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ASSESSMENT OF QUALITY OF POSTABORTION CARE IN GOVERNMENT HOSPITALS IN ADDIS ABABA

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THESIS SUBMITTED TO THE FACULTY OF MEDICINE
ADDIS ABABA UNIVERSITY
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTERS IN PUBLIC HEALTH

April 2002

Acknowledgement

First and most, I would like to thank my advisors Ato Fikre Enqusilassie and Dr Ahmed Ali for their availability and encouragement throughout the study. My acknowledgement also goes to Dr Shabbir Ismail for his valuable comment during topic selection and proposal preparation.

I deeply acknowledge Dr. Hailemichael Gebresilassie (IPAS-Ethiopia) for providing me important materials and comment. I am very grateful to IPAS-Ethiopia for funding the majority of the expenses.

I am very much indebted to Dr. Lukman H. Yusuf (Department of Gynecology and Obstetrics) for providing me with important materials and advice.

My heart felt thank goes to Marie Stopes International-Ethiopia for financial support they gave me.

I wish to express my deep appreciation to medical directors, department heads, head nurses and other staffs of the hospitals because their cooperation was beyond my expectation.

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List of abbreviations

AAU Addis Ababa University

AIDS Acquired Immune Deficiency Syndrome

CSA Central Statistics Authority

DCH Department of Community Health

EVA Electrical Vacuum Aspiration

FGAE Family Guidance Association of Ethiopia

FP Family Planning

HIV Human Immunodeficiency Virus

ICPD International Conference on Population and Development

IEC Information Education and Communication

IPAS International Projects Assistance Service

MCH Maternal and Child Health

MOH Ministry of Health

MVA Manual Vacuum Aspiration

NGOs Non-Governmental Organizations

PAC Postabortion Care

QAP Quality Assurance Project

RH Reproductive Health

RHC Reproductive Health Care

SPSS Statistical Package for Social Sciences

STDs Sexually Transmitted Diseases

WHO World Health Organization

Abstract

Abortion related complications are major causes of maternal morbidity, mortality and disability in developing countries including Ethiopia. Countries have been trying to improve postabortion care (PAC) services in the last decade.

A cross sectional descriptive study was conducted on quality of PAC in government hospitals in Addis Ababa, Ethiopia, from November 2001- February 2002. Assessments conducted involved interactions between providers and patients, information provision, postabortion FP counseling and method provision, provider's technical competence and equipment and supplies of the hospitals. Patient interview, direct observation, provider interview and inventory of equipment and supplies were used for the assessment.

Interaction between providers and patients was found to be satisfactory whereas information provisions on important aspects of care such as danger signs and follow-up needs were very limited. Postabortion FP counseling and method provision were also found to be very low. About 20% and only 3% received FP counseling and contraceptives respectively. Other reproductive health related issues such as STDs and HIV/AIDS are rarely raised by the providers during managing patients. Overall, 92.3% of the patients responded that they were satisfied with the services. Those who responded that waiting time was too long, who had difficulty in locating or getting services and those who responded that the general information provision was inadequate appeared to be less satisfied. Those with spontaneous abortion of current pregnancy were also less satisfied

with the services they received. Significant proportions of the providers were trained on PAC and related issues.

Implications of the findings were discussed and recommendations were made.

1. INTRODUCTION

Each year above half a million maternal deaths occur due to preventable pregnancy related complications. The developing world is disproportionately more affected than the developed. From the direct causes of maternal deaths, complications due to abortion stands third by accounting for 13% of the overall causes of maternal deaths (1,2).

Abortion is known to cause serious short term and long-term negative health consequences including death. It is also an important everyday medico legal, social, political and public health issue though it is left out of governmental-level debates while discussing about women's health and rights (3).

Despite its public health and other significances, abortion started to receive due attention only in the last few decades. Since the early nineties it has gained attention by experts, governments and international organizations. Especially, since the Cairo conference on population and development, several governments and organizations have made a considerable progress (3). The three elements of PAC that are said to reduce abortion related maternal mortality, morbidity and disability are widely mentioned, but there are few experiences from different countries on how these elements are delivered separately or being integrated. If well integrated the three elements are believed to address several aspects of care including those who need

beyond emergency care (4,5).

Limited studies have shown that one or two of the elements are neglected. For instance, the best strategy to reduce the number of unsafe abortion is prevention of unwanted pregnancy through providing family planning counseling and method. While PAC setting is one of the few important opportunities where FP counseling and method are provided, studies show that they are often missed (6,7).

Adolescents, victims of rape and sexual violence, women with STDs, including HIV/AIDS, women in refugee settings and other marginalized populations are women with specific risks and deserve appropriate care. This element is also quite neglected in the developing world (6).

Though mainly facility based, there are several studies conducted on abortion with regard to its magnitude, causes, settings and outcome in Ethiopia. These studies have shown that abortion is a public health problem in the country and consumes significant proportion of the limited health resources.

The current study provides information on how the services related to postabortion care are integrated with regard to the three elements of PAC and tries to identify areas for improvement. Since it is the first experience to assess postabortion care comprehensively, it could serve as baseline information for similar operational researches and particularly performance of hospitals. Most of all, it gives valuable

information for decision makers on how to design a service that is sensitive to different needs of postabortion patients.

Within the concept of quality of health care, a pioneering organization in postabortion care, International Projects Assistance Services (IPAS), has developed a quality of care framework for postabortion care. The framework and assessment tools developed by the organization are utilized in this study.

2. LITERATURE REVIEW

2.1. Magnitude of the problem

Globally about 600,000 pregnancy related maternal deaths occur. Sadly 99% of these occur in the developing world. Lifetime risk of dying from pregnancy related complications or during childbirth is one in forty eight in the developing world, compared to only one in 1,800 in the developed world (1).

Maternal deaths have direct and indirect causes. The direct causes account for 80% of the deaths, which include obstetric complications such as severe bleeding, infection, unsafe abortion, hypertensive disorders, and obstructed labor. The indirect causes, aggravated by pregnancy, leading to death are malaria, diabetes, hepatitis, and anemia (1,2).

Around 25% of maternal deaths in Asia and 30-50% of maternal deaths in Africa and Latin America occur as a result of abortion (8). It is a frequent consequence of un-intended pregnancy and, in the developing world, can result in serious, long-term negative health effects including infertility and maternal death (9).

Studies done in Ethiopia have shown that abortion is a major public health problem, being responsible for maternal mortality and morbidity (10-20). It was shown that significant hospital resources in the country are wasted on care for abortion. The

studies address mostly the magnitude and distribution of abortion directly or indirectly. Of those, majorities were hospital based and focused on the reasons for abortion, settings, knowledge of contraceptives, complications and outcomes.

A recent nationwide study on abortion related complications has shown that in a month an estimated number of 17 patients are seen in hospitals for postabortion complications (10). According to this study complications due to abortion were also reported from low-level facilities, which do not provide postabortion care services. This study involved all, but two of the regions in Ethiopia and showed abortion complications to occur in both urban and rural areas and seen not only in hospitals, but also in health centers and at health stations.

Barbara E. et al documented in 1986 abortion to be the most common cause of maternal death in Addis Ababa. From this community based large-scale survey, maternal mortality in the city was estimated to be 566 per 100,000 live births (11).

Taddesse E, et al, in 1993 conducted a six months survey of abortion in public hospitals in Addis Ababa (12). Two thousand two hundred seventy five patients were interviewed in the study. The frequency of abortion per delivery was calculated to be 317.8/1000. The study showed that induced abortion, compared to spontaneous, consumed significant resources due to higher rate of complications.

Studies done in different occasions in the two teaching hospitals out of Addis Ababa

(Gondar College of Medical Sciences and Jimma University) have also shown that abortion is a major health problem encountered in the hospitals (13,14,15,16). Yesuf and Zein reported abortion to be a major problem in consuming resources due to complications in Gondar College of Medical Sciences Hospital (13). About a decade later, Worku and Kumbi have come up with similar finding from the same hospital (14). Direct obstetric causes were responsible for 19 of 22 maternal deaths occurred in Jimma Teaching Hospital from 28 Oct. 1991 to 30 Dec. 1992. This study has also shown that induced abortion is a frequent cause of the death (15). Similar study has also shown that out of 80 patients admitted to the same hospital 50 (62.5%) were admitted for complications like bleeding and infection (16).

Out of Addis Ababa and the teaching hospitals, there are few studies done so far. According to W/Meskel and Chekol, seventy percent of patients admitted to gynecology ward of Gambella Hospital were cases of abortion. Thirty six percent and 64.3% were cases of induced abortion and spontaneous abortion respectively (17). A study from Sidama Regional Hospital (South Ethiopia) came up with similar finding. Within seven months 185 cases of abortion were admitted to the hospital of which 121 (65%) were spontaneous and 64 (35%) induced (18).

Few community-based studies have also reflected the same reality. From 976 female respondents in Addis Ababa, 489 (50%) were pregnant in the past. Of those women who gave history of previous pregnancy, 113 (23%) had live births, 4 (0.8%) had stillbirths, 10 (2.0%) had spontaneous abortions, and 362 (74%) had

illicit abortions (19). According to Getahun and Berhane lifetime history of abortion in a northern rural community of Ethiopia was 20.8% (20). They have also reported mean number of abortion per woman to be 1.8 ranging from 1 to 9.

2.2. Characteristics of patients with abortion

Studies on abortion showed that the victims, especially those with induced, are largely young, nulliparas, single, relatively more educated, unemployed and students. Findings from Kenya and Tanzania showed that those who are more commonly affected are the young, schoolgirls, those with formal education, and not married (21,22). A study done in South Africa showed women in younger age group, of less parity, single and unemployed were more likely to interfere with their pregnancies and end up in abortion (23).

According to Taddesse, et al of the total abortion cases admitted to the study hospitals 2275 (27%) were below the age of 20 years (12). All cases aged below 15 years were in the certainly induced abortion category, 46.6% were nulliparas, 21.9% were para one and 55.6% were single. Among the certainly induced abortion cases students constituted 27.9%. Similarly in Gambella Hospital patients with induced abortion were younger and were more likely to be single compared to patients with spontaneous abortion (17). Nearly half of the patients with induced abortion had a secondary education, those with spontaneous abortion being largely illiterate (84.2%) and housewives (64.8%). Worku and Kumbi reported mean age of patients with

abortions to be 25.1 years (SD ± 6.2) years (14). The study has also showed induced abortion to be higher among those who were single than married women. The study by Madebo and G/Tsadik, also showed induced abortions to be higher in those who were unemployed, those who attained grade 7-12 grade (67%), single (65%), 20-24 years old (61%), and nulliparous (48%) (18). Surafel et al have also reported similar findings from Jimma Hospital (16). Eighty seven percent of them were literate, 61.2% were unmarried. Hassen reported that from a total of 205 women in reproductive age group attending reproductive health clinic in Jimma Town, the majority (93.3%) of women with induced abortion were age less than 30 years, 57% were unmarried, and 64% had high formal education (24).

Maternal mortality was shown to be highest from the community based study in Addis Ababa for nulliparous, the unmarried, employed as maids, janitresses, and students, from which abortion was the most common cause of death (11). Getahun and Berhane, found out that young age was one of the determinants for abortion in rural Ethiopia among others (20).

2.3. Reasons for interfering with pregnancy

The reasons why women resort to abortion are more or less similar in Africa. A community based study from Zambia showed women's main reasons to seek abortion were fear of being expelled from school, unwillingness to reveal a relationship and to protect the health of their previous baby (25). Justesen et al reported the main reason

for termination to be having a small child to look after, and having completed the family (22). Study done in an urban hospital in Mozambique on 394 women requesting abortion showed majority of women gave economic and continuation of studies as the main reasons. Desire to space children is the third reason according to this study (26).

In most of the cases, reasons given for the unwanted pregnancies and then induced abortions in an Ethiopian setting were economic reasons, being on education and too close or too many pregnancy or deliveries. In the study by Surafel et al, 22.5% of the women gave economic problem as a reason for abortion (16). According to Hassen, the leading reason for termination of pregnancy was not being married (33.3%) and a desire to space births (28%) (24).

2.4. Settings under which pregnancies are interfered

Unsafe abortion in Africa is characterized by inadequate provider skills, hazardous techniques, and unsanitary facilities. Either the woman herself or unskillful provider attempt termination by inserting foreign bodies or instruments or by the woman ingesting modern or traditional medicines (27).

In Ethiopia, studies have indicated that abortions take place at homes of the patient or the inducers and also in health facilities. Usually patients do not disclose such information to protect the individuals who assisted them. Those who admit

interference usually give plastic tubes, metallic instruments, different medication used orally, vaginally or intravenously. Taddesse et al reported metallic instruments followed by plastic tubes (12). The study done in Gambella reported metallic materials to be responsible in 41.6% of the cases (17). Madebo et al also reported plastic tubes to be the first (58%) followed by metallic instruments (52%) (18). Similarly, Surafel et al, from Jimma Hospital found that in 95% of postabortion patients admitting interference rubber tubes or roots of plants were used to induce abortion (16).

Health workers varying from physicians to traditional birth attendants were found to be abortionists in several studies. According to Tadesse et al majority reported the inductions have been performed by health assistants in 35.3% of the cases and 28.4% were self-induced (12). From the Gambella study it was shown that health workers were responsible for 55% of the abortions (17).

2.5. Family planning knowledge and practice of postabortion patients

Studies done in Africa on postabortion women shows women presenting with abortion were not using contraceptive methods frequently despite demonstration of good awareness of methods (21,28). According to Tadesse et al, from those interviewed postabortion cases in 44.4% of them family planning was not used despite awareness of availability of FP method in 84.1% of the cases (12). Similar finding was reported from a study at one of Marie Stopes International clinics in

Addis Ababa. In this study, though clients seeking menstrual regulation demonstrated high awareness of contraception only 41.5% of them reported ever use of contraceptives (29). Surafel et al from Jimma Hospital reported that from postabortion cases interviewed 87.5% knew about family planning methods and 52.6% had used at least a method previously (16).

2.6. Postabortion care

The term “postabortion care” denotes a specific combination of integrated services that can significantly reduce abortion-related maternal morbidity and mortality and help break the cycle of unwanted pregnancy and unsafe abortion (6,27,30,31). The elements of postabortion care are:

1. Emergency treatment services for complications of spontaneous or unsafely induced abortion.
2. Postabortion family planning counseling and services
3. Links between emergency abortion treatment services and comprehensive reproductive health care

According to the postabortion care consortium (a group of international technical assistance agencies that specialize in reproductive health, FP and abortion), ***emergency medical services*** for abortion complications should include: *I)* An initial assessment of the woman’s status, consultation with her about her medical condition and treatment plan, medical evaluation (brief history and limited physical and pelvic

examinations), *II)* Prompt referral and transfer as appropriate depending on the level at which a woman enters the health system, stabilization of her condition and treatment of complications (e.g.- severe bleeding, sepses, intra abdominal injury and uterine perforation), and *III)* uterine evacuation to remove products of conceptus (6).

Postabortion FP is an important element of PAC since ovulation can occur as early as two weeks following abortion. Many women and their health care providers are not aware of the prompt return of fertility after both spontaneous and induced abortion (6,30). Apart from negligence and lack of awareness by the providers, administrative and physical separations between emergency treatment for abortion complications and family planning services also impede the provision of postabortion FP (6).

International experts on reproductive health gathered at Bellagio, Italy, in 1993, defined three key family planning related messages that health care providers should convey clearly to every woman who has experienced an unsafe abortion and does not wish to become pregnant. Those messages are: “That the women could become pregnant again almost immediately, before the next menses, that she can safely prevent unwanted pregnancy by using modern contraceptives and where and how she can obtain such methods” (30).

Links to reproductive health care and other services: While integrated care is important it is not true in settings of developing countries, therefore, it is important to

establish effective referral mechanisms and linkages to reproductive health service providers who will provide ongoing and accessible care. Specific risk groups who may need both treatment for abortion complications and referrals for other health and social services include: adolescents, victims of rape and sexual violence, women with STDs, including HIV/AIDS, women in refugee settings and other marginalized populations (6). Implementation of the three elements of PAC was recommended in the technical guidelines for maternal and newborn care issued by the MOH in 1998 for health professionals (32). But details of the elements were not explicitly presented.

2.7. Quality Postabortion Care

Several health related evaluations since Alma Ata deceleration focused on measuring changes in mortality, morbidity or on measuring coverage rates. Emphasis on quality or the process of service delivery was minor. Recently studies have focused on service quality, revealing widespread deficiencies in health care services in developing countries (33).

While no single definition of health service quality applies in all situations, Roemer and Montoya have tried to define it as " proper performance (according to standards) of interventions that are known to be safe, that are affordable to the society in question, and that have the ability to produce an impact on mortality, morbidity, disability, and malnutrition"(34).

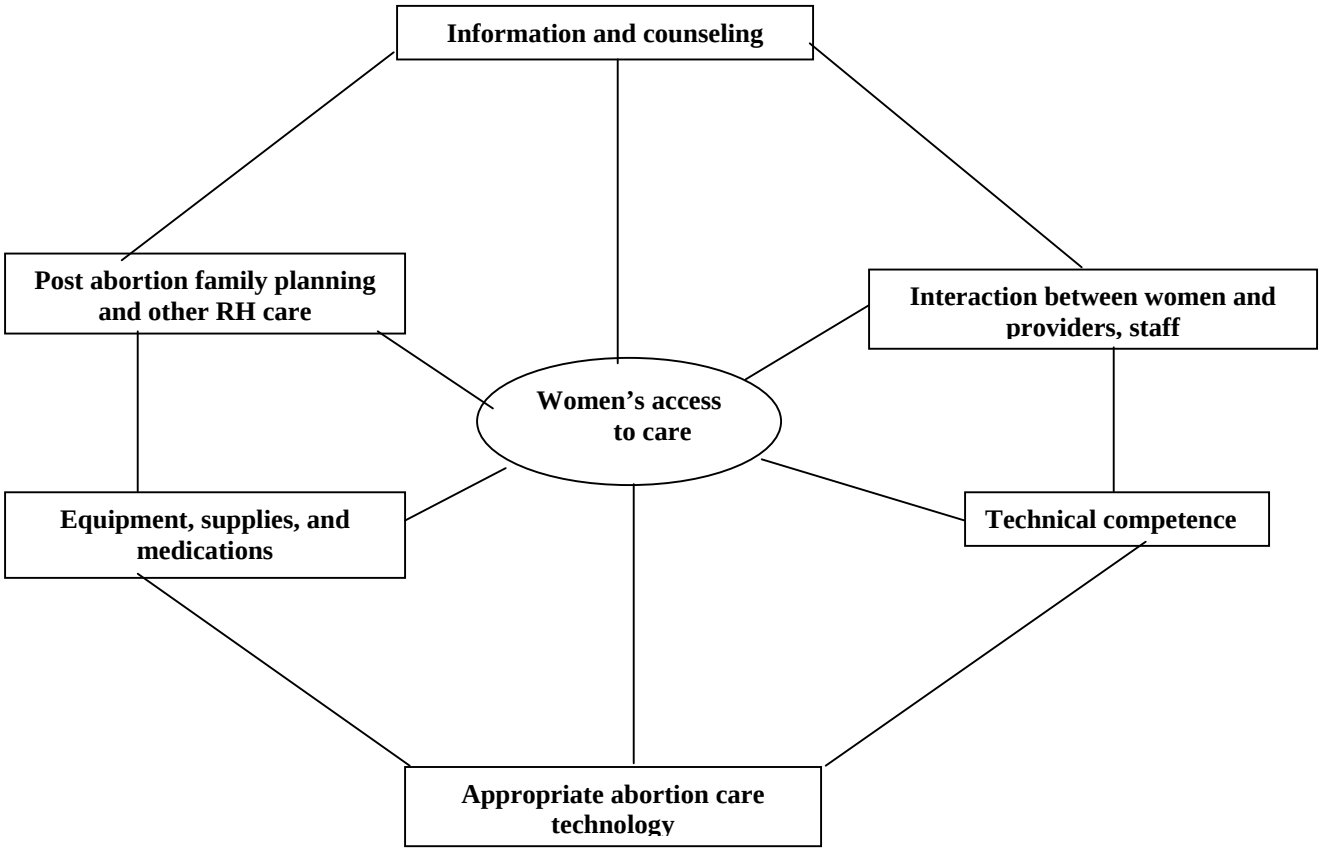
Several dimensions of quality are recognized and one may address one or more of these dimensions depending on what effort are taking place. Dimensions of quality include: *technical competence* (skills, capability, and actual performance of health providers, managers, support staff and material resources), *access to service* (not restricted by geographic, economic, social, cultural, organizational, or linguistic barriers), *effectiveness* (whether the desired results are achieved or not), *interpersonal relations* (interaction between providers, the health team and the community), *efficiency* (provide greatest benefit within the resources available), *continuity* (service provision on an ongoing basis), *safety* (minimizing dangers related to service delivery) and *amenities* (physical appearance and comfort) (33).

The expert meeting at Bellagio, just before the ICPD, recommended that quality of services should be examined and improved, and studies of successful, integrated program models and tests of postabortion family planning kits for women and providers should be carried out (30).

In 1994, at the ICPD, participants have agreed and made a commitment for quality postabortion care: " *In all cases women should have access to quality services for the management of complications arising from abortion. Postabortion counseling, education and family planning services should be offered promptly which will also help to avoid repeat abortions."* This forum was the first international gathering to address the issue of abortion (3).

Most of all, IPAS, a non-for profit organization working to improve postabortion care worldwide, has introduced a framework of quality of postabortion care (35). The framework developed in 1991 is applicable after the ICPD (fig 1).

Fig. 1 QUALITY OF CARE FRAMEWORK FOR ABORTION CARE



The framework was designed to help identify areas in which services are stronger or weaker and also assess improvements made over time. More or less it includes every dimension of quality discussed above. The components of the framework are not other entities but details of the three elements of postabortion care. Details of the

framework and some related issues and findings are discussed below:

2.7.1. Interaction between women and providers

Interaction refers to respect and support, non-judgmental attitude, respect for women's ability and right to make informed decisions/choices about their health and fertility, absence of providers bias or coercion in provision of care, an opportunity to express their views, concerns, and questions (35).

The group at Bellagio stressed, in addition to postabortion family planning training for all staff involved in postabortion care should emphasize quality of care and sensitivity to women's needs (30).

It was shown in a nation wide assessment of reproductive health needs in Ethiopia that interpersonal relations and the need for privacy and confidentiality in reproductive health, especially in the area of STDs, family planning and postabortion care were poor. The investigators have recommended inclusion of these issues in training of all health care activities (36).

2.7.2 Information provision and counseling

In the ICPD program of action, it was stated that women with abortion should have ready access to reliable information and compassionate counseling (3). The expert

group on PAC also stressed that women should leave abortion care facilities understanding their immediate return to fertility, that there are ways to prevent future unwanted pregnancies, and where to obtain contraceptive methods, if they desire (30).

2.7.3. Postabortion family planning and reproductive health care

Although trends have been following different paths in individual country settings, evidences from the developed world have shown that increase in contraceptive use ultimately has lead to decreases in induced abortion rates (37).

Considering lack of this component, especially in the developing world, the technical working group of Bellagio stressed that extensive education and training of abortion providers as crucial first steps in eradicating ignorance about postabortion family planning. They have suggested including professional associations and meetings, in-service training in the public sector, and development of special training and supply packages for abortion providers that include contraceptive methods (30). In this meeting, it was recommended to include family planning in the key elements of quality abortion or postabortion care. According to them facilities providing abortion or PAC should offer direct provision of information, counseling and contraceptive methods or referral to other sources for these services.

Recent evidences show that efforts are made to change the situation in several

countries especially after the ICPD program of action in 1994 (3). To improve postabortion family planning services, some countries have made successful interventions. To implement different models of PAC-family planning services they have assessed the status of their services. A pre-intervention study done in Peru showed that before discharge only 2% of cases received contraceptive methods (38). Similar study from Zimbabwe found that 49% of patients discharged with some method or counseling, and from a total of women treated 34% received actual contraception (39). Newar et al found at baseline 35% of women received information on family planning before an intervention to improve the situation (40). Although 86% of abortion patients from 6 Kenyan hospitals expressed an interest in contraceptive counseling, only 5% reported actually receiving such information (4).

Studies have also shown women who have undergone unsafe abortion and risked their health and their lives want to avoid pregnancy. In a study done to create linkage between incomplete abortion treatment and family planning services in Kenya, substantial number of patients reported desire to use family planning (41). This finding was reflected both in the baseline and post intervention surveys. In the post intervention survey, sixteen percent reported they did not want to have more children, whereas almost half stated they would like to wait one to two years for their next child, and 24 % said they would like to wait more than two years.

So far there is no study done to assess postabortion FP that can be representative in this country. Study done on few samples at Jimma University Hospital showed that

from 41 patients admitted for abortion complications, only 8(19.5%) were counseled for FP (42). A study done after 3 years in the same hospital showed only 29.4% left the hospital with counseling or methods (43).

2.7.4. Technical competence

Technical competence refers to adherence to protocols and standards. It also refers to training of providers in relevant aspects of care and adequate supervision (35). A standard is an expectation of quality that is explicit (written) or implicit (understood). The later derives from expertise of professionals who work in a specific environment. To provide uniformity among providers it is recommended to convert it to explicit standards. Explicit health care standards appear in a variety of forms, such as specifications, procedures, or protocols. Based on most up-to-date research it is usually developed by health ministries and professional organizations (44).

As mentioned above, the guideline by MOH needs to be clearer with regard to the elements of PAC and treatment or service protocols should be more explicit so that all providers stick to standards (32).

2.7.5. Appropriate abortion care technology

Apart from being manufactured to high standards the technologies used in abortion care should be appropriate to specific service delivery settings. WHO and IPAS

recommend adoption of Manual Vacuum Aspiration (MVA) for treatment of incomplete abortion, which is found to be cost-effective and relatively safe way to decentralize and improve emergency abortion treatment services (31).

A study done in Mexico to evaluate different models of PAC revealed that MVA is a safe and effective alternative to sharp metallic curettage for treatment of abortion complications (5). Similarly, Yusuf and Pogharican, on a study conducted at Ghandi Memorial Hospital, Addis Ababa to compare sharp metallic curettage and MVA, reported that procedure related complications like perforation, hemorrhage, shock and infection were found to be lower in the case of MVA but higher in sharp metallic curettage (45). Relatively minor complications like nausea, vomiting and incomplete curettage were reported to be higher in MVA. The investigators have recommended wide use of MVA in the country since it was found to be inexpensive, noninvasive technology.

2.7.6. Equipment, supplies, medications and access to care

Essential equipment, supplies, and medications should be present at every level in sufficient quantities. There should be established management system (31). In addition to the above mentioned points considering costs, linkage of service to other reproductive health services and referral systems make the service more accessible (6,31).

Abortion services should be provided in the context of comprehensive reproductive health care for women with direct provision of family planning services and screening for sexually transmitted diseases (STDs), and referral for other types of care such as treatment for STDs and infertility (30).

2.8. Rationale of the study

Together with the high maternal mortality, morbidity and disability the very low contraceptive prevalence rate (5.9%) and very high fertility (5.9) makes it a priority to find ways to improve maternal health in Ethiopia (46). This study, being the first of its kind in this country, tried to assess status of postabortion services in public hospitals in Addis Ababa. The findings of this study are believed to be useful in several ways. The main ones are:

- To determine best ways to design and deliver PAC services, to make them accessible and appropriate to women who need them.
- To understand women's perspectives and incorporate them into programs so as to design effective postabortion services.
- To solve obstacles to the delivery of postabortion family planning and to find ways to modify negative attitudes towards women who have undergone abortion among providers of both abortion care and family planning, and ways to overcome providers' lack of motivation to provide or refer women for postabortion family planning.

The study, using the opportunity, also described characteristics of the women

receiving PAC; assessed reasons for termination of pregnancy and knowledge and practice of family planning.

3. OBJECTIVES

General:

To assess quality of postabortion care in government hospitals in Addis Ababa.

Specific:

1. To describe patient characteristics, reasons and settings of abortion and family planning knowledge and use.
2. To examine the interaction between service providers and patients.
3. To describe the information provision and counseling.
4. To assess postabortion family planning service and RH care.
5. To assess providers' technical competence.
6. To assess the availability/ appropriateness of equipment, supplies and medication.

4. METHODS AND MATERIALS

4.1. Study design

This was a cross-sectional descriptive study on quality of postabortion care in four government hospitals (Tikur Anbessa, Zauditu Memorial, Gandhi Memorial and Yekatit 12) in Addis Ababa.

4.2. Study area

Addis Ababa is one of the eleven regions in the country and also the capital city of the Federal State. It is located in the central part of the country. According to the 1994 census by Central Statistics Authority (CSA), the city has a projected population of 2,646,000 (47). Of these, 1,273,000 (48.1%) were estimated to be males while 1,373,000 (51.9%) were females. Women in reproductive age group (15-49) are estimated to be 874,867 (63.7%) (48).

There are 18 hospitals, 24 health centers and 161 health stations that are run by the MOH, other governmental agencies, NGOs and the private sector. The four central hospitals are also located in the city. There are 340 private clinics categorized into lower, medium, higher and especial types (48). Two of the hospitals initially planned to be included in the study are central hospitals (Tikur Anbessa and Saint Paul) while the rest three (Zauditu Memorial, Gandhi Memorial and Yekatit 12) are owned by the Addis Ababa Regional Administration. Except Gandhi Memorial Hospital, which is

the only government owned maternity hospital in the country; the other four provide comprehensive health services.

4.3. Study unit

From all government hospitals in the city, only five provide postabortion care (Gandhi, Zauditu, Tikur Anbessa, Yekatit and Saint Paul). At the beginning of this study it was planned to include all the five hospitals, however, the service was not resumed at the Saint Paul's following the reopening after renovation. The MOH and Addis Ababa University jointly run the Gynecology and Obstetrics Department. Due to shortage of staff (resident physicians and interns) the university could not assign staff at least while the data was being collected from the other hospitals. Thus, the hospital has to be excluded from the study.

4.4. Sampling

4.4.1. Exit interview

Four hundred twenty two postabortion patients were interviewed just before discharge from respective hospitals. Patients were interviewed by using non-probability (quota) sampling, which is recommended by the WHO to study abortions in facility settings (49).

Sample size calculation:

To calculate sample size the following formula was used:

$$n = \frac{(Z\alpha/_2)^2\, p\,(1-p)}{(d)^2}$$

Assumptions:

$Z\alpha/_2$ = standardized normal distribution curve value for the 95% confidence interval which is 1.96

p=0.5(to achieve the maximum possible sample size, on the absence of previous study, it was assumed that from those women who receive postabortion services 50% of them leave the facilities being satisfied by the service they have received)

- d= 0.05 degree of margin of error
- n= the number of postabortion cases to be interviewed i.e. sample size of the study
- Adding 10% non-response rate, the total sample was 422.

4.4.2. Observation

Observation is useful to document physician patient interactions and delivery of health services in general. It is particularly useful for crosschecking information collected in interviews about quality and delivery of services (49). The WHO recommends a small sample for observation because this method is said to be time consuming and intrusive. For instance in Mexico, in an attempt to compare three

models of postabortion care the investigators have conducted observation on 12% of the cases interviewed on average (5). In the current study, considering time and cost it was decided to observe a minimum of 10-15% of the exit interview at each hospital.

4.4.3. Provider interview

All service providers directly involved in history-taking, physical examination, and counseling during the data collection period were included. This includes residents, general practitioners, interns and nurses.

4.5. Data collection

4.5.1. Exit interview

The questionnaire has three major sections: (i) *Socio-demographic*: age, marital status, educational status and occupational status. (ii) *Reproductive history and family planning background*: previous pregnancy, deliveries, abortion, FP knowledge and practice and (iii) *quality related variables*: interaction between providers and patients, information provision, FP counseling and method provision and satisfaction (Annex I). It was translated into Amharic and then back to English to ensure consistency. Five twelve-grade complete non-health professional female interviewers were recruited for data collection. They had training on reproductive health matters at Family Guidance Association of Ethiopia (FGAE) and were working as peer

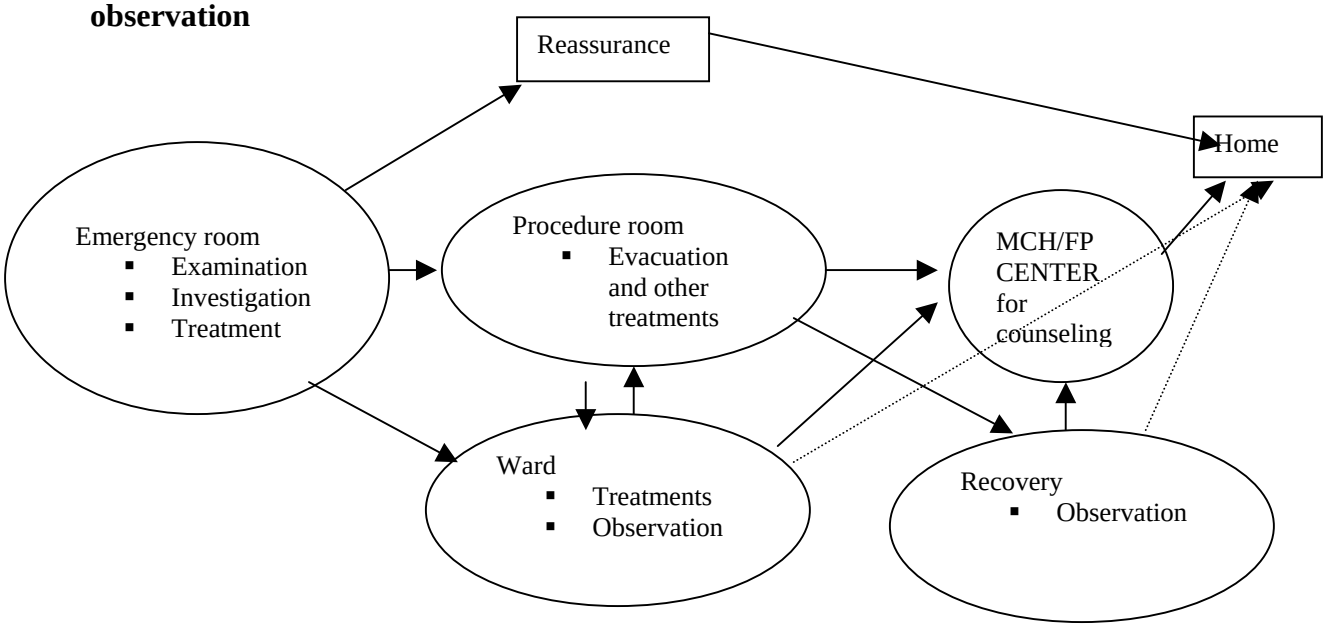
promoters in their residential areas. Training on data collection was given for one week by the principal investigator and the questionnaire was pre-tested on ten patients at Gandhi hospital. Corrections, mostly skip patterns and grammar, were made based on the pretest and finalized. The principal investigator and a nurse supervised data collectors daily.

4.5.2. Observation

Observation was conducted using a checklist which had three major sections (Annex II): (i) *pre-procedure*: subdivided into interaction between providers and patients and information provision (ii) *procedure*: subdivided into interaction between providers and patients and information provision (iii) *postabortion FP counseling and methods*. Experienced nurse on PAC who has worked for Marie Stopes International-Ethiopia and FGAE conducted the observation in three hospitals. The principal investigator trained her for two days; and pre-test of the instrument was done along with the exit interview. The principal investigator conducted the observation at one of the hospitals after making sure that there is uniformity between the two investigators. Patients in life threatening situation and unconscious were not observed. Observers were in white coat and were careful not to interfere with service provision.

To understand sequence of activities in postabortion care a flowchart was prepared for each hospital and every attempt was made to observe pre-procedure, intra-procedure and FP counseling services (Fig. 2). The ellipses show where the observations were conducted and broken arrows show possible alternative paths.

Fig. 2 Flowchart used to trace sequence of activities in the hospitals for observation



4.5.3. Provider interview

The questionnaire for the providers has three different sections. (i) Training background (ii) opinion on the status of PAC in the hospitals and (iii) socio-demographic characteristics. Questionnaires were distributed to the providers just before the end of data collection. It was in English and pre-tested on physicians working in other departments. Except the questionnaire for the providers standardized questions and checklists obtained from IPAS were utilized.

4.5.4. Equipment and supplies

The checklist used to assess equipment and supplies of the hospitals has six different sections. Facility assessment, reusable equipment and supplies, disposable supplies,

medication, laboratory and contraceptives. Equipment and supplies of the hospitals were assessed by using the checklist along with the observations.

4.6. Data Analysis

EPI-info version 6.04 and SPSS version 10 were used for data entry, cleaning and analysis. Frequencies, percentages, means (SD), odds ratios and 95% confident limits were used to present the findings.

4.7. Operational definitions

Postabortion patients: any patient presenting with signs and symptoms of abortion and declared by the physician in charge as having an abortion regardless of the cause and type.

Current pregnancy: pregnancy that has ended in abortion for which a patient is attending the hospital during the interview.

Provider: in this study refers to health professionals involved in history taking, physical examination, treatment and counseling of postabortion cases.

4.8. Ethical considerations

Before data collection, ethical clearance was obtained from the Research Ethics Committee of Faculty of Medicine, Addis Ababa University. Letter was written to Regional Health Bureau, medical directors, department heads, and head nurses of the

respective hospitals to obtain their consent. Verbal consent was obtained from each patients and providers. Those who were unwilling to participate in the study were omitted. To ensure privacy and confidentiality the exit interview was conducted where questions and responses cannot be overheard. Names and other identifying information were not used in the study.

5. RESULTS

5.1. Caseloads of study hospitals before and during the study

Before data collection records of each hospital were reviewed to get information on their caseloads on PAC. Accordingly, in 1999-2001(1992 E. C.) Gandhi Hospital rendered 884 abortion care while Zauditu handled 218 abortion cases in the same year. In Tikur Anbessa in 2000-2001(1993 E. C.) 476 women were served for abortions. In the same year Yekatit Hospital served 621 women for abortions (Source: registers of respective hospitals and shows only cases undergone procedures).

Four hundred twenty two postabortion women were identified during the data collection period and interviewed. Twenty-one refused to participate in the study making the response rate 95%. Distribution of patients interviewed by hospital was 193 (48.1%) patients from Gandhi Memorial Hospital 82(20.4%) patients from Tikur Anbessa Hospital, 71(17.7%) patients from Yekatit 12 and 55(13.7%) from Zauditu Memorial Hospital. A total of 138 observations were made. Pre-procedure, 62,11,11 and 12 observations were made at Gandhi, Tikur Anbessa, Yekatit 12 and Zauditu hospitals respectively. During and after procedure, 79,7,9, and 8 observations were made at Gandhi, Tikur Anbessa, Yekatit 12 and Zauditu Hospitals respectively (since a single patient can be observed during pre-procedures and procedures the figures do not add up to 138).

Forty-two service providers were interviewed using a self-administered questionnaire. Relevant equipment and supplies of the hospitals were also assessed.

5.2. Characteristics of post abortion patients

Age of postabortion cases attending the four hospitals ranged from 15 to 47 years with a mean of 26.4 years (SD ± 6.42) (Table1). Just over half 225(56.1%) of them were aged between 20-29 years. Mean age of those with spontaneous abortion was 27.07 (SD ± 6.42) while those with induced abortion were 23.09 (SD ± 4.91). The difference between the means is statistically significant at p<00.5. As shown in Table 1, two hundred fifty eight (64.3%) were unemployed, 24 (5.9%) were daily laborers and 12 (3.0%) were students. Two hundred eighty six (71%) of them were married, and 281 (70%) attended formal education varying from primary to tertiary level.

Table1. Socio-Demographic Characteristics of Postabortion Patients,Government Hospitals, Addis Ababa, November 2001-February 2002.

Variables (n=401)	Number	Percent
Age Mean 26.4 (SD ±6.4)		
15-19	55	13.7
20-24	121	30.2
25-29	104	25.9
30-34	57	14.2
35+	64	16.0
Marital status		
Married	286	71.3
Single	98	24.4
Cohabiting	4	1.0
Separated, divorced and widowed	13	3.1
Occupation		
Employed	76	18.9
Private business	31	7.7
Unemployed	258	64.3
Student	12	3.0
Daily laborer and housemaid	24	5.9
Education		
No education	118	29.4
Read and write	2	0.5
Primary	116	28.9
Secondary	143	35.7
Beyond secondary	22	5.5
Ethnic group		
Amhara	186	46.4
Oromo	94	23.4
Gurage	74	18.5
Tigray	28	7.0
Others	19	4.7
Religion		
Orthodox	315	78.6
Muslim	54	13.5
Protestant	30	7.5
Catholic	2	0.5

Almost 70% of the respondents were at least pregnant once before the current pregnancy ending in abortion (Table 2). Maximum number of pregnancy was 15. Number of deliveries ranged from one to 14 with median delivery of 1.0. One hundred and sixteen (29.0%) of the respondents gave history of previous abortion, which was experienced once in 72.4%, twice in 16.4% three times in 9.5% and four and above times in the rest. Two hundred forty five (61.1%) respondents reported current pregnancy ended in abortion was wanted while the rest 156(38.9%) reported the pregnancy was unwanted. As indicated in the same table, over three quarter of the patients said that current pregnancy was terminated spontaneously while the rest admitted interference with pregnancy.

Three hundred ten (77.3%) of them know at least one contraceptive method. Ever use of contraceptives was 53.4%. When seen by type of abortion 31(44.9%) of those who admitted interference and 183(55.1%) of those with spontaneous abortion reported ever use of contraceptives.

Table 2. Reproductive History of Postabortion Patients, Government Hospitals, Addis Ababa, November 2001-February 2002.

Variables	Total	Percent
Previous pregnancy (median=2)		
2-4	199	49.6
5-7	59	14.7
8-10	17	4.2
11 and above	5	1.2
Delivery (median=1)		
None	159	39.7
1	89	22.2
2-4	117	29.2
5-7	28	7.0
8-10	6	1.5
11 and above	2	0.5
Previous abortion (n=401)		
Yes	116	29.0
No	285	71.0
Current pregnancy wanted (n=401)		
Yes	245	61.1
No	156	38.9
Current pregnancy induced (n=401)		
Yes	69	17.2
No	332	82.8

* Current pregnancy not included

Half of those who reported their last pregnancy were unwanted stated negligence to take contraceptives regularly and poor knowledge of contraceptives as a main reason for the pregnancy (Table 3). Main reason given for resorting to unsafe abortion by those who admitted interference were economic 27(34%), not being married 17 (25.8%) and to complete education in 15 (22.7%). The pregnancies were interfered at inducers house, health institutions and patients house in 31 (44.9%), 25(36.2%) and 11(15.9%) respectively. Materials used were metal in 28 (40.6%), different medications in 20 (29.0%) and plastics in 16 (23.2%) of the cases. Fifty-six (74.0%) reported that health workers varying from physicians to traditional birth attendants assisted them.

Table3. Reasons for Unwanted Pregnancy, Interference and Setting of Interference of Current Pregnancy in Postabortion Patients, Government Hospitals, Addis Ababa, November 2001-February 2002.

Variables	Number	Percent
Reason for pregnancy (n=156)		
Contraceptive failure	30	19.2
Forget to take contraceptives	40	25.6
Partner pressure	18	11.5
Do not know contraceptives	38	24.4
Afraid of parents to keep contraceptives	22	14.1
Other	8	5.1
Reason for interference (n=69)		
Economic reasons	27	34.8
Health reasons	3	4.5
Partner pressure	2	3.0
Too many too close pregnancies	5	7.6
To complete education	15	22.7
Not being married	17	25.8
Place of interference (n=69)		
Health institutions	25	36.2
Patient's house	11	15.9
Inducers house	31	44.9
Not reported	2	2.9
Method used (n=69)		
Plastic	16	23.2
Metal	28	40.6
Medication (oral, vaginal and injection)	20	29.0
Herbs	3	4.3
Not reported	2	2.9
Patient was assisted by (n=69)		
Health worker	41	59.4
Traditional birth attendant	17	24.6
Self	10	14.5
Not reported	1	1.4
Sex of who assisted patient (n=58)		
Male	41	70.7
Female	17	29.3

Analysis of induced abortion by socio-demographic variables and status of previous and current pregnancy revealed that induction was higher among age groups 14-19 and 20-24 years, single, literate, unemployed, and those with unwanted pregnancy (Table 4). In the bivariate analysis, induced abortion decreases as age increases, and found to be more in those who were single, with unwanted pregnancy, and previous history of abortion. The same is true in the multivariate analysis, except for previous abortion, which fails to hold.

Table 4. Induced Abortion in Postabortion Patients by Socio-Demographic Variables and Reproductive History, Addis Ababa, November 2001-February 2002(n=401)

Variables	Induced abortion		COR[@] (95% CI) **	AOR[@@](95%CI)**
	Yes	No		
Age				
14-19	15	40	1	1
20-24	33	88	1.00(0.47,2.21)	0.55(0.13,2.33)
25-29	14	90	0.41(0.17,1.02)	**0.22(0.06,0.77)**
30+	7	114	**0.16(0.05,0.47)**	**0.21(0.06,0.79)**
Marital status				
Married	18	268	1	1
Single	51	64	**11.86(6.27,22.94)**	**7.33(3.21,16.76)**
Education				
Literate	53	230	1	1
Illiterate	16	102	0.68(0.35,1.28)	0.54(0.20,1.43)
Occupation				
Employed	16	91	1	1
Unemployed	53	241	1.25(0.66,2.47)	0.57(0.21,1.57)
Religion				
Christian	60	287	1	1
Others	9	45	0.96(0.39,2.14)	1.18(0.37,3.79)
Ethnic group				
Amhara*	38	148	1.52(0.88,2.66)	1.98(0.54,7.32)
Oromo*	16	78	0.98(0.50,1.87)	2.19(0.54,8.95)
Gurage*	8	66	0.53(0.21,1.18)	0.35(0.07,1.60)
Knowledge of contraceptives				
At least one method	52	258	1	1
No method	17	74	1.14(0.58,2.15)	1.32(0.47,3.71)
Current pregnancy				
Unwanted	66	90	1	1
Wanted	3	242	**0.02(0.00,0.05)**	**0.02(0.00,0.06)**
Previous abortion				
No	60	225	1	1
Yes	9	107	**0.32(0.13,0.67)**	0.54(0.19,1.52)
Parity				
Less than 4	66	299	1	1
Greater than 4	3	33	0.41(0.08,1.38)	0.97(0.18,5.28)

[@]Crude odds ratio, [@@]adjusted odds ratio, **95% confidence interval*compared to others

5.3. Interaction between service providers and postabortion patients

Majority of the respondents (94.3%) said that they were treated with politeness and respect. Out of 50 patients who reported having questions 31(62.0%) said that the providers listened and responded to their questions (Table 5). Data from service observation shows that except in one case, patients were greeted in a friendly and polite manner. To the contrary, except in one case, providers did not introduce themselves to patients by name. In 83 (86.5%) of the observations, patients were given an opportunity to express concerns and raised questions on their illness from which all got responses. In 94 (97.7%) of the observations providers approach to patients was supportive. During performing procedures providers were supportive to patients in 94 (91.3%) of the cases and also let patients ask questions in 92 (89.3%) of the cases.

Table5. Interaction Between Service Providers and Postabortion Patients, Government Hospitals, Addis Ababa, November 2001-February 2002.

Variables	Number	Percent
Exit interview		
Treated with politeness and respect (n=401)		
Yes	378	94.3
No	18	4.5
No response	5	1.2
Patient had questions on FP or abortion (n=401)		
Yes	50	12.6
No	349	86.9
No response	2	0.5
Pre-procedure observation		
Patient greeted in friendly and polite manner (n=96)		
Yes	95	99.0
No	1	1.0
Provider introduced himself by name (n=96)		
Yes	1	1.0
No	95	99.0
Patient given an opportunity to express concerns/questions (n=96)		
Yes	83	86.5
No	13	13.5
Provider's approach to patients		
Supportively	94	97.9
Neutrally	1	1.0
Negatively	0	0
Did not speak at all	1	1.0
Procedure observation		
Provider's approach to patients (n=103)		
Supportively	94	91.3
Neutrally	8	7.8
Negatively	1	1.0
Opportunity to ask questions (n=103)		
Yes	92	89.3
No	11	10.7

5.4. Information provision and counseling

Three hundred one (75.8%) of the respondents feel that information provision by the providers were up-to their expectations (Table 6). The responses for Tikur Anbessa, Zauditu, Gandhi and Yekatit were 86.3%, 81.8%, 72.4% and 68.6% respectively. According to the respondents, in just over three quarter of the cases, providers give information on current illness while 373 (94.0%) cases were not told about danger signs that may necessitate revisiting the facilities. Those who reported receiving information on danger signs and symptoms mentioned excessive vaginal bleeding, abdominal pain, and fever, abnormal discharge and ammenoreha. Follow-up appointment was given only for 48(12.1%) of the women. In 89 (93%) of the cases, providers have informed patients what would happen during pelvic examinations. Issues on other reproductive health matters like STDs, HIV/AIDS and multiple partners were raised only in 3 % of the cases. During and after procedure providers were explaining the treatment procedure in 93(90.3%) while danger signs and symptoms and when to revisit the health facility in 42 (40.8%) cases only (Table 6).

Table 6. Information Provision to Postabortion Patients, Government Hospitals, Addis Ababa, November 2001-February 2002.

Variables	Number	Percent
Exit interview		
Patent feels general information provision adequate (n=401)		
Yes	301	75.8
No	100	24.2
Provider gives information on current illness (n=401)		
Yes	318	79.3
No	77	19.2
No response	6	1.5
Patient told to revisit the facility for danger signs (n=401)		
Yes	21	5.3
No	373	94.0
None response	3	0.8
Appointment given for follow-up (n=401)		
Yes	48	12.1
No	348	87.4
No response	2	0.5
IEC materials used any time in patent's stay (n=401)		
Yes	2	0.5
No	393	98.0
Non response	6	1.5
Pre-procedure observation		
Informed patient about pelvic exam (n=96)		
Yes	89	92.7
No	7	7.3
Reproductive health related issues raised during consultation (n=96)		
Having more than one partner	1	1.0
Concerns about HIV or STDs	3	3.1
Previous history of STDs	0	0
None	93	96.9
Procedure observation		
Treatment procedure explained (n=103)		
Yes	93	90.3
No	10	9.7
Provider mentioned danger signs (n=103)		
Yes	42	40.8
No	61	59.2
Provider mentioned when to revisit the facility		
Yes	42	40.8
No	61	59.2

5.5. Post abortion family planning and other reproductive health (RH) care

When asked on how soon they could become pregnant again if involved in sexual intercourse 107(26.7%) said soon, 125(31.2%) one month, 66(16.4%) above one month while 92(22.9%) said do not know (Table 7). Regarding future pregnancy plan, only 73(18.2%) responded that they want to become pregnant in the coming three months.

All hospitals provide family planning services at the MCH centers, which are open only every working days of the week. Information on family planning was provided in 78 (19.5%) of patients and only 11(2.7%) received contraceptives. When information provision on FP is seen by hospital, 41(21.2%) patients received from Gandhi, 29 (35.4%) from Tikur Anbessa, 9 (12.7%) from Yekatit and 1 (1.8%) from Zauditu. All patients who received family planning methods were from Gandhi Hospital. According to the patients 22 (5.5%) didn't want to use contraceptive while 318 (79.3%) stated that no one raised the issue of contraceptives at all. (Table7). All patients who received contraceptives were told appropriate information needed on the particular methods.

Table7. Fertility Awareness, Pregnancy Intentions and Postabortion FP Counseling and Method Provision, Government Hospitals, Addis Ababa, November 2001-February 2002.

Variables (n=401)	Number	Percent
Fertility return after abortion		
Soon	107	26.7
One month	125	31.2
Two-three months	41	10.2
Above four months	25	6.2
Don't know	92	22.9
No response	11	2.7
Future pregnancy plan		
Never	127	31.7
Within three months	73	18.2
Between three months and two years	70	17.5
Above two years	89	22.2
Not sure	39	9.7
No response	3	0.7
Information on FP provided		
Yes	78	19.5
No	318	79.3
No response	5	1.2
FP method provided		
Yes	11	2.7
No	385	96.0
No response	5	1.2
Reasons		
No one raised the issue	318	79.3
Changed my mind	4	1.0
Referral	6	1.5
Health reasons	10	2.5
Appointed	20	5.0
No contraceptives	5	1.2
Do not need contraceptives	22	5.5
No response	5	1.2
Methods provided (n=11)		
Oral Contraceptive Pills (OCP)	1	9.1
Injectable	9	81.8
Norplant	1	9.1

During the pre procedure, previous contraceptive method use was raised in half of the cases from which ten patients were found to have used methods some time before. Five of them reported problems with previous use and four of them were counseled about the problem they have had with the methods (Table 8). Specific preference for contraceptives was raised either by the patients or the providers only in 7(7.3%) of the observations. Four patients showed preference to oral contraceptive pills, 2 for indictable and 1 for intrauterine device.

Twenty-eight (27.2%) of the patients observed during and after procedure received FP counseling. Counseling was given by residents and interns in the two teaching hospitals in 39.3% and by general practitioners in 25% working in the four hospitals. Twenty-five of the 28 patients were counseled at Gandhi the rest Zauditu. Majority 23(82.1%) of the counseling were given in the procedure room (Table8).

Table 8. Postabortion FP Counseling during Pre-Procedure and Procedure to Postabortion Patients in Government Hospitals, Addis Ababa, November 2001-February 2002

Variables	Number	Percent
Pre-procedure observation		
Previous method use raised (n=96)		
Yes	47	49.0
No	49	51.0
Problem with previous method (n=47)		
Yes	5	10.6
No	5	10.6
No previous method use	37	78.7
Action taken for the problem (n=5)		
Counseled about the problem	3	60.0
Given medical treatment	1	20.0
No actions	1	20.0
Specific preference for contraceptives (n=96)		
Yes	7	7.3
No	89	92.7
Method Preferred (n=7)		
OCP	4	57.1
Injectable	2	28.6
IUD	1	14.3
Procedure and post procedure observation		
FP counseling given (n=103)		
Yes	28	27.2
No	75	72.8
Place where counseling given		
In the recovery room	4	14.3
In the procedure room	22	78.6
In the ward	2	7.1
Provider who provided counseling		
OB/GYN specialist	3	10.7
General practitioner	6	21.4
OB/GYN resident	11	39.3
Intern	7	25.0
Nurse	1	3.6

5.6. Access to service and satisfaction

All four hospitals provide emergency postabortion care for 24HRS throughout the week. As depicted in Table 9, one hundred twenty (29.9%) of the patients commented that the waiting time between arrival and treatment to be very long. Only 46 (11.5%) of the patients had difficulty in locating or getting the services which were mainly due to lack of money 26 (56.5%), absence of adequate signs or information 14 (30.0%), and lack of cooperation from service providers 10 (21.7%).

Ninety-seven (24.2%) of patients reported that they were not given pain medication though they have had pain during their stay in the hospitals (Table 9). From 96 of the cases observed during the pre procedure 28 (29.2%) of them had evidence of visual or audible pain during physical examination; and only in 14 (50.0%) of them the pain seems adequately controlled. During the procedure 73 (71.0%) patients were asked if they were in pain, in 62 (60.2%) of the cases there was evidence of pain and the pain was not adequately controlled throughout the procedure and only 11 were given pain medication.

Table 9. Pain Management, Access to Services and Satisfaction of Postabortion Patients in Government Hospitals, Addis Ababa, November 2001-February 2002.

Variables (n=401)	Number	Percent
Pain treatment given		
Yes	176	43.9
No	97	24.2
No pain	123	30.7
No response	5	1.2
Waiting time		
Reasonable	267	66.6
Very long	120	29.9
Don't know	11	2.7
No response	3	0.7
Difficulty in locating or getting services		
Not difficult	354	88.3
No adequate sign	11	2.7
No adequate information	3	0.7
No enough money	26	6.7
Were not cooperative	10	2.5
Service was closed	4	1.0
Referral paper required	5	1.2
Overall satisfaction		
Satisfied	370	92.3
Not satisfied	31	7.7

Overall, 370 (92.3%) of the patients were satisfied with the services they have received (Table 9). Analysis of the overall satisfaction by socio-demographic variables, status of current pregnancy and quality related variables showed those aged between 20-29 years, married, illiterates, unemployed with unwanted current pregnancy, induced abortions, those who received pain treatment, those who responded waiting time to be good, those who had no difficulty in locating services and those who said information provision was adequate were more satisfied.

Statistically significant difference was observed in the bivariate and multivariate analysis in responses regarding waiting time, locating or getting services and general information provision (Table 10). In the three cases those with negative responses were less satisfied. Significant difference was also observed between induced and spontaneous abortions in the multivariate analysis.

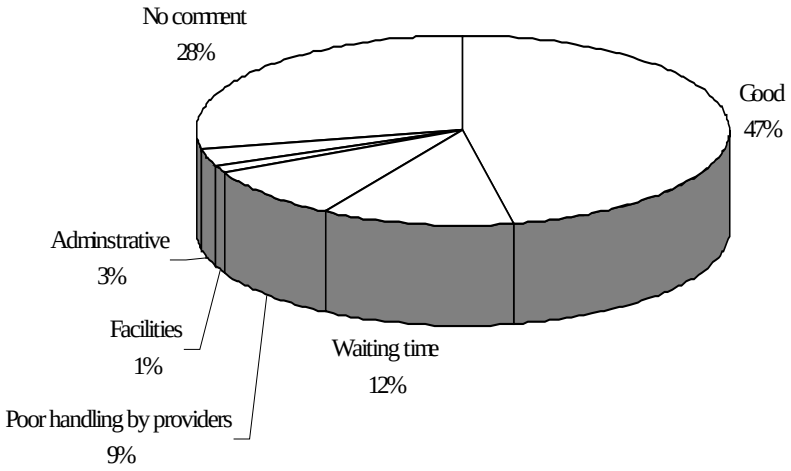
Table10. Satisfaction of Postabortion Patients with Services they have received by Socio-Demographic and Selected Service Related Variables, Addis Ababa, November 2001-February 2002.

Characteristics	Satisfied with services			
	Yes	No	COR[@] (95% CI) **	AOR[@@] (95% CI) **
Age				
14-19	47	8	1	1
20-24	115	6	3.26(0.93,11.99)	1.46(0.35,6.14)
25-29	97	7	2.36(0.70,8.10)	0.69(0.19,2.58)
30+	111	10	1.89(0.60,5.68)	0.92(0.25,3.37)
Marital status				
Married	268	18	1	1
Single	102	13	1.90(0.82,4.26)	0.39(0.12,1.25)
Ethnic group				
Amhara*	168	18	1.66(0.75,3.81)	3.51(0.38,32.80)
Oromo*	87	7	0.95(0.33,2.37)	1.79(0.16,20.40)
Gurage*	69	5	0.84(0.24,2.33)	1.76(0.16,19.52)
Education				
Literate	259	24	1	1
Illiterate	111	7	1.47(0.59,4.16)	1.16(0.33,3.99)
Occupation				
Employed	96	11	1	1
Unemployed	274	20	1.57(0.65,3.58)	2.40(0.76,7.59)
Current pregnancy				
Wanted	223	22	1	1
Unwanted	147	9	1.61(0.69,4.10)	0.76(0.21,2.77)
Current pregnancy				
Induced	67	2	1	1
Spontaneous	303	29	0.31(0.04,1.29)	**0.12(0.16,0.89)**
Pain treatment				
Given	283	21	1	1
Not given	87	10	0.65(0.28,1.60)	0.91(0.33,2.48)
Waiting time				
Reasonable	261	6	1	1
Too long	109	25	**0.10(0.03,0.26)**	**0.20(0.06,0.58)**
Locating or getting services				
Not difficult	341	14	1	1
Difficult	29	17	**0.07(0.03,0.17)**	**0.15(0.05,0.40)**
General information provision				
Adequate	292	9	1	1
Not adequate	78	22	**0.11(0.04,0.26)**	**0.14(0.05,0.37)**

[@]crude odds ratio, [@@]adjusted odds ratio, **95% confidence interval, * compared to others

Patients were asked to give comment on the services they have received with an open-ended question (Figure 3). One hundred eighty-eight (47.1%) said the service is generally good, 47 (11.8%) resented on delay of service provision, 36 (9.0%) on inappropriate handling by physicians or nurses, 5 (1.3%) commented on setup of facilities like availability latrines, proximity of latrines, cleanliness while 13 (3.3%) lamented on administrative issues like requirement for purchase of medications from outside and requirement of referral paper. The rest had no comment.

Figure 3. Comments of postabortion patients on the services they have received in government hospitals, Addis Ababa, November 2001-February 2002.



5.7. Technical Competence

From the 45 health professionals who received the questionnaire, a general practitioner and two interns did not return the questionnaire. Fourteen (33.3%) residents, 11 (26.2%) general practitioners, 2 (4.8%) interns, and 15 (35.8%) nurses providing services during data collection period were successfully interviewed (Table 11). The physicians including interns handled pelvic examination, history taking and operative procedures. Nurses were involved in taking vital signs, counseling and assisting physicians. All the providers reported that their basic training included postabortion emergency management, FP counseling and method provision and STDs diagnosis and treatment. Eighteen (42.9%), 10 (23.8%) and 15 (35.7%) had training on STDs counseling, HIV/AIDS counseling and MVA/EVA respectively during their basic training. Fifteen (35.7%) and 18 (42.9%) providers were trained on skills in FP methods and counseling, MVA/EVA and PAC respectively either as post basic training or as refresher course. It was observed that all physicians trained and untrained on MVA were using MVA in all the hospitals. Twenty (47.6%) of the providers reported FP alone or together with other reproductive health care as weak, followed by emergency care 4 (9.5%) and emergency care with FP 4 (9.5%). Regarding best place to provide family planning counseling and method 12 (30.8%) reported in the MCH center, 8 (20.5%)in the recovery or ward while 16 (41.0%) at both sites. With respect to responsibility to provide the service 14 (35.0%) responded that it is a responsibility of staff in the MCH while 24 (60.0%) reported that it is responsibility of all the staff.

Table11. Profile of Service Providers Involved in PAC and their Opinion on PAC, Government Hospitals, Addis Ababa, November 2001-February 2002

Characteristics	Number	Percent
Age		
Below 20	1	2.4
20-29	11	26.2
30-39	26	61.9
40 and above	4	9.5
Sex		
Male	25	59.5
Female	17	40.5
Marital status		
Single	16	38.1
Married	26	61.9
Religion		
Christian	36	85.7
Muslim	6	14.3
Qualification		
Resident	14	33.3
General practitioner	11	26.2
Intern	2	4.8
Nurse	15	35.8
Work experience		
Less than 1 year	16	40.0
1-4 years	21	47.5
5 years and above	5	12.5
Basic training included		
STDs counseling	18	42.9
HIV/AIDS counseling	10	23.8
MVA/EVA	15	35.7
Post basic or refresher training included		
FP counseling and methods	15	35.7
MVA/EVA	18	42.9
Services inadequately provided in the hospitals (provider's opinion)		
Emergency care	4	9.5
Emergency care and FP	4	9.5
Emergency care and reproductive	1	2.4
Family planning	11	26.2
FP and reproductive	9	21.4
Reproductive	3	7.1
All	1	2.4
None	4	9.5
Don't know	5	11.9

5.8. Equipment, supplies and medication

All hospitals fulfill the required basic equipment by the MOH (Table 12). From the equipment, supplies and medications required by WHO and international organizations such as IPAS, they have most of the materials. Items like IEC materials on PAC, emergency light source apart from backup generators were uniformly absent from all the hospitals (Annex IV). Facilities such as toilets, sinks and running water are absent in some of the departments of the hospitals. Vital equipment like ambu bags, oral airways, suction apparatus and oxygen apparatus are absent in most of the departments. But they are all available in the major operating theaters that are not always near to where PAC provided.

TABLE 12. Basic Equipment for Uterine Evacuation, Government Hospitals, Addis Ababa, November 2001-February 2002.

Equipment	Gandhi Memorial	Tikur Anbessa	Zauditu Memorial	Yekatit 12
Vaginal speculum	U	U	U	U
Sponge forceps	U	U	U	U
Tenaculum	U	U	U	U
Dilators	U	U	U	U
Curates	U	U	U	U
Uterine sound	U	U	U	U
Vacuum syringes (single and double valve)	U	U	U	U
Silicone lubricants	U	U	U	U
Adaptors	U	U	U	U
Cannulae	U	U	U	U
EVA with accessories	N	N	N	N

U= the item is always or nearly always available, functioning and adequate
N= the item is not available, not functioning, and/or not adequate

6. DISCUSSION

It is known that hospitals work as a system with interdependent parts and processes to deliver a common outcome, i.e., patients or clients well being. Focusing on specific aspects of the health care and overlooking the interrelationship between the services and departments could not usually address the problem as a whole (44).

However, considering the fact that the concept of PAC is only recently introduced and received attention by decision makers and providers, assessing services that are currently provided and trying to improve the situation through feasible integration is important and worth undertaking (3). It is also understandable that providing quality PAC alone will not solve problems related to abortion in general and that efforts should be made to understand the problem at every level and develop appropriate measures.

6.1. Characteristics of post abortion patients

Mean age of abortion patients is slightly lower than studies from Peru and Egypt but similar to findings from Ethiopia (13, 14,38, 40). Range and mean parity is again slightly higher when compared to the two studies from abroad, but almost similar to the findings by Yusuf and Zein where mean parity was 2.9. This may be explained by the difference between fertility and contraceptive prevalence rate between the countries.

History of previous abortion appears to be higher when compared to other studies from Ethiopia, but lower than the study from Egypt (20,40). In this study, though 39% reported current pregnancy was unwanted, only 17% admitted that the pregnancy was interfered. WHO classification of abortion puts the group who admitted interference in the certainly induced abortion category while those who said current pregnancy was unwanted but denied interference in the category of possibly induced abortion (49). Therefore, the number of interference with current pregnancy may be higher than stated in the study. In general this is a sensitive area that respondents do not want to disclose. Due to this fact results from different studies show varying number of proportions between spontaneous and induced abortions. Nawar et al reported 4%, and from Ethiopia Yusuf and Zein, W/Meskel and Madebo reported 9.5% 35.7% and 35.0% patients admitting interference respectively (13,17,18,40).

Similar to the current finding, Hassen F. found contraceptive misuse or poor knowledge as main cause for the unwanted pregnancies (24). The main reasons for resorting to unsafe abortions were not different from the work of previous investigators (16,24,25,26). These facts show how the low social and economic status of women in the community affects their decision that risks their life temporarily or permanently.

The fact that 74% of the patients were assisted by health professionals and 36.2% undertaken in health institutions could be due to the flare-up of private clinics and

management in below the standard settings. According to Tadesse et al and Madebo et al, health workers undertook the inductions in 35.3% and 55% respectively (12,18). In the study by Taddesse et al, the share of health institutions as a place of induction was only 5%. Materials used for the inductions were not different from those reported in several studies (12,16,17,18).

6.2. Interaction between patients and service providers

Postabortion patients seeking treatment are often under severe emotional stress on top of the physical illness. Therefore, quickly establishing a good, positive relationship can help ease the anxiety and concern that patients may feel. Their right should be respected and care should be provided without expressing judgment (7,30). Data from exit interview and observation shows that service providers generally do not introduce themselves to patients. This was also true in the study done in Peru where only 8.8% of providers were introducing themselves. The fact that 36(9.0%) patients reported inappropriate handling by the providers when they were asked their general comment deserves attention considering the inevitability of courtesy bias that may undermine responses.

6.3. Information provision and counseling

Information given to patients on current illness, about physical examination and treatment procedures are generally good as indicated in the data from exit interview

and observations. Contrary to this, information pertaining to complications that might arise after patients are discharged from the hospital and on follow-up needs or visits were poor leaving large group of women uninformed about what dangers might happen after care.

In addition to postabortion FP, abortion services should be provided in the context of comprehensive reproductive health care including screening for sexually transmitted diseases (STDs), referral for other types of care such as treatment for STDs and infertility (30). Providers raised important reproductive health issues like HIV/AIDS, other STD, and multiple sexual partners only in 3% of the observations. Compared to finding from Peru explaining current medical condition and about medical procedures to be performed is far better. In the later study only 10.8% and 9.8% of patients were told about current illness and treatment needed.

6.4. Postabortion FP counseling and method provision

Postabortion care setting is one of the few important opportunities to provide contraceptive counseling to women in the developing world (7,30). Postabortion FP is not equivalent to providing FP method for every postabortion patient. Some women may want to become pregnant soon after having an abortion. Most women receiving postabortion care, however, don't want to be pregnant at this time (7).

It is not always possible to provide true counseling or make a truly informed,

voluntary decision about contraceptive methods, particularly those with long-term or permanent implications. Giving temporary methods and appointing or referring to nearby facilities for counseling at later time may be appropriate in some cases (6). Minimum information should be given on how soon fertility can return, about different contraceptives and how to obtain them. (7). Sadly, this study revealed neither the information and counseling nor method provision to be sufficient. Information and method provision were limited to 19.5% and 2.7% respectively. The findings of this study are similar to that of baseline survey in Peru in 1996 whereby only 2% of 103 women received contraceptive method (38). A study from Kenya in the same year also showed only 7% of women receiving family planning counseling of which only 3 % received method (41). These two countries have managed to improve the services significantly. After intervention in Peru 60% of women were provided contraceptives. The Kenyan intervention was able to increase family planning counseling to 68% and method provision for those counseled to 70%. All methods provided during the current study were from one hospital. The hospital served frequently as a training base for PAC since 1992 by IPAS and the MOH. This may be the reason for relative better performance of the hospital.

Need for family planning is well reflected because 81.8% of the interviewees have no intention to get pregnant at least in the coming three months after having abortion. Seventy three percent of the women also were not able to tell when they become pregnant again if they are involved in intercourse immediately after discharge. Generally, a women's fertility returns within two weeks after abortion in the first

trimester. Many women are unaware of this fact and confuse with postpartum period where return to fertility is more delayed (7).

One can explain the low FP counseling or method provision to be due to physical separation between the MCH or FP clinics and where abortion patients are treated. Factors such as lack of awareness, diffusion of responsibility between family planning clinic staff and those who provide treatment may be important for not providing information or counseling.

Creating links between family planning and PAC is found to be not that costly according to a research attempting to test different models from Kenya. Additional requirements needed for the interventions tested were having adequate and trained staff, private space on or near where counseling is intended, space where to store FP commodities and planning in keeping the place stocked with contraception (41). According to this study it was possible to raise contraceptive counseling to 92 % when provided in the ward by ward staff, 62% when provided in the ward by staff from family planning clinic and 54% when the service was provided in the FP clinic as compared to only 7% counseling at base line.

Trying several methods and finding feasible strategies that might improve the situation is very important, not only for those particular hospitals studied but also other hospitals and clinics, since these hospitals are the biggest in the country and could be models. The other important fact is, since two of the hospitals studied are

teaching hospitals resident physicians and the undergraduate medical students can also learn from the successful experiences or interventions and may apply to where they will be deployed after completing education.

6.5. Access to services and satisfaction

Significant proportion of patients reported the waiting time between arrival and initiation of treatment to be very long. Also around 7% of patients were denied the services due to lack of money. Considering the fact that the illness is almost always life-threatening emergency, attention should be given to ready access to services. Apart from service related variables only those with spontaneous abortion remained to be less satisfied in the multivariate analysis. This could be because those with induced abortion may come to the facilities with very low expectations anticipating that they may not be well treated by the providers due to interference with their pregnancies.

6.6. Technical competence, equipment, and supplies

The study has shown that significant proportions of providers were trained on important aspects of PAC either as basic or refresher trainings. It was also possible to witness the use of MVA by providers not trained. Appropriate equipment and supplies needed for providing PAC are available in all the hospital. These achievements are mainly due to the joint effort by MOH and IPAS over the last decade.

6.7. Strengths and limitations of the study

Strengths

1. The study tried to attempt all dimensions of quality of care.
2. Non-health professional interviewers were used to minimize courtesy bias.

Limitations

1. Saint Paul Hospital was not included in the study. But the findings of this study could be generalized to this hospital with some limitations.
2. The study focused only on public hospitals and does not give picture of practice in the private setting in the city.
3. Despite maximum effort, as in any health care quality related studies, courtesy and inter-observer bias are inevitable. Tendency by service providers to be at their best behavior due to the presence of an observer is another source of bias.

7. CONCLUSION

This study reveals important weaknesses in PAC in the study hospitals:

1. Not forgetting the limitations discussed, one can conclude that the interaction of patients and service providers is more or less satisfactory.
2. Important information on danger signs, follow-up needs and other reproductive health issues are overlooked.
3. Opportunities for FP counseling and method provision are lost in all the hospitals.
4. Providers who were trained or not trained on MVA are using the equipment.
5. Except for very few items all the hospitals have basic and appropriate medical equipment and supplies required for providing postabortion services.

8. RECOMMENDATIONS

Based on the findings of the study it is recommended that:

1. Ministry of Health, Regional Health Bureau and concerned NGOs should try to develop clear performance standards and indicators for the three elements of PAC. These help in clearly understanding what should be done and to assess achievements overtime.
2. Basic and refresher trainings should focus on the importance of family planning counseling and method provision, information provision regarding danger signs, follow-up needs, the importance of other aspects of care like STDs including HIV/AIDS and pain management.
3. Feasible ways for integrating family planning services and emergency care should be determined and implemented
4. Information provision should be supplemented by IEC materials, including materials that the patient can take home and read.
5. Further operational researches at different levels of service delivery and all sectors (Government, private and NGOs) should be undertaken.

9. REFERENCES

1. Unsafe Abortion-A Worldwide Problem, WHO, Safe Motherhood, A Newsletter of Worldwide Activity, Issue 28,2000(1)
2. Making pregnancy and childbirth safer, Fact Sheet, Population Reference Bureau, 1997 World Population Data Sheet, 1997
3. Charlotte E. H., ICPD Paragraph 8.25: A Global Review of Progress, Issues in Abortion Care 5, IPAS, 1999
4. Reducing Unsafe Abortion in Kenya, Population Briefs, 1997 spring: 3(2): 2
5. Jamie F.V., Deborah. L. B., A Comparison of three Models of Postabortion Care in Mexico, Final Report, July 1998
6. Ellen B., Rahna R. and Merrill W., A Guide for Action, Prevention and Management of Unsafe Abortion, Family Care International with IPAS, IPPF and Population Council, 1998
7. Judith W., Elizabeth O. and Noel M., Postabortion Care, A Reference Manual for Improving Quality of Care, Postabortion Care Consortium, 1995, 9-1 to 9-16
8. Odlind V., Induced Abortion a Global Health Problem, Acta Obstet Gynecol Scand, Suppl; 1997, 164:43-5
9. Klima CS., Unintended Pregnancy, Consequences and Solutions For a World Wide Problem, J Nurse Midwife, 1998 Nov-Dec 43(6): 483-91.
10. Jeppsson A, Tesfu M. and Bohmer L., Magnitude of Abortion Related Complications in Ethiopian Health Facilities: A National Assessment, East African Med. J. 1999: 76(10): 547-51
11. Barbara E. K., Roger W. Rochat, and Widad Kidanemariam, Maternal Mortality

in Addis Ababa, Ethiopia, Studies In Family Planning, 1986; 17(6/1): 288-301

12. Taddesse E, Yoseph S., Gossa A., Illegal Abortion at Five Hospitals in A. A, Eth. Med. J., 1994 Oct., Vol. 32, No. 4, p: 283-84 (abstract)
13. Yesuf L.and Zein A., Abortion at Gondar College Hospital, East African Med. J. May2001, Vol. 78 No. 5, p: 265-268.
14. Worku G. and Kumbi S., A one year Analysis of Abortion in Gondar College of Medical Sciences Hospital, 1999, A Data Base on Abortion, A Compilation and Analysis of Available Studies In Ethiopia, ESOG, Addis Ababa, 2000, p: 16
15. Yohannes A., Analysis of Maternal Deaths in Jimma Hospital, Southwestern Ethiopia, Ethiopian Med. J., 1994; 32:125-29
16. Surafel K., Chali J., Damtew W/M., A Survey of Illegal Abortion in Jimma Hospital, South Western Ethiopia, Ethiop. Med. J. 2000; 38:35-42
17. W/Meskel Y. and Chekol A., Induced Abortion and Prevalence of Sexually Transmitted Diseases and Contraceptive Behavior in Abortion Cases, Ethiopian J. Health, Sci, 1999, 9(2): 77-83
18. Madebo T., Gebretsadik T., A Six-Month Prospective Study on Different Aspects of Abortion, Ethiop. Med. J. 1993; 31:165-72
19. Tadesse E, Gndunfa A. and Mengistu G, A Survey Adolescent Reproductive Health in The City of Addis Ababa, Ethiop. J Health Dev., 1996; 10(1): 35-39
20. Getahun H., Berhane Y., Abortion Among Rural Women in North Ethiopia, Int. J. Gynecology and Obst, 71(2000) 265-266
21. Lema, V.M, Rogo, K.O., Kamau, R.K., Induced Abortion in Kenya: Its Determinants and Associated Factors, East African Medical Journal, 1996, Vol.

73 No. 3, pp. 164-168

22. Justesen A, Kapiga. SH, Van A., Abortions in a Hospital Setting in Dares Salaam, Tanzania, Stud. Fam. Plann, 1992 Sept. – Oct., 23(5): 325-9.
23. SA Adu, Biosocial Profile of Women with Incomplete Abortions in Ga-Rankuwa Hospital, Medunsa, RSA, Central African Journal of Medicine, 1996, Vol. 42, No. 7:198-202
24. Hassen F., Analysis of factors for Unwanted Pregnancy among Women in Reproductive Age Group Attending Health Institutions in Jimma Town, Feb 2000,Report
25. Koster-Oyekan W., Why Resort to Illegal Abortion in Zambia, Findings of a Community Based Study in Western Province, Soc. Sci. Med, 1998 May, 46(10): 1303-12
26. Victor A., "Quasi-Legal" Abortion Services in A Sub-Saharan Setting, User's Profile and Motivations, International Family Planning Perspective, 1998, 24(3): 111-116
27. Family Planning Methods and Practice: Africa, Second Edition, CDC, 1999,p: 547-560
28. Adewole IF, Trends in Postabortal Mortality and Morbidity in Ibadan, Nigeria, Int. J Gynaecol Obstet; 38(2): 115-8
29. Yoseph S., Muleta E, Report on a Cross-Sectional Study of Clients Seeking Reproductive Health and Family Planning Services At Kirkos Marie Stopes Clinic, May 1996, Report
30. Wolf M., Benson J. Meeting Women's Needs For Postabortion Family

Planning, Report of a Bellagio Technical Working Group, Int. J. Gynecology and Obst, 1994; 45(suppl): S_{3-33}

31. Forrest C. G., Harrison M., Merrill W., Katie McL., Advances In Abortion Care, Carrboro, NC, 1994, vol. 4, No. 1: 1-2
32. Technical Guidelines in Maternal and Newborn Care, Ministry of Health/FHD, Addis Ababa, Ethiopia, 1998
33. Lori Di P. B., Lynne M. F., Nadwa R., Theresa H., Quality Assurance Of Health Care In Developing Countries, Quality Assurance, Methodology Refinement Series, Quality Assurance Project, USA
34. Roemer, M.I, and Montoya-Aguilar, C., " Quality Assessment And Assurance In Primary Health Care", WHO Offset Publication No.105, World Health Organization, Geneva, Switzerland, 1988
35. Ann H.L. and Judith W., A Quality of Care Framework for Abortion Care, Advances in Abortion Care, IPAS, June 1997,Vol. 1, No. 1
36. An Assessment of Reproductive Health Needs in Ethiopia, World Health Organization; Geneva, (1999).
37. Pinar S., Sian L. C., Jill M., and Han R., The Role of Changes in Contraceptive Use in the Decline of Induced Abortion in Turkey, Studies In Family Planning, 2001, 32(1): 41-52
38. Janie B., Victor H., Marian A., Tim K., Improving Quality and Lowering Costs in an Integrated Postabortion Care Model in Peru, Final Report, 1998
39. K Mohammed, J. Healy, S. Tandom, Family Planning Counseling-A Priority for Postabortion Care, Central African Journal of Medicine, 1997, vol. 43, No. 7, p

205-207

40. Nawar, Laila et al, Scaling-Up Improved Postabortion Care in Egypt: Introduction to University and Ministry of Health and Population Hospitals, Population Council, Frontiers In Reproductive Health, May 2000.
41. Julie S., Deborah L. B., Colette A., Achola O., and Margaret M., Creating Linkages Between Incomplete Abortion Treatment and Family Planning, Studies in Family Planning, 1999, 30: 17-27
42. Lij-Alem M., Cross-Sectional Study on Prevalence and Characteristics of Women Admitted to Jimma Hospital Gynecology Ward, Bachelor Thesis, Feb. 1997,Jimma University, Jimma, Ethiopia.
43. Wolde Gabriel Y., Cross-Sectional Study on Knowledge, Attitude and Practice of Modern Contraceptives by Women Admitted To Jimma Hospital as a Case of Unsafe Abortion, Bachelor Thesis, Feb. 2000, Jimma University, Jimma, Ethiopia.
44. Monitoring the Quality of Hospital Care, Health Manager's Guide, Quality Assurance Project, USA, 2001
45. Yusuf L., and, Pogharican D., Management of Incomplete Abortion With Manual Vacuum Aspiration in Comparison to Sharp Metallic Curettage in an Ethiopian Setting, East African Medical Journal, September 1996, Vol. 73, No. 9: 598-603
46. Demographic and health survey, CSA, Ethiopia, 2000
47. Office of Population And Housing Census, Central Statistics Authority. The 1994 Population and Housing Census of Ethiopia, Results of Addis Ababa, 1996

48. Health and Health Related Indicators, Planning and Programming Department, Ministry Of Health, Ethiopia, 2001
49. Studying Unsafe Abortion: A Practical Guide, Maternal And Newborn Health, Safe Motherhood Unit, Division of Reproductive Health, WHO, Geneva,1994

10. ANNEXES

10.1. ANNEX I. Exit interview for women who received postabortion care

Date of interview: _____

Questionnaire number_____

Health facility

1. Tikur Anbessa
2. Gandhi memorial
3. Zauditu memorial
4. Yekatit 12
5. Saint Paul

Read greeting:

Hello!
My name is _____. I am working with a study group from Addis Ababa University. I do not work for this hospital. We would like to improve the services provided by the facility and would be interested to find out about your experience. I would like to ask you some questions about the visit you have had and would be very grateful if you could spend some time answering these questions.

Confidentiality:

I will not write down your name, and everything you tell me will be kept strictly confidential. Also, you are not obliged to answer any question you don't want to, and you may withdraw from the interview at any time. The interview takes about___ min. May I continue?

1. Yes
2. `No

Name of interviewer_____

Section I: socio-demographic			
No.	Questions	Response	Code
1.	How old are you?	1. _____Years 2. Don't know	
2.	Can you read and write?	1. Yes 2. No (to 4) 99. No response (to 4)	
3.	If you can read write what is the highest level of education you attained?	_____	
4.	To which ethnic group do you belong?	1. Oromo 2. Amhara 3. Gurage 4. Tigray 5. Other_____	
5.	What is your religion?	1. Orthodox 2. Muslim 3. Protestant 4. Catholic 5. Other_____ 99. No response	
6.	What is your current marital status? (Probe for exact status)	1. Married 2. Single 3. Separated 4. Divorced 5. Cohabiting 6. Widowed 99. No response	
7.	What is your occupation?	1. Government employee 2. NGO employee 3. Private organizations employee 4. Self dependent 5. No employment 6. Student 7. Other_____ 99. No response	
Section II reproductive history and FP knowledge and practice			
8.	How many times have you ever been pregnant (including this one)?	1. _____ 99. No response	

9.	How many children have you had that were born to you	1. _____ 2. None 99. No response	
10.	Have you had miscarriage before?	1. Yes 2. No (to 12) 99. No response (to 12)	
11.	(If yes) for how many times?	1. _____ 99. No response	
12.	Was this current pregnancy wanted?	1. Yes (to 14) 2. No 99. No response (to 14)	
13.	(If no) how did you became pregnant	1. Contraceptive failure 2. Forget to take contraceptive 3. Pressure from partner 4. Don't know contraceptives 5. Other_____ 99. No response	
14.	Is the current miscarriage after an attempt to terminate the pregnancy?	1. Yes 2. No 99. No response	
15.	Why did you decide to terminate this pregnancy?	1. Financial reason 2. Health reason 3. Partner pressure 4. Too many/too close pregnancies 5. To complete my education 6. Other_____	
16.	Where was the induction took place?	1. Health facility 2. Your home 3. Inducer's home 4. Other_____	
17.	What method was used?	1. Plastic 2. Metal 3. Herbs 4. Modern medicine (Vaginal) 5. Modern medicine (injection) 6. Other_____ 99. No response	

18.	Who conducted the induction?	1. Physician 2. Nurse 3. Health assistant 4. Traditional birth attendant 5. Don't know designation but health professional 6. My self 7. Other 99. No response	
19.	What was sex of the individual assisted you?	1. Male 2. Female 99. No response	
20.	Other than the last pregnancy, have you ever been pregnant at a time when you were not ready for the pregnancy?	1. Yes 2. No (to 23) 99. No response (to 23)	
21.	(If yes) what did you do the last time this happened to you?	1. Nothing, continued with the pregnancy (to 23) 2. Attempted to stop pregnancy but did not succeed, gave birth (to 23) 3. Attempted to stop pregnancy and succeeded 4. Other_____ 5. Don't know (to 23) 99. No response (to 23)	
22.	If succeeded, for how many times?	1. Only once 2. Twice 3. Three times 4. More than three times 99. No response	
23.	Do you desire a future pregnancy?	1. No- never 2. Yes- immediately (within 3 months) 3. Yes- within two years 4. Yes- more than two years 5. Other (other)_____ 99. No response	

24.	If you are involved in sexual intercourse again, how soon do you think you become pregnant again?	1. Two weeks 2. One month 3. Three months 4. Six months 5. Other_____ 99. No response	
25.	What methods do you know to prevent unwanted or unplanned pregnancy (don't read methods but probe for answers)	1. Condom (Male or Female) 2. Spermicide (Foam, Tablet, Gel, Jelly, Film) 3. Diaphragm or Cervical Cap 4. Oral Contraceptives (Combined Oral Contraceptive, Progestin-only Pill) 5. Injectable (Depo-Provera, Net-pellets) 6. Implant (Norplant) 7. IUD 8. Female Sterilization 9. Male Sterilization 10. Lactational amenorrhea 11. Periodic Abstinence (Rhythm/Calendar, Basal Body Temperature, Cervical mucus/ Billings method) 12. Withdrawal 13. Traditional Methods (Herbs, etc.) 14. Other (specify)_____	
26.	Have you ever used modern contraceptives before?	1. Yes 2. No	
27.	Were you using contraceptives during the last pregnancy?	1. Yes(to 29) 2. No	
28.	If you were not using a contraceptive method when you got pregnant this time, why not? (Choose all that apply)	1. Current pregnancy was planned 2. Not planning to have sex 3. Contraceptives not available 4. Cost of contraceptives(s) 5. Partner opposed 6. Concerns about contraceptive (side effects, health risks, etc.) 7. Religious of moral reasons 8. Other (specify)_____	

Section III Quality of PAC related variables			
29.	Were you treated politely and respectfully during your stay in this hospital?	1. Yes 2. No 99. No response	
30.	During this visit, did you have any concerns about abortion, family planning or other health issues that you wanted to discuss with the provider?	1. Yes 2. No (to 33)	
31.	(If yes) did the provider listen to your concerns to your satisfaction?	1. Yes 2. No	
32.	(If yes) did the provider respond to your questions to your satisfaction?	1. Yes 2. No 99. No response	
33.	Do you feel that you received the information and services that you wanted?	1. Yes 2. No 99. No response	
34.	Before your treatment procedure, did a physician or nurse talk to you about the cause of your medical problem?	1. Yes 2. No 99. No response	
35.	During this visit, did the provider conduct any health examinations or procedures?	1. Yes 2. No (to 37) 99. No response	
36.	(If yes) did the provider explain the examinations or procedures before they were performed?	1. Yes 2. No	

37.	Did the provider explain the results of the health examinations or procedures?	1. Yes 2. No	
38.	Did the provider tell you danger signs/ that may necessitate revisiting the health facility?	1. Yes 2. No (to 40) 3. Don't know (to 40)	
39.	(If yes) what are these signs/symptoms	1. Massive or prolonged bleeding 2. Abdominal pain 3. Fever 4. Abnormal discharge 5. Delay (6 weeks or more) in resuming menstrual periods 6. Other (specify)_____	
40.	During this visit, were you given or did you take any brochure or educational material to bring home?	1. Yes 2. No (to 42) 3. Don't know (to 42)	
41.	(If yes) what was the subject (s) of the material? (Do not read list, but probe by asking. "Any other subject?")	1. FP 2. Antenatal/Postnatal 3. Delivery service 4. HIV/AIDS 5. Other STDs 6. Child welfare 7. Nutrition 8. Abortion 9. Other (specify)_____ 99. No response	
42.	If you say that you were in pain, were you offered any pain medication during the procedure?	1. Yes 2. No 3. No pain 4. No response	
43.	Did any service provider tell you when to come back for another visit?	1. Yes 2. No 3. No response	

44.	Once you got to the facility, did you have any difficulty locating or getting services? (Choose all that apply)	1. No 2. Not enough signs 3. Not enough information 4. Not enough money to pay for services 5. Hospital staff were unhelpful 6. Service were closed 7. I had to pay fees before getting services 8. Other (specify)_____ 99. No response	
45.	Do you feel that the wait between the time you first arrived at this facility and the time you began receiving the services you came for was reasonable or too long?	1. Reasonable 2. Too long 3. Don't know	
46.	Did you get contraceptive method during this visit?	1. Yes (to 48) 2. No	
47.	(If no) what is the main reason you did not obtain a contraceptive method today?	1. No one raised the issue 2. Change my mind 3. Told to go to other health institutions 4. Other health reason 5. Method not available 6. Other (specify)_____	
48.	Which method(s) did you accept today? (Do not read methods but probe by asking, "Did you accept any other methods?")	1. Condom (Male or Female)----to 49 2. Spermicide (Foam, Tablet, Gel, Jelly, Film)----to 50 3. Diaphragm or Cervical Cap---to 51 4. Oral Contraceptives (Combined Oral Contraceptive, Progestin-only Pill)----to 52 or 53 5. Injectable (Depo-Provera, Net-pellets)----to 54 6. Implant (Norplant)----to 55 7. IUD----to 56 8. Female Sterilization-----to 57 9. Other (specify)_____	

49.	If you were given CONDOMS, were you told: (Choose all that apply)	1. That you have the right to choose whether or not to use condoms? 2. How to properly place a condom on the penis (or insert a FEMALE CONDOM into the vagina)? 3. Where to get additional condoms when you run out? 4. To always have your partner put on the condom before his penis penetrates your vagina (or to insert a FEMALE CONDOM before his penis penetrates your vagina)? 5. To always remove the condoms before your partner looses his erection? 6. To use a new condom each time you have sex? 7. How to store the condoms? 8. That condoms may help protect you against sexually transmitted infection such as HIV? 9. What to do if you miss a period? 10. Other (please explain)_____(to 58)	
50.	If you were given SPERMICIDES (FOAM, TABLET, GEL, JELLY, FILM), were you told: (Choose all that apply)	1. That you have the right to choose whether or not to use spermicides? 2. How to properly insert spermicides into the vagina? 3. Where to get additional spermicides when you run out? 4. To always insert the spermicide into your vagina at least one hour before his penis penetrates your vagina? 5. To re-insert more spermicide each time you have sex? 6. That spermicides may help protect you against sexually transmitted infection such as HIV? 7. What sort of side effects you might have while using spermicides (itching, discomfort)? 8. What to do if you miss a period? 9. Other (please explain)_____ (to 58)	

51.	If you were given a DIAPHRAGM OR CERVICAL CAP, were you told: (Choose all that apply)	1. That you have the right to choose whether or not to use a diaphragm or cervical cap? 2. To always use your diaphragm or cervical cap with a spermicide? 3. How to correctly insert your diaphragm or cervical cap? 4. To check and make sure your diaphragm or cervical cap is properly inserted before having sex again? 5. You should check to make sure the diaphragm or cervical cap is not cracked or broken before you use it? 6. That diaphragms and cervical caps may help protect you against sexually transmitted infection such as HIV? 7. What sort of side-effects you might have while using a diaphragm or cervical cap (discomfort, etc.)? 8. What to do if you miss a period? 9. Other (please explain) _____ (to 58)	

52.	If you were given COMBINED ORAL CONTRACEPTIVES (the PILL), were you told: (Choose all that apply)	1. That you have the right to choose whether or not to use the Pill? 2. How to get more Pills when you run out? 3. That you should take a Pill everyday, regardless of whether or not you plan to have sex that day? 4. To try to take the Pill at the same time each day (such as first thing in the morning)? 5. What to do if you forget to take a Pill one day? 6. That the Pill does not help protect you from sexually transmitted infections such as HIV. 7. What sort of side effects you might have while using the Pill (changes in your menstrual patterns, weight gain, etc.)? 8. That you should not use the Pill if you are breast-feeding. 9. What to do if you miss a period? Other (please explain)_____ (to 58)	

53.	If you were given PROGESTIN-ONLY PILLS (the Mini-PILL), were you told: (Choose all that apply)	1. That you have the right to choose whether or not to use the Mini-Pill? 2. How to get more Mini-Pills when you run out? 3. That you should take a Mini-Pill everyday, regardless of whether or not you plan to have sex that day? 4. To try to take the Mini-Pill at the same time each day (such as first thing in the morning)? 5. What to do if you forget to take a Mini-Pill one day? 6. That the Mini-Pill does not help protect you from sexually transmitted infections such as HIV. 7. What sort of side-effects you might have while using the Mini-Pill (changes in your menstrual patterns, weight gain, etc.)? 8. That it is okay to use the Mini-Pill if you are breast-feeding. 9. What to do if you miss a period? 10. Other (please explain)_____ (to 58)	
54.	If you were given INJECTABLES (Depo-Provera, Net-pellets), were you told: (Choose all that apply)	1. That you have the right to choose whether or not to use an injectable? 2. How long the injection protects you from pregnancy. 3. How to get another injection when it is time? 4. That injectables do not help protect you from sexually transmitted infections such as HIV. 5. What sort of side-effects you might have while using injectables (changes in your menstrual patterns, weight gain, etc.)? 6. What to do if you miss a period? 7. Other (please explain)_____ (to 58)	

55.	If you were given an IMPLANT (Norplant), were you told: (Choose all that apply)	1. That you have the right to choose whether or not to use an implant? 2. How long the implant protects you from pregnancy (up to 5 years). 3. How to get another implant when it is time? 4. How to get the implant removed if you decide you want to try to become pregnant? 5. That implants do not help protect you from sexually transmitted infections such as HIV. 6. What sort of side-effects you might have while using implants (changes in your menstrual patterns, weight gain, etc.)? 7. What to do if you miss a period? Other (please explain)_____ (to 58)	
56.	If you were given an IUD, were you told: (Choose all that apply)	1. That you have the right to choose whether or not to se an IUD? 2. How long the implant protects you from pregnancy. 3. How to get another IUD when it is time? 4. How to get the IUD removed if you decide you want to try to become pregnant? 5. How to check for the IUD “string” to make sure it is still properly in place? 6. That IUDs do not help protect you from sexually transmitted infections such as HIV. 7. What sort of side-effects you might have while using IUDs (changes in your menstrual patterns, discomfort, etc.)? 8. What to do if you miss a period? Other (please explain)_____ (to 58)	

57.	If you were offered a FEMALE STERILIZATION procedure, were you told: (Choose all that apply)	1. That you have the right to choose whether or not to be sterilized? 2. That sterilization is permanent? 3. If you had a tubal ligation (or your tubes "tied"), that you should use another contraceptive method for the first 3 months after the surgery. 4. That sterilization does not help protect you from sexually transmitted infections such as HIV. 5. What sort of side-effects you might have after being sterilized (discomfort, etc.)? 6. What to do if you miss a period? 7. Other (please explain)_____	
58.	Overall, would you say you were satisfied with your visit to the facility today, or were you dissatisfied with your visit today?	1. Satisfied 2. Dissatisfied 3. Other: _____ 99. No response	
59.	If you suggest one improvement to the services provided, what would it be?		

Thank you very much for letting me talk with you today!

10.2. Annex II. Observation guide for postabortion care

HOSPITAL:

1. **Tikur Anbessa**
2. **Zewuditu Memorial**
3. **Gandhi Memorial**
4. **Yekatit 12**
5. **Saint Paul**

Questioner number_____

Patient code No. _____(Same code with exit interview)

Date_____

Day_____1. Monday 2. Tuesday 3. Wednesday 4. Thursday 5. Friday 6. Saturday 7. Sunday

Time observation began_____

INSTRUCTIONS FOR CONDUCTING OBSERVATIONS:

- **Informed Consent: You should have informed consent for every participant in the study. The forms should be accessible only to research staff. It is essential to get the consent of both the patient and the provider before observing their interaction. Those patients unable to give informed consent should not be included in the study.**
- **Strive to minimize disruptions during the treatment of the patient.**
- **Explain to providers that the purpose of the observation is not to assess their personal performance, nor will information gathered through the observation be provided to their superiors to be used in a performance appraisal. The purpose of the study is for the observer to get a sense of how PAC services are provided *overall* at the health care facility.**
- **Always dress white coat.**
- **Before the session begins, find a place to sit or stand so that the patient-provider interaction can be seen clearly.**
- **During the session, you should remain quiet and still so as not to distract the patient and provider. Writing on the forms should be done as discreetly as possible.**
- **Allow the patients and providers to refuse to be observed at any time, or to discontinue the observation completely.**
- **Do not discuss your observations with anyone other than the study staff.**

PRE-PROCEDURE			
Section I: interaction between patient and provider			
1.	Who examined the patient?	1. Obstetrician/Gynecologist (OB/GYN) 2. General Physician 3. Resident Physician or Resident OB/GYN 4. Medical Intern 5. Nurse or Nurse Midwife 6. Nursing assistant 7. Midwife (trained or untrained) Other (please specify) _____ 8. Not observed	
2.	Did the provider greet the patient in a friendly/polite manner?	1. Yes 2. No 3. Not observed	
3.	Did the staff member who examined the patient introduce him or herself to the patient by name?	1. Yes 2. No 3. Not observed	
4.	If pelvic exam was performed did the provider inform the patient what would happen before the exam?	1. Yes 2. No 3. Not observed	
5.	During the pelvic examination, how did the provider speak to the patient?	1. Supportively 2. Neutrally 3. Negatively 4. Did not speak to patient at all 5. Not observed	
6	Did the patient have the opportunity to ask questions before or after diagnostic examinations were completed?	1. Yes 2. No (to 213) 3. Not observed	
7	Did the provider respond to her questions?	1. Yes 2. No 3. Not observed	
Section II: information provision			
8	Did the provider ask about or did the client spontaneously mention any of these subjects	1. If client has had more than one sexual partner in past year 2. If client has any concerns about STDs or HIV/AIDS 3. If client had previous symptoms/signs/treatment suggestive of STDs	

		4. None of these subjects 5. Not observed	
9	Did the provider ask about or did the client spontaneously mention any previous method use?	1. Yes 2. No 3. Not observed	
10	(If use of previous method raised) did the provider ask about or did the client spontaneously mention any problems with her previous method	1. Yes 2. No 3. No previous method use 4. Not observed	
11	(If client had problems with her method) did the provider take any of these actions?	1. Counseled client about problem 2. Gave medical treatment 3. Suggested/agreed that client change method 4. Referred client elsewhere for treatment 5. No actions 4. Other (specify)_____ 5. No previous method use 6. Not observed	
12	Did the provider ask or did the client spontaneously mention a specific preference for a contraceptive method?	1. Yes 2. No (to 220) 1. Not observed	
13	(If yes) which method?	1. Condom (Male or Female) 2. Spermicide (Foam, Tablet, Gel, Jelly, Film) 3. Diaphragm or Cervical Cap 4. Oral Contraceptives (Combined Oral 5. Contraceptive, Progestin-only Pill) 6. Injectable (Depo-Provera, Net-pellets) 7. Implant (Norplant) 8. IUD 9. Female Sterilization 10. Male Sterilization 11. Lactational amenorrhea 12. Periodic Abstinence (Rhythm/Calendar, Basal Body Temperature, Cervical mucus/	

		Billings method 13. Withdrawal 14. Traditional Methods (Herbs, etc.) 15. Not observed	
14	For a new method proposed, did the provider talk about any of these issues?	1. How to use method 2. Advantages 3. Disadvantages 4. Medial side effects (e.g. bleeding nausea, etc.) 5. What to do if client has problem with method 6. Possibility of switching 7. Ability of method to prevent STDs/HIV 8. None of these issues 9. Not observed	
15	Which IEC materials, if any, were used during the consultation?	1. Flipchart 2. Brochure/pamphlets 3. Contraceptive samples 4. Posters 5. Other: _____ 6. None 7. Not observed	
16	Was the patient asked if she was in pain during the exam(s)?	2. Yes 3. No 3. Not observed	
17	Was there evidence of patient pain (visual or audible) during the exam(s)?	1. Yes 2. No (to 211) 3. Not observed	
18	Did patient's pain during the exam(s) seem adequately controlled?	1. Yes 2. No 3. Not observed	
PROCEDURE			
19	Were the following items available to the patient while she waited for treatment? *(Check all that apply)*	1. Standing area only 2. Chairs or benches 3. Couches 4. Beds 5. Not observed	
20	Primary staff member who performed /treated patient:	1. Obstetrician/Gynecologist (OB/GYN) 2. General Physician 3. Resident Physician or Resident OB/GYN	

		4. Medical Intern 5. Nurse or Nurse Midwife 6. Nursing assistant 7. Midwife (trained or untrained) 8. Other (please specify) _____ 9. Not observed	
Section I: interaction and information provision			
21	If patient was conscious during procedure, how did staff speak to her?	1. Supportively 2. Neutrally 3. Negatively 4.Did not speak to patient at all 5.Not observed	
22	Did the patient have the opportunity to ask questions before or after procedures were completed?	1. Yes 2. No Not observed	
23	Were treatment procedures explained to patient prior to implementation?	1. Yes 2. No 3. Not observed	
24	Did the provider mention danger signs that may necessitate revisiting the facility?	1. Yes 2. No 3. Not observed	
25	Did the provider mention when to revisit the facility?	1. Yes 2. No 3. Not observed	
26	Was the patient asked if she was in pain?	1. Yes 2. No 3. Not observed	
27	Was there evidence of patient pain (visual or audible cues) during the procedure?	1. Yes 2. No 3. Not observed	
28	Was the patient given any pain medications?	1. Yes 2. No 3. Not observed	
29	Did patient's pain seem adequately controlled?	1. Yes 2. No 3. Not observed	
Section II: other service related issues			
30	Before the treatment procedure began, did it appear that?	1. All necessary supplies, medications, and instruments were available in the treatment	

	began, did it appear that?	area? 2. Instruments were sterilized or high-level disinfected? 3. Treatment procedure tray was prepared? 4. All necessary staff members were present? 5.Not observed	
31	Was patient told that her access to treatment depended upon certain preconditions (e.g. payment, permission of husband, etc.)?	1. Yes 2. No 3. Not observed	
32	When conscious, was the patient told:	1. Normal bleeding varies from none to the equivalent of a heavy menses? 2. Bleeding may last from three days to light bleeding for up to three weeks? 3. Where to go for medical care and information 4. Take paracetomol for cramping 5. Rest for at least 24 hours? 6. Usual activities may be resumed when comfortable after 24 hours? 7. Sexual intercourse may be resumed 1 week after bleeding stops? 8. Condoms should be used for sex for the first week after abortion, regardless of fertility intentions? 9. Avoid douching? 10. Fertility will return in as soon as 10 days? 11. Risk factors for Sexually Transmitted Infections? 12. How to prevent Sexually Transmitted Infections? 13. Other reproductive health services available? 14. Where to obtain other reproductive health services? 15. Other (please specify)_____	
33	Was the patient told to visit a provider if she has:	1. Severe or increased pain? 2. Fever? 3. Chills or extreme tiredness? 4. More than 3 weeks of bleeding? 5. Bleeding more than menstrual bleeding? 6. Passage of clots >8 cm in size? 7. No bleeding coupled with abdominal pain?	

		8. Has a concern about the treatment or her health? 9. Other (please specify)_____	
POST ABORTION CONTRACEPTIVE COUNSELING			
34	Were contraceptive and/or information offered to the patient? *If NO, then skip*	1. Yes 2. No 3. Not observed	
35	Where did contraceptive counseling take place:	1. In the recovery area? 2. In the procedure room 3. On the obstetrics & gynecology ward? 4. At the family planning clinic? 5. Other (please specify) _____ 6. Not observed	
36	Who primarily provided the contraceptive counseling?	1. Counselor from Family Planning Clinic 2. Obstetrician/Gynecologist (OB/GYN) 3. General Physician 4. Resident Physician or Resident OB/GYN 5. Medical Intern 6. Nurse 7. Other (please specify) _____ 8. Not observed	
37	Did the patient express a desire for contraception?	1. Yes 2. No 3. Not observed	
38	If the patient desired a contraceptive, what method was she given?	1. Male Condom 2. Female Condom 3. Spermicide 4. Diaphragm 5. Combined oral contraceptive 6. Progestin-only pill 7. Injectable 8. Implant 9. IUD 10. Female sterilization 11. Other method (please specify _____ 12. 11.Not observed	
39	If the patient was not given her desired contraceptive method, was she:	1. Sent home with no further information or services? 2. Given a referral slip to go elsewhere? 3. Given an appointment for another time at this clinic? 4. Given an appointment at another clinic? 5. Given appointment for follow up visit in	

		home? 6. Brought to another site within or near clinic for method provision on same day? 7. Not observed	
40	If desired method unavailable or contraindicated, was the patient offered an alternative method?	1. Yes 2. No 3. Not observed	
41	If patient was offered and accepted an alternative method, what was the method?	1. Male Condom 2. Female Condom 3. Spermicide 4. Diaphragm 5. Combined oral contraceptive 6. Progestin-only pill 7. Injectable 8. Implant 9. IUD 10. Female sterilization 11. Information on male sterilization 12. Other method (please specify _____ 13. Not observed	
42	If the patient did not accept the alternative method, why not?	1. Patient did not like the alternative method 2. Alternative method not available at site 3. Alternative method out of stock 4. Medical contraindication to alternative method 5. Patient wanted alternative method at later date 6. Social barrier to alternative method (please specify) _____ 7. Other (please specify)_____ 14. 8. Not observed	
43	Was the patient given verbal or written instructions on how to use the method she was given?	1. Yes 2. No 3. Not observed	
44	Was the patient told how to get re-supplies of the method (if applicable)?	1. Yes 2. No 3. Not observed 4. Not applicable	
Be sure to thank the patient and providers for allowing you to observe the patient's care!			

10.3. Annex III. Questionnaire for service providers

Tikur Anbessa □ Gandhi □ Zauditu □ Yekatit □

Dear colleague:

We are carrying out a survey of health facilities that provide postabortion services to find ways of improving services. We would be interested to know about your experiences so far with providing postabortion care. Please be assured that information you provide is strictly confidential, and your name is not being recorded. Also, you are not obliged to answer any question you don't want to, and you may leave filling the questionnaire.

1. What is your qualification?
    1. Obstetrician/Gynecologist (OB/GYN)
    2. General Physician
    3. Resident Physician or Resident OB/GYN
    4. Medical Intern
    5. Nurse
    6. Nurse midwife
    7. Health assistant
    8. Other (please specify) _____
2. Do you have any responsibility other than service provision? (If yes what is your responsibility)
    1. Medical director
    2. Department head
    3. Matron
    4. Head nurse
    5. Other (please specify)_____
3. How long have you been working here at this department?
    1. _____Years (round to nearest year
    2. _____< 6 months
    3. _____Don't know
    4. No response
4. How many years ago did you complete your basic training?
    1. _____Years (round to nearest year)
    2. _____< 6 months
    3. _____Don't know
    4. Currently on basic training
    5. No response
5. Did your basic training cover (Circle all that apply)?

1. ANC
2. Post abortion care
3. Maternity care/delivery service
4. Postnatal care
5. HIV/AIDS counseling/IEC
6. Other STD counseling /IEC
7. Other STD diagnosis
8. Other STD treatment
9. Family planning
10. MVA/EVA procedures (manual/electrical vacuum aspiration)
11. Other_____
12. No response

6. Have you attended any refresher or post-basic training course specifically on post abortion care, family planning & other reproductive health matters?

1. Yes
2. No
3. No response

7. (If yes) did that training include? (Circle all that apply)

1. General clinical skills in Family Planning
2. Family Planning counseling
3. STD risk assessment/ screening
4. STD counseling
5. MVA/EVA procedures (manual/electrical vacuum aspiration)
6. Post abortion care
7. ANC
8. Postnatal care
9. Other (specify)_____
10. No response

8. In the last 3 months, have you yourself actually provided family planning to clients?

1. Yes
2. No
3. Don't know
4. No response

9. (If yes), which methods have you yourself actually provided in the last 3 months? (Circle all that apply)

1. Condom (Male or Female)
2. Spermicide (Foam, Tablet, Gel, Jelly, Film)
3. Diaphragm or Cervical Cap
4. Oral Contraceptives (Combined Oral Contraceptive, Progestin-only Pill)
5. Injectable (Depo-Provera, Net-pellets)
6. Implant (Norplant)
7. IUD
8. Female Sterilization
9. Male Sterilization
10. Lactational amenorrhea

11. Periodic Abstinence (Rhythm/Calendar, Basal Body Temperature, Cervical mucus/ Billings's method)
12. Withdrawal
13. No response

10. In your opinion which element of post abortion care is provided **inadequately** in your Hospital (circle all that apply)
    1. Emergency care
    2. FP counseling and method provision
    3. Link to other reproductive health care
    4. None
    5. I don't know
    6. No response
11. Where do you think is the best place to provide postabortion FP counseling and method provision
    1. In the MCH/FP center
    2. In the recovery room/ward
    3. At both sites
    4. Other (please specify)_____
    5. No response
12. In your opinion whose responsibility is it to provide postabortion FP counseling and method
    1. MCH/FP staff
    2. All staff involved in post abortion care
    3. Other (please specify)_____
    4. I don't know
    5. No response
13. How old are you

    _____Years

    Don't know
14. Sex
    1. Male
    2. Female
15. What is your current marital status?
    1. Married
    2. Cohabiting
    3. Single, never married
    4. Divorced/separated/ widowed
16. What is your religion?
    1. Orthodox
    2. Muslim
    3. Protestant
    4. Catholic
    5. Other_____
    6. None

Thank you very much!

10.4. Annex IV. Supplies and equipment for postabortion care in government hospitals, Addis Ababa, November 2001-February 2002.

Y=The item is available, Functioning and adequate N=The item is not available, Not functioning, and /or Not adequate(shaded areas =not applicable)												
	Tikur Anbessa			**Zauditu**			**Gandhi**			**Yekatit 12**		
Facilities	ER*	PR*	RR*	ER	PR	RR	ER	PR	RR	ER	PR	RR
Visual privacy	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Auditory privacy	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y
Examination table	Y	Y		Y	Y		Y	N		Y	Y	
Beds			Y			Y			Y			Y
Stretchers	Y	Y	Y	Y	Y	Y	Y	N	N	Y	Y	Y
Chairs or benches	Y		Y	Y		Y	Y		Y	Y		Y
Toilet for patients	N	Y	N	Y	Y	Y	Y	N	N	Y	Y	Y
Sink	Y	Y	N	Y	Y	Y	N	Y	N	Y	Y	Y
Running water	Y	Y	N	Y	Y	Y	N	Y	N	Y	Y	Y
Adequate room lighting	Y	Y	N	Y	Y	Y	Y	Y	Y	N	Y	Y
Electricity	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Locked storage area	Y	Y	N	Y	Y	Y	Y	Y	N	Y	Y	N
Reusable equipment and supplies												
Clean linens (gowns, sheets, towels)	Y	Y	Y	N	Y	Y	N	Y	N	Y	Y	Y
Examination glove	Y	Y		Y	Y		Y	Y		Y	Y	
Cleaning glove	Y	Y		Y	Y		Y	Y		Y	Y	
Reusable masks	Y	Y		Y	N		Y	Y		Y	Y	
Eye protection (goggles)	N	Y		N	N		N	N		N	N	
Surgical gowns or aprons	N	Y		N	Y		N	Y		N	Y	
Adjustable lighting	Y	Y		Y	Y		N	Y		Y	Y	
Stool	Y	Y		Y	Y		Y	Y		Y	Y	
Instrument table	Y	Y		Y	Y		N	Y		Y	Y	
Sterilizer	Y	Y		N	Y		Y			Y	Y	
Container (For storing sterilized instruments)	Y	Y		Y	Y		Y	Y		Y	Y	
Stethoscope	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y
Blood pressure gauge	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y
Thermometer	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y
Vaginal speculum	Y	Y		Y	Y		Y	Y		Y	Y	
Sponge forceps	Y	Y		Y	Y		N	Y		Y	Y	
Tenaculum	Y	Y		Y	Y		N	Y		N	Y	

Sharp disposal container	Y	Y		Y	Y		N	N		N	N	
Container for disposing contaminated trash	Y	Y		Y	Y		Y	Y		Y	Y	
Decontamination bucket	Y	Y		Y	Y		N	Y		Y	Y	
Oxygen thank with set	Y	Y	Y	N	Y	Y	N	Y	N	N	N	N
Ambu bag	N	Y	N	N	Y	Y	N	Y	N	N	N	N
Oral airways	N	Y	N	N	Y	N	N	Y	N	N	N	N
Suction apparatus	Y	Y	Y	N	Y	N	N	Y	N	Y	N	N
Flash light (emergency light source)	N	N	N	N	N	N	N	N	N	N	N	N
MVA single valve syringe		Y			Y			Y			Y	
Valve set replacement for single valve		Y			Y			Y			Y	
MVA double valve syringe (with adaptors)		Y			Y			Y			Y	
Valve set replacement for double valve		Y			Y			Y			Y	
MVA cannulae 4mm-12mm		Y			Y			Y			Y	
Curette (7mm & 12mm)		Y			Y			Y			Y	
Dilators		Y			Y			Y			Y	
IEC materials	N	N	N	N					N	N	N	N

U= The item is always or nearly always available, Functioning and adequate
S= The item is sometimes or occasionally available, functioning and adequate
N= The item is not available, not functioning, and/or not adequate

Disposable supplies	**Emergency room**				**Treatment area**				**Recovery area**			
	TA	**ZM**	**GM**	**Y12**	**TA**	**ZM**	**GM**	**Y12**	**TA**	**ZM**	**GM**	**Y12**
Disposable sterile gloves	S	U	U	U	U	U	U	U	N	U	U	U
Disposable masks	N	U	U	N	U	U	U	N	U	U	U	N
Disposable 10 cc syringes with needles	N	S	N	U	U	U	N	U	U	U	N	U
Cotton swabs	U	U	U	U	U	U	U	U	U	U	U	U
Gauze	U	U	N	U	U	N	N	U	U	U	N	U
Cotton	U	U	U	U	U	U	U	U	U	U	U	U
Alcohol	U	U	U	U	U	U	U	S	U	U	U	S
Disinfectant	U	U	U	U	U	U	U	U	U	U	N	U
Antiseptics (for cleaning vagina and cervix)	U	U	U	U	U	U	U	U	U	U	U	U
Soap	U	U	N	U	U	U	N	U	N	U	N	U
IEC materials for patients to keep	N	N	N	N					N	N	N	N
Medication												
General anesthesia					U	N	N	N				

Regional					U	N	N	N				
Local					U	U	N	N				
Analgesics					U	U	U	N				
Antibiotics	U	U	U	U					U	U	U	U
Pitocine	U	U	U	U	U	U	U	U	U	U	U	U
Ergometrine	U	U	U	U	U	U	U	U	U	U	U	U

Laboratory	Common			
Hematocrit/ hemoglobin	U	U	U	U
Pregnancy test	U	U	S	S
Ultrasound	U	U	U	U
Radiology	U	U	U	U
Blood cross match	U	U	U	U
Blood typing	U	U	U	S
Transfusion	U	U	U	U
Rh factor	U	U	U	S
Blood bank	N	N	N	N
Microscope	U	U	U	U
Gram stain	U	U	U	U
Culture media and supplies	U	U	N	N

Contraceptives	MCH centers			
	TA	ZM	GM	Y12
Male condom	U	U	S	U
Female condom	S	S	S	N
Spermicide	N	N	N	N
Diaphragm	N	N	N	N
Combined oral contraceptives	U	U	U	U
Progestin only contraceptives	U	U	U	U
Injectables	U	U	U	U
Implant	U	U	U	N
IUD	U	U	U	S
Female sterilization	U	U	S	U

*ER=emergency room PR=procedure room RR=recovery room