

The Hidden Emergency:

*A Facility-based Assessment
of Postabortion Care Services
in Public Health Sector Facilities
in Northern Nigeria*

Tamara Fetters, MPH
Tiyin Jolayemi, MD, MPH





Ipas works globally to improve women's lives through a focus on reproductive health. We train and equip health-care providers to ensure that abortion services are safe and accessible to the full extent of the local laws. For more information on Ipas products, programs and publications:

Ipas
300 Market Street
Suite 200
Chapel Hill, NC 27516 USA
ipas@ipas.org
www.ipas.org

Authors:
Tamara Fetters, MPH
Toyin Jolayemi, MD, MPH

Cover designer: Valerie Holbert
Editor: Jill Molloy

ISBN: 1-882220-36-6

Suggested citation: Fetters, Tamara and Toyin Jolayemi. *The Hidden Emergency: A Facility-based Assessment of Postabortion Care Services in Public Health Sector Facilities in Northern Nigeria*. Chapel Hill, NC, Ipas.

Copyright 2002 Ipas. This publication may be reproduced in whole or in part, without permission, provided the material is distributed free of charge and the publisher and authors are acknowledged.

Acknowledgements

The authors of this report would like to thank the many people who made this assessment successful. Numerous colleagues at Ipas, including Hailemichael Gebreselassie, Janie Benson, Charlotte Hord, Joan Healy, Colleen Carpenter and Uche Ekenna, provided input in the design and review stages. Ipas Nigeria staff, including Dr. Ejike Oji, Ramatu Daroda, Rakiya Booth, Jamila Yussuf and Nathan Nzekwue, were of immense assistance throughout the course of the assessment. Finally, we must thank Valerie Holbert for the cover design and Jill Molloy for her editorial brilliance and abundant patience.

We extend special thanks to the staff of the State Ministry of Health (SMOH), who facilitated this assessment for us, for their cooperation. We must acknowledge the directors in each of the states for their enthusiasm during the assessment and throughout the project:

Alhaji. Bello Dogondaji	Director Primary Health Care, Sokoto State
Alhaji. Usman Bunzo	Director Primary Health Care, Kebbi State
Dr. A. K. Mohammed	Director Primary Health Care, Abuja (FCT)

The data collection teams traveled for long hours over difficult terrain. Their impressive dedication deserves commendation. The team members were:

Sokoto State

Hajiya. Amina Ladan (SMOH)	Dr. Nneka Mbelo (UDUTH)
Mrs. Taiwo A. Odujobi (SMOH)	Dr. Mansur Oche (UDUTH)
Hajiya. Luba Argungu (NPHCDA)	Dr. Oyetunji Jaiyeola (UDUTH)

Kebbi State

Hajiya. Hafsatu Bukar (SMOH)	Dr. Ndubuisi Ottah (Private Hosp)
Hajiya. Hafsatu Rasheed (SMOH)	Dr. Hope Abitare (Spec. Hosp)
Mrs. Victoria Jibo (FSP Hosp)	Dr. Monsudi Kehinde (Spec. Hosp)

Abuja (Federal Capital Territory)

Mrs. Mary Ayo (FCDA)	Dr. O.A. Nwoke (Wuse GH)
Hajiya. Rakiya Idris (FCDA)	Dr. Olabode Charles (Garki GH)
Mrs. Elizabeth Galadima (Garki GH)	Dr. O.K. Omotosho (Wuse GH)

Finally, we wish to thank the management and staff of the numerous health facilities in Abuja and in Sokoto and Kebbi states for their cooperation and assistance. This study was made possible with funds from the David and Lucile Packard Foundation.

I. Introduction

An estimated five million unsafe abortions occur in Africa each year, placing abortion among the leading causes of maternal death in the region (WHO, 1995). These deaths are often preventable with the appropriate skills and technology offered in essential obstetric care (EOC). Essential obstetric care comprises a range of technological and life-saving interventions used to treat the major causes of maternal deaths, including hemorrhage, hypertensive diseases of pregnancy, infection, prolonged or obstructed labor, and abortion complications (UNICEF/WHO/UNFPA, 1997).

A number of international bodies have agreed that uterine evacuation is an essential obstetric service and should be a component of any safe motherhood or essential obstetric care initiative (UNICEF/WHO/UNFPA, 1997). However, the provision of high-quality uterine evacuation services alone does not address the underlying causes for the abortion and the woman's subsequent reproductive health needs. Incorporating high-quality uterine evacuation services into a comprehensive approach to postabortion care (PAC) can improve women's lives and empower them to take control of their reproductive health. Postabortion care includes a series of medical and related interventions designed to manage the complications of incomplete and unsafe abortion and treat a woman's reproductive needs. PAC also includes the provision of postabortion contraceptive services to prevent future unintended pregnancies, and information, counseling and referrals to related reproductive health services.

By expanding PAC services to rural facilities, and training and equipping midlevel health-care providers to perform uterine evacuations, women's access to these life-saving services will be greatly increased and they will receive higher-quality care closer to their homes. In areas with a high rate of maternal mortality and morbidity from unsafe abortion, women's access to PAC services becomes particularly crucial. This study was conducted to determine the need for expanded PAC services in Nigeria and to assess the quality of existing PAC services.

Nigeria has one of the highest ratios of maternal mortality in the world, with an estimated 1,000 maternal deaths per 100,000 live births (Population Action International, 2001). Although abortion is illegal in Nigeria except to save the life of the woman, thousands of women resort to it each year. Nigerian women obtain approximately 610,000 abortions annually, a rate of 15 to 25 abortions per 1,000 women of reproductive age (Henshaw et al., 1998). Although data are usually based on extrapolations from hospital-based studies the WHO estimates that in Nigeria, deaths due to unsafe abortion could account for up to 51% of obstetric deaths, some of which may be classified as hemorrhage or infection, or not classified as an abortion-related death at all (WHO, 1995). The fact that so many women risk injury or death, as well as social or criminal consequences, to terminate a pregnancy demonstrates how desperately those women wish to delay or avoid having children.

An unsafe abortion, as defined by the World Health Organization (WHO, 1995), is characterized by a provider who has inadequate or no skills, or uses hazardous techniques or unsanitary facilities. As outlined by Therese McGinn and her colleagues at Columbia University (McGinn et al., 1996), unsafe abortion has far-reaching consequences:

- Clients and providers risk legal punishment for their roles in terminating an unwanted pregnancy;
- Clandestine abortion is often costly to the client and her family members;
- Clients of illegal practitioners have no recourse if poor care is received, and there are no quality standards that pertain to illegal practitioners;
- In cultures in which women's worth is closely associated with childbearing—such as the predominately Muslim regions of Northern Nigeria—infertility, which can result from abortion complications, carries grave repercussions for women;
- Denial of access to information and the means to "decide freely the number, spacing and timing of their children" is an infringement of basic human rights.

In a restrictive legal environment, such as in Nigeria, where regulation of the abortion economy is nonexistent, no abortion is “safe” because most providers lack the proper technical skills, equipment and information to provide high-quality services. According to one provider survey conducted in Benin state, less than half of the abortion practitioners (45.6%) had the knowledge or skills necessary to appropriately induce abortion during both the first and second trimesters. This group of providers estimated that slightly more than half of women who seek abortions in Nigeria are thought to go to medically trained providers (Makina-Adebusoye et al., 1997).

In Nigeria the management of abortion complications is a tremendous burden on the scarce clinical resources of many health facilities. According to studies carried out in selected tertiary health institutions, abortion cases account for 20% to 35% of maternal deaths, requiring elaborate life-saving measures and draining hospital resources (Archibong, 1991; Omu et al., 1981; Adewole, 1992). In one hospital-based study conducted in Nigeria, researchers estimated at the time of the study that it cost US\$223.11 to treat one septic abortion patient (Konje et al., 1991). Given the weak funding base for public-sector maternal health needs, the strain on available resources from abortion cases may further erode the already poor state of maternal health in Nigeria.

In Northern Nigeria, the region selected as the focus for this study, geographic, infrastructural and social barriers all contribute to limiting women's contraceptive options, putting them at even greater risk for unwanted pregnancies. Women living in predominately rural areas of this region are likely to experience greater difficulty in accessing reproductive health services than women in urban areas. Deeply-held Islamic beliefs among the people of Northern Nigeria create barriers for women who wish to access and use contraception and reproductive health services to prevent pregnancy. Like women in other rural or semi-rural regions, the women of Northern Nigeria are more likely to choose traditional or unorthodox abortion providers when confronted with unwanted pregnancies. Women are afraid to admit to seeking an unsafe abortion, and

both traditional and biomedical providers are fearful of acknowledging their part in helping a woman terminate an unwanted pregnancy. This in turn may increase a woman's likelihood to delay seeking appropriate care for treatment of the complications of an unsafe abortion.

The secrecy and stigma that surround abortion in Northern Nigeria make it difficult to gather reliable data. However, health statistics from service-delivery points in this region clearly demonstrate that life-saving efforts are performed daily on women seeking care for complications related to abortion. By looking closely at the health system, insight can be gained about the abortion complications experienced by women, the resources used to treat these complications, and facilities' readiness to provide women with high-quality abortion-related care.

To develop a clearer understanding of postabortion care in Northern Nigeria, Ipas collaborated with the State Ministries of Health on a baseline assessment with two main objectives:

- Determine the current provision of postabortion care (PAC) services in a variety of service-delivery settings common within selected states in Northern Nigeria.
- Determine training needs of various cadres of service providers in the area of PAC.

The findings of this assessment will inform Ipas activities, as well as activities of other program managers and policymakers working in Northern Nigeria.

II. Methodology

A baseline assessment examining health facilities and interviewing providers was carried out between March and May 2001 in three areas within Northern Nigeria: Sokoto State, Kebbi State and the Federal Capital Territory (FCT), Abuja. There are significant differences between the predominately urban area of Abuja and the rural areas of Kebbi and Sokoto. Access to health facilities and choices for health care vary tremendously among these populations, so most data have been disaggregated in this report. Some key differences are highlighted in Table 1.

FCT (Abuja)	Kebbi	Sokoto
3,400,000 people (2001)	2,821,314 people (2001)	3,081,991 people (2001)
Mixed religions	Mostly Islamic	Mostly Islamic
Mostly urban	Mostly rural	Semi-urban and rural
8 public hospitals	14 public hospitals	13 public hospitals

Table 1. Demographic Characteristics of States in Baseline Assessment*

* Population and hospital figures from the Federal Ministry of Health, NHMIS Division (September 2002).

To develop a clearer understanding of PAC in these areas, the assessment included the wide variety of service-delivery settings that are common in Nigeria. Hospitals in the sample included teaching institutions, general hospitals, maternity and women's and children's hospitals, missions, and military institutions. Health centers included both rural and urban, and public and private facilities.

A two-part questionnaire incorporating observation and interviews with providers in charge of antenatal clinics, labor wards, and maternal and child health (MCH), and family-planning clinics was completed at each service-delivery point (SDP). The questionnaire included two parts: (1) Health facility information: background, the range of reproductive health (RH) and EOC services offered, the provision and quality of PAC-related care, an inventory of supplies and equipment, and a review of abortion-related service statistics and; (2) Health provider information: background and socio-demographics of providers, training, and exposure to the essential elements of PAC. This study used multistage cluster sampling including all secondary and tertiary SDPs, a smaller proportion of primary health centers and two private clinics per local government area.** Data collection was done in a total of 142 facilities (50 private sector and 92 public SDPs) and with 270 providers (186 from public and 84 from private facilities) to encompass the wide range of services and care being offered. For the purposes of this report, only the results and data from the public sector facilities and providers are described.

The data collectors were recruited from within each state to build local capacity for research and increase awareness of issues regarding PAC services. The data collectors included the MCH coordinator or the deputy of the MCH department, the family-planning coordinator or deputy, and physicians and nurses working in the obstetrics and gynecology or maternity units of public-sector facilities. Three teams, each made up of a physician and a nurse, collected data in each state. A two-day training was conducted on the use and pretest of the assessment tool before the actual data collection. To reduce observer bias, data collectors were not allowed to collect data in facilities they directly supervise. Data were entered and analyzed using Epi Info Version 6.

The assessment findings and recommendations were presented in each state. Dissemination meetings, attended by key policymakers, health administrators, health providers, staff of nongovernmental organizations, and representatives of religious and community-based organizations, were held in September 2001. Participants provided their insights and feedback regarding the findings and recommendations and assisted in drafting plans to address their local needs.

** Total numbers of tertiary and secondary SDPs reported by the State MoH and used for the sampling frame varied slightly from hospital figures reported by the Federal MoH in Table 1.

III. Characteristics of the providers and service-delivery points

A map highlighting the location of the three states included in the study is shown below.



Figure 1. Location of the States Included in the Baseline Study

Table 2 gives the distribution of hospitals and primary health centers in each state.

State	Type of Health Facility		
	Tertiary facilities	Secondary facilities	Primary health centers
Sokoto (n=32)	1	10	21
Kebbi (n=39)	1	13	25
FCT (n=21)	2	7	12

Table 2. Health Facilities Included in the Study (n=92)

The provider survey, Part B of the assessment, was conducted among 184 providers from the 92 health facilities in the three states. Interviewers were asked to survey three providers in each facility except in primary health-care sites with less than three providers. Just over two-thirds (68%) of those interviewed were female. Most (65%) were Muslims; the remainder were Christians or traditional spiritualists. The respondents were physicians, nurse-midwives or community health officers providing maternal health services, which sometimes included uterine evacuation and postabortion family planning. However, many of the primary health centers had only one staff member working in the facility; in some of these cases a lower-level provider was interviewed to elicit information on the types of services sought by clients in the vicinity of the facility. The types of providers interviewed are shown in Figure 2. The graph illustrates that the facilities in Kebbi and Sokoto were more likely to be staffed by primary health-care providers.

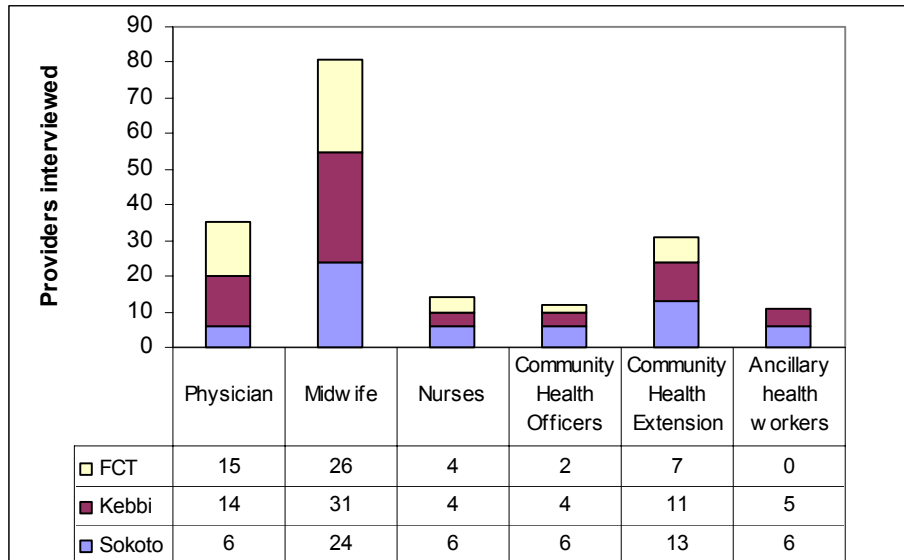


Figure 2. Distribution of Health Providers Interviewed (n=184)

IV. Study Findings

Complications of Abortion: The Magnitude of the Problem

Figure 3 shows that 70 (76%) of the facilities included in this study reported that women seek care in their facilities for treatment of abortion-related complications. The remaining 22 facilities (24%) reported that women do not come in seeking postabortion care; all but one of these facilities were primary health centers. The majority of the providers from health facilities treating postabortion patients (79%) stated that they care for 1 to 10 women seeking postabortion care per month. Yet seven (10%) of these facilities treat 11 to 20 postabortion cases per month and providers in 8 facilities (11%) treat more than 20. In Kebbi, located in the most remote and rural part of Northern Nigeria, health facilities (87%) were more likely to report that women seek postabortion care than were similar facilities in the semi-urban or urban areas of Sokoto (65%) and Abuja (71%), where women presumably have more choices for seeking emergency obstetric care. According to this study, women suffering from complications of abortion were more likely to seek care in hospitals (97%) than in primary health-care centers. Two-thirds (66%) of primary health centers also reported treating postabortion patients in some way, even if they could only stabilize and refer these women to other facilities.

Regardless of the type of provider or facility, 84—almost two-thirds—of the providers surveyed (64%) had encountered a patient with abortion complications during the three months prior to the assessment. Almost one-quarter of these providers had more than 10 cases, and 4% had treated more than 40 patients suffering from abortion-related complications during the previous three months. Only 59% of these providers had the skill and expertise required to provide these women with uterine evacuation. Another 31 providers reported that they had seen postabortion clients but were forced to try to stabilize them and refer them to another site because they lacked the proper skills and equipment to manage them. Delays such as these not only increase women's discomfort,

but are also likely to increase the severity of the complications and sequelae and place an additional burden of transport on family members.

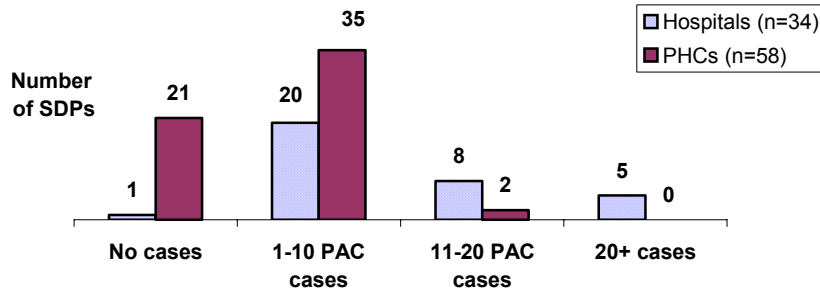


Figure 3. Average Number of Abortion Complications per Month in Clinics and Hospitals—Providers' Estimates

Although only doctors and midwives are allowed to provide uterine evacuation according to Nigerian health service-delivery guidelines, more than one-quarter of the providers who reported encountering women with incomplete abortions were nurses, health officers or other ancillary health-care staff (26%). This emphasizes the need to prepare all health-care staff in the proper stabilization and transport measures that they may require at any level of the health-care system.

Skills and Equipment Necessary for Essential Obstetric Care

Tremendous efforts made over the past decade by regional Safe Motherhood committees have heightened awareness about maternal mortality and obstetric emergencies in Nigeria. Health-care facilities at every level have taken steps to train providers and provide appropriate care for the most common causes of direct obstetric deaths, including the complications of unsafe abortion.

UNICEF has been active in setting standards and establishing process indicators for essential obstetric care (EOC) in health facilities in developing countries (UNICEF/WHO/UNFPA, 1997). The following functional EOC definitions categorize the necessary skills and equipment for two types of facilities to be able to respond appropriately to obstetric emergencies. Comprehensive-care facilities are defined as facilities that can perform all of the basic EOC functions, as well as caesarean sections and blood transfusions.

Basic EOC services	Comprehensive EOC services
Administer parenteral antibiotics	All basic services
Administer parenteral oxytocic drugs	Caesarean section
Administer parenteral anticonvulsants for pre-eclampsia and eclampsia	Blood transfusion
Perform manual removal of placenta	
Removal of retained products/uterine evacuation	
Perform assisted vaginal delivery	

Table 3. Skills and Equipment Necessary to Meet the Requirements for Basic and Comprehensive Essential Obstetric-Care Services (UNICEF/WHO/UNFPA, 1997)

In this assessment, facilities were evaluated on whether or not they had the life-saving skills and the equipment necessary for proper emergency care for women with obstetric emergencies. Among the skills necessary to properly manage obstetric emergencies, providers should have the skills to perform a uterine evacuation, one of the most common surgical procedures worldwide. Uterine evacuation is one emergency obstetric service crucial in the management of abortion complications and is potentially lifesaving. Uterine evacuation can be accomplished either by sharp curettage or manual vacuum aspiration (MVA). Although 70 providers reported that women had sought care for abortion complications at their sites, at only 39 (56%) sites were providers able to perform the simple but essential procedure of uterine evacuation with either sharp curettage or MVA. Figure 4 shows the percentage of facilities in the study with providers with the necessary skills and equipment to perform a uterine evacuation. In an effort to extend access to emergency care to more women, facilities in less urban areas, Sokoto and Kebbi, were more likely to offer uterine evacuation services in lower-level facilities such as general hospitals. Twelve (92%) of the hospitals in Kebbi and nine (90%) of the hospitals in Sokoto provided uterine evacuation services, but only two (33%) of the hospitals in Abuja were able to provide this service. This represents a trend seen in other urban areas around the continent where a wider variety of services are centralized in a small number of large tertiary centers.

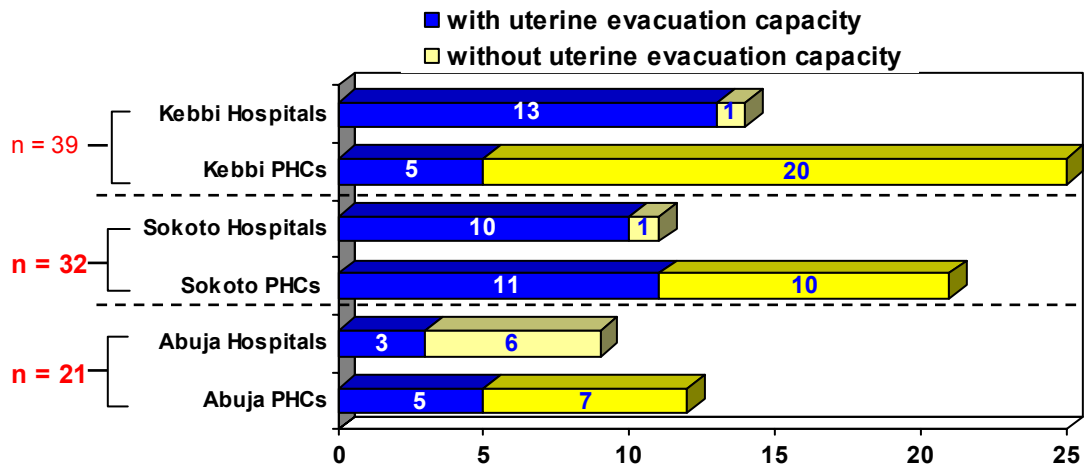


Figure 4. Number of Hospitals and Clinics with the Skills and Equipment to Perform a Uterine Evacuation

Although sharp curettage is an acceptable procedure for uterine evacuation, both the WHO and the International Federation of Gynecology and Obstetrics (FIGO) have called for properly equipped hospitals to adopt aspiration methods to treat incomplete abortion and inevitable abortion in pregnancies up to sixteen weeks (WHO, 2000). The use of vacuum aspiration is particularly advantageous in rural areas because aspiration generally requires lower levels of pain control and is simpler, safer and equally effective as sharp curettage. (Greenslade et al., 1993). Despite this, the assessment shows that in Northern Nigeria sharp curettage is a more commonly used technique for the treatment of abortion complications. In the 39 health facilities that provide uterine evacuation, 79% of providers reported that their facilities treat patients with sharp curettage while only 46% report that they treat patients with MVA. Even providers that reported having the skills and equipment to use MVA were likely to rely predominately on curettage. To validate this finding, a three-month record review of first-trimester procedures was conducted; of the 252 procedures recorded, only 27% were carried out using MVA. It must be noted that, as shown in Figure 5, only 14 of the 39 facilities kept records reliable enough to use for this review.

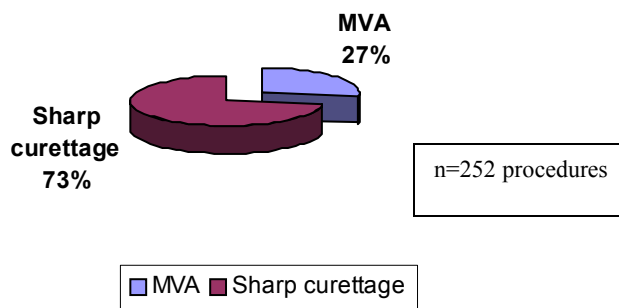


Figure 5. Record Review of the Types of Uterine Evacuations Recorded in 14 Clinic Logbooks with Accurate Records

This trend was reconfirmed when interviewers asked providers to specify which types of uterine evacuation techniques they themselves had used during the prior three months. Fifty-seven (31%)—almost one-third—of these 184 providers had cared for at least one woman needing postabortion care during this period. This group of providers indicated that they themselves had performed 71 uterine evacuation procedures and again confirmed that sharp curettage is a more common method for uterine evacuation, as seen in Figure 6. Thirty-four of these providers (60%) also stated that they had provided postabortion contraceptive counseling or methods to these patients .

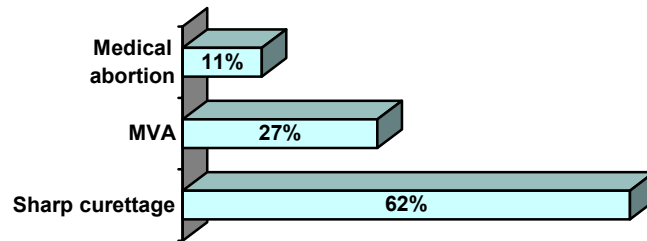


Figure 6. Self-Reports of Uterine Evacuation Procedures Performed in a Three-Month Period (n=71 procedures)

Globally, midwives are often the target of interventions intended to improve access to and quality of postabortion care, but the extent of care midwives are able to provide is often limited by cultural and gender norms, as well as national standards and guidelines. Even though Nigerian midwives technically are allowed to perform uterine evacuation with MVA, nurse-midwives are rarely the main providers of these services, according to the respondents in the study. In other countries, midwives have been trained not only in supportive roles, but also to be the primary providers of uterine evacuation services with MVA. In Ghana, for example, the use of MVA by midwives has proven to be an effective means of expanding PAC services to women seeking care at primary and lower-level health facilities, and a more effective way to improve the quality of postabortion contraception (Brookman-Amisshah, et al., 1999).

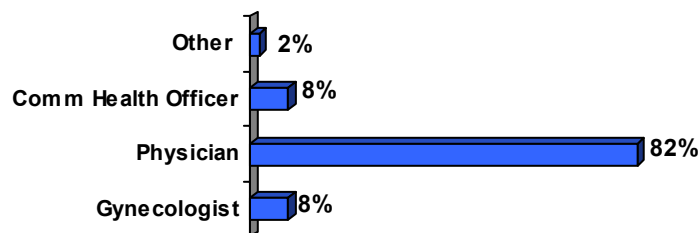


Figure 7. Primary Providers of Uterine Evacuation Services (n=38)

In this study, nearly all of the primary providers of uterine evacuations were either obstetrician-gynecologists, physicians or community health officers (see Figure 7). Only in one case was another type of midlevel provider actually responsible for these services. Having PAC services dependent on these more specialized providers puts women in more rural areas at a distinct disadvantage for receiving appropriate and timely postabortion care close to home. In Nigeria, midwives are trained in the use of MVA as part of life-saving skills, but because most are paired with physicians who are more likely to perform uterine evacuations, many midwives lack the opportunity to achieve competency and self-confidence in performing the procedure. This situation potentially hinders access for tens of thousands of women seeking emergency obstetric care in rural areas.

In addition to skilled personnel, the continuous availability of appropriate equipment, essential supplies and drugs is crucial for managing obstetric emergencies and providing safe and effective postabortion care. The facilities in this study varied tremendously in their readiness to manage obstetric emergencies. Table 4 compares the availability of some equipment and commodities essential for stabilization and treatment of basic obstetric emergencies. The table compares availability in facilities that provide uterine evacuation services and those that do not to give an indication of the level of preparedness in these two types of service-delivery points.

Equipment and supplies necessary for basic EOC	Facilities providing uterine evacuation (n=39)	Facilities NOT providing uterine evacuation (n=53)
Sharp curettage kit	82%	
MVA kit	49%	Zero
Blood pressure cuff	92%	76%
Stethoscope	95%	79%
Thermometer	72%	55%
Light source	56%	42%
Oxytocics	85%	50%
Intravenous solution	79%	64%
Oxygen	26%	14%
Analgesics	85%	81%
Antibiotics	82%	81%
Gloves (sterile and disposable)	74%	66%

Table 4: Inventory of Equipment and Supplies for EOC^{*}**

In facilities that provide uterine evacuations, most (82%) had complete sharp curettage kits, but less than half (49%) had complete MVA kits. In 13% of the facilities providing uterine evacuation with MVA, the health-care provider “owns” the MVA kits, meaning that MVA instruments are usually available only when the provider is on duty and not for the recommended 24 hours a day necessary to provide emergency services. In a few cases where kits are available, they are locked up and inaccessible for use at all hours of the day and night. Many facilities lacked basic items like blood pressure cuffs, thermometers

^{***} Results less than 75% are in bold.

and stethoscopes. Nearly half of providers reported that they did not have an adequate light source. Many providers stated that they did not have intravenous solution for rehydrating patients or oxygen necessary for resuscitation. Two physicians stated that their facility refers PAC patients to other hospitals simply because they have an inadequate light source.

Only four facilities in this study located in Abuja could be categorized as comprehensive EOC facilities, but Sokoto and Kebbi each had nine facilities that were able to perform these services. According to the UNICEF guidelines (UNICEF/WHO/UNFPA, 1997), in order to handle the estimated number of obstetric emergencies it is necessary to have one comprehensive EOC facility per 10,000 women of reproductive age. Even without looking at the geographic proximity of women to the sites, it is clear that all of these states fall short of that goal. An important intervention point will be to make sure that additional basic and comprehensive EOC facilities are dispersed geographically to ensure access to women in all areas of the state as more facilities are equipped and more providers are trained in essential obstetric care.

Basic Training in MVA and Postabortion Family Planning

Most of the providers (79%) who were interviewed stated that they had only received training and information on postabortion care during their initial pre-service (medical or midwifery school) training. Thirty-nine (21%) of the providers interviewed stated that they had received clinical training in MVA technique, essentially providing them with the knowledge and skills to provide higher-quality PAC services. Most of these providers, 26 (66%) in all, were physicians; ten of these providers were midwives and two were other health-care staff that had been included in a training program. Only 27 of this group of 39 individuals (69%) said that they had ever used MVA for the treatment of incomplete abortion. This means that just under one-third (31%) of providers who were trained never went on to become familiar with or achieve competency with aspiration methods. These other twelve providers said that although they had been trained to use MVA they had never practiced the technique. They gave a number of reasons, including MVA “is not the best procedure,” “is used only by doctors,” and “is not applicable in my working situation.”

Clinical training in MVA and postabortion family planning is inadequate among physicians and even less sufficient among nurses and midwives. Basic training in MVA was just 83% among physicians and 17% among nurse-midwives. When interviewers asked if providers had been trained in the elements of postabortion care, the responses were slightly higher, 89% among physicians and 65% among nurse-midwives. Table 5 gives the proportion of providers with training in MVA and postabortion family planning.

Type of Provider	MVA	PAFP
Physicians (n=35)	83%	89%
Nurses-Midwives (n=89)	17%	65%
Community Health Workers (n=62)	13%	45%

Table 5: Training in Use of MVA and Postabortion Family Planning by Category of Health Provider

Providers at every level of the health-care system need to be prepared to manage the complications of abortion and they also need to be prepared to help prevent additional unwanted pregnancies. Because women are likely to delay seeking care they may seek help at any level of the health-care system. Training and equipping providers with the skills to manage abortion complications at tertiary, secondary and primary health facilities will facilitate higher-quality care and reduce delays in the appropriate management of PAC patients.

Quality of Postabortion Services

A framework of fundamental elements necessary for delivering high-quality PAC, developed by Ipas and revised for the USAID global PRIME Project in 1998, provides guidance for developing and using the elements of PAC services to monitor and evaluate the quality of abortion-related care. These elements, shown in Figure 8, include appropriate technologies, technical performance, equipment and supplies, client-provider interaction, and information and counseling.

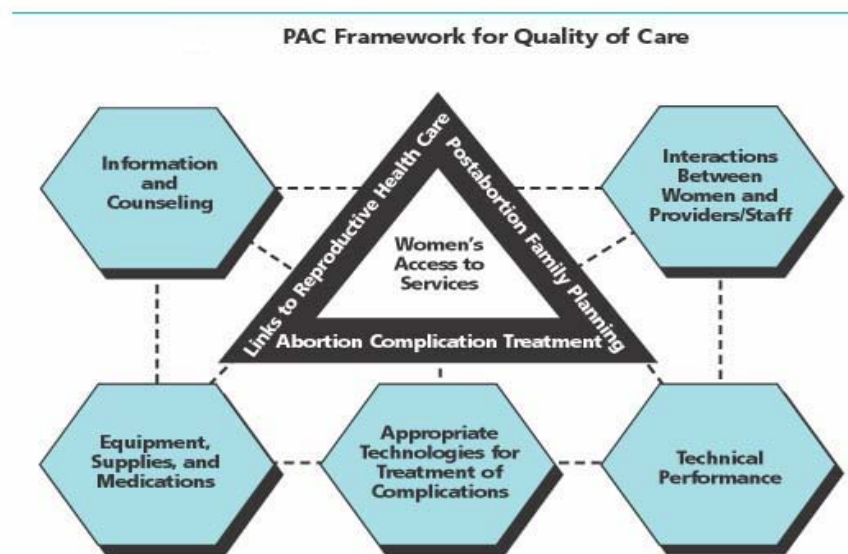


Figure 8. Postabortion Care Services: An Update for PRIME (F.C. Greenslade and W.H. Jansen, 1998)

For this assessment, appropriate technology, equipment and supplies were selected as proxy measures for determining the quality of PAC services. In all of the 39 facilities that currently provide PAC services, interviewers collected providers' reports and observation of:

- ⇒ Average length of waiting time and hospital stay for uterine evacuation clients
- ⇒ Emergency transport
- ⇒ Pain management for uterine evacuation clients
- ⇒ Infection-prevention techniques
- ⇒ Location of uterine evacuation services
- ⇒ Client-provider interaction and recordkeeping
- ⇒ Postabortion family planning
- ⇒ Linkages to other reproductive health services

Average waiting time and hospital stay

Data collectors asked providers from all 39 facilities providing uterine evacuation to estimate the average waiting time for PAC patients. They found that waiting time was similar whether a patient received sharp curettage or an MVA procedure. The overwhelming majority (82%) of facilities reported an estimated waiting time of less than four hours before a patient received a uterine evacuation. In only 6% of all facilities was it estimated that patients may wait (on average) longer than eight hours. This is an important indicator for measuring performance improvement.

Providers in these 39 facilities were also asked to estimate the average hospitalization time for PAC patients. Providers' reports showed that the difference in the average hospitalization time between the two procedures, while negligible, was always higher for women treated with sharp curettage, as illustrated in Figure 9.

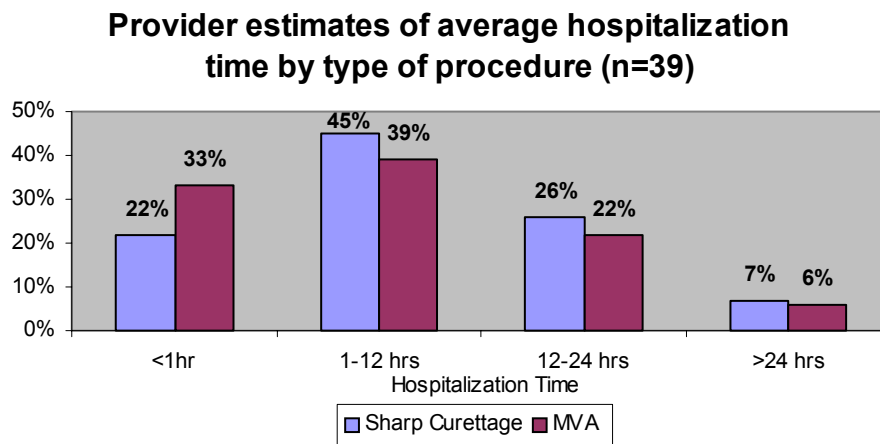


Figure 9. Average Hospitalization Time by Type of Procedure

Emergency transportation

Providers from only 17 facilities are sometimes able to provide emergency transportation for PAC patients being referred to a higher-level facility. With the exception of one

facility, these are hospitals and clinics that already provide uterine evacuation services on-site. In many referrals, the patient or her family must also purchase the fuel for the ambulance. In situations where referral to a higher-level facility is necessary, most of the referring facilities lack systems for patient follow up. In a few sites, referring clinics required patients to return for follow-up care, conducted home visits or required forms with written confirmation that the patient was seen by the higher-level facility.

Pain management

In accordance with clinical protocols on the treatment of incomplete abortion, the amount of pain management is generally lower for MVA when compared to sharp curettage. However, because feelings of pain vary for each individual, physicians are encouraged to discuss with their patients the level of pain medication, sedation or analgesics necessary to keep them comfortable. When interviewers asked physicians what type of pain control, if any, was usually used for sharp curettage and MVA methods, 14 (36%)—almost one-third—stated that they usually use general anesthesia for curettage. Only four (10%) of these same providers stated that they usually use general anesthesia for patients undergoing aspiration. The use of general anesthesia creates significant barriers to extending PAC services, as well as greater risk to patients. The use of anesthesia requires specialized treatment areas, physicians and specialists, and medication limited to higher-level facilities. Aspiration is a simpler and less painful procedure that can be managed at lower-level health facilities that would otherwise be forced to stabilize and refer patients needing comprehensive postabortion care.

Infection prevention

The essential elements for infection prevention at all levels of abortion care include thorough hand washing, use of gloves, decontamination of instruments, and sterilization and disinfection of equipment and supplies. When using plastic cannulae and vacuum aspiration syringes that may not be autoclaved, it is essential that these instruments are processed by sterilization or high-level disinfection.

The mechanisms for infection prevention used in the health facilities providing uterine evacuation are generally satisfactory but could be improved. Among the 39 health facilities providing uterine evacuation, 30% of providers do not always wash their hands prior to pelvic examination and 20% do not wash their hands prior to a procedure. According to those interviewed, gloves are often in short supply so that at times patients are asked to purchase and bring their own. These health facilities reported that a high patient load, emergency situations and inadequate availability of running water are reasons providers do not wash their hands more frequently. The data revealed that most of the facilities had wells, but only half stated that they had adequate clean water. Facilities in Kebbi (60%) and Sokoto (67%) were somewhat less likely to have enough clean water than facilities in Abuja, where 75% of the facilities had running water.

Organization of services

Comprehensive postabortion care occurs at many different levels of the health-care system, creating significant challenges in monitoring PAC services. The organization of PAC services varies in each facility depending on the range of services offered, the infrastructure and the client load, among many other factors. The 39 facilities that provide uterine evacuations use a procedure room, a side room, the labor ward, the maternal and child health unit, or the operating room for those procedures. Each of these units keeps its own records and logbooks for a different range of services. This variability increases the likelihood of error and decreases the accuracy of PAC reporting systems.

The organization of the services and patient flow varies tremendously at each of these facilities. Studies have shown that designated PAC areas or procedure rooms can decrease client waiting time by keeping these simpler procedures out of busy operating theaters and labor wards (Solo et al., 1999). Only two of the thirty-nine facilities providing uterine evacuation were using this model of service delivery.

Recordkeeping

Only 23 of the facilities (61%) reported that they keep records of their service-delivery statistics for PAC patients. Among these 23 sites, a total of 327 clients were treated for complications from abortion during the three-month period preceding the study. Many of these facilities reported that they did not have the staff to regularly compile demographic and health information on PAC treatment to a register that could be used to make programming decisions. Just 12 of the facilities that kept records said that someone regularly compiles information from PAC patient cards, which contain relevant information from their diagnosis and treatment, to a register. In many other facilities patients are sent home with their patient cards, making routine monitoring of services and validation of records much more challenging.

Postabortion family planning

In this increasingly threatened environment for reproductive health services it is alarming that only 82% of all of the service-delivery points offer any contraceptive services at all. Even more alarming is that many of the providers in these facilities reported that only contraceptive counseling was offered, not methods. The investigators also observed stock-outs of contraceptive commodities and heard reports from Ministry officials stating that contraceptives were recently very difficult to resupply. Therefore, when we asked about methods that were “usually provided” the reports were much higher than when we asked if the facilities were “currently providing” methods. Providers from only 42% of all of the SDPs in the study stated that condoms are “usually” offered at their facilities. In the facilities that usually provide contraceptive methods, the most common methods were oral and injectable contraceptives; in only 28% of all facilities were any long-term methods such as IUDs, Norplant® implants or voluntary surgical contraception available for women who wished to choose them. Facilities in Abuja were most likely to be providing family planning services (90%), followed by the SDPs in Sokoto, (84%) and only 74% of the sites in Kebbi.

Most of the health facilities in this study offer a limited range of contraceptive methods or counseling. Yet only 27 (55%) of the hospitals and 12 (33 %) of the primary health-care centers that provide uterine evacuation offer family-planning services specifically to PAC patients. The contraceptive options are more limited in Sokoto and Kebbi than in Abuja. Although facilities that provide family planning indicated that a wide range of contraceptives are usually available in their facilities, only half of them were able to distribute barrier methods at the time of this assessment. Very few of the facilities offered any type of long-term method.

Linkages to other reproductive health services

Other types of reproductive health services available to PAC clients were also described by providers. Of the facilities providing PAC services (including uterine evacuation), 35 (90%) also offer services related to pregnancy and 25 (64%) offer HIV testing and counseling. At this point little is known about operationalizing these linkages for PAC patients and few studies, if any, have attempted to make this assessment. In these areas of Nigeria there seems to be no infrastructural reason why patients needing these services could not receive care. However, the facilities that do not offer uterine evacuation, and instead refer PAC patients to other facilities, are much less likely to offer additional reproductive health services. Out of 31 responses only two facilities stated that they offer HIV testing. Fifteen facilities (48%) provide treatment for sexually-transmitted infections and six offer pregnancy tests to their clients. Postabortion care offers an excellent but underutilized opportunity to screen patients for other essential reproductive health services.

V. Summary of Findings and Recommendations

A number of conclusions can be drawn from the data that were gathered in this assessment. Some of the major findings pertain to the accessibility and quality of the facilities. Based on UNICEF guidelines and the findings in this assessment, it appears that these three states lack an adequate number of facilities to handle the number of obstetric emergencies predicted for the estimated number of pregnancies. PAC services tend to be centralized in a small number of large tertiary centers, geographically inaccessible to many semi-rural and rural women. In places where women have access to lower-level facilities, emergency transportation to a higher-level facility is frequently unavailable and follow up on these patients is rarely conducted.

In facilities where PAC services already exist, more emphasis should be placed on improving the quality and effectiveness of these services. Although most facilities were performing satisfactory infection prevention, study findings show areas needing improvement. For example, a common hindrance to proper infection prevention was a lack of gloves. Lack of appropriate supplies also affected contraceptive services, with study findings revealing that many facilities offer contraceptive counseling but do not provide modern contraceptive methods. Even condoms, which are often not thought of as a “family planning method,” were in short supply. Shortages of other types of equipment

and supplies, particularly MVA kits, also posed barriers to delivering high-quality services.

In some cases simply replacing or repairing essential equipment can improve the quality of services, and perhaps even save lives. Two providers interviewed for this study stated that they were forced to refer women in crisis because their light source was inadequate. In many cases the supply of analgesics was inadequate to appropriately manage a woman's pain.

In addition to findings about facilities, the study uncovered valuable information about providers and the quality of care being delivered to patients. Study findings indicate that obstetrician-gynecologists and physicians are the main providers of uterine evacuations. Most of these providers, particularly midlevel providers, are not receiving adequate training in the use of MVA for uterine evacuations or in postabortion family planning. Few providers have received comprehensive training in MVA, the method recommended by the WHO for uterine evacuation, during medical school. Despite WHO endorsement of aspiration methods as the preferred method for the treatment of incomplete abortion, many providers, even those who have been trained in MVA use, have not adopted this procedure and still feel more comfortable using only sharp curettage. Using sharp curettage for uterine evacuations in Northern Nigeria may be a barrier to expanding PAC services, since this method generally involves the use of general anesthesia which increases the risk and the cost for the patient and is usually confined to hospital settings. Data revealed that almost one-third of the providers who received training in MVA use never used the procedure in their clinical practice. Better selection criteria for training participants, especially in specialized post-basic training events, may improve acceptance and use of aspiration methods. Also, stronger institutional endorsement of the WHO recommendation of aspiration methods for all appropriate evacuation cases would increase the pace of acceptance of MVA in Nigeria.

In conducting training and equipping providers with MVA instruments it should be clear that MVA equipment is the possession of the facility and not solely for the use of one provider. Equipment should be available for all skilled staff for their use 24 hours a day. To improve the sustainability of these services, improving the capacity and skills necessary for high-quality postabortion care within their own facilities should be the goal of all training participants.

Although PAC services are more decentralized in the less densely populated states of Kebbi and Sokoto, the assessment also revealed that a variety of staff members—nurses, health officers or other ancillary health-care staff nurses—encounter women experiencing incomplete abortion, yet lack the skills to treat or stabilize and refer these patients. This study indicates that providers at all levels of the health-care system are confronted with women with abortion complications. This suggests a need to train all health-care staff to perform the proper stabilization and transport measures that may be required.

The reliance on physicians and obstetrician-gynecologists to perform uterine evacuations in Northern Nigeria places women in more rural areas at a disadvantage. These women generally rely on local midwives for their reproductive health care and therefore

experience greater difficulty receiving appropriate and timely postabortion care. Women in Kebbi and Sokoto have fewer transport options, encounter more challenging terrain and have greater distances to travel to receive the next level of emergency care. Most of the midwives interviewed for this study act in supportive roles to physicians, although they are legally permitted to perform uterine evacuation. Study findings show that their lack of opportunity to achieve competency and self-confidence in performing the procedure was a significant barrier to expanding services to rural women.

Monitoring and evaluation are fundamental parts of improving training for abortion care and service delivery. According to this assessment, however, as of May 2001 most facilities were not keeping accurate records of postabortion clients. In order to make informed decisions, routine recordkeeping and reporting on postabortion care need to be improved and incorporated into Ministry of Health information systems.

By studying the treatment of abortion complications in Northern Nigeria, Ipas and other program managers and policymakers working in the region have created a foundation for future efforts to improve the quality of services. During the upcoming project year, Ipas Nigeria intends to work with the local Ministries of Health to establish quality-of-care standards for pre-procedure, procedure and post-procedure services appropriate for each service delivery level. These standards should include improvements in instrument processing, infection prevention, pain management, patient waiting time, provider-client relations and postabortion contraception. These quality-of-care standards must address the minimal but essential elements of quality as agreed upon by technical leaders in the field.

These findings indicate that unsafe abortion is widespread. Women in all of these states are seeking care at all levels of the health care system. Renewed efforts need to be made to ensure universal access. Wherever a woman turns for help she should get the help she needs - be it information and referral or uterine evacuation. This does not mean simply access to MVA services but high-quality comprehensive PAC services that improve her ability to meet her reproductive health needs, including her ability to avoid another unintended pregnancy. Finally, it is important to confront the problems of unsafe abortion at all levels, from the community to the Ministry of Health, and not be silenced by the stigma attached to this issue. The solutions are simple as long as there is a commitment to change.

References

- Adewole, I.F. 1992. Trends in postabortal mortality and morbidity in Ibadan, Nigeria. *International Journal of Gynecology and Obstetrics*, June 1992, 38(2):115-8.
- Archibong, E.I. 1991. Illegal induced abortion — A continuing problem in Nigeria. *International Journal of Gynecology and Obstetrics*, 1991 March, 34(3):261-5.
- Brookman-Amisssah, E., J.E. Taylor, T. Baird, D. Billings, H. Odoi-Ayarko, K. Ababio and F. Quarcoopome. 1999. Decentralising postabortion care in Africa: A call to action. *African Journal of Reproductive Health*, 3(1):109-114.
- Greenslade, F.C. and W.H. Jansen. 1998. Postabortion care services: An update from PRIME. *Resources for Women's Health*, 1(2):1-12.
- Greenslade, F.C., A.H. Leonard, J. Benson, J. Winkler and V.L. Henderson. 1993. *Manual vacuum aspiration: A summary of clinical and programmatic experience worldwide*. Carrboro, NC, IPAS.
- Henshaw, S.K., S. Singh, B. A. Oye-Adeniran, I. F. Adewole, N. Iwere and Y. P. Cuca. 1998. The incidence of induced abortion in Nigeria. *International Family Planning Perspectives*, 24(4):156-164.
- Konje, J.C. and K.A. Obisesan. 1991. Septic abortion in University College Hospital, Ibadan, Nigeria. *International Journal of Gynecology and Obstetrics*. 1991 Oct, 36(2):121-5.
- Makina-Adebusoye, P, S. Singh and S. Audam. 1997. Nigerian health professionals' perceptions about abortion practice. *International Family Planning Perspectives*, 23:155-61.
- McGinn, D. Maine, J. McCarthy and A. Rosenfield. 1996. *Setting priorities in international reproductive health programs: A practical framework*. New York, Center for Population and Family Health, Columbia School of Public Health.
- Omu, A.E., A.U. Oronsaye A.U., M.K.B. Faal and E.E.J. Asuquo. 1981. Adolescent induced abortion in Benin City, Nigeria. *International Journal of Gynecology and Obstetric*, 1981 Dec, 19(6):495-9.
- Population Action International. 2001. *A world of difference: Sexual and reproductive health & risks*. Washington, DC, Population Action International.
- Solo, J., A. Ominde, M. Makumi, D. Billings and C. Aloo-Obunga. 1999. Creating linkages between incomplete abortion treatment and family planning services in Kenya. *Studies in Family Planning*, 30(1):17-28.

UNICEF/WHO/UNFPA. 1997. *Guidelines for Monitoring the Availability and Use of Obstetric Services*. New York, UNICEF.

World Health Organization. 1995. *Complications of Abortion*. Geneva, WHO.

World Health Organization. 2000. *Managing complications in pregnancy and childbirth – A guide for midwives and doctors*. Geneva, WHO.