Abortion and Postabortion Care in Guatemala: A Report from Health Care Professionals and Health Facilities

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Abortion and Postabortion Care in Guatemala: A Report from Health Care Professionals and Health Facilities is the first in a series of reports from the Guttmacher Institute and its Guatemala partners that offers research findings about unsafe abortion in Guatemala. Susheela Singh, vice president for research at the Guttmacher Institute and Akinrinola Bankole, director of international research, oversaw the process from the development of the study design through the production of this report. The authors thank Luisa Cabal, Center for Reproductive Rights; Rebecca Koladycz, International Planned Parenthood Federation; Romeo Menéndez, OB/GYN Society of Guatemala; Martha Murdock, Family Care International; Sandra García, Population Council; and Clemetine Rossier, Institut National D'études Démographiques for having provided insightful comments and suggestions on an early draft. The assistance and advice of other Guttmacher staff members was also very useful. The authors acknowledge Lisa Remez for writing the executive summary, Ann Moore for having provided comments on early drafts, Haley Ball for editing the report, Martha Urdaneta for translating the report into Spanish and Michael Greelish for layout and production work.

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Table of Contents

Abortion and Postabortion Care in Guatemala: Executive Summary

In Guatemala, which has the highest fertility rate in Central America, women currently have more than four children; among the indigenous population, which accounts for 43% of the total population, women have more than six. Although the proportion of married women who use a modern contraceptive method has risen in recent years—it now stands at 34%—increases in use are not keeping pace with declines in desired family size. Nearly one-third of recent births to Guatemalan women were unintended, and 28% of women have an unmet need for contraception. Unfortunately, and sometimes with tragic results, many Guatemalan women turn to abortion when they lack the means to carry out their reproductive goals.

Induced abortions are illegal in Guatemala, except for those that are necessary to save the life of the pregnant woman. As a result, women who resort to abortion to resolve an unwanted pregnancy do so secretly and under conditions that pose a grave risk to their health and future fertility. The procedure's illegality means that no official data are available to measure its true extent; studies from other Latin American nations with similar cultural and legal contexts suggest that unsafe abortion contributes to unacceptable levels of maternal morbidity and mortality in Guatemala.

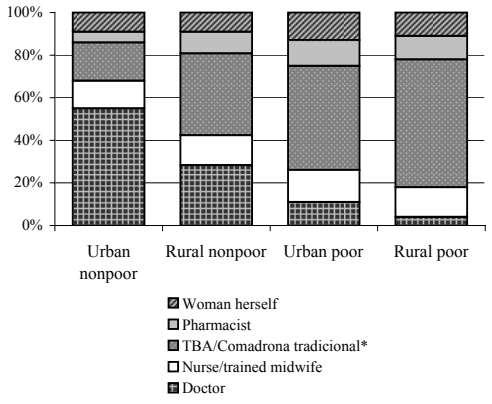
The study reported on here represents a first attempt to grapple with clandestine abortion in Guatemala, a country that until recently did little to promote family planning and has the lowest prevalence of modern method use in Spanish-speaking Latin America. The current lack of information on the problem of unsafe abortion means that, as yet, essential details that are needed to plan effective solutions are also lacking. This report details the findings of a study that aimed to describe and quantify the level of a deliberately underground activity—not an easy task. The study is based on two surveys conducted in the fall of 2003. One was fielded among a purposive sample of 74 health professionals knowledgeable about abortion, from 21 of the country's 22 departments, who were asked about their perceptions of both abortion patients and providers. The other component was a nationally representative survey of senior personnel from 174 health facilities who were asked about their experience with treating women for complications from abortions.

Unsafe Abortion and Treatment of Complications

Because no data are available from the women themselves, respondents to the Health Professionals Survey were asked about their perceptions of abortion provision in Guatemala. Two interrelated factors that influence the likelihood of complications—where a woman goes for an induced abortion and the resulting safety of the procedure—largely depend on the woman's socioeconomic status and area of residence. According to the health professionals surveyed, most urban nonpoor women use the relatively safe services of a doctor, while the majority of poor women (and, by extension, indigenous women who are overwhelming poor and live in rural areas) rely on traditional birth attendants to resolve an unwanted pregnancy (Chart 1).

The surgical abortions provided by physicians in

Chart 1. Percentage distribution of induced abortions that Health Professional Survey respondents believe are performed by each type of provider, according to women's economic status and place of residence



*Includes write-in responses for abortera, curandera, hierbero/a, santero, witch, health promoter, relative/spouse. Notes: Percentage represents average of percentages given by respondents. Source: Health Professionals Survey, Guatemala 2003.

urban areas are believed to be primarily done by dilation and curettage, a method that has been widely replaced by the safer manual vacuum aspiration (MVA) in much of the developed world. Other techniques thought to be commonly used in urban areas include intramuscular injections of oxytocics, the introduction of a rubber catheter (on its own or for injecting fluid into the uterus), and the ingestion of hormonal drugs (particularly when the women self-induces). In rural areas, women are believed to typically rely on herbs and the introduction of solid objects into the uterus.

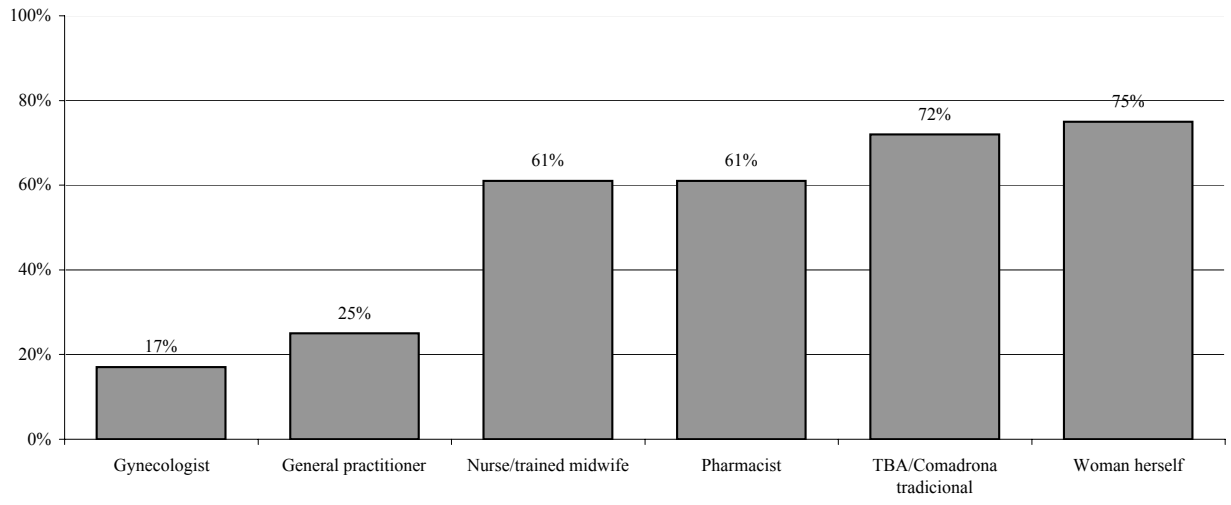
Not surprisingly, women who induce their own abortions or who use untrained providers are the most likely to experience complications. According to the health professionals surveyed, nearly three-quarters of rural poor women who induce their own abortion will develop complications that require medical treatment, as will 61% of similar women who use a trained nurse or a pharmacist (Chart 2). The high incidence of abortion complications experienced by poor women is partially explained by the types of providers they are able to use, but even when they go to the same providers as other women, poor women are still more likely to develop complications for a range of reasons, including language or cultural barriers that prevent them from following postabortion care instructions and their poorer general health and nutrition status to begin with.

Overall, an estimated two-fifths of Guatemalan women who have a clandestine abortion will be hospitalized for treatment of complications. According to respondents to the Health Facilities Survey, the typical Guatemalan woman who is treated in formal facilities is a housewife with one or two children, a profile that is generally consistent with research conducted in other Latin American countries with similarly restrictive abortion laws. According to the health professionals surveyed, the complications of unsafe abortion most commonly include hemorrhaging, sepsis and infection, a perforated uterus and incomplete abortion. Managing these complications drains scarce medical resources, especially when women are treated in public hospitals—77% of the representatives of public health facilities considered postabortion care to be a financial burden.

Even though the complications from unsafe abortion may be life-threatening, many women who need medical treatment will not receive it. The health professionals interviewed estimated that nearly two-fifths of rural poor women who require treatment for postabortion complications will not seek care, nor will 28% of urban poor women (Chart 3). Fear of being chastised and mistreated by medical personnel, extreme poverty that prevents travel to and payment for care, and cultural norms that prohibit indigenous women from seeing male doctors all contribute to especially high rates of untreated complications among rural poor women.

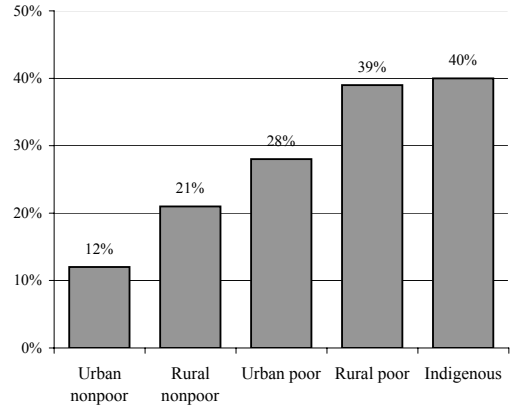
The estimates of the costs of an induced abortion range widely, from just US $8 for a rural poor woman who induces her own abortion, to US $491 for an urban nonpoor woman who is able to obtain an abortion from a medical doctor in a private facility. Even in this best

Chart 2. Estimated percentage of rural, poor women obtaining induced abortions who experience complications that require medical treatment, by type of provider



Source: Health Professionals Survey, Guatemala 2003.

Chart 3. Health Professional Survey respondents' estimates of the percentage of women with induced abortion complications likely to go without medical treatment, by women's economic status and place of residence



Source: Health Professionals Survey, Guatemala 2003.

case scenario, however, complications from clandestine abortions still occur (i.e., 13% of these relatively well-off women will develop complications that require medical attention).

The responses to the Health Facilities Survey allow an estimate of the overall number of Guatemalan women treated for complications from spontaneous and induced abortions each year—a total of 27,013 women. This means that 10 out of every 1,000 women of reproductive age will be treated in formal medical facilities for complications from induced or spontaneous abortions each year. The majority of these women are treated on an inpatient basis (76%) and in public-sector facilities (77%, i.e., in Ministry of Health hospitals and those run by the national Social Security program). In the very poor regions of the country, such as the Southeast, an especially low proportion of women with complications are treated in the better equipped private facilities (12%).

Although nearly all health facilities, public and private, treat complications of abortion using dilation and curettage (requiring an overnight stay and anesthesia), only half of public hospitals and less than one-fifth of private hospitals use MVA, a far safer and more cost-effective way to treat the complication of incomplete abortion. Most health facilities also rely on antibiotics, oxytocics, surgery and electric vacuum aspiration to handle postabortion complications.

Addressing the problem of unsafe abortion in Guatemala

An important first step toward lessening the harm caused by unsafe abortion is improving postabortion care and preventing unintended pregnancy to begin with. To that end, nearly all respondents endorsed on-site family planning counseling to postabortion patients, and a solid majority of the health professionals supported providing family planning methods to women when they present for complications. Unfortunately, the responses of facility personnel suggest that many Guatemalan health centers lack supplies of contraceptive methods to distribute to patients, especially supplies of short-term methods, such as pills, injectables and condoms.

Many facilities respondents also mentioned the importance of raising the availability and quality of postabortion care in Guatemala, specifically by providing MVA kits (and training in their use) along with ultrasound equipment, and by increasing the use of antibiotics. To reduce the practice of unsafe abortion many health experts pointed to the need to raise public awareness of the health risks involved, provide family planning counseling to women who have come to facilities for postabortion care, and increase women's overall access to effective contraceptives.

The majority of Guatemalans (61%) live in rural areas, a situation that is out of the norm in the predominantly urbanized region of Latin America; what is more, three-quarters of rural Guatemalans live in poverty. The problem of unsafe abortion is most acute within this subset, rural poor women, who are especially likely to seek an unsafe abortion from untrained providers and to develop serious complications as a result. To make matters worse, these women are also the most likely to go without medical treatment once complications arise.

Nevertheless, because all abortions are performed underground in Guatemala, complications are common among all women who turn to abortion as a last resort, no matter where they live or how wealthy they are. Improvements in postabortion care would yield the greatest cost-effective impact on morbidity if they were targeted to public facilities—which provide the lion's share of such treatment—and to rural poor women. The findings from this study suggest that the most promising improvement would be to make contraceptive counseling and services, including emergency contraception, available at facilities to prevent unintended pregnancy, and to provide training in MVA and establish that method as the standard protocol for postabortion care.

In 2001, the government of Guatemala enacted the Social Development and Population Law, which contains many policies aimed at improving women's overall reproductive health, such as extending the reach of sexual education and raising awareness and use of fam-

ily planning. That law has yet to be fully implemented, however. The results of this study point to the urgent need to step up implementation to increase access to contraception so women can reach their reproductive goals. Fewer unplanned pregnancies and better postabortion care constitute the starting point for addressing the largely preventable problem of unsafe abortion in Guatemala.

Chapter 1

Introduction

Overview

Approximately 3.7 million induced abortions occur each year in Latin America and the Caribbean, and an estimated 17% of all maternal deaths are due to unsafe abortion.[1] Nonetheless, abortion remains illegal, highly restricted or otherwise inaccessible in much of the region. With the exception of Guyana, Cuba, Puerto Rico and a few other Caribbean nations,[2] abortion laws in Latin America are among the most restrictive in the world, in part due to the influence of the Catholic Church, which continues to influence both public opinion and policymaking. Because they are illegal, unsafe abortions continue to be neglected by most public health authorities in the region.

Despite the illegal status of abortion, many women who face an unplanned pregnancy resort to unsafe procedures. A large proportion of these procedures are performed by nonprofessional providers and under unsanitary conditions, which can result, if not in death, in serious illness and long-term disability. Conditions vary across countries, but have likely improved somewhat in the past two decades with the introduction of medical abortion (misoprostol and mifepristone) and improvements in access to safe clandestine services.

It has been stated that unsafe abortion carries serious risks in Guatemala and other Central American countries.[3] Evidence also shows that elsewhere in Latin America, a high proportion of women who undergo clandestine abortions experience complications that require medical treatment—a 1960 Chilean study estimated one in three[4] and a 1981 Peruvian study estimated one in four.[5] Some of the most frequently reported complications are incomplete abortion, sepsis, hemorrhage and damage to internal organs, such as rupture of the uterus. Long-term consequences include chronic pain, pelvic inflammatory disease and infertility.[6]

In addition to the serious costs to the health and lives of women, treatment of abortion complications constitutes a heavy burden on the health system in countries where abortion is illegal. Depending on the severity of the complication, treatment may require several days of hospitalization, anesthesia, surgery, blood transfusions, antibiotics and pain medications. Localized studies in Africa, Asia[7] and Latin America[8] have shown that women with abortion complications account for a high percentage—as many as half—of all gynecological patients.

Currently under Guatemalan law, elective abortion is illegal and permitted only to save the woman's life.[9] Consequently, abortion is often performed in secrecy and under unsafe conditions, potentially leading to serious health consequences for women, including death. Official statistics on abortion, even for legal abortions are not collected in Guatemala. Therefore, the actual occurrence of abortion in the country is unknown. However, a recent government baseline study on maternal mortality shows that unsafe abortion is occurring in the country and that it is a contributing factor to maternal deaths. Results of this study revealed that the four major causes of maternal mortality were postpartum hemorrhage (54%), sepsis (14%), hypertension (12%) and abortion (10%).[10] A four-year surveillance program recently carried out in the Guatemala City metropolitan area found that between 1993 and 1996, 10% of all deaths among women aged 15–49 were related to pregnancy or childbirth and, of these, 25% were due to infection. Of all maternal deaths due to infection, 32% were related to induced or spontaneous abortion.[11] Although information does not exist on what proportion of these abortion-related deaths are due to spontaneous or induced abortion, clearly both contribute, and it is likely that induced abortion, often performed under unsafe conditions, is an important factor.

Guatemala Context

Guatemala is divided into 22 administrative departments comprising eight major geographic regions, as presented in Figure 1.1. The country is highly diverse both ethnically and geographically, and the income dis-

tribution is one of the most unequal in the world. The North, Northeast and Southeast regions are somewhat less developed than the rest of the country. Forty-two percent of the population—mainly indigenous—lives in these regions.[12]

Guatemala has a population of over 11 million people.[13] The majority are *mestizos* (people of mixed European and indigenous ancestry), while about four in 10 are indigenous (43%), including 21 ethno-linguistic groups of Mayan descent. Other minority ethnic groups include *garífunas* (people of Afro-Caribbean decent) and *xíncas* (people of non-Mayan indigenous ancestry). Sixty-five percent of Guatemala's population lives in rural areas while 23% is concentrated in the Guatemala City metropolitan area.[14]

Compared with other Latin American countries, Guatemala ranks among the poorest. Poverty is widespread, and is highest among the rural and indigenous populations. Three-quarters of the rural population is poor and one-fourth is exremely poor. Also, three-fourths of indigenous Guatemalans are poor, compared with 41% of the nonindigenous population.[15]

Health indicators in Guatemala have improved over the past 20 years but remain poor, and there has been less progress in Guatemala than in some countries in the region, including Bolivia, Nicaragua and Honduras. Guatemala ranks third (after Nicaragua and Honduras) in Latin America and the Caribbean (LAC) for low life expectancy and ranks highest in infant mortality, and ranks after only Haiti and Bolivia for high maternal mortality. Malnutrition rates in Guatemala are also among the highest in the world and relatively little progress has been made[16]. According to Granolati and Marini,[17] Guatemala's poor health indicators are largely due to poverty and long-standing civil unrest, as well as a shortage of well-trained providers in the private sector and the widespread practice of traditional medicine. In addition, access to health services is severely limited. According to the World Health Organization's definition of access (living within an hour of a health care facility), only 11% of the Guatemalan population has adequate access to services. Those who lack access generally live in rural areas, and therefore are frequently poor or indigenous. These groups often rely on self medication or assistance from family members or traditional health providers to treat their illnesses.[18]

Women without access to private care have faced additional challenges in obtaining reproductive health services. Until very recently, the government of Guatemala refused to include family planning as part of general public health services. According to a recent study, this policy is largely due to a lack of action on the part of politicians and the opposition of conservative groups, particularly the Catholic Church, who are opposed to the use of "artificial" family planning methods. By refusing to offer family planning information and services, the Guatemalan government has failed to comply with numerous international and regional treaties—in particular, the International Conference on Population and Development and the Fourth World Conference on Women—that establish the obligation of governments to promote and protect the right to family planning services for all people, regardless of race, gender and social class. Guatemala entered reservations in the final documents of these two conferences, but did agree to the basic principles. In addition, the government has a constitutional obligation to provide family planning services. Written in 1985, the constitution contains provisions for the government to ensure the right to family planning services and related rights, such as women's equality, the right to self-determination and the rights of indigenous people. In addition, the 1996 Peace Accords acknowledge the rights of indigenous groups and demand government reforms in the areas of health, education, social services and women's rights.[19]

Recently, the government of Guatemala has taken some important steps to promote women's economic, political, and social equality, and has made attempts to improve women's access to family planning information and services. In 1999, the government enacted the Law for the Dignity and Integral Promotion of Women, which addresses reproductive rights in two articles. However, this measure fails to define the specific steps the government should take to ensure implementation.[20] In 2001, the government enacted the Social Development and Population Law, which promotes specific policies in the areas of population, reproductive health, family planning and sex education.[21] The great political challenges for the current government include pushing for the full implementation of these laws, increasing public awareness of reproductive health rights for all citizens and backing policies with strong law enforcement to ensure compliance.

Trends in Childbearing, Contraceptive Use and Unmet Need

Guatemala has the highest fertility rate of any Central American country and one of the highest in all of Latin America. While the average family size for the Central American region as a whole has dropped substantially, to 2.9 lifetime births per woman in 2002, the average

family size in Guatemala is 4.4 children per woman.[22] Indigenous women have a significantly larger average family size (6.1 children) than nonindigenous women (3.7 children).[23] Although the average family size in Guatemala declined for all groups of women between 1987 and 2002, this decline has been more pronounced among nonindigenous and rural women than among their counterparts.[24]

Contraceptive use has increased among Guatemalan women since 1987, but it remains relatively low. Forty-three percent of married women are using a method of family planning (34% use modern methods), compared to 23% in 1987 (19% modern methods).[25] Even though a higher proportion of women are using some form of contraception today compared with 15 years ago, the widening gap between actual and wanted births suggests that desired family size is falling faster than contraceptive use is increasing. Unmet need for contraception continues to be high: In 2002, 28% of all married women in Guatemala did not want a child soon or ever, yet were not using any method of contraception.[26]

Available evidence suggests that Guatemalan women want fewer children than they did 15 years ago and are still having more children than they want. Between 1987 and 2002, what women considered to be the ideal family size declined from 4.9 children to 3.7. Since they had 4.4 children on average in 2002, this means Guatemalan women want 0.7 fewer children than they are having.[27] While Guatemalan women in urban areas are closer to achieving their desired family size, analysis indicates that rural women, who make up the vast majority of the population, are having an average of nearly one child more than they want (an actual total fertility rate of 5.2 children, compared to an average desired family size of 4.3 children). The same holds true for indigenous women, who also have an average of one child more than they report wanting.

The percentage of births to Guatemalan women that were unintended has remained largely stable over the past decade. The 1995 DHS survey found 29% of recent births to be unintended[28], compared to 28% in 2002.*[29] Urban women experienced a drop in unintended births, from 35% in 1995 to 30% in the 2002. This rate is closer to that of their rural counterparts, for whom 28% of births were unintended in 2002. It is worth noting however, that unintended pregnancy increased somewhat among adolescent women (15-19) during this time period, rising from 24% to 29%.

The long-standing governmental resistance to providing family planning in public health facilities means that even now, the main providers of contraceptive services are private providers and nongovernmental organizations (NGOs) such as APROFAM. This gap is closing, however. In 1998, the public sector distributed about 25% of the contraceptives used,[30] while in 2002, it distributed 44% of all modern methods. However, the availability of methods at public facilities varies widely and is often inadequate at smaller facilities. In addition, public providers do not generally broach the subject of family planning with their patients, but rather provide methods only at the patient's request.[31]

A woman's ability to prevent an unwanted pregnancy is not only a factor of access to contraception. Unwanted pregnancy may occur if sex is not consensual, or if a woman is unable to effectively negotiate the use of contraceptives with her partner. In addition, a woman may not use available health services (including family planning services) if they do not respond to her cultural needs and values.

Rationale, Goals and Objectives

As a result of Guatemala's restrictive abortion policy, there is little data on abortion and the data that exist are piecemeal. However, the Guatemalan government, international agencies, health professionals, NGOs and society in general need information on abortion to enable them to deal more forthrightly with unsafe abortion and its causes and consequences.

This study serves to fill knowledge gaps by collecting new information on abortion provision and its consequences through three surveys: the Health Professionals Survey (HPS), the Health Facilities Survey (HFS) and the Community Abortion Morbidity Study (CAMS). Each of these study components seeks to document different aspects of the abortion issue. The broader aims of the study are to provide evidence of unsafe abortion and its consequences, raise awareness of the problem, increase national and international response to unwanted pregnancy and unsafe abortion, and inform those responses. In other words, we expect that the new evidence this study provides will help build political and institutional commitment to addressing the impact of unsafe abortion on maternal health, and hopefully will lead to appropriate policies and programs to reduce unintended pregnancy and improve postabortion care. If unsafe abortion is acknowledged and addressed, Guatemala will be closer to meeting two of the UN Millennium Development Goals: improving maternal health and promoting gender equality.

*Includes all births in the five years preceding each survey (not including pregnancy at the time of interview).

The first two surveys—HPS and HFS—were conducted in 2003. The HPS provides information on the conditions under which induced abortion is provided by obtaining perceptions and opinions from a purposive sample of doctors, nurses, researchers and policymakers. It also documents professionals' perceptions of the probability that a woman will experience complications following an induced abortion and the likelihood that women with such complications will obtain care at a medical facility.

The HFS, which surveyed all health facilities that provide treatment of abortion complications in Guatemala, provides an estimate of the number of women treated annually for complications from both induced and spontaneous abortions in the country as a whole and by region. Subsequent analysis, to be a presented in a 2006 article, will use indirect techniques to estimate the number who were treated for complications of spontaneous abortion or miscarriages, the number treated due to induced abortion and the rate of induced abortion.

The CAMS study is qualitative and exploratory in nature. It uses the personal experiences of health care providers and community members to examine morbidity and other consequences for women who have complications resulting from unsafe abortion but do not obtain medical care or delay seeking care. In-depth interviews and focus group discussions were fielded in two areas of Guatemala: La Reinita, a community on the outskirts of Guatemala City, and Patzún, a largely rural and Mayan area of the country. A separate report will summarize findings from this study.

This report presents results from the HPS and HFS on the conditions of abortion provision. The issues examined include respondents' perceptions of the characteristics of women who have an abortion and those who seek treatment for complications, 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 performed the procedure, the providers women go to when they experience complications and the probability that women will seek medical treatment when they experience complications. All of these issues are examined by area of residence (urban versus rural), economic status (poor versus nonpoor) and ethnic group (indigenous versus nonindigenous). The number of women treated for complications from induced and spontaneous abortion, according to ownership (public versus private) and size of facilities and location (by region), are also presented in this report.

Report Structure

Chapter One of this report offers an overview of the local and global context for the study and introduces the study's objectives and individual components.

Chapter Two describes the study design and methodology, including descriptions of the surveys and the fieldwork conducted by the research team. It also discusses the characteristics of health facilities that treat abortions, as well as the characteristics of respondents to both surveys.

Chapter Three outlines the profile of abortion service provision in Guatemala based on the opinions of experienced health professionals. It describes the respondents' perceptions of the characteristics of women who seek abortion, the methods commonly used to induce abortion, the providers women go to and the cost of having a first trimester abortion.

Chapter Four presents health professionals' perceptions of complications from induced abortion and their treatment, including the type of complications experienced, the likelihood of experiencing them and the proportion of women with complications who seek care. It also presents results from the HFS on the provision of postabortion care, including the number of women who are treated for complications from induced or spontaneous abortions and the procedures used in treatment.

Chapter Five discusses family planning services and counseling available to women who have been treated for complications, as well as health professionals' opinions on postabortion care.

Finally, Chapter Six summarizes the key findings and highlights the need to increase access to family planning services, improve the quality of health care and expand postabortion care in Guatemala.

Figure 1.1. Map of Guatemala

Notes: Metropolitan region includes the Guatemala Department; North region includes the departments of Alta Verapáz and Baja Verapáz; Northeast region includes the departments of El Progreso, Izabal, Zacapa and Chiquimula; Southeast region includes the departments of Santa Rosa, Jalapa and Jutiapa; Central region includes the department of Chimaltenango, Sacatepéquez and Escuintla; Southwest region includes the departments of Sololá, Totonicapán, Quetzaltenango, Suchitepéquez, Retalhuleu and San Marcos; Northwest region includes the departments of Huehuetenango and Quiché; and the Petén region includes the department of Petén.

Chapter 2

Methodology

Introduction

It is extremely difficult to obtain accurate information on unsafe abortion in countries like Guatemala where the procedure is legally restricted and official statistics are not collected. In these cases, useful and insightful information about the conditions under which abortion is provided and estimates of the numbers of women who are treated for postabortion complications may be obtained by interviewing knowledgeable informants. The study design and protocols used in this study are based on the Guttmacher Institute's prior research on induced abortion in contexts where the procedure is unsafe and legally restricted, and have been adapted to the Guatemalan context.[32] The report presents key findings from two nationwide surveys: one of knowledgeable health professionals and the second a survey of key informants at all hospitals in Guatemala. These surveys provide new information on the conditions under which abortion is provided, and on postabortion care. This report does not present estimates of the incidence of induced abortion: This topic will be covered in a subsequent analysis using the data from these two surveys, and applying an existing methodology to the Guatemalan context.[33]

This chapter describes the study design for the HPS and HFS and the instruments used. It also details the pretest and fieldwork, which consist of interviews with key respondents, mainly health care professionals and administrators in health facilities.

The design phase for the HPS and HFS took place from March to July, 2003. This process involved extensive collaboration between the Guttmacher Institute and research partners who were familiar with the issue of abortion in Guatemala. The Epidemiological Research Center in Reproductive Health (CIESAR), the Guatemalan research partner, provided guidance in the development of the HPS and HFS questionnaires and the sampling strategy, and also supervised data collection.

Health Professionals Survey

The goal of interviewing health professionals was to obtain the opinions and perceptions of a sample of experts regarding abortion service provision in Guatemala. The survey population included clinicians and nonclinician health professionals who were recognized by the survey team as knowledgeable about the conditions under which abortion is provided and the extent to which unsafe abortion occurs in Guatemala. These professionals were chosen based on information gathered through interviews with NGOs, program planners and other stakeholders about key people working in the reproductive health field. The professionals chosen were knowledgeable about induced abortion through personal experience as health care providers in treating abortion complications, as researchers, as advocates of women's health or as program planners and administrators. They were purposively selected from government (including Social Security) and private (including NGO) health facilities. Although the majority of HPS respondents worked in urban areas (primarily Guatemala City), an effort was made to include experts with knowledge of abortion in rural areas. A total of 85 professionals were identified from 21 of the 22 departments of Guatemala.

Out of the 85 planned interviews, 11 were not completed. Three of the intended respondents declined to participate, one could not be contacted and the remaining seven were deemed more suitable as key informants for the HFS survey, leaving a total of 74 interviews that were successfully conducted. In each case, the interviewer contacted the identified professional by telephone or by visiting his or her place of work. Each participant completed a face-to-face interview that followed a semi-structured questionnaire covering the following topics:

- characteristics of the respondent;
- 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 from each type of provider;
- the likelihood that those who experience complications will obtain medical treatment;
- sources of postabortion care;
- typical family planning methods used by abortion-seeking women at the time they had an unplanned pregnancy; and
- opinions on postabortion counseling and strategies for reducing unintended pregnancy.

For each of these questions, respondents were asked to make distinctions between the conditions of six subgroups of women: rural poor and nonpoor, urban poor and nonpoor, and indigenous and nonindigenous women. Poor women were defined as those with lower than average income levels. Indigenous women were defined as those of Mayan descent who typically use Mayan dress and speak one of the Mayan languages.

Indigenous women are examined separately because they are at a unique disadvantage for obtaining family planning and other health services. Terborgh et al. note that, in addition to being disproportionately poor and rural, indigenous women experience discrimination in health care facilities and often have trouble communicating with health care workers, who tend to speak Spanish exclusively. Also, the belief that family size is predetermined is common among indigenous women, and is backed both by traditional indigenous beliefs and Catholic and evangelical groups who are influential in their communities.[34]

Health Facilities Survey

The HFS was conducted at health facilities that are considered likely to be treating postabortion complication patients. The HFS in Guatemala surveyed the whole universe of relevant facilities because the number of facilities that provide postabortion care is relatively small. (By comparison, in larger countries where studies of this kind have been carried out, a sample of facilities was drawn). An interview was conducted with a key informant at each health facility. This informant was a senior professional deemed the most 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 another physician specializing in obstetrics and gynecology. In only five cases the selected key informant was not available or declined to be interviewed, and in those cases the informant was replaced by the next most knowledgeable professional at the facility.

Health institutions that provide treatment for abortion complications in Guatemala include two categories of public facilities—Ministry of Health and Social Security facilities—as well as privately owned facilities. An initial inventory was drawn from the lists available from the Ministry of Health and public telephone directories. This list was updated during fieldwork with information provided by key informants at surveyed health facilities.

A total of 225 health facilities were initially identified. Of these, 47 were eliminated due to the following reasons: Twenty-three facilities did not provide treatment for abortion complications, 13 did not exist at the time fieldwork was carried out, six were listed twice, three declined to be interviewed and two began but did not complete interviews. The final number of facilities with completed interviews was 178.

The key informant from each facility was interviewed in person, using a semi-structured questionnaire which covered
- characteristics of the facility (types of departments, facilities and services, and number of beds);
- number of patients with complications from induced or spontaneous abortions who are treated on an inpatient and outpatient basis, both in the past month and in an average month at the facility;
- methods used to treat complications from induced or spontaneous abortions; and
- family planning services offered to women treated for postabortion complications.

Respondents were also asked for their perceptions of
- characteristics of a typical woman receiving treatment for complications of an induced or spontaneous abortion;
- the likelihood of experiencing complications following an induced abortion; and
- the likelihood that those who experience complications from an induced abortion will obtain medical treatment.

Table 2.1 presents the distribution of health facilities that were successfully interviewed by region and ownership. The majority were private facilities (69%), about one-fourth were Ministry of Health facilities (23%) and a small number were Social Security facili-

ties (8%). The Metropolitan and Southwest regions, where two-fifths of the population lives, contain the largest number of health facilities treating abortion complications (50 and 42 facilities, respectively), while the Petén, North and Southeast regions, where one-fifth of the population lives, contain the fewest (8 or 9 facilities). In the rest of Guatemala, the number of health facilities in each region ranges from 13 to 27.

Publicly owned facilities (Ministry of Health or Social Security) are concentrated in the Southwest region, with the fewest such facilities located in the Southeast region. Private facilities are most heavily concentrated in the Metropolitan region and have noticeably little presence in the North, Southeast, Northwest and Petén regions. These findings are more or less in line with the results of the Living Standards Measurement Survey, which found that access to health care is worst in the North, Central, Southwest, Southeast and Petén regions.[35]

Training, Fieldwork and Data Collection

Fieldwork personnel were all female physicians. Due to the sensitive nature of the abortion issue in Guatemala, it was considered crucial to use women as interviewers because women are believed to be more sympathetic and knowledgeable on this issue than men and because health professionals, particularly those working at formal health care facilities, are more open to talking about abortion with colleagues than with interviewers coming from other fields. Three doctors were selected as regional coordinators. Twelve others were chosen as interviewers and organized into five fieldwork teams. The team for the Metropolitan region had four interviewers, and the remaining four teams had two interviewers each. One regional coordinator was in charge of the Metropolitan team, while the other two regional coordinators were each in charge of two two-person fieldwork teams. During data collection, regional coordinators maintained close supervision of all teams through in-person visits and frequent telephone calls.

In August 2003, all fieldwork personnel attended a three-day training seminar to become familiar with the questionnaires and discuss the logistics of the fieldwork. The training was led by CIESAR and the Guttmacher Institute. During the training, mock interviews were carried out.

Both questionnaires were pretested and adjusted before data collection began to ensure clarity and accuracy. Twelve health facilities located in Guatemala City were selected for pretesting. Because these facilities were to be interviewed during regular fielding as well, pretesting was conducted with a lower level professional, such as a nurse or auxiliary nurse, whereas the regular interview was held with the director of the obstetrics and gynecology department or the next most knowledgeable person. This pretesting was conducted on September 2–5, 2003. Regular fieldwork was carried out for both surveys simultaneously on September 25–October 24, 2003. Each team of interviewers was responsible for both the HPS and HFS surveys for a certain area. Prior to each interview, the respondent was contacted by phone to schedule an appointment. Efforts were made to minimize inconvenience to respondents and to provide a comfortable interview environment. Respondents were assured that their answers would be kept confidential and used only for research purposes. Consent forms were not used because respondents were only asked for their opinions and a few numerical estimates.

Prior to fieldwork, the regional coordinators visited their assigned areas in order to update the HPS and HFS sample lists, obtain the consent of institutions and professionals to carry out interviews, and become familiar with the area. During fieldwork, regional coordinators were also charged with validating two interviews per interviewer (one at the beginning and the other in the middle of fieldwork), reviewing all questionnaires and helping the interviewers make any adjustments necessary to maintain consistency.

Characteristics of HPS Respondents

Respondents from the HPS survey were, on average, 45 years old and more than half were female. The majority were trained doctors (44% general practitioners and 26% gynecologists), and 15% were registered nurses or nurse aides. The remaining 15% were involved in politics, activism, research or social work (Table 2.2).

Approximately half of respondents worked primarily in the public sector (53%) and the other half in the private sector (including NGOs) (47%). They had an average of 15 years of work experience in their primary profession (Table 2.3). The length of experience ranged from one to 37 years, and the vast majority (88%) reported more than five years of experience. Also, the majority reported working primarily in urban areas (84%). All but one of those who worked in rural areas had done so for at least two years. In addition, the majority of respondents considered themselves knowledgeable about the health care needs of indigenous groups: 7% said they knew more about indigenous than nonindigenous women, and 51% said they were equal-

ly knowledgeable about both groups (data not shown).

Respondents were asked to report the way or ways they had been exposed to the issue of induced abortion. About two-thirds (62%) had experience with abortion through work in public health facilities and one-third (37%) through work in private clinics. Many also reported they had been exposed to the issue of abortion through interaction with colleagues or the media, or through research or counseling work.

Characteristics of HFS Respondents and Facilities

The HFS survey collected some basic information about respondents in order to see whether perceptions of postabortion care varied according to the key informant's characteristics. This information is presented in Table 2.4.

Overall, more men than women served as respondents to the HFS survey, with a ratio of 4 to 1 This ratio was even higher at private facilities (9 to 1) compared to public facilities (7 to 3). The high ratio of men to women is not unexpected, since the key informant sought was the head of the obstetrics and gynecology department, and in Guatemala this position is most often held by a male doctor. The average age of the respondents was 42 years old, with an age range of 20–73 years. Respondents at private facilities were, on average, seven years older than those at public facilities. The age difference may be due to the fact that jobs at private facilities tend to be better paid and more desirable than jobs at public facilities, and young doctors are more likely to accept lower wages to gain experience.

The most common profession among HFS respondents was that of gynecologist (67%). These doctors constituted the largest percentage of respondents for both sectors.

The mean length of time that respondents had worked in their primary profession was 14 years. This period was significantly longer for respondents at private facilities than those at public facilities. The mean number of years for respondents in public facilities was just under 10 years, while respondents from private facilities averaged almost 16 years of experience.

The main characteristics of the surveyed health facilities are shown in Table 2.5. This information provides a general picture of the infrastructure of the health facilities and their capacity to provide treatment for abortion complications. Health facility characteristics are examined according to ownership—public or private—and size, in the case of public facilities. Public facilities were much larger on average than private facilities, so those with fewer than 100 beds were designated "small" while those with 100 or more beds were designated "large." All private facilities had fewer than 100 beds, with the exception of one, which had 146 beds.

The facilities that offer postabortion care have a broad range of services and subfacilities. Nearly all facilities have an operating room, emergency room and general ward. Three-quarters (77%) have an outpatient gynecology department, one-third (32%) have a maternity ward, one-quarter have an intensive care unit and one-tenth (11%) have a separate septic ward. Public and private facilities are similarly equipped in terms of their subfacilities, but there are a few differences. Private facilities are somewhat more likely to have a maternity ward and large public facilities are the most likely to have almost all other subfacilities, including outpatient gynecologic services and septic wards. Although the type of subfacilities is fairly consistent across ownership and size, there is some clustering of these subfacilities in larger institutions.

Although nearly all facilities surveyed provide inpatient services, the average number of beds housed in private and public facilities varies significantly. As expected, public facilities have a greater capacity to hold patients overnight, with an average of 45 beds at small facilities and 193 beds at large facilities. Private facilities, on the other hand, averaged 16 beds. The same pattern holds true for the average number of deliveries per month in public and private facilities: There are more deliveries at both large and small public health facilities than in private facilities.

Table 2.1. Distribution of health facilities in Guatemala by ownership of facility, according to major region

Sector	Metropolitan	North	Northeast	Southeast	Central	Southwest	Northwest	Petén	Total
Total	**50**	**9**	**27**	**9**	**20**	**42**	**13**	**8**	**178**
Ministry of Health	5	4	4	3	4	9	8	4	41
Social Security	2	2	4	0	1	5	1	0	15
Private	43	3	19	6	15	28	4	4	122

Source: Health Facilities Survey, Guatemala, 2003.

Table 2.2. Characteristics of Health Professionals Survey respondents

Characteristic	% (N=74)*
Age	
30–39	21
40–49	53
50+ (oldest=70)	26
Sex	
Male	47
Female	53
Primary profession	
Gynecologist	26
General practitioner	44
Nurse/auxiliary nurse	15
Policymaker/researcher/activist/social worker	15
AVERAGE	
Age of respondents	45.1

*Response rate was 99% to 100%. Source: Health Professionals Survey, Guatemala, 2003.

Table 2.3. Work experience of Health Professionals Survey respondents

Experience	% (N=74)
PERCENTAGES	
Primary sector	
Private sector/NGO	47
Public sector	53
Duration of experience (in years)	
1–5	12
6–11	23
12–19	37
20+ (longest experience=37 yrs)	28
Primary area of work	
Works in an urban area	84
Works in a rural area	16
Rural work experience, for ≥6 months*	15
Sources of knowledge of abortion	
Through working in public health facility	62
Through working in private clinic	37
Through work outside medical setting†	15
Through contact with colleagues	42
Other‡	24
AVERAGE	
Number of years of work	15.1

*Includes those working in rural areas for more than six months and those who work in urban areas but have worked in rural areas for more than six months. †Includes through work as a consultant, through women known and through university work. ‡Includes work with the media, through contact with women who have had an abortion. Note: Response rate was between 93% and 100%. Source: Health Professionals Survey, Guatemala, 2003.

Table 2.4. Characteristics of Health Facilities Survey respondents, according to ownership of facility

Characteristics	Public (N=56)	Private (N=122)	Total (N=178)
PERCENTAGES			
Sex			
Male	68	87	81
Female	32	13	19
Age			
20–29	18	3	8
30–39	50	30	37
40–49	27	43	38
50–73	5	23	17
Profession			
Gynecologist	84	59	67
General practitioner	14	36	29
Specialized physician*	0	4	3
Nurse	2	1	1
Years of work experience			
1–5	54	16	28
6—1	20	21	20
12–19	11	30	24
20+ (longest experience=53 yrs)	16	34	29
AVERAGES			
Age of respondents	37.0	43.8	41.6
Years of work experience	9.2	15.6	13.6

*Includes internist and anesthesiologist. Source: Health Facilities Survey, Guatemala, 2003.

Table 2.5. Characteristics of health facilities, according to ownership and size of facility

Characteristics	Public		Private	Total
	Small facilities* (N=35) %	Large facilities† (N=21) %	(N=122) %	(N=178) %
Type of subfacilities				
Operating room	89	100	98	97
Emergency room	94	100	95	95
General ward	91	95	92	92
Outpatient gynecology department	91	95	70	77
Maternity ward	17	24	37	32
Intensive care unit (ICU)	14	48	25	25
Septic ward‡	17	29	7	11
Other§	43	71	45	47
Obstetric (separate from general)	74	95	59	66
Type of services provided				
Specialized OB/GYN	100	100	96	97
Specialized other**	97	100	97	98
Non specialized	66	52	50	54
Other††	3	5	3	3
AVERAGES				
Number of beds	45	193	16	42
Deliveries per Month	113	360	18	76

*<100 beds. †≥100 beds. ‡Includes *legrados* and *sépticas* . Two respondents named septic ward. §Includes recuperation, inpatient, observation, recent births. **Includes internal medicine, surgery, trauma, pediatrics. ††Includes lab, outpatient consultations, prescriptions. Source: Health Facilities Survey, Guatemala, 2003.

Chapter 3

Characteristics and Conditions of Abortion Service Provision

This chapter presents respondents' perceptions of the characteristics of women who obtain abortions and those who seek treatment for abortion complications, as well as perceptions of the various types of abortion services women use, depending on their economic status and area of residence. The chapter also presents a description of the methods most commonly used to induce abortion, the type of providers women usually go to and the cost of an abortion. Respondents' perceptions are deemed well-informed because of their professional experience in the area of abortion.

Profile of Women Seeking Abortion

Understanding who is most likely to interrupt an unwanted pregnancy and experience abortion complications is crucial to enabling policymakers and service providers to adequately address the problem of complications from induced abortion. HPS respondents were asked to describe the characteristics of the average women seeking to terminate a pregnancy and HFS respondents were asked to identify the most common characteristics of women seeking treatment for abortion complications. Characteristics that were asked about included age, educational level, marital status, parity, area of residence and profession/type of work performed. The specific question asked was "which age group [or other characteristic] is most common?"

HPS respondents consider the typical women seeking an induced abortion to have primary education, live in an urban area and be nonindigenous (Table 3.1). Fifty-nine percent of HPS respondents reported that the typical woman seeking an abortion tends to have no children, 63% say she is younger than 20 years old and 83% say she is single or never married. It is possible that HPS respondents are influenced by the fact that they mainly work in urban areas where there might be more young, unmarried, childless and nonindigenous women than in rural areas. However, the vast majority of HPS respondents (86%, data not shown) considered themselves knowledgeable or very knowledgeable about the conditions in rural areas and among indigenous groups.

According to HFS respondents, the typical woman admitted for abortion complications (from induced or spontaneous abortions) has a primary education, lives in an urban area and is nonindigenous. These respondents also believed that the typical woman seeking care has one or more children (77% of respondents), is 20–24 years old (60%) and is a housewife (64%). HFS respondents considered women receiving postabortion care to be nearly as likely to be single as married (48% and 52%, respectively). The HFS profile of women receiving postabortion care should be largely reliable because respondents are reporting on women they see personally. The differences between the profiles of women obtaining abortion and women obtaining postabortion care are partly due to the fact that the group of women obtaining postabortion care is largely made up of women who have had an unsafe abortion, while the former group is of all women obtaining an abortion—safely or unsafely. We expect the demographic and socioeconomic characteristics of these two groups to be different.

Methods of Abortion

In countries where abortion is highly restricted, many women are at risk for serious health problems, disabilities and even death as a result of undergoing an unsafe abortion procedure. The secrecy surrounding the practice means that surgical procedures such as dilation and curettage (D&C) and manual vacuum aspiration (MVA) are often performed under unhygienic conditions. Other methods frequently used to induce abortion are also likely to result in serious complications and sometimes in death. Information on the methods used and the conditions under which abortion occurs is important for understanding the types of complications that women are most likely to experience and helping plan for appropriate postabortion care. It is also important to tailor education and prevention efforts to help

eliminate the use of harmful practices

HPS participants were given a comprehensive list of methods used to induce abortion and were asked to indicate all methods they believe are used in urban and rural areas of Guatemala (Table 3.2). Striking differences were seen. The four most common methods for inducing abortion in urban areas, reported by 80–89% of respondents, were injectables, D&C, insertion of a catheter and insertion of solid objects into the vagina. Other methods cited by more than two-thirds of respondents were the oral intake of hormonal drugs such as misoprostol or oral contraceptives, as well as herbal teas. More than two out of five respondents reported that vacuum aspiration and vaginal hormones were used in urban areas. Around 20% reported harmful actions such as using hands and fingers, falling down, administering blows to the stomach and carrying heavy objects. Some methods commonly used in urban areas—injectables, oral intake of hormonal drugs and insertion of a catheter or solid objects—were also mentioned by more than half of those surveyed as being used in rural areas. However, only about one-third of respondents mentioned D&C and very few (4%) reported that vacuum aspiration is used in rural areas. Almost all participants (93%) believed women in rural areas commonly use herbs to induce an abortion. Solid objects were also frequently cited: Three out of four respondents believed that rural women insert solid objects (for example, sticks or hangers) into the uterus, and insertion of herbs into the vagina was mentioned by more than half of those surveyed.

HPS respondents were asked which single method is most commonly used by physicians, nonphysicians and women themselves in both urban and rural areas, and amongst indigenous and nonindigenous women. As expected, the respondents believed that physicians most commonly use surgical procedures while nonphysicians most commonly use nonsurgical procedures to induce abortion (Table 3.3). D&C was cited as the most frequent method used by physicians, regardless of the area of residence or ethnic group of the patient. Only a small percentage of respondents (8%) named vacuum aspiration as the most common method used by doctors in urban areas and no respondents said it was used by doctors in rural areas. Also, about one in six believed that physicians in rural areas most frequently use a catheter or injectables to induce abortion.

Methods reportedly favored by nonphysicians are considerably more risky than those used by physicians. Almost half of respondents believed nonphysicians in urban areas most commonly use a catheter to induce abortion, while those in rural areas are thought to favor herbs or solid objects.

Not surprisingly, the methods that women are thought to use in performing abortions on themselves are quite different than those used by providers and are generally less likely to be effective. Respondents believed that women in urban areas use oral medications or injectables most often in order to self-induce (41% and 34% of respondents, respectively), while most believed women in rural areas generally use herbs (66% of respondents). Less than 10% of respondents cited solid objects as a methods used by women in both urban and rural areas. The oral medications used by women may include mifepristone and misoprostol, the regimen used to perform medical abortions. Other studies in Latin America, particularly in Brazil, have found that women often use these drugs when inducing an abortion.[36]

HPS respondents believed the services indigenous women receive from physicians were similar to those received by nonindigenous women. Regardless of ethnic group, the majority of respondents believed physicians most often used D&C. However, methods used by nonphysicians and methods women use to self-induce were thought to be different for indigenous women and nonindigenous women. A higher percentage of respondents believed that nonphysicians are most likely to use solid objects to induce abortion in indigenous women, whereas nonphysicians are most likely to use a catheter with nonindigenous women. A large majority of respondents believed indigenous women would typically use herbs to self-induce abortion compared to nonindigenous women, who are thought to use oral medicines, injectables and herbs.

Abortion Providers

Information on the types of providers women go to when seeking an induced abortion was ascertained from two sets of questions. The HPS questionnaire included a general question about the frequency of use of eight different potential providers* by women seeking an abortion. Respondents were asked to identify use of each provider according to three different levels—commonly, sometimes or never. The second question asked respondents to estimate the proportion of all induced abortions performed by each of five provider types. Since a woman's place of residence and relative

*These series of questions included the option of "other" type of provider. These responses fell in the category of untrained providers and in most tables were combined with traditional birth attendant/comadrona tradicional.

affluence are important factors that may influence the choice of an abortion provider, in both questions respondents were asked about the use of each of these providers according to four different subgroups of women (urban poor, urban nonpoor, rural poor and rural nonpoor).

HPS respondents believed that nonpoor women, particularly nonpoor urban women, commonly go to "safe" providers, such as a doctor or nurse (Table 3.4). Sixty-four percent of study participants thought nonpoor women in urban areas typically seek a physician in a private practice or private facility for an abortion (data not shown). Nonpoor women living in rural areas were also thought to be fairly likely to seek out private doctors, but much less so than their urban counterparts. Nonpoor rural women were also considered much more likely to go to less safe providers, particularly traditional birth attendants (TBAs)/*comadronas tradicionales* (40% said this was common, compared to 8% for nonpoor urban women).

Poor women seeking an abortion are perceived to rely on less safe providers to self-induce. The most commonly named provider for poor women (in both urban and rural areas) and indigenous women was TBA/*comadrona tradicional.* Over two-thirds of HPS respondents believed that poor urban women who seek an abortion commonly go to a TBA/*comadrona tradicional.* This percentage is even higher for poor rural women and for indigenous women (80–84%). Self-induced abortion is the second most commonly perceived abortion method among women in these three groups. Physicians were reported as being rarely used by poor women in either urban or rural areas or by indigenous women.

In urban areas, self-induced abortions are believed to be more common among poor women than nonpoor women (28% versus 10%), while in rural areas, a similar proportion of HPS respondents believed poor and nonpoor women commonly self-induce (18% and 15%, respectively). High costs of obtaining an abortion in urban areas and lack of knowledge of abortion providers could be two of the barriers preventing poor urban women from approaching qualified abortion providers.

Respondents were also asked to estimate, for each of the key subgroups of women, the percent distribution of induced abortions according to type of provider (Table 3.5). The HPS respondents estimated that the majority of nonpoor urban women obtain abortions from doctors (55%) and another 13% go to a nurse/trained midwife. A large proportion of nonpoor rural women use relatively safe providers (doctors 28% and nurses/trained midwives 14%), but this group also relies to a great extent on less safe providers, particularly TBAs/*comadronas tradicionales* (38%). Poor women (urban and rural) and indigenous women are quite similar in terms of safety of abortion services. Poor women and indigenous women are thought to obtain abortions primarily from less safe providers such as TBAs/*comadronas tradicionales* (49–63%), with only 15% or less going to each of the more highly trained providers (nurse/trained midwife or physician).

Costs of Induced Abortion

HPS respondents were asked to estimate how much a woman pays for a first trimester abortion. Most respondents were able to provide information on the use of nurses, TBAs/*comadronas,* pharmacists and doctors by nonpoor women. The percentage of respondents able to give estimates for the use of doctors by poor women was lower, in part due to a lack of knowledge, but also because of the perception that these women do not generally receive care from doctors. According to respondents, it is several times more expensive to obtain an abortion from a private physician than from a nurse/trained midwife or a TBA/*comadrona tradicional* (Table 3.6). Obtaining an abortion from a physician at a private facility was reported to be significantly more expensive than at private practice. The lowest cited cost for an abortion was US$8* (the average cost of a self-induced abortion by a poor, rural woman), and the highest cited cost was US$491 (the average cost for a nonpoor, urban woman who goes to a doctor in a private facility).

Generally, nonpoor women are believed to pay more for abortion services than poor women, even for the same type of provider. In addition, nonpoor women who live in urban centers are expected to pay significantly more for abortion services than their counterparts in rural areas pay to any provider. This pattern of cost differentials across most provider types is maintained between poor and nonpoor women in rural areas.

Conclusion

Perceptions from HPS respondents about the characteristics of the average woman obtaining an abortion are similar in many respects to HFS respondents' perceptions of the characteristics of the average woman treated for postabortion complications. However, HFS respondents believe women who receive treatment for complications are slightly older and more likely to be

*The exchange rate at the time of the study was US$1=7.80 quetzales.

married and have children than HPS respondents believe women seeking abortions to be. This may reflect the higher probability that women in these groups will have an unsafe abortion, or it may suggest that women who are young (aged 15–19), single and nulliparous have greater barriers to accessing treatment for complications than older women who are married and have children.

There is consensus among health professionals that induced abortion in urban areas is done by D&C, and by the use of injectables, catheters and solid objects introduced into the uterus, while herbs are used more frequently in rural areas. Many respondents reported that unsafe methods, such as the use of catheters and solid objects, were the most commonly used methods among rural women. It is important to note that methods which are safe when used by experienced professionals such as surgical procedures can be very dangerous when administered by an untrained provider.

A woman's choice of provider appears to be strongly tied to her resources, cultural values and geographic location, and less safe providers are common among all subgroups. According to respondents, nonpoor urban women were the most likely of any group of women to obtain an abortion from a doctor, yet only half of the women in this category were perceived to use that type of provider. Despite their relative economic advantages, less than a third of nonpoor rural women seeking an abortion were perceived to go to a doctor, and slightly more than one-third were perceived to go to a TBA/*comadrona tradicional.* Only 4–11% of poor and indigenous women were thought to go to a doctor and half or more (49–63%) were thought to go to a TBA/*comadrona tradicional.* The vast majority of women have to resort to "less safe" abortion providers.

The cost of obtaining a first trimester abortion in Guatemala is perceived to be significantly higher for nonpoor women than for poor women, and higher for urban woman than for rural woman, even when they see the same type of provider. However, even when this cost is relatively low, an abortion may be an enormous expense for a woman with very few resources, and cost is therefore likely to be a key factor in a woman's choice of abortion provider.

Table 3.1. Percentage distribution of characteristics of women who obtain an abortion, according to HPS respondents; and percentage distribution of characteristics of women who seek treatment for abortion complications, according to HFS respondents

Characteristics	Women obtaining abortion (N=74)*	Women treated for abortion complications (N=178)†
Age group		
15–19	63	24
25–39	10	17
Level of education		
No education	15	14
Primary	47	53
Secondary	38	31
Post-secondary	0	2
Place of residence		
Urban	88	69
Rural	12	31
Marital status		
Married or living together	16	52
Single or never married	83	48
Divorced or separated	1	0
Number of living children		
Nulliparous	59	23
1–2	21	49
3–4	17	22
≥5	3	6
Ethnic group		
Indigenous	8	14
Nonindigenous	73	73
Indigenous and nonindigenous equally	19	14
Profession		
Students	32	10
Housewives	26	64
Maids	17	9
Other workers (formal and informal)‡	25	11
Professionals	0	5

*Multiple response, "don't know" and nonresponse were excluded. Valid response rate was between 72% to 100%. †Multiple response, "don't know" and nonresponse were excluded. Valid response rate was between 86% to 100%. ‡Includes factory workers and service workers. Sources: Health Professionals Survey, Guatemala, 2003; Health Facilities Survey, Guatemala, 2003.

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

Method	Urban (N=74) %	Rural (N=74) %
Vacuum aspiration	43	4
Evacuation with a curette/D&C	87	34
Saline instillation	31	18
Oral induction—Hormonal	77	55
Oral induction—Herbal teas	74	93
Oral induction—Other*	23	16
Injectables	89	59
Vaginal—Hormonal	60	16
Vaginal—Herbs or solutions	33	58
Vaginal—Catheter	84	69
Vaginal—Other solid object (i.e. stick, hanger)	80	76
Vaginal—Other†	3	4
Other means‡	18	22

*Includes aspirin and antimalaria drugs. †Includes hands and fingers. ‡Includes blows, massage, carrying heavy objects. Note: Responses of "don't know" were excluded. Valid response rate was between 95% to 100%. Source: Health Professionals Survey, Guatemala, 2003.

Table 3.3. Percentage of HPS respondents who reported specific methods for abortion as most commonly used by different provider types in urban and rural areas and among indigenous and nonindigenous women

Provider and method	Urban (N=74)	Rural (N=74)	Indigenous (N=74)	Nonindigenous (N=74)
Physician				
Evacuation with a curette/D&C	78	53	78	84
Vacuum aspiration	8	0	1	4
Catheter/injectables	1	17	5	4
Other*	10	16	7	4
Nonphysician				
Catheter	43	20	24	32
Herbs	12	32	24	11
Solid objects	29	35	35	28
Injectables	0	0	5	12
Other†	15	11	7	15
Woman herself				
Injectables	34	7	1	20
Oral medication	41	10	8	31
Solid objects	4	10	8	7
Herbs	10	66	67	24
Other‡	10	3	10	15

*For urban/rural breakdown includes oral medicine, intravaginal hormones, surgery; for indigenous includes oral hormones. †For urban/rural breakdown includes dilation, oral medicine, intravaginal solution; for indigenous includes oral hormones. ‡For urban/rural breakdown includes catheter, falls, blows, lemon and aspirin; for indigenous includes catheter, blows, lemon and aspirin, carrying heavy objects. Notes: Responses of "don't know" were excluded. Valid response rate was between 85% to 100%. Source: Health Professionals Survey, Guatemala, 2003.

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

	Nonpoor						Poor						Indigenous women			Total
	Urban			Rural			Urban			Rural						
Provider type	Commonly	Sometimes	Never	Commonly	Sometimes	Never	Commonly	Sometimes	Never	Commonly	Sometimes	Never	Commonly	Sometimes	Never	
Doctor in public health facility	0	7	93	0	12	88	0	15	85	0	8	92	0	5	95	100
Doctor in private health facility	51	38	11	23	46	31	1	27	72	0	10	91	0	28	72	100
Doctor in private practice	53	43	4	31	50	19	1	30	69	1	10	89	0	32	68	100
Nurse/trained midwife	8	50	42	14	62	24	23	47	30	12	46	42	12	46	42	100
Pharmacist	5	31	64	14	53	33	18	43	39	7	45	49	8	41	51	100
TBA/comadrona tradicional	8	34	58	40	51	8	68	28	4	80	16	4	84	12	4	100
Woman herself	10	49	42	15	50	35	28	43	28	18	58	24	18	50	32	100

Note: A total of 74 professionals responded to the survey. The response rate to particular questions ranges from 96% to 100%. Source: Health Professionals Survey, Guatemala, 2003.

Table 3.5. Percentage distribution of abortions that HPS respondents believe are performed by each type of provider, according to women's economic status, place of residence and among indigenous women

Type of provider	Nonpoor		Poor		Indigenous women
	Urban	Rural	Urban	Rural	
Doctor	55	28	11	4	6
Nurse/trained midwife	13	14	15	14	11
TBA/Comadrona tradicional*	18	38	49	60	63
Pharmacist	5	10	12	11	8
Woman herself	9	9	13	11	12
Total	100	100	100	100	100

*Includes write-in responses for *abortera* , *curandera* , *hierbero/a* , *santero* , witch, health promoter, relative/spouse. Notes: Percentage represents average of percentages given by respondents. One response of "don't know" was excluded for each subgroup of women and two were excluded for indigenous women. Source: Health Professionals Survey, Guatemala, 2003.

Table 3.6. HPS respondents' estimates of the cost, in US$ and Quetzales* of a first trimester abortion, by type of provider, according to women's economic status, place of residence and among indigenous women

	Nonpoor						Poor						Indigenous women		
	Urban			Rural			Urban			Rural					
Provider type	*Number of respondents* †	average		*Number of respondents* †	average		*Number of respondents* †	average		*Number of respondents* †	average		*Number of respondents* †	average	
		US$	Quetzales		US$	Quetzales		US$	Quetzales		US$	Quetzales		US$	Quetzales
Doctor—in private health facility	*60*	491	3829	*46*	362	2825	*16*	318	2481	*6*	168	1308	*20*	278	2165
Doctor—in private practice	*64*	339	2641	*56*	210	1641	*18*	272	2125	*7*	203	1586	*23*	146	1139
Nurse/trained midwife	*36*	86	668	*53*	50	388	*47*	45	349	*42*	49	382	*39*	32	250
TBA/comadrona tradicional‡	*31*	56	439	*61*	33	260	*68*	29	227	*66*	18	139	*66*	25	193
Pharmacist	*24*	42	329	*45*	23	179	*41*	19	150	*34*	13	103	*34*	18	137
Woman herself	*25*	19	147	*29*	20	159	*34*	12	97	*32*	8	59	*26*	10	80

*Used exchange rate of 7.8 quetzales per U.S. dollar. †Only those respondents who rated each provider as being used commonly or used sometimes by women seeking an abortion were asked to provide a price range for that provider. Of those who were asked to provide a price range for each question, nonresponse and "don't know" were excluded. ‡Includes healer, witch, health promoter, relative (spouse). Note: Response rate was between 72% to 100%. Source: Health Professionals Survey, Guatemala, 2003.

Chapter 4

Induced Abortion, Morbidity and Postabortion Care

In developing countries, common complications from induced abortion are incomplete abortion, sepsis, hemorrhage and perforation of the uterus.[37] Any of these complications can cause death if the woman does not receive medical care or delays treatment.[38] As a result of complications, many women suffer long term injuries, have difficulty becoming pregnant again or face complications in future pregnancies.[39] In this report, *complication* refers to all complications, ranging from the more severe (such as sepsis and uterine perforation) to the less severe (such as incomplete abortion).* This chapter presents health professionals' perceptions of postabortion complications, including the type of complications that typically result from induced or spontaneous abortion, the likelihood that women who experience complications from induced abortion will seek treatment, and the probable source of care.

Types of Abortion Complications

As an introduction to more detailed questions on abortion complications, HPS respondents were asked to name the most common complications suffered by women following an induced or spontaneous abortion. Although the question was asked about both induced and spontaneous abortion, the responses suggest that the respondents were considering primarily induced abortions. More than three-quarters cited excessive loss of blood, perforation of the uterus and sepsis (Table 4.1). High proportions also cited infection of the uterus or surrounding area (66%) and incomplete abortion (53%). About one-third of respondents mentioned infertility and damage to adjacent organs, and a quarter (24%) mentioned damage to the vagina or cervix. Another 14% of surveyed professionals identified death as a common result of induced or spontaneous abortion and 16% mentioned that women commonly experience other complications including pain, anemia and psychological problems.

Probability of Complications

The type of complications women experience following the interruption of a pregnancy depends on the method or methods used, the type of provider and the conditions under which the abortion is performed. However, all these factors are shaped by a woman's socioeconomic conditions. This means, for example, that a poor woman is more likely to experience abortion complications than a nonpoor woman, even if the abortion provider is a trained professional in both cases. Although some health care professionals may vary the quality of care according to the socioeconomic status of the patient, there are other important ways in which a woman's socioeconomic condition influences her health outcomes. For instance, a poor woman may have a later (and therefore riskier) abortion than her nonpoor counterpart because it took her longer to find a provider or get money to pay for the service. Moreover, poor women may face more difficulties in following the medical instructions given after the abortion procedure, for several reasons: because of a language or cultural barrier between the woman and the provider giving instructions (poor women are more likely to be indigenous and therefore non-Spanish–speaking); because they can't afford to rest for an extended period or avoid heavy work after the procedure; or because they cannot afford the recommended antibiotics or other drugs prescribed by the provider. Furthermore, the general health and nutrition conditions of poor women tend to be worse than those of nonpoor women, possibly resulting in longer recovery periods. All of these factors translate into a higher average complication rate for poor women than for nonpoor women, regardless of the provider.

*During the HPS interviews, respondents were read the following statement: As you know, the complications that result from abortion vary in seriousness. When we speak about abortion complications, we're referring to those serious consequences that require medical treatment in a health facility. The complications defined here include not only those extreme cases such as sepsis or perforation of the uterus but also those cases considered to be "incomplete abortion," which are generally defined by hemorrhaging or severe bleeding and can represent a less severe risk to the woman's health but nevertheless require hospitalization.

HPS respondents were asked to estimate the proportion of women who experience abortion complications based on the type of provider who performed the procedure (Table 4.2). Because of the reasons listed above, this question was asked separately for five different subgroups of women: urban nonpoor, rural nonpoor, urban poor, rural poor and indigenous women. The specific question asked, using the example of poor urban women, was: "Out of 10 poor women in urban areas who have an induced abortion performed by each type of provider I mention, about how many would experience a complication that should receive medical treatment?"

HPS respondents believed that abortions performed by gynecologists were the least likely to result in complications, followed by those performed by general practitioners, but even in these cases, the perceived risks are not negligible. Women thought to have the smallest risk for complications are those who are nonpoor, who live in urban areas and who go to a gynecologist. However, 8% of these women are believed to experience complications. This suggests a high level of risk associated with induced abortions overall in contexts where access to abortion is highly restricted by law and in practice.

According to HFS respondents, a woman is at the highest risk of experiencing abortion complications if she induces the abortion herself, with progressively decreasing but still high risk associated with abortions performed by a TBA, a pharmacist or lastly, a nurse (Table 4.3). Regardless of the woman's subgroup, 49–83% of women who self-induce or receive an abortion from one of these providers are thought to suffer a medical complication. However, for any given type of provider used, poor and indigenous women were thought to experience complications more often than nonpoor women.

HFS respondents were largely in agreement with HPS respondents regarding the subgroups of women most at risk for complications from induced abortion and the relative safety of providers, but overall, the complication rates offered by HFS respondents tended to be slightly higher. This may be because their experiences are mainly with women who have experienced complications.

Probability of Obtaining Treatment for Postabortion Complications

Despite the severity of some abortion complications, not all women who experience complications actively seek or are able to obtain medical care. Many factors play a role in preventing women from seeking treatment for complications or delaying efforts to do so. Some of these factors include extreme poverty, which makes treatment or transportation unaffordable, and fear of being mistreated by providers when seeking medical care for abortion complications. Cultural norms may also inhibit access to medical care. In some indigenous groups, for example, it is not viewed as acceptable for male doctors to provide obstetric care to women, and many of these women feel more comfortable being treated by traditional midwives. Institutional factors may also prevent women from obtaining adequate medical care. A woman may not meet service requirements, or the facilities available to her may be inadequately equipped to treat serious complications due to a lack of trained personnel, supplies or equipment. The barriers and limitations Guatemalan women face in seeking and obtaining reproductive health care for abortion complications may play an important role in abortion morbidity and mortality.

HPS and HFS respondents were asked to estimate the percentage of women who would obtain medical treatment from a trained person in a health facility when experiencing complications from induced abortion. Because a woman's economic resources, place of residence and ethnicity are three important factors that help determine her likelihood of obtaining treatment, HPS respondents were asked to provide estimates for six different subgroups of women: nonpoor urban women, nonpoor rural women, poor urban women, poor rural women and indigenous women. Participants from the HFS were asked to provide these estimates for four of these subgroups: poor, nonpoor, indigenous and nonindigenous women. HFS respondents were asked for less detailed information because they were also responding to questions about their facilities and the patients they treat.

As shown in Chart 4.1, the HPS respondents believed that nonpoor women and women in urban areas are more likely to obtain treatment at a health facility for induced abortion complications than are poor women and women in rural areas: Some 79–88% of nonpoor women are expected to obtain treatment (depending on area of residence), compared to 61–72% of poor women. It is not surprising that poor women in rural areas and indigenous women are believed to be the least likely to seek treatment at formal health facilities (around 60%). These estimates, provided by HPS respondents, are quite similar to those obtained from HFS respondents (data not shown). According to the HFS participants, 91% of nonpoor women, 66% of

poor women, 84% of nonindigenous and 64% of indigenous women experiencing postabortion complications would obtain treatment. Once again, HFS estimates may be higher than HPS because their experience is with women who have sought treatment for complications. However, it is surprising that both sets of respondents perceive that a relatively high proportion of poor and indigenous women would seek and obtain treatment in a health facility when having abortion complications. This seems to be an overestimation on the part of surveyed respondents because poor and indigenous groups are very likely to lack access to health care services.

By combining HPS respondents' perceptions of the percentage distribution of induced abortions, according to provider (Table 3.5) and the probability that women will experience complications, according to provider (Table 4.2), it is possible to estimate the total percentage of women who will experience complications out of the total number who have an induced abortion in each subgroup (results shown in Table 4.4). The lowest percentage is among urban nonpoor women (32%), who are the most likely to obtain abortions from doctors and who have the lowest probability of experiencing complications, even when obtaining an abortion from less safe providers. Conversely, poor rural women are the most likely overall to experience complications from an induced abortion (68%), due to the fact that they frequently seek services from less safe providers, and are among the most likely to experience complications from each individual type of provider. The abortion complication rates for rural nonpoor women and urban poor women fell in the middle, at 47% and 62% respectively.

Table 4.4 presents the overall percentage of women who are estimated to obtain care at a health facility for postabortion complications, among ***all*** women who obtain an induced abortion. This percentage is obtained by multiplying first the percentage of women in each subgroup who develop complications by the percentage with complications who are likely to be treated in a facility. This calculation yields the percentage of women each subgroup that will be treated for a complication out of all women in the subgroup who have an abortion. Forty-four percent of poor urban women and 41% of poor rural women who have an abortion are likely to eventually obtain care in a facility for complications, while 37% of nonpoor rural women and 29% of nonpoor urban women are likely to do so (panel 1, line 3). Overall, poor women are more likely than nonpoor women to end up receiving treatment for complications following an induced abortion, despite the fact that nonpoor women are more likely to obtain care for complications when they experience them. This is due to the fact that poor women are much more likely to suffer complications to begin with. When the figure for each subgroup is weighted by the percentage of women in that subgroup nationwide, we find that approximately 40% of women who obtain an induced abortion in Guatemala will end up in a health facility for postabortion complications (panel 1, line 4).

Because respondents' perceptions may vary according to the type of experience they have had with abortion provision, and the settings from where they get to know the issue of abortion, the above analysis was replicated for four categories of respondents, those who work in: the public sector; the private sector (combining NGOs with private sector); medical professionals; and non-medical professionals (results summarized in Table 4.4, panels 2 to 5). The results show that the estimated proportion of women who obtain an induced abortion and who will end up in a health facility for postabortion complications is lower and quite similar among respondents who work in the private sector (32%) and those whose experience with the issue of abortion comes from a non medical setting (33%). By comparison, higher levels are estimated by those respondents who work in the public sector (44%) and those whose experience of abortion provision is from a medical environment (40%). This pattern was identified in earlier work in Latin America,[40] and suggests that respondents who are much closer to treatment of abortion complications (public sector and medical) are likely to over-estimate both the probability of complications and the probability that women will obtain the care they need; it is likely that respondents with experience based in the private sector and non-medical work are more reflective of the actual situation.

Sources of Postabortion Care

HPS respondents were also asked to identify the types of providers from whom women seek treatment when suffering from abortion complications, indicating whether treatment is sought commonly, sometimes or never. Table 4.5 shows various sources of postabortion care according to women's economic status, place of residence and ethnicity. Public health facilities were believed to be a vital source of care for all women. Some 42–65% of respondents believed that nonpoor women commonly go to doctors in private practices, private clinics or public facilities. Three-quarters of those surveyed reported that poor urban women large-

ly rely on doctors in public health facilities, while a similar percentage of professional respondents reported that poor rural women and indigenous women commonly seek postabortion care from TBAs/*comadronas tradicionales* (65% and 68%, respectively).

Number of Postabortion Patients Treated

Table 4.6 presents information from the HFS survey on the average number of abortion cases treated annually by each type of facility and whether patients were treated on an inpatient or an outpatient basis. Respondents were asked to provide the total number of postabortion case —spontaneous and induced combined—because of the difficulty of correctly diagnosing the cause of pregnancy loss based on symptoms alone and because, in a context where abortion is stigmatized and legally restricted, women and providers are unlikely to discuss the cause of the pregnancy loss.*

Six in 10 surveyed facilities offer postabortion care in an inpatient setting only, over one-third of offer both inpatient and outpatient care, and 3% offer outpatient care only. All public facilities offer inpatient services, but are somewhat less likely to offer outpatient services in addition, compared to private facilities. Facilities located in the Metropolitan, North and Northwest regions are about evenly split between providing inpatient only and providing both inpatient and outpatient services to abortion complication patients.†

There is a large difference between public and private facilities in the size of the postabortion care caseload: Public facilities treated an annual average of 365 patients suffering from complications from either a spontaneous or induced abortion, while private facilities treated an average of 52. This is partly due to the much smaller size of private facilities (an average of 16 beds) compared to an average of 100 beds for public facilities (data not shown).

Overall, facilities treated more complications on an inpatient basis than an outpatient basis. This is seen among public facilities, which carry the largest caseloads, and to a lesser extent, among private facilities. This could be an indication that poor women (who make up the majority of the patients in public facilities) are more likely to have complications serious enough to require inpatient care, or that these women are more likely to stay overnight for other reasons, such as being far away from home.

Based on the HFS, an estimated 27,013 women in Guatemala obtain postabortion care for either induced or spontaneous abortion in formal health facilities each year (Table 4.7). Of these, 77% are treated on an inpatient basis. Most abortion complication patients (76%) are treated in public facilities, while 24% are treated in private facilities. Despite the fact that private facilities treat a relatively small share of abortion complication patients, this level of treatment is roughly in accordance with their capacity: Private facilities have 27% of the beds in Guatemala, compared to 73% for public facilities (data not shown).

The greatest numbers of postabortion patients are treated in the Metropolitan and Southwest regions—8,844 and 7,113 patients, respectively, or 59% (Table 4.7). The numbers of patients treated in the middle-range regions are significantly lower and fairly uniform: 3,000 cases in the Central region, 2,237 in the Northeast, 2,040 in the Southeast and 2,058 in the Northwest. A significantly lower number of postabortion cases are treated in the Petén and North regions (709 and 1,014 cases per year, respectively).

In Guatemala, approximately 10 out of 1,000 women ages 15–49 are hospitalized for postabortion complications each year. The rates are highest in the Metropolitan and Southwest regions, at 12.6 and 11.2 per 1,000 women, respectively. Conversely, the North region has the lowest rate (4.6 per 1,000 women), followed by the Northwest region (6.0 per 1,000 women)

While the 52% of Guatemala's health facilities are concentrated in the Southwest and Metropolitan regions and serve half of the total female population of reproductive age (49%, data not shown), four regions—North, Southeast, Northwest and Petén, where 32% of the female population aged 15–49 live—have only 22% of the national health facilities that provide treatment for abortion complications. The Northeast and Central regions are in a much better situation, with 11% and 15% of the health facilities that provide postabortion care, respectively, and only 19% of women aged 15–49. These findings suggest that more than half of the female population of reproductive age in Guatemala may have difficulty accessing reproductive health care.

Depending on the region, private facilities assume different shares of this burden, ranging from as low as 12–14% of treatment cases in the Southeast, Northwest

*In subsequent analyses, we use indirect estimation techniques to separate the reported total number of abortion patients into spontaneous and induced.

†Although we defined women who stayed in the hospital for more than 24 hours as inpatient and those who stayed less than 24 hours as outpatient, some respondents may not clearly distinguish between inpatient and outpatient service. Interviewers reported that all abortion patients receive intravenous fluids and medication and can stay at the hospital if their homes are far away, even if their ailments are not serious.

and North regions, to as high as 29% and 33% in the Metropolitan and Northeast regions, respectively. However, this is still generally in accordance with their respective capacities: Private facilities in the Northwest region may only treat 13% of abortion complication patients, but they only have 9% of the beds in this region (data not shown). Similarly, private facilities in the Metropolitan region treat a relatively high proportion of abortion complication patients compared to other regions (29%), but they hold an even greater share of the regions beds (38%).

Procedures Used for Treatment of Postabortion Complications

In developing countries, D&C, also known as sharp curettage, has traditionally been the most common surgical procedure to treat complications resulting from incomplete abortions. This appears to be the case in Guatemala as well. Almost all health facilities surveyed, regardless of ownership, currently use D&C for the complication of incomplete abortion (Table 4.8). Only about half of public hospitals and less than a fifth of private hospitals ever use manual vacuum aspiration (MVA). Only 6% overall cited this as the most common procedure used (data not shown). Antibiotics, oxytocics and surgery and are other methods used by most hospitals in treating abortion complications. All HFS respondents reported that D&C and electric vacuum aspiration are always performed using some kind of anesthesia (local or general anesthesia) and nearly all HFS respondents said the same for MVA procedures and surgery (Table 4.9).

HFS respondents were asked whether they considered postabortion complications to be a major cost for their facility. Overall, 26% responded in the affirmative (data not shown). Respondents from public facilities were much more likely to consider postabortion care a financial burden (77%) than those from private facilities (3%). This is because, as some respondents pointed out, in private facilities those costs are covered by the patient and not by the facility. It should also be noted that, on average, public facilities treated many times the number of women with postabortion complications than did private facilities. A higher percentage of gynecologists (34%) than general practitioners (12%) perceived that abortion complications are a major cost for their facilities.

HFS respondents were also asked whether services provided in their facilities for postabortion complications could be improved and how. About two-fifths of respondents consider treatment of complications in their facilities to be adequate and say no additional measures to improve services are needed (Chart 4.2). Half (52%) recommended raising the quality and availability of services such as having a separate evacuation room, having ultrasound equipment, increasing the availability of antibiotics and medicines, increasing the availability of MVA kits and training personnel in the use of this technique, and increasing prenatal care coverage to detect early health problems. Another 8% said that their facilities should boost prevention efforts such as sex education, family planning education and provision of contraceptives.

Conclusion

Respondents reported that excessive loss of blood, perforation of the uterus and sepsis were common complications experienced by women following an induced or spontaneous abortion in Guatemala. These are the same complications that commonly occur in other developing countries where abortion is highly legally restricted.

HFS respondents believe women who receive treatment for complications from induced or spontaneous abortions are slightly older and are more likely to be married and have children than HPS respondents' perceptions of women who seek an induced abortion. This may reflect a high probability that older, parous married women will have an unsafe abortion, or it may suggest that women who are young (aged 15–19), single and nulliparous have greater barriers to accessing treatment for complications than older women who are married and have children.

Although all women in Guatemala are subject to the same restrictive abortion laws, respondents indicated that women's relative risks of experiencing abortion complications depend on several factors. Poor women, indigenous women and those who live in rural areas are thought to be more likely to experience complications than nonpoor, nonindigenous and urban women. Although this can be attributed in part to the fact that women in the former groups are more likely to seek abortions from nonmedical providers, discrepancies persist even within the same provider type. In other words, a poor woman is more likely to experience complications following an abortion than a nonpoor woman, even when both attend the same type of provider.

The likelihood that women with abortion complications will seek and obtain treatment is also directly related to socioeconomic status and area of residence. Nonpoor women and women in urban areas are more

likely to obtain treatment at a health facility for induced abortion complications than poor women, women in rural areas and indigenous women. Nonpoor women, regardless of their place of residence, are more likely to go to doctors in private practices, private clinics or public facilities for postabortion care, while poor, rural women and indigenous women most often seek out TBAs or doctors in public facilities where services are free or inexpensive. This suggests that economic status has a significant influence on the options women have when seeking care for complications from an induced abortion.

An estimated 27,013 women (10 per 1,000 women aged 15–49) are treated annually for abortion complications (spontaneous and induced) in formal health facilities. Three-fourths are treated in public health facilities and one-fourth in private facilities. One-quarter of HFS respondents perceived postabortion care to represent a high economic cost for their health facility; this percentage was higher among gynecologists and those in public facilities. Although a minority of respondents felt it was a burden, the aggregate cost of treating postabortion complications in Guatemala is undoubtedly high. The treatment protocols used most often—D&C (which requires anesthesia) and overnight stays—are very expensive, and facilities treat an average of 148 women with postabortion complications each year (compared to 912 deliveries), making it a fairly common procedure.

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

Complication	% (N=74)
Excessive loss of blood	80
Perforation of uterus	80
Sepsis or septic shock	77
Infection of the uterus and/or surrounding area	66
Incomplete abortion	53
Damage to vagina and cervix	24
Other: sterility/infertility/damage to internal organs	32
Other: death	14
Other*	16

*Includes pain, anemia and psychological problems. Source: Health Professionals Survey, Guatemala, 2003.

Table 4.2. HPS respondents' estimates of the percentage of women having an induced abortion who will experience complications that require medical treatment by type of provider, according to women's economic status, place of residence, and among indigenous women

	Non-Poor		Poor		Indigenous
Provider type	Urban	Rural	Urban	Rural	Women
Gynecologist	8	11	12	17	14
General practitioner	17	18	24	25	24
Nurse/trained midwife	47	51	58	61	59
Pharmacist	51	51	61	61	60
TBA/comadrona tradicional	60	64	69	72	69
Woman herself	68	69	76	75	74

Notes: Percentages are based on 67–74 valid responses. Of those excluded, 1–2 respondents answered "don't know" and 1–4 gave no response for each subgroup of women. Percentage represents average of percentages given by respondents. Source: Health Professionals Survey, Guatemala, 2003.

Table 4.3. Average proportion of induced abortions likely to result in complication by type of provider and women's poverty status and indigenous ethnicity, as perceived by HFS respondents

	Nonpoor	Poor	Nonindigenous	Indigenous
Provider type	%	%	%	%
Doctor	11	20	16	26
Nurse/trained midwife	49	62	52	63
Pharmacist/dispenser/drug store	58	68	62	71
TBA/comadrona tradicional	70	79	69	79
Woman herself	74	79	74	83

*Percentages are based on 147–178 responses. Of those excluded, 0–6 respondents answered "don't know" and 0–30 gave no response for each subgroup of women. Source: Health Facilities Survey, Guatemala, 2003.

Table 4.4. Of all women having an induced abortion, the percentage who are hospitalized for complications, and constituent components: total HPS sample and for four subgroups, by sector where respondents work and type of work experience

	Non-poor		Poor	
	Urban	Rural	Urban	Rural
Total*				
% with complications (1)	32	47	62	68
Probability of being hospitalized following complications (2)	88	79	72	61
% hospitalized† (3)	29	37	44	41
% of women who will be hospitalized for complications out of all women who have an abortion‡ (4)	39			
Works in private sector§				
% with complications	29	42	57	60
Probability of being hospitalized following complications	85	75	65	55
% hospitalized	25	32	37	33
% of women who will be hospitalized for complications out of all women who have an abortion	32			
Works in public sector§				
% with complications	35	49	66	73
Probability of being hospitalized following complications	89	82	76	64
% hospitalized	31	40	50	47
% of women who will be hospitalized for complications out of all women who have an abortion	44			
Non-Medical setting§				
% with complications	25	40	56	65
Probability of being hospitalized following complications	85	81	71	54
% hospitalized	21	32	40	35
% of women who will be hospitalized for complications out of all women who have an abortion	33			
Medical setting§				
% with complications	34	48	63	68
Probability of being hospitalized following complications	88	81	72	62
% hospitalized	30	39	45	42
% of women who will be hospitalized for complications out of all women who have an abortion	40			

*Information is from Table 3.5, Table 4.2 and Chart 4.1. †Row (3) is the product of row (1) and row (2). ‡Row (4) is row (3) weighted by the distribution of the population by subgroup (proxy variable for poverty status is based on education). §Information for additional tabulations run by sector and work setting. Data Sources: Health Professionals Survey, Guatemala, 2003; Guatemala Census, 2002; ENSMI 2002.

Table 4.5. Percentage of HPS respondents, by perception of how commonly various postabortion care provider types are used, according to women's economic status, place of residence and among indigenous women

	Nonpoor						Poor						Indigenous women			Total
	Urban			Rural			Urban			Rural						
Provider type	Commonly	Sometimes	Rarely	Commonly	Sometimes	Rarely	Commonly	Sometimes	Rarely	Commonly	Sometimes	Rarely	Commonly	Sometimes	Rarely	
Doctor in public health facility	49	24	27	47	41	12	76	18	7	54	37	10	53	35	12	100
Doctor in private health facility	57	38	5	42	43	15	7	37	57	3	22	76	4	31	65	100
Doctor in private practice	65	28	7	53	37	10	14	45	42	5	28	66	4	46	50	100
Nurse/trained midwife	10	43	47	11	60	30	21	55	25	26	53	22	22	57	22	100
Pharmacist	3	28	69	4	39	57	11	54	35	16	41	43	14	47	39	100
TBA/comadrona traditional	3	38	60	15	57	28	37	45	19	65	23	12	68	23	10	100
Other*	0	44	56	25	38	38	22	44	33	38	50	13	27	73	0	100

*Includes healers, relatives, health promoters. Percentages based on 9–11 responses. Note: Percentages are based on 73–74 responses. Source: Health Professionals Survey, Guatemala, 2003.

Table 4.6. Percentage of facilities that offer inpatient and outpatient postabortion care, and average annual number of postabortion patients treated per facility, by ownership and region

	% that offer abortion care*			Average number of postabortion patients treated per facility per year†			Number of facilities surveyed
	Inpatient only	Outpatient only	Both	Total	Inpatient	Outpatient	
Total	**61**	**3**	**37**	**148**	**115**	**34**	**178**
Ownership							
Public	70	0	30	365	293	72	56
Private	57	4	39	52	35	17	122
Region							
Metropolitan	54	0	46	175	142	33	50
North	44	0	56	127	104	23	9
Northeast	59	0	41	79	62	17	27
Southeast	78	11	11	227	221	5	9
Central	80	10	10	150	143	8	20
Southwest	60	3	38	158	90	68	42
Northwest	54	0	46	158	120	39	13
Petén	74	13	13	86	80	6	8

*Some lines do not sum to 100 because of rounding. †Mean of the number reported for the average month and for the past month, multiplied by 12. Includes facilities that treated zero patients. Notes: Patient numbers based on 177 responses. One response of "don't know" was excluded. Source: Health Facilities Survey, Guatemala, 2003.

Table 4.7. Estimated number of women treated annually for complications from spontaneous or induced abortions, and morbidity rate by ownership of facility according to region (weighted results)*

	Total	Metropolitan	North	Northeast	Southeast	Central	Southwest	Northwest	Petén
	(N=178)	(N=50)	(N=9)	(N=27)	(N=9)	(N=20)	(N=42)	(N=13)	(N=8)
Total	**27013**	**8844**	**1014**	**2237**	**2040**	**3000**	**7113**	**2058**	**709**
Ownership									
Public (Ministry of Health/Social Security)	20460	6240	870	1506	1800	2358	5316	1794	576
Private	6553	2604	144	731	240	642	1797	264	133
PERCENTAGES									
Postbortion patients treated in public facilities	76	71	86	67	88	79	75	87	81
Postbortion patients treated in private facilities	24	29	14	33	12	21	25	13	19
RATE									
Abortion morbidity rate per 1,000 women†	9.9	12.6	4.6	9.8	9.4	10.2	11.2	6.0	9.0

*Mean of the number reported for the average month and for the past month, multiplied by 12. Includes facilities that treated zero patients. Patient numbers based on 177 responses. One response of "don't know" was excluded. †Number of women treated for postabortion complications divided by the number of women aged 15–49, multiplied by 1,000. Source: Health Facilities Survey, Guatemala, 2003.

Table 4.8. Percentage of facilities that use various procedures to treat postabortion complications by ownership of facility (weighted results)

Procedure	Public		Private‡	All
	Small facilities*	Large facilities†		
	(N=35)	(N=21)	(N=122)	(N=178)
D&C	97	100	99	99
Manual vacuum aspiration	43	57	17	26
Electric vaccum aspiration	15	20	7	10
Any vaccum aspiration (manual or electronic)	50	60	20	30
Other type of evacuation§	3	0	0	1
Blood transfusion	45	85	47	52
Intravenous solutions	43	29	39	39
Surgery	60	76	53	57
Antibiotics	91	95	85	88
Oxytocics	91	90	74	79
Other**	31	43	32	33

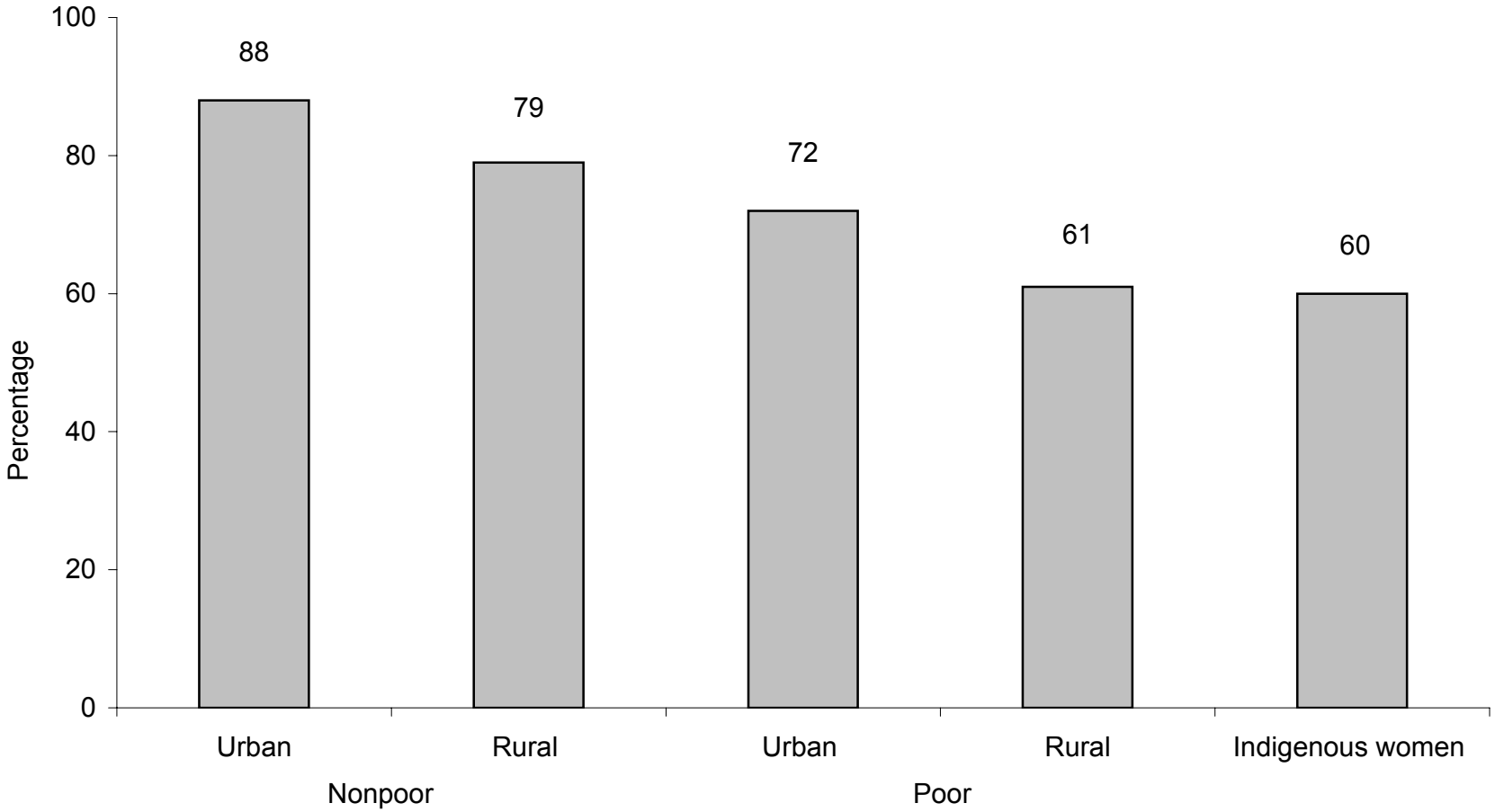
*Percentages for small public facilities based on 33–35 responses. †Percentages for large pubic facilities based on 20–21 responses. ‡Percentages for private facilities based on 117–122 responses. §The "other type of evacuation" was unspecified. **Includes labs, ultrasound, analgesics. Source: Health Facilities Survey, Guatemala, 2003.

Table 4.9. Percentage of facilities that use anesthesia with various procedures to treat postabortion complications

Procedure	Use of anesthesia		N
	Always	Sometimes	
	%*	%*	
D&C	100	0	176
Manual vacuum aspiration	94	4	47
Electric vaccum aspiration	100	0	15
Surgery	99	1	97

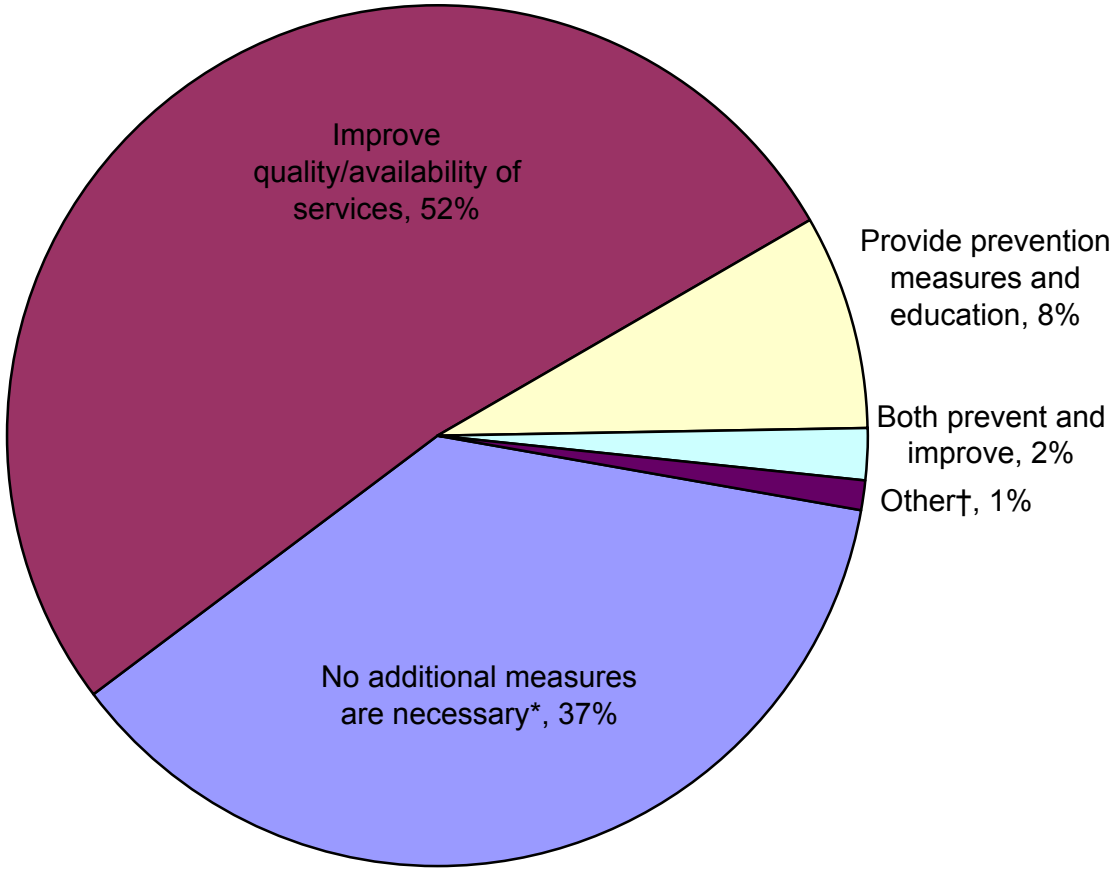
*Percentages are based on those that reported that the method is used at the facility. Source: Health Facilities Survey, Guatemala, 2003.

Chart 4.1. HPS respondents' estimates of the percentage of women with induced abortion complications likely to be treated in a health facility, by women's economic status, place of residence and among indigenous women



Note: Percentage represents average of percentages given by respondents. Source: Health Professionals Survey, Guatemala, 2003.

Chart 4.2. Percentage distribution of HFS respondents by perception of how treatment of postabortion complications can be improved in their facilities



*Respondents consider services provided to be adequate. †Includes detect abortions early, improve access to antibiotics and educate patients. Source: Health Facilities Survey, Guatemala, 2003.

Chapter 5

Family Planning, Postabortion Counseling and Opinions on Interventions to Reduce Unsafe Abortion and Improve Postabortion Care

This chapter presents information on family planning and postabortion counseling services for postabortion patients. Information for this chapter was obtained from both the HPS and the HFS. HPS respondents were asked for their opinions about the provision of postabortion services, including family planning, while HFS respondents were asked about the extent of family planning and postabortion services within their facility. Also included in this chapter are respondents' recommendations for reducing unsafe abortion in Guatemala.

Contraceptive Services for Postabortion Patients

Although contraceptive use has increased in Guatemala since 1987, use prevalence is still low, particularly for modern methods (34%).[41] Among sexually active women of reproductive age, those who use a traditional method or who do not use a method of birth control are most at risk for unintended pregnancies, and thus are the most likely candidates for an induced abortion. In addition, contraceptive failure and misuse also can make a significant contribution to unintended pregnancy. HPS respondents were asked for their perceptions regarding the type of contraceptive methods women who have unintended pregnancies were using at the time they conceived the unintended pregnancy*. High proportions of respondents perceived that women who experienced unintended pregnancies were using a contraceptive method at the time they conceived that pregnancy: Some 62% of them mentioned the pill, 41% the IUD and 39% the injectable (data not shown).

The perception that women who become unintentionally pregnant would typically have been using effective methods of contraception seems to be an overestimation on the part of the respondents. In fact, according to the National Survey of Maternal and Infant Health (2002) in Guatemala, contraceptive use is relatively low—43% of married women used a method and 57% were not using any method.[42] One possibility is that respondents misunderstood the question and answered in regard to women who were using a method, rather than for all women who experience an unintended pregnancy. However, women who seek an abortion are also more likely to be using a method compared to all other women because they are more motivated to prevent an unintended birth or pregnancy.

Both the HPS and the HFS asked respondents whether they believed postabortion complication patients should be offered family planning counseling and methods while they are at a facility for treatment. Respondents to both surveys were nearly unanimous in their approval of counseling—99% from HFS and 97% from HPS approved (data not shown). Respondents from the HPS were also asked if they thought contraceptive methods should be distributed to postabortion patients while at the health facility. Here too, respondents were largely supportive—82% responded in the affirmative. However, 14% said they did not believe women should receive methods in this context and 4% said that they should receive contraceptive methods "sometimes," presumably to be determined by the patient's circumstances.

Respondents at health facilities that do offer counseling or distribute methods were asked to name which methods they counsel on or provide (Table 5.1). According to respondents, nearly all facilities counseled on the pill and injectables and almost three-quarters counseled on IUDs. About half of facilities discussed female sterilization and condoms, 34% discussed rhythm and 25% discussed vasectomy. For nearly all methods, large public facilities were the most likely to offer counseling for postabortion patients, followed by small public facilities. With the exception of implants, private facilities were the least likely to offer counseling on each of these methods. Large public facilities

*The specific question asked to respondents was: As you know, some women who are using a contraceptive method to avoid pregnancy become pregnant nonetheless. Which family planning methods do you think women are typically using at the time of the unintended/unwanted pregnancy? The question allows multiple answers.

counseled on an average of 5.5 methods, small public facilities on 4.9 methods and private facilities on 3.9 methods.

Facilities that counsel on long-term or permanent methods are more likely to offer methods on site than are facilities that counsel on shorter-term methods. About three-fifths of respondents that reported their facilities provide counseling to postabortion patients on the pill, injectables and condoms provide methods on site. However, a slightly higher percentage (67–74%) of those who counsel on IUDs, female sterilization and vasectomy report providing methods on site. These findings suggest a lack of contraceptive supplies, particularly shorter-term methods.

Opinions on Approaches to Reducing Unsafe Abortions

Respondents for both surveys were asked for their opinions on strategies for reducing the level of unsafe abortions (and induced abortions generally) in Guatemala. Respondents from the HPS and HFS were largely in agreement that the main focus should be on helping women prevent unintended pregnancies by providing postpartum and postabortion contraceptive counseling, by increasing the availability of family planning services overall and, in particular, by improving access to effective contraception (Table 5.2). In addition, both groups of respondents supported publicizing the health risks of unsafe abortion. Although the two groups backed the same strategies, higher proportions of HFS respondents supported them than did HPS respondents. In addition to these recommendations, some HPS respondents specifically mentioned adolescents' need for education and access to contraception. A minority of both HPS and HFS respondents suggested educating TBAs/comadronas tradicionales, training providers to improve the provision of health care to postabortion patients and changing abortion law or policies.

HPS respondents were asked if they themselves had been trained to provide MVA. A quarter had received such training (26%). This percentage was higher for gynecologists and nurses (37%) and lower for general practitioners (21%, data not shown).

Conclusion

Although the vast majority of health facilities provide counseling to postabortion patients on the pill, the injectable, condoms and IUDs, a rather low proportion of them offer these methods on site.

In order to reduce the level of unsafe abortions, respondents from HPS and HFS recommended improving efforts to prevent unintended pregnancy and raising public awareness about the dangers of unsafe abortion. The fact that only a small percentage of respondents suggested changing abortion laws and policies is indicative of the conservative climate surrounding abortion in Guatemala.

Since only a small proportion of medical providers are trained in the MVA procedure, expanding training is a promising avenue for reducing costs and improving care for postabortion patients. This procedure is more cost-effective and has fewer negative medical consequences compared to the more commonly used D&C procedure.

5.1. Percentage of facilities that offer counseling on contraceptive methods to postabortion patients, by ownership and size of facility

Method	Public		Private	All	Provides methods on site
	Small Facilities (N=34)	Large Facilities (N=20)	(N=117)	(N=171)	(N=92)*
The pill	91	100	90	91	55
Injectables	97	100	85	89	58
IUD	85	95	65	72	67
Condom	65	80	46	53	62
Female sterilization	68	65	33	44	71
Rhythm	47	35	30	34	60
Vasectomy	32	40	20	25	74
Implants	8	15	12	10	61
Other method†	9	25	5	8	86
Average number of methods	4.9	5.5	3.9	4.3	5.0
N	34	20	117	171	171

*Percent is based on 92 health facilities that offer contraceptive methods to postabortion patients on site.
†Includes spermicides, female condoms, emergency contraception. Source: Health Facilities Survey, Guatemala, 2003.

Table 5.2. Percentage of HPS and HFS respondents, who believe that selected suggestions can be used to reduce unsafe induced abortion in Guatemala, according to respondent's profession

	Health Professional Survey					Health Facility Survey				
Suggestions	Total	Gynecologist	General practitioner	Nurse	Other*	Total	Gynecologist	General practitioner	Specialized physician	Nurse
	(N=74)	(N=19)	(N=32)	(N=11)	(N=11)	(N=178)	(N=119)	(N=52)	(N=5)	(N=2)
Publicize the health risk involved in unsafe abortion	55	58	63	73	18	92	92	90	100	100
Provide contraceptive counselling post delivery and post abortion	62	68	69	55	46	92	92	90	100	100
Increase availability of family planning services	45	47	50	18	46	87	90	83	80	100
Improve access to effective contraception	47	53	44	36	55	88	90	81	100	100
Open-ended responses										
Other: education†	n/a	na	na	na	na	48	47	48	40	100
Other: education and access to contraception for adolescents	60	74	66	36	36	na	na	na	na	na
Other: change laws/policies	4	5	0	0	18	na	na	na	na	na
Other: train providers/improve services	8	5	3	0	36	na	na	na	na	na
Other‡	4	5	6	0	0	32	31	37	20	0

*Includes policy makers, researchers, and activists. †For HFS includes contraceptives for adolescents. ‡for HFS includes changing abortion laws, educate traditional midwives and other providers; for HPS includes investigating the causes of abortion, prevent unqualified providers from performing abortions. Sources: Health Professionals Survey, Guatemala, 2003; Health Facilities Survey, Guatemala, 2003.

Chapter 6

Conclusions and Implications

Although elective abortion is illegal in Guatemala, the findings of this study indicate that many women are obtaining induced abortions under unsafe conditions and experiencing medical complications. According to our findings, Guatemalan health facilities treat approximately 27,000 women annually for complications stemming from induced and spontaneous abortions. This is equivalent to 74 women per day.

Unsafe abortion is occurring within the context of high levels of unmet need for contraception and inadequate availability of health care services, including postabortion care. In 2002, 28% of married women did not want a child soon or ever, yet were not using any method of contraception. By extension, approximately one-third of recent births in 2002 were unintended (either mistimed or unwanted). This situation stems from a number of factors, including the country's poverty and weak health infrastructure and the government's long-standing reluctance to provide family planning as part of public health services. In addition, only 11% of Guatemalans have adequate access to health services, according to the World Health Organization's definition. There is a shortage of well-trained providers in the private sector and traditional medicine is widely practiced. This limits the options women have in seeking an abortion provider and limits their ability to obtain adequate treatment in the case of a medical complication. These limitations disproportionately affect the most vulnerable groups: poor, rural and indigenous women.

The findings from this study, based on interviews with health professionals, suggest that women seeking an abortion frequently go to providers who are not medically trained. While women with the most resources—nonpoor urban women—are the most likely to obtain an abortion from a doctor, one-third of these women are nevertheless believed to go to untrained providers. Meanwhile, the majority of women who are poor, indigenous or living in rural areas go to less safe providers or self-induce. The methods frequently used to induce an abortion in urban areas are thought to be D&C and the insertion of catheters or solid objects into the uterus. Herbs are often used in rural areas.

Women who obtain abortions in Guatemala are thought to be at high risk for complications. This risk is highest when the abortion is performed by the woman herself, a TBA/*comadrona tradicional,* a pharmacist or a nurse, in that order. More than half of abortions performed by these providers are thought to result in complications. However, even abortions performed by doctors carry significant risk; respondents estimate that these abortions result in complications more than 10% of the time. The likelihood of experiencing complications is also higher for poor and rural women than for nonpoor and urban women, even when they go to the same type of provider.

Most women who require medical care following an abortion are thought to receive it. However, the rates given for the most disadvantaged women—poor rural women and indigenous women—are lower (around 60%), compared to nearly 90% for nonpoor, urban women. Poor, rural and indigenous 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 as their counterparts, and they are less likely to receive medical care when they experience complications. The combined effect of these factors multiplies the overall risk that the women in these groups face. About 39% of women who have an induced abortion will end up in a health facility being treated for a complication; nearly 60% of these are poor rural women, the group least likely to receive the medical care they need.

All health facilities interviewed, both public and private, treat women with complications from induced and spontaneous abortions. Of the estimated 27,000 women treated each year, about three-quarters are attended to in public facilities and one-quarter in private

facilities, a breakdown that is roughly proportional to the relative capacities of each type of facility (based on number of beds). Many facilities, both public and private, lack adequate resources. Only about half of all facilities offer blood transfusions, one indicator of a facility's ability to provide postabortion care. Most large public facilities (85%) offer blood transfusions, and fewer than half of private and small public facilities offer this service.

When asked what measures would improve postabortion care, respondents suggested increasing the availability of family planning services, improving the skills of the staff who provide postabortion care, improving the infrastructure for postabortion services and raising public awareness of the health risks of unsafe abortion.

Program and Policy Implications

The government of Guatemala has recently enacted a series of policies aimed at improving women's reproductive health and rights. These call for increasing access to family planning information and services as part of the array of public services offered, reducing maternal mortality, providing sex education, improving health care and promoting women's equity and development, among other things. These are all steps in the right direction. Since these policies were enacted only recently, the process of implementing them has just begun. However, the process can be accelerated if there is strong political commitment and enforcement of the application of law.

Increasing access to family planning information and services will go a long way toward lowering the incidence of unwanted pregnancy, which is crucial for reducing unsafe abortion. As part of its family planning policy, the government should offer a wider range of contraceptives (even in small facilities and those that are Social Security-run), make emergency contraception available to women, and target contraceptive services to high-risk groups such as postabortion patients. In addition to increasing access, the government could work toward improving contraceptive knowledge through health education campaigns and by taking steps to both empower women in family planning decision-making and encourage the involvement of men. Contraceptive and sexual health knowledge is particularly important for adolescents and young adults, a high proportion of whom are unmarried, and for whom an unplanned pregnancy would be particularly difficult. Reaching adolescents, by incorporating sex education into school curricula (as outlined in Guatemala's Social Development and Population Law[43]) and implementing targeted health campaigns, would reduce the unintended pregnancy rate for these youth.

In addition to lowering rates of unintended pregnancy, the government should develop targeted strategies for reducing morbidity and mortality associated with unsafe abortions. As suggested by health professionals in Guatemala, health outcomes for women could be improved by enhancing postabortion care programs. This includes improving equipment and facilities and raising standards of hygiene, particularly in the public sector. Because the public sector has a greater role in providing postabortion care nationally than private sector facilities, it is here where interventions to improve postabortion care are likely to be pursued most cost-effectively. The study findings indicate that there is significant room for improving postabortion care (and postpartum care), because many facilities reported being unable to perform blood transfusions or MVA procedures.

Guatemalan health authorities should continue to introduce MVA in health facilities, as they have already done in some public hospitals.[44] It is likely that the most powerful improvement that could be made to postabortion care in Guatemala is training medical professionals in the use of MVA and making it the standard of care in all facilities. This is the safest and the least expensive procedure for treating incomplete spontaneous and induced abortions, but study findings indicate that facilities overwhelmingly use D&C. The benefits of using MVA, rather than D&C, include shorter hospital stays, lower institutional and patient costs, and less pain experienced by the woman.[45] In a country where resources are limited and health budgets are strained, cost-efficiency in the provision of postabortion services is critically important. The potential for cost savings is largest in the public sector where three-fourths of the country's postabortion complication patients are treated and higher proportions are treated as inpatients.

The findings of this study indicate that unsafe abortion is occurring in Guatemala at significant levels; that poor, rural and indigenous women are most at risk for having an abortion that is unsafe and failing to receive treatment for complications; and that postabortion care offered at health facilities could be improved, both in terms of quality and cost. Health authorities should therefore strengthen efforts to make family planning services accessible and affordable, work with education authorities to improve family planning knowledge and improve postabortion care, particularly through

training in the MVA procedure. Strategies and resources should be targeted to the most disadvantaged women, who likely have the highest rates of unsafe abortion and maternal mortality. Such initiatives could go a long way toward reducing the levels of unwanted pregnancy, unsafe abortion and the resultant morbidity and mortality. The result would be major improvements in the survival, health and welfare of Guatemala's women, and significant reductions in the financial burdens on the health care system, and on women and their families.

Research Needs

Further research is needed to document women's experiences and perspectives regarding unsafe abortion, as well as clinical aspects of postabortion care. This would mean collecting evidence from women themselves on their decision-making process when facing the unwanted pregnancy and the abortion experience, including the factors influencing their decision to seek an abortion, how they obtained the abortion, whether they experienced complications, what types of complications they experienced, and the process of seeking medical care. Along with these data, it would be useful to obtain information from medical professionals about the specifics of postabortion care, including the condition of the woman on arrival at the facility, the procedures used in treatment, the type of complications and the length of stay needed. Finally, data should be collected on the total cost of postabortion complications—the economic resources spent by the facilities, the amount paid by the woman, the opportunity cost to women and their families (for example, the amount of productive time lost through illness), and the social costs of stigma associated with obtaining an abortion. This information would provide the more complete picture of abortion provision necessary for motivating change and developing highly targeted interventions.

Acronyms

CIESAR	Epidemiological Research Center in Reproductive Health (Centro de Investigación Epidemiológica en Salud Sexual y Reproductiva)
D&C	Dilation and Curettage
EVA	Electric Vacuum Aspiration
HFS	Health Facility Survey
HPS	Health Professionals Survey
IUD	Intrauterine Device
LAC	Latin America and the Caribbean
MVA	Manual Vacuum Aspiration
NGO	Nongovernmental Organization

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