE STATE

Supervisor:
Dr. George S. Melah

Interviewers:
Mrs. Maemuna Umar Abdullahi
Mrs. Lois Baka
Mrs. Aishatu Bukar
Azumi Al-Hassan Jatto
Mrs. Nelda Madziga
Dr. Bukar Mohammed
Mrs. Maiso Yakubu Musa

KADUNA STATE

Supervisors:
Dr. Clara Ejembi
Dr. Oladapo Shittu

Interviewers:
Dr. Shedrach C. Anekwe
Dr. Hadiza S. Balarabe
Mrs. Justina J. Kura
Mrs. Laraba E. Maikas
Dr. Addo Z. Mohammed
Dr. Emmanuel U. S. Ochu
Dr. Austin Ojeboh
Dr. Nanben V. Omole

KANO STATE

Supervisor:
Dr. Hadiza Shehu Galadanci

Interviewers:
Dr. Idris Suleiman Abubakar
Dr. Adewale Olufemi Ashimi
Dr. Francis J. Belga
Mrs. Halima L. Dambazau
Dr. Aliyu Labaran Dayyubu
Dr. Sule Abdullahi Gaya
Dr. Tukur A. Jido
Dr. Aishatu M. Nanado
Dr. Agu Osondu

©2006 Guttmacher Institute, a not-for-profit corporation advancing sexual and reproductive health worldwide through research, policy analysis and public education; all rights, including translation into other languages, reserved under the Universal Copyright Convention, the Berne Convention for the Protection of Literary and Artistic Works and the Inter- and Pan American Copyright Conventions (Mexico City and Buenos Aires). Rights to translate information contained in this report may be waived.

ISBN: 0-939253-81-X

Suggested citation: Bankole A, et al., *Unwanted Pregnancy and Induced Abortion in Nigeria: Causes and Consequences*, New York: Guttmacher Institute, 2006.

Guttmacher Institute
120 Wall Street
New York, NY 10005 USA
Telephone: 212-248-1111; Fax: 212-248-1951
E-mail: info@guttmacher.org

1301 Connecticut Avenue NW, Suite 700
Washington, DC 20036 USA

www.guttmacher.org

For more information, contact:
The Campaign Against Unwanted Pregnancy
36b Olu-Akerele Street, off Obafemi Awolowo Way
Ikeja, Lagos, Nigeria

Design: © Emerson Wajdowicz Studios/NYC/www.designEWS.com; Photo: © Victor Mello

GUTTMACHER
INSTITUTE

CA
UP