

**Abortion and Postabortion Care
In Uganda: A Report from
Health Care Professionals and
Health Facilities**

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Abortion and Postabortion Care in Uganda: A Report from Health Care Professionals and Health Facilities is the first of a series of reports from The Alan Guttmacher Institute (AGI) and Uganda partners that offers research findings about unsafe abortion in Uganda. Susheela Singh, vice president for research at AGI, and Akinrinola Bankole, associate director for international research, oversaw the research process from the beginning of the study design through the development of this report. The authors thank Charles Katende, Social & Scientific Systems, Inc.; Valentino Lema, World Health Organization and University of Malawi; Margaret Mbogoni, United Nations; and S.B.O. Ojwang, University of Nairobi, for having provided insightful comments and suggestions on an earlier draft. The assistance and advice of other AGI staff were also very useful. The authors acknowledge Adam Sonfield for writing the executive summary, Ann Moore, Beth Fredrick, Jennifer Nadeau and Melanie Croce-Galis for having provided comments on earlier drafts, Caroline Sten and Lindsay Dauphinee for having helped in data processing and Dore Hollander for editing the report. Kathleen Randall and Judith Rothman were responsible for layout and production.

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Table of Contents

Acknowledgments	2
Executive Summary	5
Chapter 1: Introduction	9
Overview	9
Unintended pregnancy and abortion in Uganda	9
Rationale, goals and objectives	10
Report structure	11
Chapter 2: Methodology	13
Health Professionals Survey	13
Health Facilities Survey	14
Training, fieldwork and data collection	16
Characteristics of survey respondents	16
Tables:	
2.1 Distribution of health facilities in Uganda, of those sampled and of those interviewed by type of facility, according to ownership	18
2.2 Number of facilities sampled for Health Facilities Survey and total number of facilities (weighted), by type of facility and ownership, according to major region	19
2.3 Characteristics of Health Professionals Survey respondents	20
2.4 Characteristics of professional experience of Health Professionals Survey respondents	21
2.5 Characteristics of Health Facilities Survey respondents, by type of facility and ownership	22
2.6 Characteristics of health facilities sampled	23
Chapter 3: Characteristics and Conditions of Abortion Service Provision	25
Profile of women seeking abortion	25
Methods of abortion	25
Abortion providers	26
Costs of induced abortion	27
Conclusion	28

Tables:

3.1 Percentage distribution of health professional respondents by perceptions of characteristics of women who obtain abortions; and percentage distribution of health facility respondents by perceptions of characteristics of women who seek treatment for abortion complications	29
3.2 Percentage of health professional respondents who reported use of specific methods for abortion in urban and rural areas	30
3.3 Percentage of health professional respondents who reported specific methods for abortion as most commonly used by different provider types in urban and rural areas	31
3.4 Percentage of health professional respondents, by perception of how commonly various abortion provider types are used, according to women's economic status and place of residence	32
3.5 Percentage of abortions that health professional respondents believe are performed by each type of provider, according to women's economic status and place of residence	33
3.6 Health professional respondents' estimates of the cost, in US\$, of a first trimester abortion, by type of provider, according to women's economic status and place of residence	34

Chapter 4: Induced Abortion, Morbidity and Postabortion Care	35
Types of abortion complications	35
Probability of obtaining treatment for postabortion complications	36
Source of postabortion care	37
Number of postabortion patients treated	37
Procedures used for treatment of postabortion complications	38
Conclusion	38

Tables:

4.1 Percentage of health professional respondents who reported selected complications that result from induced or spontaneous abortion as common	39
--	----

4.2 Health professional respondents' estimates of the percentage of women having an abortion who will experience abortion complications, by type of provider, according to women's economic status and place of residence	40
4.3 Percentage of health professional respondents, by perception of how commonly various postabortion care provider types are used, according to women's economic status and place of residence	42
4.4 Percentage of facilities that offer inpatient and outpatient postabortion care, and average annual number of postabortion patients treated in sampled facilities, by type of facility and ownership	43
4.5 Estimated total number of women treated annually for post-abortion complications, by type of facility and ownership (weighted results)	44
4.6 Estimated total number of women treated annually for post-abortion complications, by type of facility and ownership, according to major region (weighted results)	45
4.7 Percentage of facilities that use various procedures to treat postabortion complications, by type and ownership of facility	46
4.8 Percentage of facilities that use anesthesia, analgesia and intravenous fluids with various procedures for postabortion care management	47

Figure:

4.1 Health professional respondents' estimates of the percentage of women with abortion complications likely to be treated in a health facility, by women's economic status and place of residence	41
--	----

Chapter 5: Family Planning, Postabortion Counseling and Opinions About the Law on Abortion 49

Contraceptive services for postabortion patients	49
Opinions on approaches and interventions to reduce unsafe abortions	50
Opinions on current abortion law	50
Conclusion	51

Tables:

5.1 Health professional respondents' perceptions of the percentage of women obtaining abortions who were using selected family planning methods at the time they became pregnant	52
5.2 Percentage of health professional respondents, by opinion about whether contraceptive methods should be provided to all abortion patients while still at the health facility	52
5.3 Percentage of facilities that commonly offer contraceptive methods to postabortion patients, by type and ownership of facility	53
5.4 Percentage of health facility respondents who believe treatment of abortion complications is a major cost for their facilities, by type of facility, ownership, and profession	54
5.5 Percentage of health professional and health facility respondents who believe that selected suggestions can be used to reduce unsafe abortion in Uganda	56

5.6 Percentage of health professionals and health facility respondents, by opinions about modifying the abortion law	57
--	----

Figure:

5.1 Percentage of health facility respondents suggesting various approaches to improve treatment of abortion complications in facilities in Uganda	55
--	----

Chapter 6: Conclusions and Implications 59

Research Needs	59
Policy and Program Implications	60

Acronyms 63

References 65

Abortion and Postabortion Care in Uganda: Executive Summary

Women in Uganda today give birth to almost seven children, on average—two more children than they would prefer. In fact, nearly 40% of all births in 2000 were unwanted or mistimed, up from 29% of births only five years earlier. Only 23% of married women were using contraceptives in 2000, although this proportion was about five times that in 1988. Given such facts about the gap between their desired family size and their actual fertility, as well as their low likelihood of using contraceptives, it is not surprising that many women turn to abortion.

Abortion is illegal in Uganda unless a woman's pregnancy endangers her life. As a result, the procedure is performed in secrecy and often under dangerous conditions. There are no official statistics even on abortion complications, but what data are available indicate that unsafe abortion in Uganda is a leading cause of maternal morbidity and mortality.

Reliable, current data are needed, both to inform debate about the problem of unsafe abortion and to improve women's care. This report presents results from two surveys. One is a survey of health professionals, in which 53 experts on abortion in Uganda were asked their opinions and perceptions about abortion provision and postabortion care. The second is a survey of health facilities, in which senior professionals from a nationally representative sample of facilities that treat postabortion complications were interviewed about their own perceptions and actual service provision.

Unsafe Abortion and Its Complications

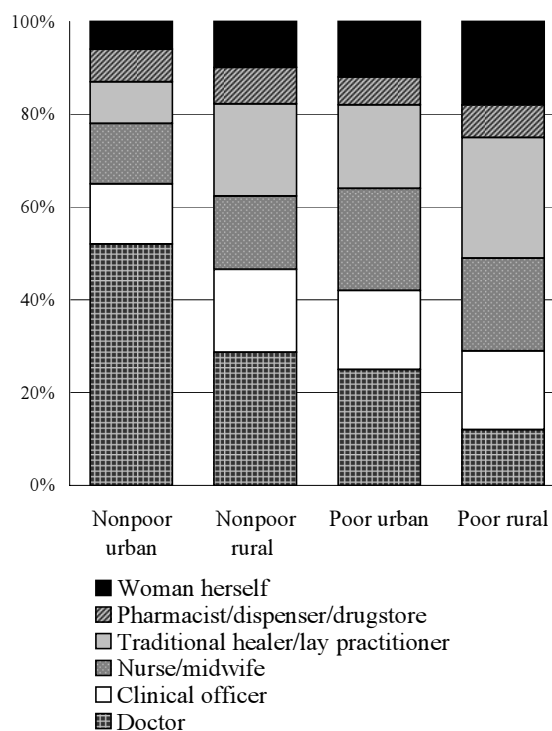
Abortion and postabortion complications are experienced by all types of women in Uganda: young and old, more and less educated, married and single, urban and rural, rich and poor. Because of economic, geographic and social disadvantages, however, poor women, especially those in rural areas, are most at risk.

Nonpoor women rely most often for abortion on providers that survey respondents deem generally safe: physicians, clinical officers, nurses and midwives. Poor

women have less access to doctors, especially in rural areas, and are more likely to rely on less safe providers—traditional healers, other lay practitioners and pharmacists—or to induce an abortion themselves (see Chart 1).

Physicians in Uganda tend to rely on surgical methods, such as dilation and curettage; vacuum aspiration (the primary method of abortion in most industrialized countries) is much less used. Most nonphysicians in urban areas are thought to use hormonal drugs or rubber catheters, and many in rural areas turn to herbs and

Chart 1. Percentage of abortions that health professional respondents believe are performed by each type of provider, according to women's economic status and place of residence



Source: Health Professionals Survey, Uganda, 2003.

sharp objects (such as sticks and hangers). Women typically use herbs to self-induce an abortion.

It costs far more to obtain an abortion from a physician than from a traditional provider—for poor urban women, for example, the cost ranges from an average of \$7 for drugs from a pharmacist to \$64 for the services of a private-sector physician. One of the few positive findings for poor rural women is that they appear to pay less than their nonpoor and urban counterparts, regardless of the type of provider, suggesting that providers adjust their prices to women’s ability to pay.

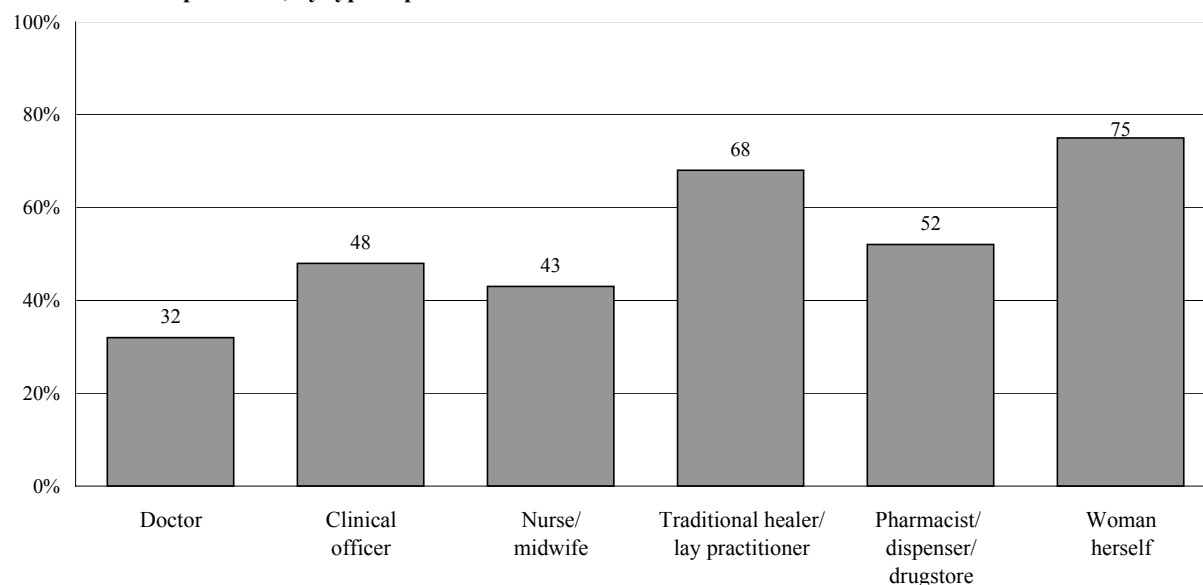
Even in the best of circumstances in Uganda, abortion complications are not uncommon; they are thought to affect, for instance, one in six nonpoor urban women obtaining an abortion from a physician. Yet, complications are far more common for women whose abortions are self-induced or who rely on traditional healers (see Chart 2). Poor women are thought to experience complications more often than nonpoor women, regardless of the quality of care, because of such factors as delays in getting the abortion, problems in understanding and following postabortion instructions, and overall poorer health and nutrition. Complications can be serious, and even deadly: Over three-quarters of survey respondents mentioned sepsis and excessive blood loss, half cited infertility and damage to the uterus, and one-third mentioned death as common outcomes of unsafe abortion.

Treatment and Pregnancy Prevention after Unsafe Abortion

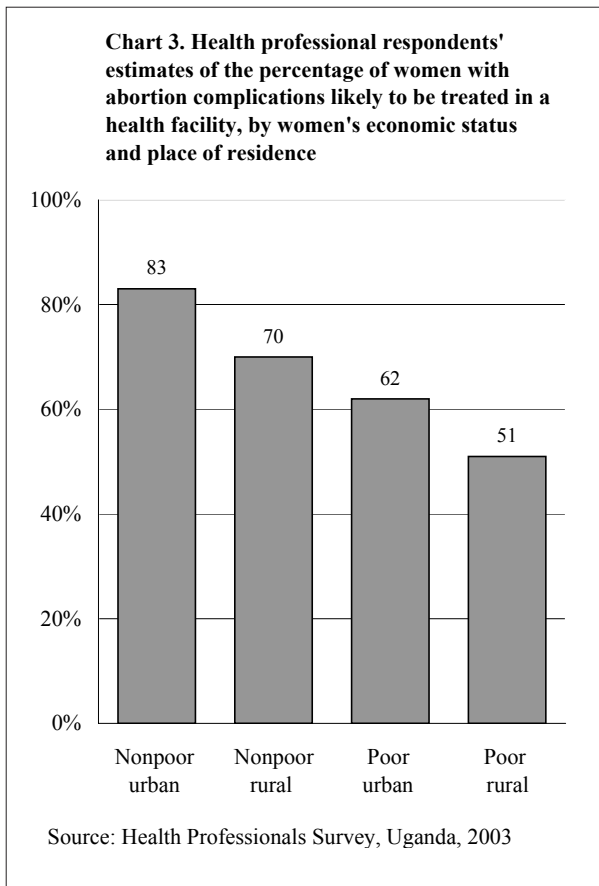
Not only are complications of induced abortion frequent, and sometimes fatal, they also are frequently untreated. Predictably, it is poor women who are most at risk: Four in 10 poor urban women and half of poor rural women who experience complications are thought to go without treatment from a formal health care facility (see Chart 3). They face such obstacles as distance from properly equipped facilities, financial hardship, fear of mistreatment by medical providers, opposition from husbands and partners, and lack of education about what treatments are safe and appropriate. Thus, two-thirds of survey respondents believe that poor rural women often or sometimes rely for postabortion care for their complications on other, less reliable options, such as traditional healers, other lay practitioners and pharmacists.

Nevertheless, the survey respondents indicate that health facilities in Uganda provide inpatient and outpatient treatment to 110,000 women annually for complications of abortion (including induced and spontaneous abortion). This means that 18 out of every 1,000 women aged 15–49 receive such care annually. Almost 60% of this care is on an outpatient basis, usually through public clinics and private midwives. These facilities make use of antibiotics, drugs to promote uterine contractions and other medications, but few are

Chart 2. Estimated percentage of poor rural women obtaining abortions who experience complications, by type of provider



Source: Health Professionals Survey, Uganda, 2003.



equipped for more advanced procedures. The more serious, inpatient cases are typically handled by hospitals and better equipped clinics run by the government and nongovernmental organizations.

Nongovernmental hospitals are more likely than government hospitals to use dilation and curettage for uterine evacuation. Less than half of government hospitals make use of manual vacuum aspiration, one of the safest procedures for treating an incomplete abortion that took place during the first trimester. Notably, when poor women receive treatment from a doctor, it is usually from a doctor working in a government facility. Thus, even when poor women receive treatment, the quality of treatment is not likely to be ideal.

The health experts surveyed overwhelmingly support provision of contraceptive counseling and supplies to women being treated for postabortion complications. In fact, the facilities providing postabortion treatment report widespread provision of injectables, the pill and condoms. This focus on preventing future pregnancies—and thus future unsafe abortions and their complications—is not surprising, given the frequency of complications. The majority of respondents, especially those from hospitals and public facilities, see these complications as a serious fiscal burden.

Addressing the Problem of Unsafe Abortion

More than nine in 10 respondents representing health facilities see a need to improve the quality and availability of postabortion services. They report a host of recommendations, including providing adequate supplies and more advanced medical equipment (such as manual vacuum aspirators), expanding capacity for midwives and other providers to manage abortion complications on their own, and establishing transportation services for referrals. Many survey respondents also support measures to prevent abortion, including campaigns to educate Ugandans about the risks of unsafe abortion and expanded contraceptive counseling and provision. Two-thirds of the health experts and over two-fifths of the health facility representatives favor liberalizing current abortion law.

Eighty-five percent of Ugandans live in rural areas, where access to health services is limited, and the overwhelming majority are poor. Poor rural women epitomize the problem of unsafe abortion in Uganda. If they obtain an abortion, they are more likely, compared with other women, to rely on an untrained provider using an unsafe method. Regardless of the provider, they are more likely to have complications. They are less likely to obtain trained medical care for complications, and if they do, they are more likely to rely on public facilities, which rarely provide the most advanced care.

The findings in this report point the way to solutions for these collective problems. During the 1990s, the Ugandan government enacted a series of policies to address the country's problems with maternal mortality and unintended pregnancy. These policies are meant to encourage contraceptive use, improve access to family planning services, raise the minimum age of marriage to 18 years, empower women through education and employment, and strengthen regional and local health care delivery. Yet, these policies and programs have not been fully implemented, particularly in less affluent areas of the country, and the Ugandan government can work to change this situation. This report also provides support for expanding upon existing policies and programs to deal more effectively with unsafe abortion and postabortion care. Together, these initiatives could substantially reduce unwanted pregnancy, unsafe abortion and resulting morbidity and mortality, as well as the health, social and financial burden on women, their families, health care facilities and Ugandan society.

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in Uganda. The study was carried out by Ugandan researchers and The Alan Guttmacher Institute with support from the Netherlands Ministry for Development Cooperation, the World Bank and the United Kingdom's Department for International Development.

Chapter 1

Introduction

Overview

In developing countries, access to family planning is often limited, and misconceptions and myths about effective contraceptives inhibit women from using them, causing many to have unplanned and unwanted pregnancies. It is estimated that across the developing world, 36% of pregnancies are unintended.¹ One-quarter of the world's women live in countries where abortion is highly restricted or banned outright,² and approximately 19 million unsafe abortions* and 75,000 abortion-related maternal deaths occur each year worldwide.³

Access to safe methods for terminating unwanted pregnancies is not an option in many countries, like Uganda, where abortion is prohibited, causing women to resort to dire measures and unsafe procedures when seeking to terminate a pregnancy. In developing countries overall, there are an estimated 330 deaths for every 100,000 abortions performed, while for Africa alone, the rate is estimated to be twice that: 680 deaths per 100,000 abortions.⁴ This occasional report is part of a larger study that aims to document the incidence and health consequences of unsafe abortion in Uganda.

Abortion is highly restricted under Ugandan law and is permitted only when pregnancy endangers the life of a woman. Because of this, there are no official statistics on abortion complications; hospitals do not register complications due to abortion, and in the few hospitals and health facilities that do have information, it is often incomplete, not systematic and outdated. Reliable and updated data are needed on the level of unsafe abortion and the size of the public health burden for treating postabortion complications in Uganda, not only to inform public discussion and policymakers about the extent of the problem, but also for the pur-

poses of improving postabortion care programs and expanding the provision of contraceptive services in efforts to reduce unwanted pregnancies and the need for abortion.

Unintended pregnancy and abortion in Uganda

Today, the average woman in Uganda has almost seven children over the course of her childbearing years, just slightly fewer than the 7.4 children her counterpart had in 1988. While there has been a relatively small decline in average family size at the national level between 1988 and 2000, certain areas of the country, such as urban centers, have experienced larger declines in family size. The average woman living in an urban area in 1988 had six children, compared with four in 2000, while women living in rural areas continue to have approximately the same number of children as they did 12 years ago: 7.6 children in 2000, compared with 7.4 children in 1988.

Yet, desired fertility appears to be falling faster than actual fertility. Ugandan women today are having two more children, on average, than they would ideally like. In 2000, the average woman in Uganda wanted 4.8 children—a substantial decrease from the 5.5 children she wanted in 1988. While Ugandan women in urban areas are close to achieving their desired family size (desiring 3.8 children and having 4.0), rural women, who make up the vast majority of the population, are having over two children more than they would like (desiring 5.1 and having 7.4). These findings point to high levels of unplanned childbearing, which are most pronounced in rural areas.

In 1995, roughly 30% of recent births in Uganda were either unwanted or mistimed, and in 2000, this proportion had risen to nearly 40%—with 24% of births considered unintended because they were mistimed (wanted later) and 14% not wanted at all. Unintended childbearing has increased in all regions of Uganda except the Central region, where the level was already high in 1995—42% (13% unwanted and 29%

*According to the World Health Organization, an unsafe abortion is defined as a procedure for terminating an unintended pregnancy either by persons lacking the necessary skills or in an environment lacking the minimal medical standards, or both.

mistimed). Particularly rapid increases have occurred in the Northern region (from 22% in 1995 to 33% in 2000) and in the Eastern region (from 25% to 47%), both regions where insurgency has resulted in the breakdown of basic services, including health care. Since some women will seek to terminate unintended pregnancies by abortion, a country's level of unintended pregnancy will be much higher than its reported level of unintended births.

Contraceptive use has increased among Ugandan women since 1988; however, it remains low. In 2000, 23% of married women were using a method of family planning, compared with 5% in 1988 and a world average of 59%.⁵ The largest increases were in modern methods (the pill, IUDs, injectables, implants, the male condom, and female or male sterilization)—from 3% in 1988 to 14% in 2000. Traditional method use also increased, from 2% to 9% among married women.

Even though higher proportions of women are using some form of contraception today than were doing so 12 years ago, the widening gap between actual and wanted family size suggests that fertility preferences are falling faster than contraceptive use is increasing. Unmet need for contraception continues to be high in every region of the country: One-third of all women of reproductive age in Uganda do not want a child, soon or ever, yet are not using any method of contraception. This situation is likely to result in high levels of unwanted pregnancy and, perhaps, of clandestine abortion.

As mentioned earlier, abortion in Uganda is highly restricted and permitted only in the case of saving the mother's life. Because of this, abortion is often performed in secrecy and under unsafe conditions, potentially presenting serious health consequences for women, including death.

The actual level of abortion in Uganda is unknown, but some information is available from a small number of studies carried out in the past decade. A study carried out in 1993 in three Kampala hospitals found that one out of five maternal deaths was caused by unsafe abortion, suggesting that unsafe abortion is one of the leading causes of maternal morbidity and mortality in the country.⁶ Another study, of four major hospitals (all of which had obstetrician-gynecologists on staff who provide postabortion care), estimated that 2,000 incomplete abortions a year were being treated in these hospitals.⁷ Medical complications resulting from unsafe abortion also constitute a serious burden for both women and the health care system. The most frequent complications of unsafe abortion are incomplete abortion, infection (sepsis), hemorrhage and injury to the

internal organs, such as puncturing or tearing of the uterus. Unsafe abortion also has long-term health problems, which include chronic pain, pelvic inflammatory disease and infertility.⁸

Rationale, goals and objectives

Because abortion is illegal and generally performed under clandestine conditions in Uganda, it is not well documented. Yet, the Ugandan government, international agencies, health professionals and nongovernmental organizations (NGOs) need information on abortion to enable them to forthrightly address the abortion issue and provide necessary services for postabortion care and contraception.

The goal of the project of which this report is a part is to fill parts of this knowledge gap by collecting new information through four surveys. Each of these four surveys aims to document different aspects of the abortion issue. As a whole, the study intends to provide pertinent, timely and reliable evidence on the conditions, incidence and health consequences of unsafe abortion and on the options available to an HIV-positive woman should she become pregnant.

A survey of health professionals with experience in and knowledge of abortion provision in Uganda through their work was carried out to obtain the perceptions and opinions of key informants about the conditions under which abortion is provided. The Health Professionals Survey (HPS) documents professionals' perceptions of the probability that a woman will experience abortion complications and the likelihood that women with complications will obtain care at a medical facility. Secondly, a nationally representative survey of health facilities that may treat postabortion complications was carried out. The Health Facilities Survey (HFS) provides an estimate of the annual number of women treated for abortion complications in the country as a whole and by region, which is the basis for calculating estimates of the total number of induced abortions and the incidence or rate of abortion. The remaining two components are qualitative and exploratory in nature. The Community Abortion Morbidity Survey examines the health, social and economic consequences for women who have an abortion, with a particular focus on those who do not obtain medical care. In-depth interviews and focus group discussions were fielded in two districts of Uganda: Kampala, the capital city of Uganda, and Mbarara, a largely rural district. The HIV study examines the options for and preferences of HIV-positive women in Uganda who become pregnant. In-depth interviews were carried out with HIV-positive women living in the

district of Kampala.

This report presents results from two of these studies—the HFS and HPS, which focus on the conditions of abortion provision, the health consequences for women who undergo unsafe abortions and the availability of postabortion care services in Uganda. The issues examined include the characteristics of women who have an abortion, the common methods used for inducing an abortion, the cost of obtaining an abortion, the probability of experiencing abortion complications according to the type of provider who performs the procedure, the probability of seeking medical treatment and where this treatment is sought. All of these issues are examined by place of residence (urban and rural) and poverty status (poor and nonpoor).

Report structure

Chapter Two describes the study design and methodology, including a description of fieldwork. It discusses the universe of health facilities and health professionals in Uganda and those sampled.

Based on the opinions of experienced health professionals, Chapter Three presents findings on the profile of abortion service provision in Uganda. It also describes the profile of women who seek abortion, the methods commonly used to induce abortion, the providers women go to and the cost of having an abortion.

Chapter Four reports on health professionals' perceptions of postabortion complications, including the likelihood of experiencing complications, the types of complications experienced and the provision of medical care for postabortion complications. It also addresses health professionals' opinions on the proportion of women with complications who seek care, as well as information from health facilities on the number of women who are treated for postabortion complications and information on where care is sought.

Chapter Five discusses family planning services and counseling available to women who have been treated for abortion complications, as well as health professionals' opinions on current abortion laws and approaches for reducing the number of unsafe abortions.

Chapter Six summarizes the findings and discusses the policy and program implications. It highlights the need to improve family planning efforts and expand postabortion care in Uganda.

Chapter 2

Methodology

The difficulty in obtaining accurate information on abortion is widely recognized in countries like Uganda, where the procedure is legally restricted and official statistics on abortion are not collected.

To document the level of abortion, identify the common providers and methods used to induce abortion, and estimate the likelihood of experiencing abortion complications and receiving treatment, two surveys were developed: the Health Professionals Survey (HPS) and the Health Facilities Survey (HFS).

The surveys were modeled after previous surveys developed by The Alan Guttmacher Institute but were adjusted to the Ugandan context.

Health Professionals Survey

The goal of interviewing health professionals was to obtain opinions and perceptions from a sample of experts about abortion provision and postabortion care in Uganda. The participants were selected because of their knowledge and professional experience regarding postabortion service provision in Uganda. Selection of HPS participants was based on information obtained from the project coordinator in Uganda, Florence Mirembe. Factors considered in selecting respondents included the respondent's affiliation, his or her local specialty, as well as the reputation of having extensive knowledge and experience with postabortion care among local stakeholders in the field of reproductive health, such as Marie Stopes.

Respondents included clinicians and nonclinician health professionals who were purposively selected from government and private health facilities from the Kampala district and rural districts near Kampala. A total of 54 health professionals were selected, and 53 were interviewed. The total number of professionals identified was above the required number for the study design of 40–50 respondents so as to allow for replacement in case of refusal or nonresponse due to absence or any other reason. Respondents came from eight of the 56 districts: Kampala, Mukono, Mpigi,

Wakiso, Iganga, Jinja, Sembabule and Rakai. While the majority of HPS respondents worked in urban areas (primarily Kampala), an effort was made to have sufficient representation of experts with knowledge of rural areas.

The identified professionals were contacted by telephone or through in-person visits to their places of work. Most interview appointments were made outside working hours to avoid interruption of service provision.

Each participant completed a face-to-face interview that followed a semistructured questionnaire, which covered the following topics:

- methods used to induce abortion;
- characteristics of a typical woman seeking an abortion;
- common types of providers who perform abortions and the distribution of women who had an abortion according to the type of provider they went to;
- the cost of obtaining an abortion from each type of provider;
- the likelihood of experiencing complications following an abortion for each type of provider;
- the likelihood that those who experience complications will obtain medical treatment;
- typical family planning methods used by a women seeking an abortion; and
- opinions on postabortion counseling, reducing unintended pregnancy and the legal status of abortion in Uganda.

Because it is expected that different subgroups of women will vary in the ability to obtain a safe abortion, respondents were asked to make a distinction between conditions likely to be experienced by four key population subgroups: rural poor and nonpoor women, and urban poor and nonpoor women. Poor women were defined as those women with lower income levels than average, while nonpoor were defined as those with higher income levels than average.

Health Facilities Survey

The HFS is a nationally representative sample of health facilities that treat postabortion complication patients. This survey was conducted with key informants at health facilities selected in the sample.

Sample design

Uganda's public health system classifies facilities according to size and resources. The categories include community health centers levels I and II; health centers level III; health centers level IV; and district, regional and national hospitals.⁹ Of these, hospitals, health centers level III and IV were relevant for the study because they provide postabortion care on an ambulatory or inpatient basis. In particular, health centers level IV include personnel such as a resident doctor and support staff such as a midwife, an anesthesia assistant, a laboratory assistant and a community health assistant. These facilities can accommodate obstetric and other surgical emergencies. Laboratory and blood transfusion services are also essential services offered at these facilities. Health centers level III are generally concerned with providing care to ambulatory patients and are capable of providing preventive and curative services more advanced than health centers level I and II, but less sophisticated than those requiring the technical capacity of hospitals. Health centers level III provide a range of services that include mother and child care. They are based at the subcounty level and serve a population of 20,000–50,000 people. In addition to these facilities, private midwives were included in the survey. This group of providers represents an important source of health care and postabortion care for many women in Uganda. Health centers levels I and II were excluded from the survey because they are oriented to the provision of preventive care and the management of basic illnesses; they typically have no beds and are expected to refer women with postabortion complications on to a higher level facility.¹⁰

To select the facilities, we used a recent inventory prepared by the Uganda Ministry of Health¹¹ that lists all health facilities in the country, ranging from the smallest private health units to the largest public hospitals. The Ministry of Health list includes information on geographic location (district, county, subcounty and parish), ownership (public, private for-profit or non-governmental organization [NGO]) and type of facility (Health centers level II, III, or IV, or hospitals). The Ministry of Health sampling frame contained a total of 96 hospitals, 163 health centers level IV and 787 health centers level III. Because the Ministry of Health in-

ventory does not include private midwives, we contacted the Private Midwife Association to obtain a list of current members. A total of 536 private midwives were included in the list, which did not contain information on an estimated 10–15% of private midwives who practice in Uganda.

The master list was organized by major region and within each major region by type of facility, with all districts in that region listed alphabetically. We then determined the sample fractions for each facility type. These fractions represented degree of importance, such that types of facilities that treat more complication cases were given a higher probability of coverage in the sample. Hospitals are the most important source of care for abortion complication patients, followed by health centers level IV, health centers level III and, finally, private midwives. We included all hospitals in Uganda except for one that did not treat women with abortion complications. This was a military hospital in the Nakasongola district. For the other health facilities, our sample fractions were one out of every three health center level IV facilities, one out of every seven health center level III facilities and one out of every 10 private midwives.

To ensure that we would reach the targeted number of interviews, the sample fractions were increased by 20% to cover potential sample loss due to incorrect addresses, closures, failures to reach facilities and refusals. On this basis, facilities for which an interview was not completed would not be replaced. The final sample fractions were 0.405 for health centers level IV (two out of every five facilities), 0.165 for health centers level III (one out of every six facilities), 0.125 for level private midwives (one out of every eight midwives) and 1.0 for hospitals. To select facilities according to these ratios, a systematic random sampling technique was employed and all efforts were made to eliminate bias. The resulting sample consisted of 359 health facilities, of which 204 were public, 59 were NGOs and 50 were private for-profit. This group of providers represents an important source of health care, including postabortion care for many women in Uganda.

During the course of fieldwork, researchers found that in some cases, the type of facility had been entered incorrectly in the Ministry of Health list. For example, some hospitals had been mislabeled as health centers, and some health center level III facilities had been mislabeled as health centers level IV. In a few cases, differences regarding ownership were discovered. Some health units that appeared on the master list as NGO were either private for-profit or public. These changes

required an adjustment of both the master and the sample lists to calculate the weighting factors.

Of the 359 health facilities sampled from the master lists, 8% had closed or were listed under incorrect addresses, 3% were not contacted because of political instability and 2% were not surveyed because they were ineligible or no reason was given. The survey had an overall completion rate of 87%. A total of 313 usable interviews were obtained. The response rate was 97% for hospitals, 88% for health centers level IV, 94% for health centers level III and 60% for private midwives. The distribution of all selected and successfully interviewed health facilities is presented in Table 2.1.

Sample Weights

To project the results nationally, we weighted the data. To represent the original sample, the weighting factor compensated for the sample fraction for particular strata or groups of facilities, as well as for nonresponse, within facility type categories and ownership categories within each of the five major regions. The weighting factor used for a given facility type or ownership group was the inverse of that subgroup's sampling ratio multiplied by the number of completed interviews in that type or ownership subgroup, for each region. For example, the weight applied to all government health centers level IV in the Eastern region was 2.87, which is the result of multiplying the inverse of the sample fraction (0.419) by the response rate (0.833) of these type of facilities. All hospitals were given a weight of one, since all were included in the sample and all but three were successfully surveyed.

This weighting procedure created a proxy for the original sample. Weights were then applied to the 359-facility proxy sample to construct data for a total of 1,551 facilities nationwide.

Table 2.2 presents the distribution of the sampled health facilities and the weighted total number of facilities in Uganda by region. Overall, 6 % of facilities are hospitals, 11% are health centers level IV, 51% are health centers level III and 33% are private midwives. The Central region contains the most health facilities that are likely to treat abortion complications (675 facilities), and the Northern region contains the fewest (185 facilities), with the Western and Eastern regions in the middle (352 and 339, respectively). This trend holds true for all facility types, but private midwives are most heavily concentrated in the Central region, while hospitals and HC III and IV are more evenly distributed across regions. When private midwives are excluded, the differences between regions are lessened, with the

Central region containing 299 facilities (hospitals and HC III and IV), the Western and Eastern regions containing 281 each, and the Northern region containing 185 facilities.

More than half (53%) of the facilities in Uganda are public, 34% are private and about 13% are NGOs. Publicly owned facilities are evenly distributed between the Central, Western and Eastern regions, with the fewest such facilities located in the Northern region. Private facilities are concentrated in the Central region and have almost no presence in the Northern region. Facilities owned by NGOs are also concentrated in the Central region, but they are present in other regions as well, including the Northern region.

Each respondent completed a face-to-face interview, which followed a semistructured questionnaire similar to that used in the Health Professionals Survey. The questionnaire had an introduction and four modules. The interview solicited important information on service provision at that facility:

- basic information, including departments, medical specialties and number of beds;
- profile of postabortion care, including number of abortion complication patients treated on an inpatient and outpatient basis in the past month and in an average month; proportion of complications treated at the facility that were caused by induced rather than spontaneous abortion; and methods used to treat abortion complications;
- profile of postabortion counseling, including family planning services offered to women treated for abortion complications; and
- respondent's opinions about and suggestions for improving the treatment of abortion complications in the facility, reducing the number of unsafe abortions and lowering the level of induced abortions.

Respondents were also asked for their perceptions of:

- the characteristics of a typical woman seeking an abortion;
- the likelihood of experiencing complications following an abortion; and
- the likelihood that those who experience complications will obtain medical treatment.

The data were collected from May to September 2003. The key informant at each of the health facilities was a senior professional knowledgeable about postabortion care provided at the facility. It was expected that at large facilities such as hospitals, the key informant would be the chief of the obstetrics and gynecology department, or an obstetrician-gynecologist. However, in

many cases, these personnel were not available to be interviewed because of their heavy workloads. At lower level facilities, such as health centers levels IV and III, the key informant was often the director of the facility, a nurse, a midwife or another health worker who was in a position to provide information about postabortion care. At private midwife facilities, the respondent was the midwife who owned the facility.

Training, fieldwork and data collection

Both questionnaires were pretested and adjusted before data collection began in order to ensure clarity and accuracy. In all cases, interviews were carried out by trained local professionals, and efforts were made to minimize inconvenience to respondents and ensure a comfortable interview environment.

The HPS was pretested during February 2003. The questionnaire was modified the following weeks, and the data were collected from March through August 2003. All fieldwork was conducted by one of the authors, Rose Nalwadda, who is a demographer.

Appointments were made a day or two before the interview. The interviews were done one-on-one, but in some cases, respondents consulted their colleagues on some information, such as the names of herbs used for abortion.

The pretest for the HFS was carried out during March 2003, and in April of 2003, the fieldworkers participated in a three-day training course designed to familiarize them with the questionnaire and the logistics of the fieldwork. Thirty-three nurses and midwives who were known by the project coordinator, Florence Mirembe, and survey manager, Charles Kiggundu, were selected as interviewers, and 10 physicians served as regional coordinators. The training was led by the three-member in-country research team. This group of health professionals was organized into 10 fieldwork teams according to the health regions in which they typically worked. During data collection, the project coordinator and survey manager maintained close supervision of all teams through in-person visits and frequent telephone calls.

Characteristics of survey respondents

Characteristics of respondents to HPS

Respondents to the HPS were, on average, 38 years old, and more than half were female. Almost half were trained doctors (28% medical officers* and 21% gynecologists), and about a third were nurses and midwives.

The rest had backgrounds in research, policy development or education (Table 2.3). The majority (approximately three out five) worked primarily in the public sector, and the remainder in the private or nonprofit sector. The respondents had an average of 11 years of work experience in their primary profession (work experience ranged from one to 33 years—Table 2.4).

Seventy-two percent of the respondents reported working primarily in urban areas, while 28% reported working primarily in rural areas (Table 2.4). Those who worked in rural areas had done so for at least two years. However, about half of the respondents had at some point worked in a rural area for at least six months. The requirement for doctors to work in rural communities immediately after obtaining medical certification may explain why half of those surveyed had worked in rural areas.

Respondents were asked how they had been exposed to the issue of abortion, and were allowed to provide multiple responses to this question. About 62% had experience with abortion through work in public health facilities, and 40% through work in private facilities. Approximately one-fourth had been exposed to the issue of abortion outside a medical setting, such as through interaction with colleagues, the media or work in research, policymaking or counseling.

Characteristics of respondents to HFS

The HFS collected some basic information about the survey's respondents. This information is useful in order to understand how perceptions of postabortion care may vary by the characteristics of the key informants. This section of the questionnaire also ascertained general information about the sampled health facility. Table 2.5 provides information on the main characteristics of respondents in health facilities interviewed.

More women than men completed the HFS questionnaire, regardless of the type or ownership of the facility the respondent worked in. This difference is not unexpected—most, if not all, midwives in Uganda are women. In addition, women are probably overrepresented, particularly among nurses and midwives, in maternity wards and in obstetrics and gynecology departments within facilities, and were likely to be identified as the key informant of the facility.

The average age of respondents was 38 years old, and ranged from 20 to 80 years. Private midwives were the oldest group, averaging 48 years old. The majority of respondents in this group were over 40, while the majority of respondents for hospitals and health cen-

*A medical officer is a medical professional who has completed basic training as a doctor, is licensed to practice medicine but has not specialized yet.

ters III and IV were under 40.

Marked differences were found in the professions of respondents in the HFS compared with respondents to the HPS. Seventy percent of HFS respondents were nurses or midwives, while just 2% were obstetrician-gynecologists. About 20% were medical officers or clinical officers, and 7% were of other professions, such as nursing assistant, nursing aid and records assistant. Nursing-midwifery was the most common profession among the respondents, for every facility type and ownership type. At hospitals, medical officers were also frequent respondents, constituting 27% of survey participants, and at health center level III facilities, clinical officers made up one-fifth of those surveyed.

The median length of time that respondents had worked in their primary profession was 10 years. This period was shorter for hospital and health centers levels III and IV respondents (eight, nine and 7.5 years, respectively) than for private midwives (27 years). Private midwives often start out in the public sector and then enter into private practice as they get older.

Differences in overall services by level of facility

The health facility interview requested information on the number of beds and the type of subfacilities available at health facilities, as well as the presence of any specialized services. Subfacilities asked about included operating room; outpatient and inpatient services; separate evacuation room; maternity ward, drugstore; and laboratory. This information is presented in Table 2.6 and provides a general picture of the degree of specialization of the health facilities and their capacity to provide treatment of abortion complications.

As expected, the higher the level of the facility, the greater the bed capacity and the broader the available services. While hospitals have an average of seven subfacilities, health centers level IVs have an average of five, health centers level IIIs have an average of four and private midwives an average of three subfacilities (not shown). More than 90% of hospitals have outpatient and inpatient departments, premises for surgical procedures, a maternity ward, a drugstore and a laboratory. High proportions of health centers level IV and health centers level III have many of these departments, but surgical capabilities in particular are fairly rare outside the hospital setting.

Specialized services, either for obstetrics and gynecology or for other health care, are more commonly available in hospitals than in any other type of facility. Ownership makes little difference in whether or not these services are offered—public and private or NGO

facilities offer these services in about equal proportions.

Although nearly all facilities provide inpatient services, the number of beds housed in each type of facility varies significantly. Most hospitals have 100 beds or more, most health centers level IV have between 10 and 99 beds, most health centers level III have fewer than 30 beds and most private midwives have fewer than 10. The average number of deliveries taking place in each facility per month is directly related to the number of beds available. On average, there was about one delivery per bed per month.

Differences in capacity to provide postabortion care

Only one-fifth of health facilities in Uganda have a separate evacuation room to treat abortion complication patients. More than half of hospitals have this specialized service, but fewer than one in 10 of other facility types do. Similar proportions of public and private facilities contain these subfacilities. Private and NGO facilities are somewhat more likely to have separate evacuation rooms (27%), operating rooms (38%) and a maternity ward (95%), compared with government facilities, while publicly owned facilities are more likely to have outpatient services (98%) and a drugstore (92%), compared with in private and NGO facilities. Postabortion services are not easily available and accessible in public institutions, while private facilities and NGOs are more likely than public facilities to have the appropriate services to treat postabortion patients, although for a cost, which many women cannot afford, thereby further reducing access.

Table 2.1 Distribution of health facilities in Uganda, of those sampled and of those interviewed by type of facility, according to ownership

Type of facility	Health facilities in Uganda			Health facilities selected in sample			Health facilities interviewed		
	Government	NGO	Private	Government	NGO	Private	Government	NGO	Private
Total	824	193	565	217	64	78	204	59	50
Hospital*	53	38	5	53	38	5	52	36	5
Health center IV	148	12	3	62	3	1	54	3	1
Health center III	623	143	21	102	23	5	98	20	4
Private midwife†	na	na	536	na	na	67	na	na	40

*Military hospitals were not included since they do not provide treatment for abortion complications. †Number registered with the Uganda Private Midwives Association. Approximately 10–15% of practicing midwives in Uganda are not registered with the association. Notes: NGO=Nongovernmental organization. na=not applicable. Source: Ministry of Health, Health Infrastructure Division, Inventory of health units using information gathered from the district directors of health services of all districts during the period July–October 2001, Kampala: Ministry of Health, 2002.

Table 2.2 Number of facilities sampled for Health Facilities Survey and total number of facilities (weighted), by type of facility and ownership, according to major region

Type of facility and ownership	Number of facilities sampled						Total number of facilities (weighted)					
	Central	Western	Eastern	Northern	Total	%	Central	Western	Eastern	Northern	Total	%
Total	130	87	82	60	359	100	675	352	339	185	1,551	100
Type												
Hospital	26	25	20	25	96	27	26	25	20	25	96	6
Health center IV	18	18	19	11	66	18	49	42	46	26	163	11
Health center III	39	35	36	20	130	36	224	214	215	134	787	51
Private midwife	47	9	7	4	67	17	376	71	58	na	505	33
Ownership												
Public	57	60	62	38	217	60	205	231	251	137	824	53
Private	52	12	9	5	78	22	391	82	60	1	534	34
Nongovernmental	21	15	11	17	64	18	79	39	28	47	193	12

Source: Health Facilities Survey, Uganda, 2003.

Table 2.3 Characteristics of Health Professionals Survey respondents

Characteristic	% (N=53)
Age	
24–34	26
35–44	53
45–64	21
Sex	
Male	43
Female	57
Primary profession	
Medical officer	28
Gynecologist	21
Nurse/midwife	34
Policymaker advisor	13
Other*	4

*Includes researcher and public health specialist. Source: Health Professionals Survey, Uganda, 2003.

Table 2.4 Characteristics of professional experience of Health Professionals Survey

Characteristic	% (N=53)
Primary sector	
Private sector/NGO	42
Public sector	57
Other sector (UN organization/WHO)	2
Duration of experience (in years)	
1–5	21
6–11	34
12–19	32
20–33	13
Primary area of work	
Urban	72
Rural	28
Rural work experience for ≥ 6 months	52
Sources of knowledge of abortion	
Work in public health facility	62
Work in private clinic	40
Work outside medical setting*	26

*Includes research; policymaking and advocacy; counseling; legal work; contact through colleagues; media and international meetings. Notes: NGO=Nongovernmental organization. WHO=World Health Organization. Source: Health Professionals Survey, Uganda, 2003.

Table 2.5 Characteristics of Health Facilities Survey respondents, by type of facility and ownership

Characteristics	Type				Ownership		Total (N=313)
	Hospital (N=93)	Health Center IV (N=58)	Health Center III (N=122)	Private Midwife (N=40)	Government (N=204)	Private/NGO (N=109)	
PERCENTAGES							
Sex							
Male	32	24	29	8	28	24	26
Female	68	76	71	93	73	76	74
Age							
20–29	25	29	29	8	23	28	25
30–39	48	38	30	8	40	22	34
40–49	20	28	28	50	28	29	29
50–80	7	5	13	35	8	20	13
Profession							
Gynecologist	7	2	0	0	2	3	2
Medical officer	27	9	1	0	7	16	10
Nurse/midwife	64	79	63	95	69	72	70
Clinical officer	2	11	21	0	8	5	11
Other*	1	0	16	5	13	6	7
Years of work experience							
1–5	41	41	36	5	36	32	35
6–12	26	21	26	10	25	19	23
13–20	19	16	12	13	17	11	15
21–53	14	22	26	73	23	38	28
AVERAGES							
Age	36	36	37	48	37	40	38
Years of work experience	10	11	13	26	12	16	13

*Includes nursing assistant, nursing aid and records assistant. Notes: 313 health facilities were interviewed. Percentages are based on column Ns. Source: Health Facilities Survey, Uganda, 2003.

Table 2.6 Characteristics of health facilities sampled

Characteristics	Type				Ownership		Total (N=313)
	Hospital (N=93)	Health Center IV (N=58)	Health Center III (N=122)	Private Midwife (N=40)	Government (N=204)	Private/NGO (N=109)	
PERCENTAGES							
Type of subfacilities							
Operating room	91	28	1	na	30	38	33
Outpatient department	98	100	96	65	98	85	93
Inpatient services	96	93	78	60	83	84	84
Separate evacuation room	57	9	3	5	17	27	20
Maternity ward	99	97	81	98	90	95	91
Drugstore	97	97	90	50	92	81	88
Laboratory	96	86	55	20	68	70	68
Other*	58	35	20	15	33	34	33
Number of beds							
0	1	na	5	na	3	1	2
1–9	na	10	37	98	21	44	29
10–29	na	43	48	3	35	12	27
30–99	13	41	10	na	16	14	15
100–1,200	86	5	na	na	25	30	26
Type of services provided							
Specialized obstetrician/gynecologist	41	2	5	na	12	19	14
Specialized other†	39	14	7	3	17	17	17
Nonspecialized	74	98	100	98	94	88	92
Other‡	5	7	7	3	8	3	6
AVERAGES							
Number of beds	168	39	14	3	62	67	64
Deliveries per month	133	36	14	9	62	40	54

*Includes X-ray department, dental clinic and counselling room. †Includes surgery, ophthalmology and pediatrics. ‡Includes outreach program, community health and referrals. Notes: 313 health facilities were interviewed. Percentages are based on column Ns. Source: Health Facilities Survey, Uganda, 2003.

Chapter 3

Characteristics and Conditions of Abortion Service Provision

This chapter presents a description of the profile of women who seek abortion, as well as the various types of abortion services women use based on their economic status and area of residence (urban and rural). Included in this chapter are descriptions of the methods commonly used to induce abortion, the types of providers women typically go to and the cost of having an abortion. The information presented in this chapter is based on the perceptions of health professionals who are knowledgeable about abortion provision in the country and are considered to be experts in the field because of their professional experience in postabortion care within Uganda.

Profile of women seeking abortion

Health Professionals Survey (HPS) participants were asked to give their opinion on what characteristics are most common among those Ugandan women who decide to terminate their unwanted pregnancies. Characteristics that were asked about included age, marital status, years of education, parity and area of residence. In sum, health professionals consider that the typical woman who seeks an abortion in Uganda is between the ages of 15 and 19 years old, has a secondary education, lives in an urban area, has never been married (or is single), and has no children (Table 3.1). Close to 60% reported that the typical female seeking an abortion is primarily 15–19 years old, while one-third reported she is 20–24 years old. Three out of five survey participants believed the typical woman seeking an abortion has a secondary education, while one out of five suggested she has a primary education. About nine in 10 respondents viewed her as an urban resident and as mostly single or never-married, and nearly 70% believed she does not have any children.

In the Health Facilities Survey (HFS), the respondents gave the same profile for the typical woman who seeks treatment for abortion complications (Table 3.1). She is 15–19 years old (61%), has a secondary level of education (75%), is single or has never been married (83%),

lives in an urban area (64%) and has no children (70%).

These results are in line with some research on women hospitalized for abortion complications in the 1980s. According to studies conducted in 1984 and 1983–1987 in Uganda, the women who were treated at Mulago Hospital, Kampala, were most commonly young (15–19), unmarried, childless and in school.¹²

However, other studies carried out in the 1990s show that the average characteristics of women seeking abortion in Uganda are somewhat different from those identified by the HPS and HFS participants. In a 1994 study at four hospitals in Uganda, the mean age among patients who were treated for abortion complications ranged from age 23 to 28, and in three out of the four hospitals, the mean patient parity was two children.¹³ It is possible that the health professionals interviewed in the HPS are influenced by the characteristics of the most visible group of women who are hospitalized after obtaining an abortion, and the young, unmarried, childless may be the most visible subgroup of women who are hospitalized after seeking an abortion.

In addition, studies on the reasons women in Uganda give for seeking to end a pregnancy suggest that a broader cross-section of women typically resort to abortion than suggested by respondents to the two surveys.¹⁴ These studies have shown that women in Uganda try to end a pregnancy for many reasons, such as having too many children already, living in poverty, having children who are too close in age, being unmarried, having conceived at the wrong time, being in poor health or having become pregnant as a result of rape or incest. Thus, younger and older women in Uganda, unmarried as well as married, take serious steps to end an unwanted pregnancy by abortion.

Methods of abortion

HPS participants were asked to identify methods used to induce abortion, separately for urban and rural areas (Table 3.2). Nearly all (96%) respondents reported that dilation and curettage is used in urban areas. Vacuum

aspiration, oral hormones and the insertion of solid objects into the vagina were also mentioned as methods used to induce abortion in urban areas by three-quarters of those surveyed. More than half believed women living in urban areas rely on traditional methods, such as drinking herbal teas or vaginally inserting herbs and solutions. The use of injectables and saline instillation were identified by more than one-third of the respondents, and other methods (e.g., taking antimalaria drugs, drinking bleach or inserting bleach vaginally, and tying the stomach) were mentioned by fewer than one-third of HPS respondents as methods used in urban areas.

HPS respondents believed that less safe methods are more likely to be used to induce abortion in rural areas than in urban areas. Almost all of the study participants believed herbs and solid objects (e.g., sticks and hangers) are used to induce abortion in rural areas. Dilation and curettage and oral hormones were also mentioned as being used in rural areas by more than half of those surveyed. Almost half (47%) believed women in rural areas take substances such as antimalaria medication, detergent and gasoline orally as a means to induce abortion. Only one out of four reported the use of vacuum aspiration in rural areas. Fewer than one in 10 mentioned the use of saline instillation, injectables, vaginal insertion of hormones or tying of the stomach as methods used in rural areas.

Health professionals were also asked which methods were most commonly used by physicians, non-physicians and women themselves, separately for urban and rural areas. As expected, the respondents believed physicians were using different methods from those used by nonphysicians (Table 3.3). Dilation and curettage was believed to be the method most commonly used by physicians in urban and rural areas, cited by 76% and 65% of respondents respectively. Vacuum aspiration was another method believed to be commonly used by physicians, although more so in urban areas (mentioned by almost one in five respondents) than in rural areas (mentioned by approximately one in 11 respondents).

In contrast, nearly 30% of the respondents cited hormonal drugs as the most commonly used method to induce abortion in urban areas. Over one-quarter suggested that nonphysicians favored herbs and sharp objects in rural areas. The rubber catheter was also cited as a common technique used by nonphysicians in both urban (mentioned by one-fourth of respondents) and rural areas (mentioned by almost one in five respondents).

According to the HPS respondents, women themselves are likely to use herbs to induce abortion: Two-

thirds believed women living in rural areas commonly use herbs, and almost two-fifths suggested urban residents do so. Two particular herbs, enanda and oluwooko—names in the local language Luganda—were mentioned by at least one in five respondents as commonly used by women in both urban and rural areas. Hormonal drugs were also mentioned as commonly used by women in urban areas (over one-fifth of respondents); however, no one mentioned them as a favored method by women in rural areas. This is probably due to the lack of access to hormonal drugs in rural areas.

Abortion providers

Information on the types of providers women go to when seeking an induced abortion was ascertained from two questions. The first question asked about the frequency of use of nine different potential providers by women when seeking to abort. Respondents were asked to identify use of each provider according to three different levels—commonly, sometimes or never. Abortion providers were classified into nine categories: doctor in a government health facility; doctor in a private health facility or maternity home; doctor in a private practice; clinical officer; nurse or midwife; traditional healer; other lay practitioner (e.g., birth attendant); pharmacist or dispenser; and the woman herself (when an abortion is self-induced). The second question asked respondents to estimate the proportion of induced abortions performed by each type of provider (with a distribution summing up to 100%). However, for this question a simpler classification of five groups was used for abortion providers: physician; clinical officer; nurse or midwife; traditional provider (healer, herbalist, birth attendant or other lay practitioner); pharmacist or dispenser; and the woman herself.

Since a woman's place of residence and relative affluence are important factors that may influence the choice of an abortion provider, respondents were asked both these questions for four different subgroups of women (urban poor, urban nonpoor, rural poor and rural nonpoor).

Common providers

As expected, health professionals believe that nonpoor women commonly go to “safe” providers, such as a physician, clinical officer, nurse or midwife, for an abortion (Table 3.4). According to most respondents (85%), relatively well-off women in urban areas typically seek a physician in private practice for an abortion. Slightly over two out of five mentioned this provider as the common choice among relatively af-

fluent women in rural areas. Nonpoor women were also thought to commonly go to physicians in government health facilities and in private facilities in both urban and rural areas. However, nonpoor women living in rural areas were considered more likely to go to a nurse or midwife (mentioned by two in five) than to a physician at a government health facility (one in four) or in private practice (one in five).

While health professionals suggested that relatively well-off women in urban areas never or rarely go to less safe providers, such as a traditional healer or other lay practitioner (e.g., birth attendant or herbalist), one-fourth thought it was common for relatively affluent women residing in rural areas to go to a traditional healer for inducing abortion, while one in six mentioned that these women went to other lay practitioners. Interestingly, over 10% of respondents believed that it was common practice for nonpoor women living in urban areas to try to self-induce an abortion. An even higher percentage (27%) believed this was common also among nonpoor rural women.

Almost 70% of the health professional respondents believed poor women living in rural areas commonly choose to induce an abortion themselves. Traditional healers were perceived to be used by poor rural women by two out of three respondents. About two in five suggested that a nurse or midwife was often used by poor urban women who were seeking an abortion. As expected, physicians were reported as rarely used by poor women in rural areas.

Percent distribution of abortions performed, according to the type of provider

As might be expected, the majority of abortions among relatively well-off women are believed to be performed by a safe provider, such as a physician, clinical officer, nurse or midwife (three-fourths in urban areas and over a half in rural areas—Table 3.5). Physicians are thought to perform half of all abortions among relatively well-off women living in urban areas and over a quarter in rural areas. Second to trained physicians, nonpoor women are also thought to rely on clinical officers, nurses and midwives for abortion services: One-fourth of abortions among relatively well-off women in urban areas are thought to be procured by such providers—this proportion is even greater in rural areas (one-third).

Some nonpoor women are perceived to also rely on less safe providers (e.g., traditional healers or lay practitioners) for an abortion or to self-induce, particularly in rural areas. Health professionals reported that they thought one in five abortions among nonpoor women

in rural areas were performed by a traditional healer or lay practitioner, while one in 10 were thought to be self-induced.

Interestingly, the majority of abortions among poor women living in urban areas are believed to be performed by relatively safe categories of providers. One-quarter of induced abortions among poor women in urban centers are thought to be performed by a physician, and approximately the same proportion are thought to be performed by a nurse or midwife (22%), compared with only 18% by traditional healers or lay practitioners, suggesting that in urban areas, poor women may not necessarily have to rely primarily on traditional providers, considering physicians and midwives are more likely to be located in urban areas than in rural areas.

Poor women in rural areas are thought to be the least likely to go to a trained physician; only 11% of induced abortions among this subgroup of women are thought to be performed by physicians. Poor women in rural areas are believed to mainly rely on traditional healers and lay practitioners for procuring an abortion; over a quarter of abortions among this group of women are thought to be performed by traditional healers and lay practitioners. Following these types of providers, poor rural women are perceived to seek abortion services from nurses or midwives, with one in five abortions thought to be performed by such providers among this subgroup. Almost one-fifth of induced abortions, the highest proportion of all subgroups, are believed to be self-induced among poor rural women.

Costs of induced abortion

Health professionals, as may be expected, report that it costs more to obtain an abortion from a physician than from a traditional provider in Uganda (Table 3.6). Respondents estimate that the average cost of an abortion for poor women living in urban areas ranges from 11,538 shillings (US\$7.21) for drugs from a pharmacist to about 102,000 shillings (US\$63.75) for an abortion performed by a trained physician in a private health facility.

Nonpoor women are believed to pay more for abortion services than poor women, regardless of the type of provider they go to. Relatively well-off women residing in urban areas are thought to pay two-thirds more for abortion services from a doctor in private practice (131,354 shillings, or US\$82.10) than poor women (79,324 shillings, or US\$49.58) residing in the same area. Relatively affluent women in urban areas are thought to pay twice as much for drugs from a pharma-

cist for inducing an abortion as poor urban women. Interestingly, nonpoor women residing in urban centers are also expected to pay twice as much for an abortion as nonpoor women living in rural areas. The estimated cost of an abortion from a physician in private practice for a relatively well-off woman living in a rural area is around 62,917 shillings (US\$39.32), compared with 131,354 shillings (US\$82.10) for her urban counterpart.

The patterns of costs and their differences between nonpoor women and poor women are similar in rural and urban areas: Regardless of the type of health provider, abortion services cost more for nonpoor women than poor women. In rural areas, cost for an abortion is not minimal even when an abortion is performed by a traditional healer, a nurse or a midwife. For a poor woman living in a rural area, it is believed that she pays an average of 22,279 shillings (US\$14) for an abortion from a midwife and not much less for an abortion from a traditional healer (US\$12). For nonpoor rural women, the cost of an abortion from a traditional healer or a nurse or midwife is thought to be the same at 30,465 shillings (US\$19). The US\$5–8 thought to be necessary for medicines from a pharmacist for an abortion can present a financial burden to women living in rural areas of the country.

Conclusion

In Uganda, the majority (85%) of the population live in rural areas where access to basic health services can be difficult. For instance, the estimated median distance from a woman's home to the nearest health facility offering family planning services is 12 miles, too great a distance for women whose primary mode of transportation is walking. In rural areas, only 39% of the population lives within three miles of a health facility offering family planning services, compared with 99% in urban areas.¹⁵ Given such barriers, including economic barriers, it is no surprise that poor rural women are thought to be less likely to seek abortion services from health providers located in health facilities, such as a physician or a nurse, and are more likely to self-induce or seek abortion from a traditional healer. Conversely, health professional respondents believe nonpoor women (both rural and urban) commonly go to relatively safe providers, such as doctors, nurses and clinical officers, for an abortion. Poor women in urban areas, however, were thought to commonly seek out a variety of providers, both safe and less safe, including doctors, nurses and traditional healers, and to self-induce.

According to the respondents surveyed, 22% of abortions among nonpoor women in urban areas and

38% among nonpoor rural women were thought to be induced by a less safe provider, such as a traditional healer, a lay practitioner, a pharmacist or the woman herself. Among poor women in rural areas, this percentage was believed to be as high as 51%. In general, poor women were more likely to rely on a nurse or a midwife for an abortion than were nonpoor women, regardless of where they live: Some 20–22% of abortions among poor women living in urban and rural areas were thought to be performed by a nurse or midwife, compared with 13–16% among nonpoor women.

There is a strong consensus among health professional respondents about the most common methods used to induce abortions in Uganda. Almost all respondents cited dilation and curettage as the most common method used in urban areas, and herbs and solid objects as the most common methods in rural areas. The use of herbs and solid objects as the most common methods used to procure an abortion in rural areas presents a serious risk of abortion complications among this subgroup of women.

The cost of an abortion, according to respondents, varies widely based on the type of provider and a woman's poverty status and area of residence. An induced abortion performed by skilled providers in the private sector is believed to cost upward of twice as much as one performed by a less skilled provider. Abortions are also thought to be more expensive for nonpoor women and women who live in urban areas than for their poor and urban resident counterparts, regardless of the type of provider, suggesting that the cost is directly related to the woman's ability to pay.

Table 3.1 Percentage distribution of health professional respondents by perceptions of characteristics of women who obtain abortions; and percentage distribution of health facility respondents by perceptions of characteristics of women who seek treatment for abortion complications

Characteristics	Abortion (N=53)	Abortion complications (N=313)
Age-group		
15–19	58	61
20–24	34	25
25–34	8	13
Level of education		
No education	4	4
Primary	19	19
Secondary	62	75
Postsecondary	14	2
Place of residence		
Urban	86	64
Rural	14	36
Marital status		
Married or living together	6	15
Single or never-married	94	83
Divorced or separated	0	1
Widowed	0	0
Number of living children		
0	69	70
1–2	14	15
3–4	10	10
≥ 5	8	5
Total	100	100

Sources: Health Professionals Survey, Uganda, 2003; and Health Facilities Survey, Uganda, 2003.

Table 3.2 Percentage of health professional respondents who reported use of specific methods for abortion in urban and rural areas

Method	Urban (N=53)	Rural (N=53)
Vacuum aspiration	72	25
Dilation and curettage	96	65
Saline instillation	34	4
Oral induction—hormonal	83	61
Oral induction—herbal tea	72	92
Oral induction—other*	26	47
Injectable	50	15
Vaginal—hormonal	56	9
Vaginal—herb or solution	67	94
Vaginal—catheter	72	40
Vaginal—other solid object†	82	92
Vaginal—other‡	4	6
Other means§	6	6

*Includes antimalaria drugs (chloroquine, quinine); aspirin; overdosing on pills; detergent; bleach; gasoline. †Includes sticks and hangers. ‡Includes bleach and artificial rupturing of the membrane. §Includes spiritual methods; tying of the stomach; and introduction of an IUD. Notes: In most instances, the response rate was 99%–100%; however, for use of injectables in rural areas, for use of injectables in urban areas and for vaginal use of catheter in rural areas, the response rate was 74%–83%. Source: Health Professionals Survey, Uganda, 2003.

Table 3.3 Percentage of health professional respondents who reported specific methods for abortion as most commonly used by different provider types in urban and rural areas

Provider type and method	Urban (N=53)	Rural (N=53)
Physician		
Dilation and curettage	76	65
Vacuum aspiration	18	8
Rupture of membrane	6	14
Nonphysician		
Catheter	25	19
Dilation and curettage/vacuum aspiration	21	14
Hormonal drugs	29	21
Other*	15	27
Women herself		
Enanda/Luwoko†	20	24
Herbs	38	67
Hormonal drugs	22	0
Other‡	12	8

*Includes herbs, sharp objects and rupture of the membrane. †These are the two most common herbs used. Between nine and eleven respondents reported the use of Enanda as the most common method used by the woman herself. ‡Includes overdose of chloroquine and use of foreign bodies, e.g., sticks. Notes: In all instances, response rate was 99%–100%. Source: Health Professionals Survey, Uganda, 2003.

Table 3.4 Percentage of health professional respondents, by perception of how commonly various abortion provider types are used, according to women's economic status and place of residence

Provider type	Nonpoor						Poor					
	Urban			Rural			Urban			Rural		
	Commonly	Sometimes	Never	Commonly	Sometimes	Never	Commonly	Sometimes	Never	Commonly	Sometimes	Never
Doctor in government health facility	45	34	21	28	35	28	27	21	52	8	12	75
Doctor in private health facility/maternity home	45	23	30	20	26	45	8	21	72	4	21	67
Doctor in private practice/clinic/home	85	15	0	42	34	14	42	36	23	10	31	52
Clinical officer	18	40	34	28	45	14	29	47	16	28	35	24
Nurse/midwife	17	49	32	40	35	17	43	34	19	35	42	15
Traditional healer	4	28	62	25	40	25	37	40	17	64	21	6
Other lay practitioner	2	23	71	16	31	41	27	35	39	39	29	23
Pharmacist	12	48	39	14	45	31	14	48	35	10	37	41
Woman herself	12	37	52	27	37	27	42	39	19	69	17	4

Note: A total of 53 professionals responded to the survey. The response rate to particular questions ranges from 98% to 100%. Source: Health Professionals Survey, Uganda, 2003.

Table 3.5 Percentage of abortions that health professional respondents believe are performed by each type of provider, according to women's economic status and place of residence

	Non-poor		Poor	
	Urban	Rural	Urban	Rural
Doctor	52	29	25	12
Clinical Officer	13	18	17	17
Nurse/midwife	13	16	22	20
Traditional healer/lay practitioner	9	20	18	26
Pharmacist/dispenser/drug store	7	8	6	7
Woman herself	6	10	12	18

Notes: In most instances, 94–100% answered; however, the response rate for questions about providers used by women living in rural areas was 86–87%. Source: Health Professionals Survey, Uganda 2003.

Table 3.6 Health professional respondents' estimates of the cost, in US\$, of a first trimester abortion, by type of provider, according to women's economic status and place of residence

Provider type	Non-poor		Poor	
	Urban	Rural	Urban	Rural
Doctor in government health facility	\$53	\$30	\$42	\$25
Doctor in private health facility	88	37	64	27
Doctor in private practice	82	39	50	25
Clinical officer	41	24	27	19
Nurse/midwife	31	19	20	14
Traditional healer	34	19	17	12
Other lay practitioner	24	14	16	12
Pharmacist/dispenser/drugstore	14	8	7	5
Woman herself	9	6	4	4

Notes: Only those respondents who rated providers as being used commonly or used sometimes by women seeking an abortion were asked to provide a price range. In most instances, 27–38 answered; however, N=14–26 for clinical officer, traditional healer, pharmacist and the woman herself among nonpoor urban women; doctor in a private health facility and pharmacist among nonpoor rural women; doctor in a government health facility among poor urban women; and doctor in a private practice, clinical officer and pharmacist among poor rural women. N=10–13 for other lay provider among nonpoor urban women; doctor in a private health facility among poor urban women; and a doctor in a government health facility and doctor in a private health facility among poor rural women. N=48 for doctor in private practice among nonpoor urban women. The price is the average of the prices reported by respondents. Source: Health Professionals Survey, Uganda 2003.

Chapter 4

Induced Abortion, Morbidity and Postabortion Care

Given women's reliance on untrained providers when seeking an abortion and the use of unsafe methods by some providers to perform an abortion, complications resulting from the procedure are a real concern, particularly among women living in rural areas of the country, where access to health services is often limited. This chapter presents the opinions of health professionals on postabortion complications in Uganda, including the type of complications that typically result from an induced or spontaneous abortion, the likelihood that women will experience complications, the likelihood that women who experience complications will seek treatment and where this care is sought. As mentioned earlier, the views of the health professionals are based on their professional knowledge and expertise in postabortion care.

Types of abortion complications

Health professional respondents were asked if each of the selected possible complications presented to them were common or not common in Uganda. Over three-quarters cited sepsis or septic shock and excessive blood loss as common abortion complications (Table 4.1). About half believed damage to the uterus and infertility are also commonly occurring complications. A third of those surveyed identified death as a common result from obtaining an abortion in Uganda. Although the questionnaire asked respondents to identify common complications that result from either a spontaneous or an induced abortion, the responses suggest that respondents were considering primarily induced abortions when responding to the question.

These findings are consistent with previous research in Uganda. In Bazira's analysis of abortion cases in Mulago Hospital between 1983 and 1987, the leading complications resulting from induced abortion were sepsis and hemorrhage, comprising 60% of cases, while genital tract trauma occurred among 15.3% of abortion cases.¹⁶ According to a 1994 study at four hospitals in Uganda, the most common complications re-

ported were hemorrhage, infection (sepsis), uterine perforation and cervical injury, in that order.¹⁷

Probability of complications

The characteristics or circumstances of a woman are likely to influence the severity of the complications she experiences, and to affect how well she does physically, even given the same medical care. This means that the probability of complications may be greater for a poor woman than for a nonpoor woman, even when the provider is the same (e.g., a medical doctor). This is not because medical providers vary the care they offer depending on the socioeconomic conditions of the patient (even though in some cases this may happen). Instead, we expect that a woman's economic circumstances will have certain consequences that can lead to different health outcomes, regardless of the quality of medical care. For instance, poor women may tend to wait longer or to delay the decision to have an abortion (for many reasons: they do not know where to go, they need time to get the money to afford the services of an abortion provider; they may be afraid of getting the abortion, etc.). Having an abortion at a later gestation in and of itself increases the risk of complications, regardless of the skill of the person providing an abortion.

Furthermore, given their lower level of education, poor women may not be aware of, or understand the need for, the precautions they are advised to follow after the abortion (rest, avoid heavy work, hygiene, avoid sex for a specific time period, and so on). Even if they are aware of such precautions, poor women may not be able to follow the advice offered, because, for example, they have to continue most of their regular activities or the water supply may not allow them to carry out the advice regarding hygiene. Also, poor women may not have the economic resources to buy antibiotics or medicines prescribed by the provider that would speed their recovery. In addition, poor women may have poorer overall health and nutrition, regardless of the abortion (e.g., they are more likely to be anemic);

they probably also have higher levels of other medical conditions, such as hypertension; and their general health status affects how well the medical care they receive helps them (e.g., speed of recovery). These conditions for nonpoor women are generally the opposite or less evident; consequently, nonpoor women are less likely to have complications.

Health Professionals Survey (HPS) participants were asked to estimate the proportion of women who develop a medical complication according to the different types of providers who perform the abortion (Table 4.2). Since relative affluence may affect the quality of service that is provided even by the same provider, and consequently may influence the likelihood of experiencing abortion complications, this question was asked for the four main subgroups of women: nonpoor urban and rural women, and poor urban and rural women. The specific question asked was “Out of 10 (poor women in urban areas) who have an abortion performed by type of provider, about how many would experience a medical complication that should receive medical treatment?”

According to the HPS respondents, the highest risk of medical complications occurs if an abortion is self-induced, induced by a traditional healer or induced by a pharmacist, in that order: At least half of women using these means, regardless of their place of residence or poverty status, were expected to have a complication. If an abortion was performed by a nurse, midwife or clinical officer, the proportion of women expected to have a complication was still quite high (ranging from one-third to almost one-half, depending on the subgroup of women). Even with a physician, risk is also not minimal; as many as one-fifth and, in some cases, almost a third of rural poor women are thought to experience complications when obtaining an abortion from a physician.

Any procedure has a risk of complications even when it is performed by a physician. Risk depends on skillfulness of the provider, the clandestine circumstances under which abortion is practiced, the gestational age, the patient’s health condition and the ability of the patient to follow her provider’s instructions during the postabortion recovery period. Furthermore, the majority (83%) of the health professional respondents provide medical care to those women who have suffered complications; therefore, they may perceive the problem of abortion complications more than those who may not be directly involved.

Health Facilities Survey (HFS) respondents indicated a similar pattern of risk for abortion complications

for nonpoor women in urban and rural areas by type of provider (data not shown).

Probability of obtaining treatment for postabortion complications

For a number of reasons, not all women who have abortion complications seek treatment from a health facility or are able to reach a hospital. Some women may live too far from urban centers, where most health care services exist, some may not have the economic resources to cover transportation costs, others may be afraid of mistreatment by health care providers when requesting medical care, some may not be allowed by their husbands or partners to seek treatment, others may obtain care from a pharmacist or traditional provider, and some may even try to treat themselves. In addition, not all women who seek treatment at a medical facility actually obtain medical care. For instance, women may not be able to afford the costs of the available health services, women may not meet the service requirements at a particular facility, or the facility itself may lack the appropriate services, personnel or technologies necessary to treat a woman when she presents with abortion complications.

HPS respondents were asked to estimate the proportion of women who would obtain medical treatment from a trained person in a health facility among all who experience abortion complications. Since the likelihood of a woman obtaining treatment from a health facility is dependent upon her relative affluence and whether she lives in a rural or urban area, health professionals were again asked to provide estimates for four different subgroups of women—nonpoor urban women, nonpoor rural women, poor urban women and poor rural women. Participants in the HFS were also asked to provide similar estimates, but only according to the poverty status of women: poor and nonpoor.

According to HPS respondents, as shown in Figure 4.1, among women who experience medical complications from induced abortion, about 83% of those who are nonpoor and who live in urban areas, and 70% of nonpoor rural women, are estimated to obtain treatment at a health facility, compared with only 62% of urban poor women and 51% of rural poor women.

Although we relied upon the HPS as the main source of information on this topic, we did ask a similar question to the HFS respondents, and the results were consistent with the HPS findings (not shown), providing some support to the quality of the data obtained in both surveys. The rather low proportion of poor women who are expected to obtain treatment at a

health facility when having abortion complications raises serious concerns about the health outcomes of this group of women, particularly in rural areas.

Source of postabortion care

Health professionals were also asked to identify the type of providers these four subgroups of women would (commonly, sometimes or never) go to for treatment when suffering from abortion complications. Table 4.3 shows the sources of postabortion care according to women's economic status and place of residence. In general, respondents perceived that nonpoor women, regardless of their place of residence, are more likely to seek doctors in private practice or in private clinics, while poor women are more likely to seek doctors in government health facilities or other trained personnel (nurses and midwives), in government facilities or in private practice.

Over 80% of health professionals surveyed believe nonpoor women in urban areas would commonly go to a physician in private practice for treatment of abortion complications, while 60% expected that nonpoor women in rural areas would commonly rely on a physician in a government health facility. Some relatively affluent women are also thought to seek treatment from a clinical officer, nurse, midwife or even pharmacist to treat abortion complications (between one in five and one in three reported these as common sources of care for nonpoor women in rural areas). Nonpoor women's reliance on providers other than physicians may be due to the reputation these particular health professionals have in treating ailments and complications in the community, as well as their proximity to women compared with hospitals where physicians are located.

According to HPS participants, poor women in both urban and rural areas are thought to mainly seek care from a doctor in a government facility or a nurse or midwife for postabortion complications. Some poor women in urban areas are perceived to obtain care from doctors in private practice, but this is much less common among poor rural women. Poor women in rural areas are believed to rely on traditional healers and lay providers more commonly than their urban counterparts (20–28% versus 10%). A substantial proportion of all groups, poor and nonpoor, urban and rural, are believed to commonly seek care from pharmacists (14–19%). This may be due to women's general reliance on pharmacists for their medical management, the lack of access of other sources of care, particularly for poor women, and the severity of the complications experienced. Pharmacists are not necessarily relied

upon for surgical procedures such as evacuation and curettage, which are used to treat some of the more severe and common complications that may result from an unsafe induced abortion.

Although there is little information from past research on where women actually seek treatment for their postabortion complications according to their economic status and area of residence, the 1994 survey of four hospitals (three located in urban centers and one in a rural area) in Uganda, does provide some information about health providers' opinions about whether or not women seek care at a hospital, although the opinions are somewhat split. Forty-one percent of health professionals interviewed believed that the majority of women who experienced complications following an abortion sought treatment at a hospital, while 47% believed the majority of women did not.¹⁸

Number of postabortion patients treated

Table 4.4 presents information from the HFS participants on the type of facilities that offer postabortion care, as well as the average number of abortion cases treated annually in Uganda, as inpatients and outpatients, among those health facilities that provide such care. Abortion complication patients include women who have experienced complications resulting from a spontaneous abortion as well as an induced abortion.

Almost three-fifths (57%) of the sampled facilities in Uganda offered postabortion care in both an inpatient and an outpatient setting. This proportion was higher among hospitals and health centers level IV, and at public and nongovernmental organization services, than among smaller and private providers. About one-third of health center level III facilities offered abortion care on an outpatient basis only, as did more than half of private midwives. In general, hospitals are better equipped to treat the more severe complication cases than are private midwives.

On average, 159 postabortion patients were treated annually in each facility that offered abortion care in Uganda. Facilities that offered inpatient care treated an average of 109 patients annually, and those that offered outpatient care treated 88 outpatients for postabortion complications per year. As may be expected, hospitals had the highest caseload of abortion complication patients, each treating an average of 360 patients annually (followed by health centers level IV, with 95 patients per year, and health centers level III and private midwives, each treating around 50 patients annually). Nongovernmental (nonprofit) facilities and public facilities had a higher caseload of abortion complications, with

annual averages of 201 and 168 patients, respectively, than did for-profit facilities, with an average of 54 cases a year.

Based on these figures, an estimated 109,926 women in Uganda obtain postabortion care for either induced or spontaneous pregnancy loss in formal health facilities each year. This translates to approximately 18 per 1,000 women aged 15–49 annually receiving such care. Of these, almost 60% are treated on an outpatient basis (Table 4.5). Most abortion complication patients are treated in government-owned facilities. About two-thirds of patients are treated in public facilities, compared with one-fifth who are treated in private not-for-profit facilities and one-fourth who are treated in for-profit facilities. In turn, public hospitals treat a higher number of abortion complication patients on an inpatient basis, while public health centers level III and private midwives serve a higher number of abortion complication patients on an outpatient basis.

These results suggest that the most serious abortion complications—those that require hospitalization—are referred to public hospitals, while the less serious complications are handled by the least specialized facilities, such as health centers level III and private midwives.

The greatest number of abortion complication patients are treated in the Central region (42,929 out of the total 109,926 patients nationally, or 39%—Table 4.6). The absolute numbers of abortion patients treated in a formal health setting in the three other regions are similar to each other: 25,544 cases in the Eastern region, 20,941 in the Western region and 20,512 in the Northern region.

Procedures used for treatment of postabortion complications

Almost all government hospitals and 90% of private for-profit and not-for-profit facilities use evacuation with curettage for treating abortion complication patients (Table 4.7). Seventy percent of hospitals, regardless of their ownership, use dilation and curettage for uterine evacuation. Antibiotics and oxytocics follow in frequency of use, regardless of the facility's type and ownership.

Blood transfusion is another common procedure, used for postabortion care at 88% of the government hospitals and 73% of the private hospitals in the country. However, it is not used for postabortion care at lower level government health facilities such as health centers levels IV and III (1–2%). The lack of use of blood transfusions at these public facilities may be a reflection of the low blood supply at such health centers

and provides an incentive to reduce the level of abortion complications in the country.

More than 60% of facilities that provide postabortion care use anesthesia when administering dilation and curettage, while 27% use anesthesia during an evacuation with a curette (Table 4.8). In turn, more than half of facilities provide analgesia while using either dilation and curettage or evacuation with a curette.

Conclusion

The likelihood that women with abortion complications seek treatment from a health facility depends upon their relative affluence and whether they live in a rural or urban area. The rather low proportion of poor rural women who turn to health facilities when they experience complications presents serious concerns about the health outcomes not only of this particular subgroup of women but of others who cannot reach a health facility for care. In addition, the low proportion of facilities using manual vacuum aspiration and anesthesia when performing procedures such as evacuation with a curette or dilation and curettage presents concerns about the quality of reproductive health care currently available for Ugandan women.

Based on the HFS and HPS findings, every day in Uganda, 301 women (12 women per hour) are treated for abortion complications in formal health facilities. Postabortion care presents a burden to health care facilities, particularly government-owned hospitals, and deserves attention from health authorities to implement measures in efforts to decrease the level of abortion complications in the country.

Table 4.1 Percentage of health professional respondents who reported selected complications that result from induced or spontaneous abortion as common

Complication	% (N=53)
Incomplete abortion	28
Excessive loss of blood	79
Infection of the uterus/surrounding area	30
Sepsis/septic shock	77
Damage to vagina/cervix	23
Damage to uterus (e.g., perforation)	53
Damage to gut	9
Other: Sterility/infertility	51
Other: Death	34
Other: Social/psychological problems	30

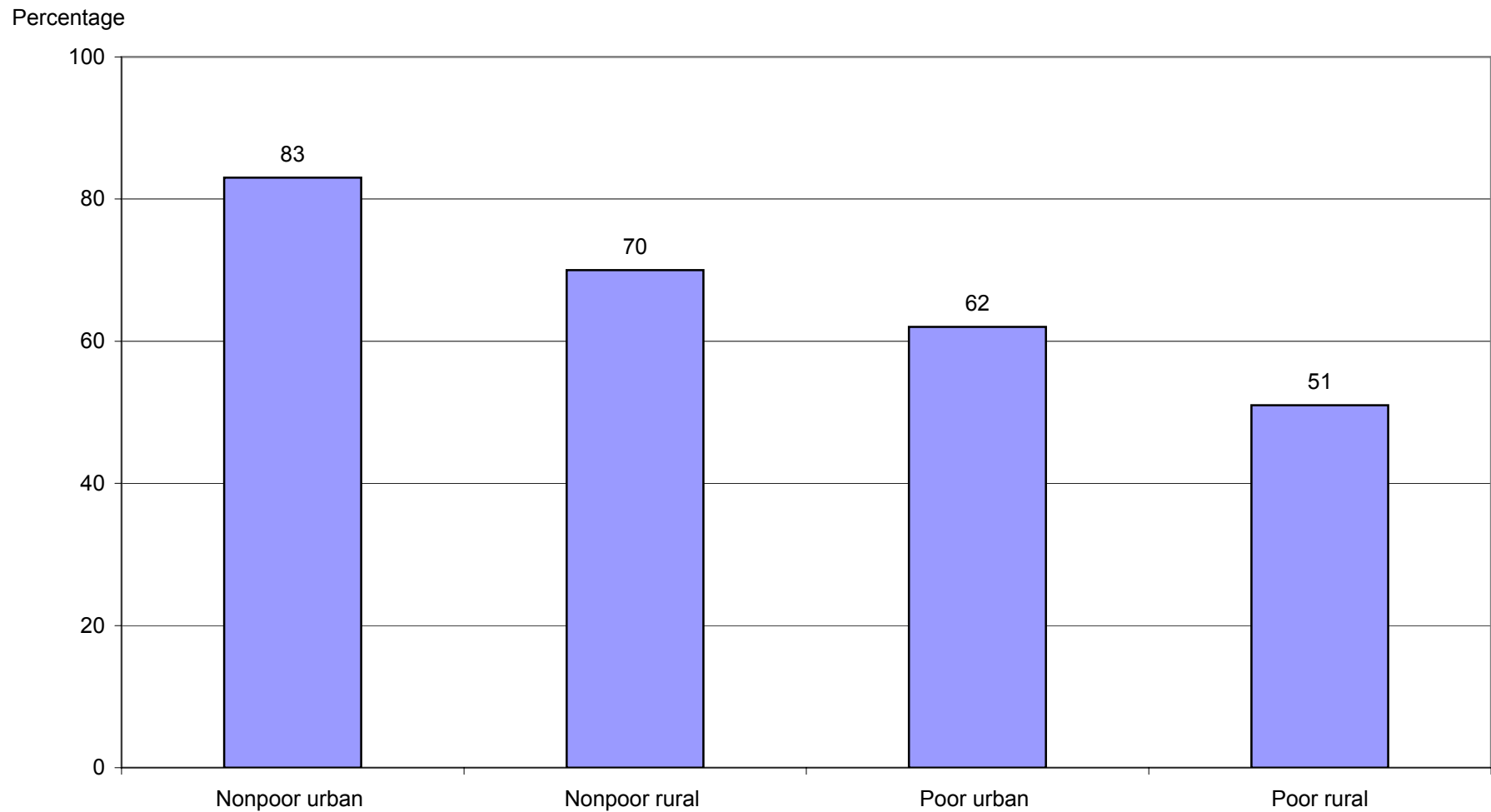
Source: Health Professionals Survey, Uganda, 2003,

Table 4.2 Health professional respondents' estimates of the percentage of women having an abortion who will experience abortion complications, by type of provider, according to women's economic status and place of residence

Provider type	Nonpoor		Poor	
	Urban	Rural	Urban	Rural
Doctor	17	25	23	32
Clinical officer	33	41	41	48
Nurse/midwife	35	38	41	43
Traditional healer/lay practitioner	60	59	68	68
Pharmacist/dispenser/drug store	45	48	51	52
Woman herself	66	65	75	75

Notes: In most instances, 44–50 answered. Source: Health Professionals Survey, Uganda, 2003.

Figure 4.1 Health professional respondents' estimates of the percentage of women with abortion complications likely to be treated in a health facility, by women's economic status and place of residence



Source: Health Professionals Survey, Uganda, 2003.

Table 4.3 Percentage of health professional respondents, by perception of how commonly various postabortion care provider types are used, according to women's economic status and place of residence

Provider type	Nonpoor						Poor					
	Urban			Rural			Urban			Rural		
	Commonly	Sometimes	Rarely	Commonly	Sometimes	Rarely	Commonly	Sometimes	Rarely	Commonly	Sometimes	Rarely
Doctor in government health facility	56	40	4	61	31	2	48	29	23	43	33	18
Doctor in private health facility/maternity h 65	29	29	6	44	42	8	19	45	36	12	28	55
Doctor in private practice/clinic/home	81	15	4	45	47	2	26	45	28	10	35	49
Clinical officer	24	49	26	35	53	6	25	55	18	31	49	14
Nurse/midwife	23	48	29	29	57	8	52	31	17	47	41	6
Traditional healer	0	15	79	8	28	56	10	29	56	28	38	28
Other lay practitioner	0	23	75	8	35	48	10	37	51	20	48	24
Pharmacist	14	46	39	18	49	27	19	56	23	16	51	25

Note: The response rate to particular questions fluctuated between 94% and 100%. Source: Health Professionals Survey, Uganda, 2003.

Table 4.4 Percentage of facilities that offer inpatient and outpatient postabortion care, and average annual number of postabortion patients treated in sampled facilities, by type of facility and ownership

Type of facility and ownership	% that offer abortion care				Average number of cases per facility per year among those that offer such care*			Number of facilities sampled
	Inpatient only	Outpatient Only	Both	Neither	Total	Inpatient	Outpatient	
Total	13	21	57	9	159	109	88	313
Type								
Hospital	24	1	74	1	360	207	203	93
Health center IV	19	10	66	5	95	54	59	58
Health center III	7	31	50	12	51	29	36	122
Private midwife	na	53	25	23	49	44	35	40
Ownership								
Public	12	21	59	8	168	117	90	204
Hospital	17	na	81	2	455	262	234	52
Health center IV	17	11	67	6	76	46	44	54
Health center III	7	37	43	13	52	30	37	98
Private	2	46	34	18	54	39	38	50
Hospital	na	na	100	na	95	35	60	5
Health center IV	100	na	na	na	6	6	na	1
Health center III	na	50	50	na	54	42	33	4
Private midwife	na	53	25	23	49	44	35	40
Nongovernmental organization	27	2	70	2	201	111	128	59
Hospital	36	3	61	na	262	152	178	36
Health center IV	33	na	67	na	440	188	378	3
Health center III	10	na	85	5	50	23	30	20

*Mean of the number reported for the average month and for the past month, multiplied by 12. Note: na=not applicable. Source: Health Facilities Survey, Uganda, 2003.

Table 4.5. Estimated total number of women treated annually for postabortion complications, by type of facility and ownership (weighted results)

Type of facility and ownership	Total	Inpatient	Outpatient
Total	109,926	47,828	62,098
Type			
Hospital	33,986	19,395	14,591
Health center IV	19,449	9,337	10,111
Health center III	37,414	13,695	23,719
Private midwife	19,077	5,400	13,677
Ownership			
Public	62,979	29,189	33,791
Hospital	23,435	13,552	9,883
Health center IV	10,737	5,737	4,999
Health center III	28,808	9,899	18,908
Private	20,745	6,040	14,704
Hospital	474	174	300
Health center IV	18	18	na
Health center III	1,176	448	728
Private midwife	19,077	5,400	13,676
Nongovernmental organization	26,202	12,599	13,603
Hospital	10,077	5,669	4,408
Health center IV	8,694	3,582	5,112
Health center III	7,430	3,348	4,083

Source: Health Facilities Survey, Uganda, 2003.

Table 4.6. Estimated total number of women treated annually for postabortion complications, by type of facility and ownership, according to major region (weighted results)

Type of facility and ownership	Total	Central	Western	Eastern	Northern
Type					
Hospital	33,986	11,430	8,957	7,128	6,471
Health center IV	19,449	11,456	2,311	3,516	2,166
Health center III	37,414	7,830	7,890	9,819	11,875
Private midwife	19,077	12,214	1,782	5,081	na
Ownership					
Public	62,979	17,332	14,173	17,284	14,190
Private	20,745	12,964	2,418	5,249	114
Nongovernmental	26,202	12,634	4,349	3,011	6,208
Total	109,926	42,929	20,941	25,544	20,512

Note: na=not applicable. The private midwives selected from the northern region were unable to be reached for an interview. In addition, private midwives are almost non-existent in the region because of the political instability. Source: Health Facilities Survey, Uganda, 2003.

Table 4.7 Percentage of facilities that use various procedures to treat postabortion complications, by type and ownership of facility

Procedure	Government			Private/ Nongovernmental organization		
	Hospital (N=51)	Health center IV (N=51)	Health center III (N=84)	Hospital (N=41)	Health center III (N=24)	Private midwife (N=31)
Evacuation with a curette	98	24	6	90	26	0
Manual vacuum aspiration (MVA)	49	26	8	32	13	7
Electric vacuum aspiration (EVA)	8	0	1	5	na	0
Evacuation with sponge forceps	59	33	19	46	26	0
Dilation and curettage (D&C)	71	12	1	76	9	0
Blood transfusion	88	2	1	73	4	0
Surgery	63	0	1	59	4	0
Antibiotics	98	94	93	93	96	100
Oxytocics	94	88	75	88	91	97
Manual removal (digital extraction)	12	24	17	7	13	16
Other*	26	33	49	17	29	42

*Includes hematinics, intravenous fluids, referral. Notes: Percentages are based on health facilities that provide treatment for abortion complications. Information from private/nongovernmental health centers level IV is not provided because of too few cases (N<5). Source: Health Facilities Survey, Uganda, 2003.

Table 4.8 Percentage of facilities that use anesthesia, analgesia and intravenous fluids with various procedures for postabortion care management

Procedures	Anesthesia				Analgesia				Intravenous fluids			
	Always		Sometimes		Always		Sometimes		Always		Sometimes	
	%	N	%	N	%	N	%	N	%	N	%	N
Evacuation with a curette	27	30	35	39	52	58	35	39	23	25	73	81
Manual vacuum aspiration (MVA)	3	2	14	9	29	19	46	30	9	6	70	46
Electric vacuum aspiration (EVA)	75	6	0	0	0	0	25	2	75	6	25	2
Evacuation with sponge forceps	10	9	26	24	35	32	34	31	11	10	67	61
Dilation and curettage (D&C)	64	49	13	10	52	40	26	20	31	24	57	44
Surgery	80	47	2	1	48	28	12	7	75	44	9	5

Source: Health Facilities Survey, Uganda, 2003.

Chapter 5

Family Planning, Postabortion Counseling and Opinions About the Law on Abortion

This chapter presents information on family planning and postabortion counseling services for postabortion patients. Information in this chapter was obtained from both the Health Professionals Survey (HPS) and the Health Facilities Survey (HFS). The health professionals were asked about their opinions about family planning, counseling and the abortion law, while the health facility respondents were asked about the current family planning and postabortion services within their facilities. Also included in this chapter are the opinions of health professionals and health facility providers about recommendations for reducing unsafe abortion in Uganda.

Contraceptive services for postabortion patients

Although contraceptive use among women is increasing in Uganda, the level is still low, particularly with the use of modern methods.¹⁹ Lack of contraceptive protection increases the risk of unwanted pregnancies, some of which lead to unsafe abortion. Respondents to the HPS were asked about the type of contraceptive methods they believed women who have obtained an abortion were using, if any, at the time they became pregnant (Table 5.1). Respondents could give multiple answers and reported high expected levels of use of some contraceptive methods: the pill (93%), the condom (45%), injectables (25%) and the IUD (19%). Other methods mentioned included rhythm and breastfeeding (23%).

The perception that many women who become pregnant would have been using such methods seems to be an overestimation on the part of the respondents, and it is possible that the question was misunderstood. According to the 2000 Demographic and Health Survey, a high proportion of Ugandan women of childbearing age do not use any method of contraception: Eighty percent of unmarried sexually active women and 77% of women who are in union are not using a contraceptive. Only 18% of women in union and 44% of unmarried sexually active women use a modern method, such as

tubal ligation, the pill, injectables or condoms, all of which are highly effective at preventing pregnancy. While it is likely that contraceptive users are more motivated than nonusers to prevent an unintended birth, and therefore more likely to seek abortion when they experience an unintended pregnancy, it is nevertheless likely that a higher proportion of abortion patients would have been nonusers than reported by respondents, where only 13% reporting no use.

In Kinoti et al.'s 1994 survey of four hospitals in Uganda, there was a consensus among all providers interviewed that the majority of women treated for incomplete abortion were not using a method of family planning at the time they became pregnant. Reasons cited by providers for nonuse included health concerns, partner disapproval, lack of access and lack of information about family planning services or methods.²⁰

Both HPS and HFS respondents were asked whether they believed all postabortion patients should be counseled about family planning while still in the hospital or at the health facility in which they received care. Respondents in both surveys unanimously believed this should occur.

HPS participants were also asked whether they think abortion patients should be given a contraceptive method while at the hospital or health facility (Table 5.2). Nearly all of the respondents (81%) said yes. However, 4% objected, and 15% thought family planning methods should be provided sometimes, suggesting that it would depend on the circumstances of each woman.

According to the HFS, contraceptive methods most commonly offered to postabortion patients among those health facilities that offer contraceptives are injectables, the pill and condoms, in that order (Table 5.3). The vast majority of government facilities that offer contraceptive methods, offer injectables (94–96%). Between 71% and 88% of government-owned facilities provide the pill and the condom. The IUD and female sterilization are the two modern methods least likely to be offered to postabortion patients by

government facilities.

The low proportion of government facilities that offer the IUD to postabortion patients may be explained by the fact that for women who experience immediate abortion complications, the IUD is not an option. In addition, many providers may not be trained in IUD insertion, and providers may lack appropriate materials, such as a speculum, sterilization equipment or even the ability to provide privacy for an IUD insertion. The low level of sterilization offered to postabortion patients may be explained by the necessity for informed consent for this procedure, a lack of materials required for tubal ligation at such facilities, or the cultural belief among some providers and patients alike that women should not stop childbearing (especially when 15–19-year-old women are thought to be the most likely to have abortion complications).

Even though we cannot confirm whether women are actually receiving and accepting those methods offered at health facilities, it is a good sign that health care providers, particularly those from government facilities, report offering contraceptive supplies. But it is of some concern that highly effective methods, such as the IUD and female sterilization, are offered in just a few types of facilities.

In countries where abortion is not legally permitted, it is widely recognized that treatment of abortion complications presents a heavy burden to the limited resources of the health system. We asked professionals working at health facilities if they considered treatment of abortion complications to be a major cost to their health facility's budget and how they anticipate treatment for abortion complications could be improved at the facility. Overall, more than a half of the HFS respondents indicated that treatment of abortion complication patients is a major cost to their facility (Table 5.4). Respondents working at hospitals and those working at government and privately owned facilities were more likely than those working at lower level health facilities and nongovernmental facilities to identify the high costs that the treatment of abortion complication patients presents to institutional budgets.

HFS respondents were also asked to provide suggestions for improving treatment of abortion complications at their facility. HFS respondents suggested a wide spectrum of measures that facilities can implement to improve the provision of postabortion care (Figure 5.1). These measures fall under three major categories: providing preventive measures to abortion; improving the quality and availability of services; and combining both of these recommendations. More than

three-quarters of the HFS respondents suggested improving the quality and availability of services. Specifically, respondents recommended the need to improve the provision of medical supplies and equipment such as antibiotics, intravenous fluids, speculums and a manual vacuum aspirator, as well as to increase the number of beds, develop capacity building for midwives and medical staff to manage abortion complications, provide transport for referrals and ensure separate rooms for the treatment of abortion complication patients.

Among the measures to prevent abortion suggested by the respondents included the need to raise community awareness about the dangers of abortion through health education campaigns; offer counseling on family planning and provide contraceptive methods; and lower the cost of treatment to patients at private facilities.

Opinions on approaches and interventions to reduce unsafe abortions

Respondents from both surveys were read a list of possible actions for reducing the number of unsafe abortions and lowering the level of induced abortions in the country. Differences in suggestions among the two groups of respondents were considerable (Table 5.5). While HFS respondents favored publicizing the health risks of unsafe abortion, providing contraceptive counseling postdelivery and postabortion, and increasing availability to family planning services and accessibility to effective contraception, HPS respondents favored legalizing abortion and increasing education activities. This difference may be explained by the nature of the work of the health professionals selected for the HPS compared with the work of the HFS participants. The HFS providers are more likely to interact directly with postabortion patients, while the HPS respondents may be more involved in policy work.

HPS respondents were also asked if they thought training midlevel providers in the use of the manual vacuum aspiration technique would help reduce the level of unsafe abortion in Uganda. Two-thirds of those surveyed believed the training would make abortion safer, more affordable and more accessible (not shown). However, even with midlevel providers being trained in manual vacuum aspiration, accessibility and affordability of abortion would still be limited, because abortion is generally illegal in the country.

Opinions on current abortion law

Under the current Ugandan law, abortion is permitted only to save the life of a mother. To understand how health professionals in the country view this issue, re-

spondents in both surveys were asked whether the current abortion law should be modified and, if so, in what ways should it be modified. Two-thirds of HPS respondents and over two-fifths of HFS respondents suggested that the current law should be changed (Table 5.6). Among those who agreed about changing the law, important differences were found. About half of HPS respondents, compared with a third of HFS respondents, suggested legalizing abortion. Most of the HFS respondents who supported a change preferred broadening the conditions under which abortion is permitted rather than legalizing abortion. The specific conditions under which abortion could be legal that were mentioned included rape, incest, contraceptive failure, defilement (having sex with someone below 18 years, the age of consent), poor health and poor socioeconomic conditions.

Conclusion

Health professionals believe that women who seek abortion are using a contraceptive method at the time of their pregnancy, and a vast majority of HFS respondents report family planning methods are offered as part of the postabortion care services in their facilities. However, the contraceptive prevalence rate in Uganda is still very low (23%), and unmet need for contraceptives among women of reproductive age is high (33%). The choice of family planning methods offered to postabortion patients at health facilities is largely limited to injectables, the pill and condoms, while the IUD and female sterilization are not available in most types of health facilities in the country.

Improving the provision of postabortion care is a need that many health professionals are aware of, especially those who are exposed to abortion patients on a daily basis. Respondents identified a long list of items needed for improving postabortion care, such as increasing access to proper medical supplies, improving the skills of health professionals who treat abortion complications and improving the infrastructure of health facilities.

While all respondents believe there should be measures implemented to reduce the incidence of unsafe abortions and lower the level of induced abortions overall, it seems health professionals from the HPS are more likely than health care providers from the HFS to believe that abortion should be legalized or made more accessible.

Table 5.1 Health professional respondents' perceptions of the percentage of women obtaining abortions who were using selected family planning methods at the time they became pregnant

Method	% (N=53)
Pill	93
Injectable	25
IUD	19
Condom	45
Female sterilization	4
Vasectomy	2
Withdrawal	11
Rhythm	23
Breast-feeding	23
Other*	6
No method	13

*Includes spermicides; antibiotics; herbs. Source: Health Professionals Survey, Uganda, 2003.

Table 5.2 Percentage of health professional respondents, by opinion about whether contraceptive methods should be provided to all abortion patients while still at the health facility

Opinion	% (N=53)
Yes	81
Sometimes	15
No	4

Source: Health Professionals Survey, Uganda, 2003.

5.3 Percentage of facilities that commonly offer contraceptive methods to postabortion patients, by type and ownership of facility

Method	Government			Private/Nongovernmental organization		
	Hospital (N=51)	Health center IV (N=53)	Health center III (N=95)	Hospital (N=26)	Health center III (N=16)	Private Midwife (N=35)
Pill	88	81	77	70	[75]	74
Injectable	94	94	96	58	[88]	97
Implants	32	4	8	15	[0]	3
IUD	22	6	2	11	[0]	0
Female sterilization	16	8	0	11	[0]	0
Rhythm	18	8	7	30	[6]	9
Condom	74	72	71	59	[75]	57
Vasectomy	6	4	0	11	[0]	0
Other*	0	6	3	15	[13]	6

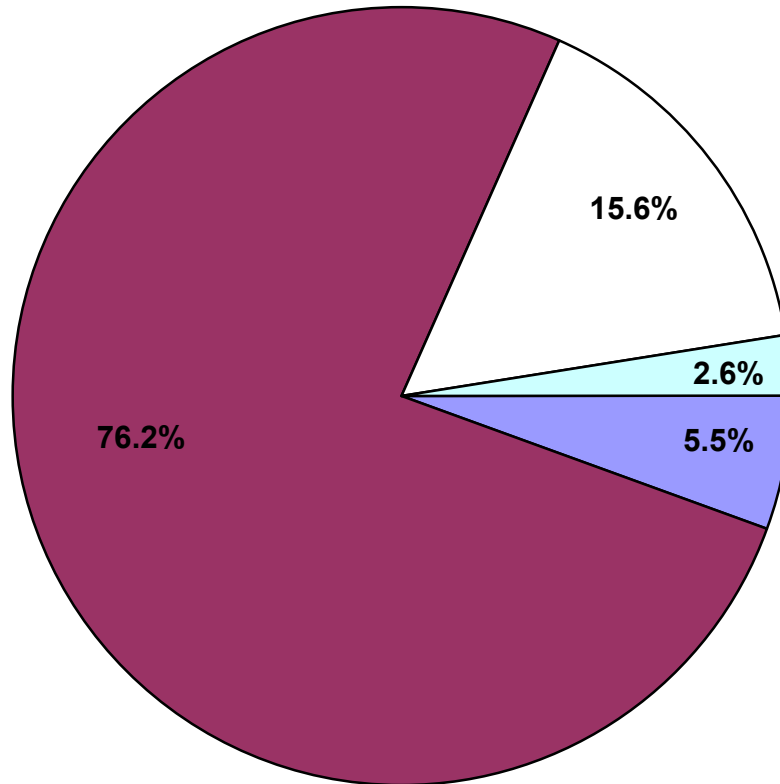
*Includes abstinence, breast-feeding, spermicide. Note: Percentages are based on health facilities that offer contraceptive methods to postabortion patients. Information from private/nongovernmental health centers level IV is not provided because of too few cases (N<5). [] = N is 20 or fewer. Source: Health Facilities Survey, Uganda, 2003.

Table 5.4 Percentage of health facility respondents who believe treatment of abortion complications is a major cost for their facilities, by type of facility, ownership, and profession

Type of facility, ownership, and profession	% (N=313)
Total	55
Type	
Hospital	65
Health center IV	53
Health center III	49
Private midwife	53
Ownership	
Public	58
Private	56
Nongovernmental	42
Profession	
Gynecologist	67
Medical officer	39
Nurse	50
Midwife	55
Nurse/midwife	68
Clinical officer	46
Other*	64

*Includes nursing assistant, nursing aid, records assistant. Source: Health Facilities Survey, Uganda, 2003.

Figure 5.1 Percentage of health facility respondents suggesting various approaches to improve treatment of abortion complications in facilities in Uganda



- Provide prevention measures
- Improve quality/availability of services
- Both prevent and improve
- Other*

* Includes training counselors, treating sexually transmitted infections and malaria, and no improvement necessary.

Table 5.5 Percentage of health professional and health facility respondents who believe that selected suggestions can be used to reduce unsafe abortion in Uganda

Suggestions	Health professionals (N=53)	Health facilities (N=313)
Publicize the health risk involved in unsafe abortion	57	93
Provide postdelivery and postabortion contraceptive counseling	9	84
Increase availability of family planning services	55	79
Improve access to effective contraception	8	74
Other: provide/legalize abortion	19	7
Other: education activities	43	26
Other*	9	13

*Includes training more health workers, allowing pregnant girls to remain in school, punishing those who induce abortion. Sources: Health Professionals Survey, Uganda, 2003; and Health Facilities Survey, Uganda, 2003.

Table 5.6 Percentage of health professionals and health facility respondents, by opinions about modifying the abortion law

Opinion	Health professionals (N=53)	Health facilities (N=308)
Law should be modified		
Yes	66	43
No	30	53
Don't know	4	5
	(N=37)	(N=131)
Ways to relax/modify law		
Legalize abortion	51	30
Broaden abortion conditions	43	66
Punishment	0	2
Other*	5	1

*Includes health education for mothers and adolescents, the government should fight poverty and illiteracy, and only trained personnel can provide abortions. Sources: Health Professionals Survey, Uganda, 2003; and Health Facilities Survey, Uganda, 2003.

Chapter 6

Conclusions and Implications

Despite the illegal status of abortion in Uganda, unsafe abortion is prevalent in the country. According to our findings, an estimated 110,000 abortion complications (resulting from both spontaneous and induced abortions) were treated in formal health facilities in Uganda in 2003. This translates to an average of approximately 300 abortion complication cases per day nationally.

This study's findings, based on surveys of health professionals and health facilities across the country, show that women of higher economic status are most likely to obtain abortions from safe providers, usually in the private sector, while poor women are most likely to seek abortions from less safe providers or self-induce. In addition, the majority of nonpoor women living in urban areas are believed to obtain induced abortions through dilation and curettage, while poor women living in rural areas rely mainly on herbs and solid objects.

The likelihood of experiencing abortion complications is believed to be very high among women in Uganda. According to health professionals, the highest risks are estimated to occur if the abortion is self-induced, induced by a traditional healer or induced by a pharmacist, in that order, a pattern that is found regardless of a woman's place of residence or her economic status.

Not all women experiencing complications obtain treatment. The main reasons for failing to obtain treatment are inability to afford or to access services. For instance, according to surveyed health professionals, among women who experience abortion complications, those who are poor are less likely to obtain care at a health facility than those who are better off: Some 51% and 62% of poor women who experience a complication obtain care in urban and rural areas, respectively, compared with 70% and 83% of nonpoor women living in urban and rural areas, respectively.

Poor rural women are therefore worse off than their counterparts on several fronts: They are more likely to

receive an abortion from a medically untrained provider using an unsafe method, they are more likely to experience complications even when they go to the same type of provider for an abortion and they are less likely to receive medical care when they experience complications. The combined effect of these factors increases the overall risk that disadvantaged women face.

The vast majority of Ugandan health facilities, both public and private, provide postabortion care on an inpatient basis, an outpatient basis or both. Public-sector facilities provide care to about 60% of postabortion patients, while private facilities serve the remainder. However, the capacity to adequately treat postabortion patients is weak in public facilities: Fewer than 5% of small public-sector facilities are able to provide blood transfusions, and fewer than half of public hospitals use manual vacuum aspiration to treat postabortion patients.

Among the measures respondents mentioned as ways to improve postabortion care were increasing access to medical supplies, improving the skills of staff who provide postabortion care and improving the infrastructure of health facilities.

Research Needs

Further research is needed to document women's perspective on unsafe abortion, as well as clinical aspects of postabortion care and its cost. For instance, it would be informative to collect data from patients receiving postabortion care. Useful information would include patients' pregnancy and fertility histories, their knowledge and use of contraceptives, as well as their unwanted pregnancy and abortion experience, including how they obtained an abortion, the cost of services and the complications they experienced as a result of their abortion. Coupling this information with information from the medical practitioners treating these patients would also be useful. Asking the practitioners to provide their assessment of the condition of patients on arrival at the hospital, the procedures performed in the facility to treat abortion complications and the amount

charged for the services would provide an additional and needed perspective. More research can be done through community-based surveys of women of reproductive age, providing data that are representative of a cross section of women on the decision making process, the process of seeking an abortion, interrelationships with contraceptive practices, complications from abortions, use of medical care, and health and social consequences.

Policy and Program Implications

The government of Uganda has made steps toward improving women's reproductive health. During the 1990s, the Ugandan government enacted a series of policies aimed at reducing high fertility rates and high levels of maternal mortality by encouraging contraceptive use, improving access to family planning services, raising the minimum age of marriage to 18 years, and promoting educational and employment opportunities for women and empowering women.²¹ The government also decentralized and strengthened the management of health services at the district level and built capacity to improve health care delivery at the subdistrict level.²² However, many Ugandan women are still unable to achieve their family size goals, particularly in less affluent areas of the country. One reason is that these policies and programs have not been fully implemented.

What the Ugandan government should do now is ensure that these policies are fully known and implemented so that the services they call for can be sufficiently developed at the local level. In addition, it is possible to extend and expand the existing policies and programs that are supportive of women's sexual and reproductive health to address the issue of unsafe abortion, and to propose specific ways of reducing the high level of abortion morbidity and the costs they present to the health care system. The government's commitment to and support of reproductive health policies that do serve the needs of women in Uganda suggest a potential openness toward adopting such policies and programs.

An important step in addressing unsafe abortion is to reduce the incidence of unwanted pregnancy. This could be achieved by improving access to effective contraceptives and implementing health education campaigns, particularly among adolescents. Sexually active unmarried women, who are mostly adolescents or women in their 20s, and who are particularly affected by an unplanned pregnancy, have a great need for better education on sexual and reproductive health and prevention of unplanned pregnancy. One of the ways to reduce abortion and its complications is to facilitate compre-

hensive information on sex and reproduction among adolescents, as well as improve accessibility and affordability of contraceptives among this subgroup.

Overall, family planning programs need to be improved in Uganda. Suggestions for improving programs include strengthening counseling by emphasizing continuous, consistent and correct use; offering information on what to do and where to go in case of method failure; and providing a method in case of method failure. Increasing the availability of family planning services in underserved areas and making contraceptives more affordable to poor women are also important measures for reducing unintended pregnancies and the need for abortion. In addition, family planning services should offer a wide range of contraceptives that meet the needs of all women. Services also need to empower women in family planning decision making and encourage the involvement of men. And lastly, identifying institutional barriers that impede women's access to services and implementing measures to overcome such barriers should be considered.

Postabortion care services also need to be strengthened. As suggested by our survey respondents, counseling and contraceptive methods should be provided to all women with abortion complications as part of their postabortion care. Improving the skills of staff who provide postabortion care, particularly in lower level facilities (for example, training midwives in the use of the manual vacuum aspiration technique), would go a long way toward reducing the level of morbidity and mortality associated with unsafe abortion. Improving the capacity of hospitals as well as lower level health facilities to treat abortion complications is also important. For instance, increasing training in manual vacuum aspiration and making the necessary supplies available in all facilities would not only improve the quality of postabortion care, but also reduce the burden of cost for health facilities that currently rely on more expensive methods of treatment, such as dilation and curettage, which requires anesthesia. Additional benefits of manual vacuum aspiration over dilation and curettage include shorter hospital stays, lower institutional costs and less pain experienced by women.²³

With public facilities treating just under 60% of abortion complication patients and the private and non-governmental sectors providing a large component of care (about equal proportions of the remaining 40% of patients), there is need to improve the provision of postabortion care in all sectors. In a country where resources are limited and health budgets are strained, cost-efficiency in provision of postabortion services is

critically important.

To address the problem of unsafe abortion in Uganda, the findings of this report suggest that a comprehensive approach should be considered, which involves extending existing policies and programs that are supportive of women's sexual and reproductive health to effectively deal with unsafe abortion, as well as improving the accessibility, availability and quality of family planning services and postabortion care. Such initiatives could go a long way toward reducing the levels of unwanted pregnancy, unsafe abortion and resulting morbidity and mortality. Additional gains would include significant reductions in the financial burden on the health care system in Uganda as well as in the health, social and financial burden on women and their families. Without comprehensive steps to improve the current situation, many Ugandan women will continue to risk their health and lives to end unwanted pregnancies by unsafe abortion.

Acronyms

AGI	Alan Guttmacher Institute
CAMS	Community Abortion Morbidity Study
DFID	United Kingdom's Department for International Development
D&C	Dilation and Curettage
E&C	Evacuation and Curettage
EVA	Electric Vacuum Aspiration
HC	Health Center
HF	Health Facilities
HFS	Health Facility Survey
HP	Health Professionals
HPS	Health Professionals Survey
IUD	Intrauterine Device
MVA	Manual Vacuum Aspiration
NGO	Non Governmental Organization
OB/GYN	Obstetrics and Gynecology
PAC	Postabortion Care
UPMA	Uganda Private Midwife Association
WHO	World Health Organization

References

1. The Alan Guttmacher Institute (AGI), *Induced abortion worldwide, Facts in Brief*, New York: AGI, 1999.
2. AGI, *Sharing Responsibility: Women, Society and Abortion Worldwide*, New York: AGI, 1999.
3. World Health Organization (WHO), *Unsafe Abortion: Global and Regional Estimates of Incidence of and Mortality Due to Unsafe Abortion with a Listing of Available Country Data*, third ed., Geneva:WHO, 1998
4. Ibid.
5. Population Reference Bureau (PRB), Datafinder, <<http://www.prb.org/datafind/datafinder5.htm>>, accessed Apr. 11, 2005.
6. Mirembe F and Okong P, Risk factors associated with maternal mortality in three Kampala hospitals, Kampala, Uganda: Makerere University, 1995.
7. Kinoti S et al., *Monograph on Complications of Unsafe Abortion in Africa*, Arusha, Tanzania: Reproductive Health Research Programme, Commonwealth Regional Health Community Secretariat for East, Central and Southern Africa, 1995, Table 9, p. 65.
8. World Health Organization, *Abortion: A Tabulation of Available Data on the Frequency and Mortality of Unsafe Abortion*, third edition, 1994.
9. Ministry of Health, Department of Community Health, Reproductive Health Division, Sexual and Reproductive Health Minimum Package for Uganda, Kampala: Ministry of Health, 1999.
10. Ibid.
11. Ministry of Health, Health Infrastructure Division, Inventory of health units using information gathered from the district directors of health services of all districts during the period July to October 2001, Kampala: Ministry of Health, 2002.
12. Bazira ER, Induced abortion at Mulago Hospital Kampala, 1983–1987: a case for contraception and abortion laws’ reform, *Tropical Health*, 1992, 11(1):13–16; and Mirembe FM, A situation analysis of induced abortions in Uganda, *African Journal of Fertility, Sexuality and Reproductive Health*, 1996, 1(1):79–80.
13. Kinoti S et al., 1995, op. cit. (see reference 7), Table 9, p. 65.
14. Kasolo J, Abortion in Uganda, *Initiatives in Reproductive Health Policy*, 2000, 3(2):9–10; and Kinoti S et al., 1995, op. cit. (see reference 7), Table 15, p. 71.
15. Wolff B, Blanc A and Ssekamatte-Ssebuliba J, The roles of couple negotiation in unmet need for contraception and the decision to stop childbearing in Uganda, *Studies in Family Planning*, 2000, 31(2):124-137.
16. Bazira ER, 1992, op. cit. (see reference 12).
17. Kinoti S et al., 1995, op. cit. (see reference 7), Table 12, p. 69.
18. Kinoti S et al., 1995, op. cit. (see reference 7). p. 68.
19. Ahmed FH et al., Reducing unintended pregnancy and unsafe abortion in Uganda, *Research in Brief*, New York: AGI, 2005, No. 1.
20. Kinoti S et al., 1995, op. cit. (see reference 7).
21. Uganda Government Policy Database, <<http://kob.parliament.go.ug/policy/policy>>, accessed Feb.17, 2004; PRB, *Reproductive Health in Policy and Practice: Case Studies from Brazil, India, Morocco, and Uganda*, Washington, DC: PRB, 2000; and PRB, *Reproductive Health in Policy and Practice: Uganda*, Washington, DC: PRB, 1998.
22. Ibid.
23. Billings DL, Fuentes-Velásquez J and Pérez-Cuevas R, Comparing the quality of three postabortion care models in hospitals in Mexico City, *International Family Planning Perspectives*, 2003, 29(3):112–120; and Tietze C and Hensahw SK, *Induced Abortion: A World Review, 1986*, sixth ed., New York, AGI, 1986.

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