2008

Situation analysis of the integration of family planning services in postpartum, postabortion and prevention of mother to child transmission programs in Haiti

M. Estela Rivero-Fuentes
Population Council

Ricardo Vernon
Population Council

Michaëlle Boulos

Louis-Marie Boulos

Follow this and additional works at: https://knowledgecommons.popcouncil.org/departments_sbsr-rh

Part of the [Demography, Population, and Ecology Commons](#), [International Public Health Commons](#), [Maternal and Child Health Commons](#), and the [Public Health Education and Promotion Commons](#)

How does access to this work benefit you? Let us know!

Recommended Citation

Rivero-Fuentes, M. Estela, Ricardo Vernon, Michaëlle Boulos, and Louis-Marie Boulos. 2008. "Situation analysis of the integration of family planning services in postpartum, postabortion and prevention of mother to child transmission programs in Haiti," FRONTIERS Final Report. Washington, DC: Population Council.

This Report is brought to you for free and open access by the Population Council.

Situation Analysis of the Integration of Family Planning Services in Postpartum, Postabortion and Prevention of Mother to Child Transmission Programs in Haiti

Frontiers in Reproductive Health, Population Council

Ma. Estela Rivero Fuentes
Ricardo Vernon

Centre d'Evaluation et de Recherche Appliquée (CERA)

Michaëlle Boulos
Louis-Marie Boulos

March, 2008

This study was made possible by the generous support of the American people through the United States Agency for International Development (USAID) under the terms of Cooperative Agreement No HRN-A-00-98-00012-00 and Subproject number AI06.01A. The contents are the responsibility of the FRONTIERS Program and do not necessarily reflect the views of USAID or the United States Government.

SUMMARY

This report presents the results of a situation analysis of the provision and use of contraception in Postpartum, Postabortion and Prevention of Mother-to-Child transmission of HIV (PMTCT) Services in Haiti. The Centre d’Evaluation et de Recherche Appliquée (Center for Evaluation and Applied Research or CERA), a Haitian health research and evaluation consulting firm, was responsible for the data collection, cleaning, and entry processes. FRONTIERS provided CERA with technical assistance throughout these phases and analyzed the data. Data were collected between November and December 2006 from a sample of 41 public, private and mixed health establishments in five of Haiti’s 10 departments, including the three most heavily populated departments. Data were collected through:

1. Content analysis of the National Family Planning and Maternal Health Norms
2. Inventories of equipment, supplies, and service statistics in family planning, antenatal care, delivery care, maternal and child care in the extended postpartum, and PMTCT services
3. Structured interviews with health providers
4. Exit interviews with women in antenatal, delivery, and postpartum care and women in the six-month postpartum period visiting a health outlet for any reason; and with women living with HIV and receiving care in an integral care unit (ICU)
5. Observation of client-provider interactions in antenatal, delivery and postabortion care by non-participants
6. Focus groups with women who had delivered recently, women who had delivered in the last six months and women who did not use reproductive health services.

There is a substantial unmet need for family planning services among postpartum women and many missed opportunities to provide these services during the pregnancy-extended postpartum period continuum. Practically all of the women interviewed wanted to space their next pregnancy for at least two years and 80 percent of those interviewed before discharge following a hospital delivery said that they would like to start using contraception in the following six months (with 54% wanting to start immediately). However, only 26 percent received a method before discharge.

Only 17 percent of the women interviewed in the first six months postpartum had started using contraception, which left an estimated 39 percent at risk of an unplanned pregnancy. This was the result of a combination of factors: a) Many women did not deliver in a facility and did not have the opportunity to receive family planning services immediately after childbirth; b) only a fraction of the women who delivered in a facility received family planning counseling and services before discharge; and c) post-delivery contacts with health providers (e.g. for postpartum, vaccination and well-baby care) were not used to offer family planning information or contraceptive methods.

The National Service Delivery Norms and Guidelines emphasize the importance of family planning counseling during antenatal, delivery, postpartum and postabortion care. However, the guidelines do not recommend offering contraceptives during postpartum contacts with health providers.

Most staff in public and private facilities did not know about the National Service Delivery Guidelines and at least half of the outpatient and inpatient services visited did not have any internal norms or protocols for postpartum and postabortion family planning.

Most outpatient facilities (public, private, and mixed) had the resources necessary for providing postpartum family planning services. They had trained staff and an array of contraceptive methods available, even though stock-outs were frequent. Even though outpatient facilities have the necessary resources, and the National Norms specify that women should receive family planning services during antenatal and postpartum care, this was seldom done in practice. Only half of the women interviewed in antenatal care said that they were counseled on the contraceptives they could use after delivery. Family planning services during the extended postpartum period were even rarer – only one-fourth of the women interviewed said that they had received counseling during their post-delivery contacts with health providers.

The delivery of postpartum family planning services in public outpatient services was weaker than in private and mixed establishments, despite similarity among the types of facility as to characteristics, demand for services, and available resources available.

Inpatient services have the necessary resources, but they are not well organized to offer family planning services to postpartum and postabortion women before discharge. Ninety percent of the staff in the Ob-Gyn wards had been trained in family planning, but only a limited number of them were assigned to this task; one-third of the hospitals visited did not have any providers responsible for family planning services. Furthermore, all the establishments had a good range of contraceptives available, but in half of them temporary methods were provided only in the outpatient area. Private and mixed hospitals were more readily prepared to offer family planning services to postpartum and postabortion women than public hospitals. Their staff were better trained and they have at least some information, education, and communication (IEC) materials to support their family planning counseling.

Only one-fourth of the women received family planning counseling and a contraceptive method before their discharge from the hospital after delivery. The proportion of women who left with information about breastfeeding and the return of fertility was similarly low. Women who received postabortion care in hospitals (both public and private) had a particularly urgent need for family planning services. Of 11 women interviewed, only three were given family planning counseling and offered a method—which they all accepted. All but two of the eight women who were not counseled or offered a method said that they would have liked to receive contraception before leaving the hospital.

Most of the outpatient services visited had successfully implemented counseling on HIV and its mother-to-child transmission during antenatal care. HIV testing, however, was available in only 45 percent of public facilities and in 74 percent of the private and mixed establishments. One-third of the public and private outpatient services included antiretroviral therapy in their PMTCT activities in antenatal care. All these establishments had adequate supplies of these products at the time of the visit. Sixty-eight percent of women attending for antenatal care had received PMTCT counseling, and at least 61 percent had been tested. Informed consent on HIV testing during antenatal care needs to be improved, however, particularly in private and mixed establishments. Approximately 25 percent of the women who had a blood sample taken during their antenatal care visits in private and mixed establishments (15% in public facilities) did not know what the test was for. The negative attitudes that many health providers have toward their PMTCT clients needs to be addressed; providers in several facilities believe that women's ignorance and lack of cooperation are among the main obstacles to the PMTCT program.

Women living with HIV have significant family planning needs and are disadvantaged in many ways. Compared to HIV- women in the postpartum and postabortion periods, women living with HIV interviewed in integral care units (ICUs) were less likely to be living with a male partner, more likely to be illiterate and to want to limit their fertility permanently. Eighty eight percent of these women did not want to have more children, or wanted to wait at least three years before their next pregnancy (the rest were pregnant), but only 34 percent were using contraception. Some ICUs – including both private and public facilities – had implemented a system of systematically offering family planning counseling and methods to women living with HIV. However, this system had not yet reached 50 percent of the ICU users in our sample.

Based on these findings, the following recommendations are proposed:

1. The Ministry of Health and reproductive health stakeholders in Haiti should revise the National Family Planning and Maternal Health Norms to mandate systematically offering contraceptive methods to all women who visit health services during the extended postpartum and postabortion periods. This revision should also resolve the several existing contradictions in the current guidelines.
2. Once the norms are revised, they should be disseminated throughout public, private, and mixed institutions—including primary, secondary, and tertiary level establishments. This activity should be used to refresh the knowledge of health providers involved in family planning, antenatal, postpartum, and postabortion care on such key topics as contraceptive eligibility criteria for postpartum and postabortion women, the return of fertility after a delivery and an abortion, and the correct use of the lactational amenorrhea method, which are not well known at present.
3. Nurses and nurse auxiliaries in Ob-Gyn wards should be assigned responsibility for counseling postpartum and postabortion women and for providing them with contraceptive methods. In the case of family planning methods that cannot be provided by nurses and nurse auxiliaries, they should be responsible for directing women to the provider or place where they can obtain the desired method.
4. Hospitals that do not offer temporary methods before discharge after a delivery or an abortion should make them available, perhaps by keeping a small supply of contraceptives in the Ob-Gyn nursing station.
5. Health providers working both in health facilities and in communities should systematically screen all women during the six months postpartum period for unmet family planning needs. The systematic screening technique developed by the Population Council (a brief questionnaire that is administered by the health provider) can easily be adapted for this purpose.
6. Job aids should be developed to remind health providers of the need to offer family planning counseling and methods to all women in antenatal, postpartum and postabortion care, and to guide them through this process. Several existing materials could be adapted for this purpose.
7. IEC materials should also be developed to remind women in antenatal, postpartum and postabortion care of key points regarding their return to fertility and where to obtain a

contraceptive method when needed. Such materials would be very useful for most of the women in our sample, who were able to read, and could be distributed both by facilities, community workers, and midwives during their home visits.

8. Monitoring, evaluation, and supervision systems for postpartum and postabortion family planning services need strengthening, starting with developing an information system in public facilities that can provide statistics on the number and proportion of postpartum and postabortion clients who received family planning services. Systems to keep updated, written inventories of contraceptive stocks should also be reinforced.
9. Antenatal HIV testing needs to be extended to public facilities that are not currently offering such testing. During this expansion, providers should be reminded to always inform women of the tests that they will receive.
10. Sensitization workshops should be conducted among providers involved in activities to prevent mother-to-child transmission of HIV. These workshops should help providers to understand the cultural and socioeconomic barriers that make it difficult for users to accept being tested and to adhere to treatment. Providers should also be encouraged to find culturally-appropriate ways to make their messages and instructions understood.
11. Special efforts should be made to reach persons living with HIV to offer them family planning services. There are several successful experiences in Haiti to link health care services and family planning for PLH (such as those of GHEIKO and Fosref), which could be extrapolated to other establishments. Operations research could be conducted to support this process, particularly in public clinics.

CONTENTS

Summary	i
1. Background	1
1.1. Organization of Health Care Services	1
1.2. Fertility and Contraception in Haiti	2
1.3. Postpartum family planning	4
1.4. Postabortion family planning	4
1.5. Prevention of mother-to-child transmission of HIV (PMTCT)	5
2. Objectives	6
3. Methodology	6
3.1 Content analysis of the National Family Planning and Maternal Health Norms	6
3.2 Situation analysis of family planning in postpartum, postabortion and PMTCT programs	6
3.3. Qualitative study of the context of service provision	8
4. Results	8
4.1 Family planning and maternal health norms	8
4.2 Outpatient services	10
4.3 PMTCT services	13
4.4 Antenatal care services	15
4.5 Services during the first six months postpartum	17
4.6 Services for HIV+ women attending ICUs	19
4.7 Hospital services	21
5. Conclusions and recommendations	26
References	28

LIST OF APPENDICES

Appendix 1. Health establishments in sample, by department, type of establishment (public, private or mixed), participation in PMTCT activities, and MSH support	31
Appendix 2. Agreement of National Family Planning and Maternal Health Norms with key international recommendations for postpartum family planning	32
Appendix 3. Agreement of National Family Planning and Maternal Health Norms with key international recommendations for postabortion family planning	35
Appendix 4. Services offered during antenatal care, by type of establishment (%)	36
Appendix 5. Contraceptive method availability and stock-outs in outpatient services, by type of establishment (number of centers)	36
Appendix 6. Socio-demographic characteristics of women interviewed in antenatal care, by type of establishment (%)	37
Appendix 7. Socio-demographic characteristics of women interviewed in the six months postpartum, by type of establishment (%)	38
Appendix 8. Contraceptive use and willingness to use a contraceptive among women in the six-month postpartum period	39
Appendix 9. Factors associated with the risk of an unplanned pregnancy among women in the six-month postpartum: Results of a multivariate logistic regression	40
Appendix 10. Socio-demographic characteristics of ICU users interviewed, by type of establishment (%)	41
Appendix 11. Differences in the knowledge of contraindications in contraceptive methods for breastfeeding women between providers in public and private hospitals (%)	41
Appendix 12. Socio-demographic characteristics of women interviewed after a delivery, by type of hospital	42
Appendix 13. Analysis of the relationship between receiving family planning information and being offered a contraceptive method before hospital discharge for delivery and the establishment where women delivered	43
Appendix 14. Factors associated with the probability of receiving family planning information before hospital discharge for delivery: Results of a multivariate logistic regression	44
Appendix 15. Factors associated with the probability of being offered a contraceptive method before hospital discharge for delivery: Results of a multivariate logistic regression	44

1. BACKGROUND

Haiti is located in the Caribbean, west of the Dominican Republic. Ecological depletion, political turmoil, and economic crisis have contributed to the impoverishment of its population. According to the 2003 population census, Haiti had 8,373,750 inhabitants (IHSI 2003). Of these, approximately 76 percent lived on less than two dollars a day. Poverty is especially acute in rural areas, where 88 percent of the population lives on less than two dollars a day (Sletten and Egset 2004). The country is undergoing rapid urbanization, but this has not been accompanied by increased access to health services or improvement of living conditions. In 1990, 28 percent of the population was living in urban areas, while in 2003 the percentage was 40 percent (IHSI 2003). In 2005, life expectancy at birth was of 54 years for women and 52 years for men (Cayemittes et al. 2007). Only 54 percent of children were vaccinated for measles, and half the population has access to safe water or to electricity (World Bank 2007). The 2005 Demographic and Health Survey (DHS) showed that reproductive health conditions were equally deplorable, especially for young women living in rural areas and women with low educational levels. Although 85 percent of pregnant women attended at least one antenatal care (ANC) visit, only 54 percent attended the four or more visits that the World Health Organization recommends (WHO 1996). Furthermore, only 25 percent of all deliveries occurred within a health institution (Cayemittes et al. 2007).

1.1. Organization of Health Care Services

Health services in Haiti are provided through public, private, and mixed sector clinics. Public health services are managed by the Ministry of Public Health and Population (MOH); private health services include those offered by for-profit and nonprofit organizations; and mixed services are generally managed by a private non-profit organization with staff partially or fully paid for by the MOH (PAHO 2002).

The most recent study of the health infrastructure showed that there were a total of 615 health service delivery outlets in the country, of which 209 (34%) were public, 241 (39%) private and 151 (25%) mixed (management of the remainder could not be determined) (MSPP 2003). There are other estimates that show that 32 percent of the country's health care facilities were operated by non-governmental organizations (NGOs) (PAHO 2002). The public sector has been seriously affected by the country's political crisis over the last two decades, as all foreign aid was channeled through NGOs (PAHO 2002). It was not until recently that efforts to strengthen the MOH were reestablished with USAID funding (Mercier 2007).

Over half (361) of the 615 outlets were dispensaries staffed by nurse auxiliaries, 135 were health centers without beds, 68 were health centers with beds (usually a small number), and 51 were hospitals, 23 in the metropolitan area of Port-au-Prince. The biggest hospitals were in the public sector, including three large hospitals in Port-au-Prince and one large hospital in each of the ten departments. Most other hospitals had only a small number of beds (MSPP 2003).

The 2005 DHS confirmed the importance of the private sector in terms of the provision of family planning, antenatal, and delivery care. Depending on the contraceptive method used, between 22 percent and 42 percent of modern method users obtained their method in the private sector. Of

all births attended by a health professional in 2000-2005, 30 percent occurred in a private institution, 59 percent in the public sector, and 11 percent in a mixed institution (Cayemittes et al. 2007).

1.2. Fertility and Contraception in Haiti¹

According to the 2005 DHS, the total fertility rate (TFR) was 3.9, with substantial disparities between urban and rural areas (2.8 versus 5.0 children per women) and between the poorest and the richest (6.5 versus 2.1 children per women). In general, Haitian women start having children at an early age and continue with high fertility for the rest of their reproductive lifespan. In 2005, there were 69 births for every 1000 women in the 15 to 19 age group, and 155 for every 1000 women in the 35 to 39 age group. The total fertility rate decreased 0.9 children (from 4.8 to 3.9) between 1994 and 2005, and most of this decline was due to a fall in the fertility of women older than age 20. Little progress had been made in reducing fertility among teenagers.

Knowledge of modern contraceptive methods is universal, although not all methods are equally known. Practically all women have heard of the condom, the pill, and injectable contraceptives. Less-known methods include female sterilization (unknown by 68% of women), vasectomy (51%), and implants (90%). Despite this high knowledge and the desire of three-quarters of all women in union to have no more children or to space their next pregnancy for at least two years, only 32 percent of married or in union women of reproductive age use a contraceptive method and only 25 percent use modern methods. The most popular modern methods are injectables, used by 11 percent of women, and condoms and the pill (5% each). By comparison, in 1977, 25 percent of reproductive-age women who were married or in union were used a contraceptive method, but only 6.5 percent used a modern method (Allman 1982).

The majority of modern contraceptive users obtained their methods in private establishments. Thirty-seven percent of injectable users obtained their last injection in the private sector (including hospitals, clinics, and pharmacies); 32 percent obtained it in the public sector, and 13 percent in the mixed sector. Compared to injectable users, pill users were even less likely to obtain their method in the public sector (21%), while female sterilization users were more likely to do so (47%).

Among the factors that have been found to explain the low contraceptive use are the fear of side effects, health concerns, religion, the desire for more children, the perception of being sterile, past contraceptive failure, and the irregular availability of methods, particularly of injectable contraceptives (Cayemittes et al. 2007 and 2001; Maynard-Tucke 1996). The history of family planning programs in the country can also help explain this low contraceptive use. Family planning services started in private institutions in the late 1960s, and in 1972 in the public sector (MSPP et al. 1998 and McQuide and Boulos 1999), but funding for family planning diminished between 1986 and 1989 and the availability of family planning services in public institutions decreased. As a consequence, private institutions, including non-governmental organizations, gained a preponderant role in the delivery of family planning services from 1987 onwards (McQuide and Boulos 1999).

¹ Unless stated otherwise, information in this section comes from Cayemittes et al. 2007.

Several studies conducted in the 1990s and early 2000s have detected operational problems in both private and public family planning programs and services. An assessment conducted in 1995 concluded that the family planning program did not respond to the needs of the population, lacked a standard model of care, and did not adequately coordinate the different models available (Adé, Eustache and Guengant 1996). In 1996, qualitative observations in Port-au-Prince, Léogâne, and Pignon concluded that family planning clients waited long hours and that counseling was deficient and insensitive to the local culture, with mainly men providing services (Maynard-Tucker 1997). A recent study by the Futures Group found that hospitals provided better quality family planning services than health centers. According to this study, IUD insertions and postabortion family planning were particularly deficient in health centers (Futures Group 2002). An analysis of mobile clinics providing female sterilizations and vasectomies found that these clinics were distributed unequally throughout the country and that logistical and transportation problems prevented providers from offering services regularly (McQuide and Boulos 1999).

Several activities are currently being implemented to strengthen family planning in Haiti. The MOH lists improved access to family planning services as one of the key strategies for decreasing maternal mortality (MSPP 2003b). The MOH, with the collaboration of USAID, UNFPA and the European Union, is also reviewing the norms for reproductive health services, including family planning (PAHO 2006).² Additionally, USAID is providing support to strengthen the management of contraceptive supply systems and the quality of services (including natural family planning counseling) through the Johns Hopkins Program for International Education in Gynecology and Obstetrics (JHPIEGO), the Constella-Futures Group, Management Sciences for Health (MSH), and Population Services International (PSI) (MSPP 2003b and USAID 2007). MSH is providing technical and financial assistance to a network of 34 NGOs to deliver a minimum package of services and develop strategies to inform and educate the public³; FHI is helping the Association des Oeuvres Privées de Santé [Association of Private Health Providers] introduce the checklist to rule out pregnancies, to help eliminate barriers to the delivery of contraceptive services to non-menstruating women. Since 2002, FHI has also helping private providers to reintroduce the IUD as an alternative to Norplant (FHI 2007). PSI has conducted a social marketing program since 1996 to increase the availability of pills and Depo-Provera and, since 2006, of condoms (Private Sector Partnerships for Better Health 2007).

According to the Family Planning Norms, health promoters can provide the pill, condoms and natural family planning methods; health agents and nurse auxiliaries can provide the pill, condoms, natural family planning methods, and injectables; nurses can provide the pill, condoms, natural family planning methods, injectables and implants; and doctors can provide all methods, including female sterilizations and vasectomies. All these methods are provided at a

² The most recent version of the family planning norms is Ministère de la Santé Publique et de la Population. 1999. Manuel de Normes de Travail en Planification Familiale et en Soins Maternels.

³ This project is being conducted in collaboration with Johns Hopkins University/Center for Communications Program, JHPIEGO (which provides support in maternal and neonatal health, infection prevention and emergency obstetric care) the AIDS Health Foundation (AHF), the Haitian Health Foundation (HHF), the Manoff Group, Pierre André Guillaume et Associés and Thomas Bois et Associés. For more information on the MSH Health Systems Project, see http://www.msh.org/programs/haiti_hs2007.html

cost, even in public establishments, but there is an exemption policy for the poorest clients (MSPP 1999).

1.3. Postpartum family planning

Postpartum family planning services in Haiti occur within a context of little access to and great variation in antenatal, delivery, and postpartum care. For example, according to the 2005 DHS, the proportion of rural women who delivered at home was 52 percent, whereas in Port-au-Prince the percentage was 85 percent. Furthermore, in Port-au-Prince 29 percent of the births were in a public health institution and in rural areas this percentage was only 7 percent. Access to postpartum check-ups is related to the place of delivery, and consequently varies between rural and urban areas. Three of every four women (74%) who had an institutional delivery, and 19 percent of those who did not, attended at least one postpartum check-up (Cayemittes et al. 2007).

The National Family Planning and Maternal Care Service Delivery Norms that were current at the time of this study specified that during antenatal care, health providers should discuss optimal birth spacing, their postpartum family planning options, and the importance of exclusive breastfeeding (MSPP 1999). The norms direct providers to give family planning counseling and instruct women about breastfeeding during institutional delivery and postpartum check-ups, but do not mention providing contraceptive methods or referrals during these times. Reinforcing access to antenatal and postpartum care, as well as to postpartum family planning, is one of the MOH strategies to decrease maternal mortality (MSPP 2003b). However, the Strategic Plan does not specify what actions need to be implemented to achieve this. Efforts to improve postpartum family planning also include USAID-funded ACCESS-FP, which is conducting participatory research and other activities to address barriers to the use of services, particularly among young mothers (Johns Hopkins Center for Global Health 2007) and JHPIEGO's Training in Reproductive Health program (TRH), which has trained staff in hospitals in nine departments on postpartum contraception (JHPIEGO 2003).

1.4. Postabortion family planning

According to the National Family Planning and Maternal Health Norms, postabortion care (PAC) has three objectives: clinical treatment of postabortion complications, family planning counseling, and delivery of contraceptive methods (MSPP 1999). However, the quality of services is often poor: a 2001 survey among postabortion care clients showed that women were often ridiculed when seeking care, and that providers did not respect their right to confidentiality (Israel and Webb 2001).

Since 1999, JHPIEGO has been training providers in public and private hospitals in post-abortion care service delivery. This technical assistance has strengthened 16 hospitals in nine of the ten departments (Port au Prince, Cap Haïtien, Fort Liberté, Gonaïves, Jacmel, Port de Paix, Hinche, les Cayes, and Jérémie). In these sites, routine monitoring of PAC services is being conducted, using a logbook, monthly tally sheets, and wall graphs to record and analyze service delivery statistics and use them for program decision-making. The proportion of PAC clients receiving family planning counseling, methods, and referrals to other reproductive health services are among the key indicators produced by the monitoring system. The project also

provides support to expand the range of contraceptive methods available. Ten of the hospitals in the project were prepared to offer minilaparotomy with local anesthesia and Norplant implants (JHPIEGO 2003).

1.5. Prevention of mother-to-child transmission of HIV (PMTCT)

Haiti has the largest number of people living with HIV (PLH) in the Caribbean and is the second most affected region in the world: about 190,000 PLH (17,000 of which were children younger than 14 years old) at the end of 2005 (UNAIDS 2007). The latest estimate of adult prevalence, based on population surveys, was around 2.2 percent (UNAIDS 2007b). Recent data showed a decline in the prevalence among pregnant women attending antenatal care between 1993 and 2004 (from 5.6% to 3.3%), but a stabilization from 2004 onwards (UNAIDS 2007b).

Given the high HIV prevalence, most donor and service provider organizations have made the prevention and treatment of HIV/AIDS a priority, including PMTCT and the introduction and scale-up of antiretroviral treatment. Current PMTCT activities include HIV education, voluntary counseling and testing (VCT) during antenatal care (with an opt-out policy, where women are only counseled if they test positive), and universal access to antiretroviral treatment. Starting in 2007, efforts have focused on universal access to biotherapy or triple-therapy (HAART), which implies that there is no need for elective C-sections. Another PMTCT activity includes informed choice on exclusive breastfeeding or breastfeeding substitutes, but never both, for the first six months after birth (Mercier 2007).

At the end of 2005, only 20 percent of pregnant HIV-positive women were receiving antiretroviral therapy (UNAIDS 2007), but there are several ongoing projects to improve PMTCT services in the country. Among these, JHPIEGO is providing technical assistance to establish PMTCT in the 10 departmental hospitals and in five private hospitals, and to develop a PMTCT monitoring system. GHEIKO, a nonprofit, private outpatient clinic in Port au Prince that developed a highly effective PMTCT program, is providing technical assistance to 27 centers in the country to replicate their model of care; PSI is providing technical assistance to a network of hospitals and conducting media campaigns to increase awareness about mother to child transmission and the need to seek prenatal care.

Prevention of unplanned pregnancies among women living with HIV is one of the four elements of a strategic approach to prevent HIV infection in infants (WHO 2006).⁴ In Haiti, some providers have integrated family planning services and the care of persons living with HIV, including the NGO Gheskio, which has been offering counseling and methods in their STD/HIV clinic since 1999. After this integration, 16 percent of more than 3,000 women living with HIV who visited the clinic started using contraceptives. As a result of its success, their model is being scaled up to the national level with the support of USAID, UNFPA and other organizations (Deschamps et al. 2002).

⁴ The other three elements are: 1) Primary prevention of HIV infection in women; 2) Prevention of transmission from women living with HIV to their infants; and 3) Provision of care, treatment and support for women living with HIV and their families.

2. OBJECTIVES

The main objective of this project was to identify opportunities for improving family planning services in postpartum, postabortion, and PMTCT care in Haiti. The situation analysis sought to answer the following questions:

1. Do the existing norms for family planning during postpartum, postabortion, and PMTCT services reflect international recommendations?
2. Do health facilities in Haiti have the resources necessary for providing family planning during postpartum, postabortion, and PMTCT services?
3. Do existing services satisfy the family planning needs of postpartum and postabortion women and of women living with HIV?
4. What can be done to improve the quality of care of these services?

3. METHODOLOGY

3.1 Content analysis of the National Family Planning and Maternal Health Norms

The National Family Planning and Maternal Health Norms (MSPP 1999) were reviewed in relation to WHO's Four Cornerstones of Family Planning Guidance⁵ and Postabortion Family Planning: A Practical Guide for Programme Managers (WHO 1997); FHI's Contraception After Pregnancy Training Modules (FHI 2000); and Pathfinder's Postpartum and Postabortion Contraception Training Curriculums (Pathfinder International 1998). The objective of this review was to see if the MOH's norms reflected what was recommended by international guidelines.

3.2 Situation analysis of family planning in postpartum, postabortion and PMTCT programs

The situation analysis was undertaken in a sample of 41 facilities in five of the 10 departments in the country (North, West, South, Artibonite, and South East). The first three departments were sampled because they have the largest populations in the country; the last two were chosen randomly from the remainder. In each department, the two largest hospitals and three facilities that provided outpatient services (including one ICU or one facility that had PMTCT activities, one that was being assisted by MSH, and one MOH health center) were selected. In two of the facilities in the original sample the research team ran into difficulties during the data collection process (such as having too few women to interview); replacement facilities were chosen. Of the 41 facilities sampled, 21 were public, 14 were ICUs or were conducting PMTCT activities, and 16 were receiving MSH support (see Appendix 1).

⁵ These are the Medical Eligibility Criteria for Contraceptive Use, 3rd Edition (WHO 2004); Selected Practice Recommendations for Contraceptive Use, 2nd edition (WHO 2005); Decision-Making Tool for Family Planning Clients and Providers (WHO 2005b); and Family Planning. A Global Handbook for Providers (WHO et al. 2007).

Three data collection methods were used:

- Inventories of equipment, supplies, and service statistics in family planning, antenatal care, delivery care, maternal and child care in the extended postpartum, and PMTCT;
- Structured interviews with providers of the above-mentioned services;
- Exit interviews with women in antenatal, delivery and postpartum care, and with women in the six-month postpartum period visiting a health facility for any reason, and with women living with HIV receiving care in an integral care unit (ICU).

The data collection team consisted of professional nurses who had previously been trained as interviewers and had participated in health surveys. Between November and December 2006, this team stayed for six days in each of the hospitals and for three days in each clinic or health center. In the hospitals, the team filled out the inventories of inpatient and outpatient services and ICU clients. In the health centers, the team completed service inventories and conducted interviews with all providers and exit interviews with women who had received antenatal care, were in the six- month postpartum period, or were ICU clients.

Table 1. Number of observations in the quantitative component, according to type of instrument and type of establishment

Type of instrument	Type of establishment		Total
	Public	Private or mixed	
Inventory	24	24	48
Outpatient	20	19	39
Inpatient	4	5	9
Interviews with providers ^b	85	77	162
Outpatient	66	56	122
Antenatal care	38	44	72
Postpartum Maternal and child care	52	36	88
Family planning	49	36	85
PMTCT	37	36	73
Inpatient	19	21	40
Delivery care	18	21	39
Postabortion care	19	17	36
Family planning	15	20	35
PMTCT	10	7	17
Interviews with clients	512	298	810
Antenatal care	190	128	318
Delivery care	102	23	125
Six months postpartum	184	122	306
Postabortion care	8	3	11
ICU users	28	22	50

^a Only complete interviews are included in this table

^b The sum of the number of interviews with providers, according to the type of service provider is greater than the total number of interviews with providers, because some providers were involved in more than one service.

In several facilities, some providers (especially physicians) were not willing to cooperate; as a result, some service inventories could not be completed and we were only able to interview 30 percent of the health providers working in obstetric care. Other establishments did not receive any clients during the time the team was there. Another problem was that the data used for selecting the sample was not completely accurate, as several establishments described as public were actually private or mixed and some services were not functioning (especially PMTCT and ICUs).

Despite these problems, the team completed service inventories in 39 facilities and conducted 162 interviews with providers and 810 interviews with women. Table 1 describes the number of observations completed for each instruments used, according to the affiliation of the establishment where the data were gathered.

Data were captured in Epi Info and data quality control was done through double-entry. Data were later transferred to SPSS and Stata, which were used for the data analysis. No weighting was used in our analyses. In the results discussion, when the number of observations is sufficient, we compared findings from public establishments with those from private and mixed establishments.

3.3. Qualitative study of the context of service provision

To complement the results of the quantitative component with information on the context in which services are provided, the team conducted non-participative observation of client-provider interactions in antenatal (6), delivery (4), and postabortion care (4). Observations were standardized with a checklist and an observation guide and took place in public hospitals in the North, South, South-East, and West departments. In the case of antenatal care, observations were also conducted in a public hospital in Artibonite. We also conducted nine focus groups to gather more information on the perceptions and reproductive health needs of women who had delivered recently (3), women who had delivered in the last six months (3), and women who did not use reproductive health services (3). These discussions were taped, but the sound quality was poor, so unfortunately very little of the discussions could be used.

4. RESULTS

4.1 Family planning and maternal health norms

The analysis focused on the recommendations for making family planning services accessible to postpartum and postabortion women and on the eligibility criteria of contraceptive methods for these groups. Because the Norms did not address women living with HIV, we could not evaluate this aspect.

According to the National Family Planning and Maternal Health Norms (MSPP 1999), the contraceptive methods offered in Haiti were natural methods (including the Lactation Amenorrhea Method or LAM), combined contraceptive pills, progestin-only pills, condoms,

two- and three-month progestin-only injectables, (DMPA and NET EN), implants, vaginal tablets, the IUD, female sterilization, and vasectomy. Female sterilization, implants, and the IUD could only be offered in hospitals and in health centers with and without beds. All other methods could be offered in any kind of health establishment, including dispensaries and community centers. The Norms specify that female sterilization could only be performed by physicians; implants and the IUD could be given by professional nurses and physicians; and contraceptive injections could be given by all providers except health promoters.

There are several strengths in the Norms regarding **postpartum** family planning (Appendix 2 shows a detailed analysis):

- ✓ Placed adequate emphasis on the importance of exclusive breastfeeding during the first six months postpartum and on early bonding
- ✓ Asked providers to encourage women to think about optimal birth spacing and to educate them on family planning beginning with the first antenatal care visit
- ✓ Established the need to test, where possible, for HIV and syphilis beginning with the first antenatal care visit, and to provide the necessary treatment
- ✓ Made explicit the role of traditional birth attendants in the promotion of postpartum family planning among women who give birth at home, and asked them to distribute condoms among these women as a temporary contraceptive and to encourage postpartum women to visit a health establishment to choose a family planning method
- ✓ Highlighted the importance of giving family planning counseling in the immediate postpartum period and during post-delivery contacts with health providers
- ✓ Mentioned that women who want to have a female sterilization after delivery should be counseled during antenatal care and that the procedure should be done, preferably, immediately after childbirth
- ✓ Reflected most of the WHO's eligibility criteria for postpartum and postabortion women, including when to begin the use of the IUD, female sterilization, and hormonals (combined and not), and breastfeeding women, and mentioned the difficulty of using fertility awareness methods while breastfeeding.

The most relevant weaknesses identified in the norms for postpartum family planning were that they:

- Mentioned the need to provide family planning counseling during hospital stay for delivery and during post-delivery check-ups, but did not mention that methods should be offered and provided at that time, if women desire them. They also did not mention that if methods were not provided, a referral should be given
- Did not mention the return of fertility after a delivery.
- Had several inconsistencies regarding when women who are not breastfeeding should start using hormonal contraceptives (combined and not)
- Did not mention any warnings regarding the use of fertility awareness methods in the immediate postpartum period.

For **postabortion** family planning, the study identified the following strengths:

- ✓ Defined family planning services as one of the key elements of postabortion care
- ✓ Explained that postabortion women should be counseled with compassion and in a private space
- ✓ Specified that women who choose to use female sterilization after an abortion should not make this decision under the influence of the anesthesia or while in pain.

The main weaknesses were that they:

- Did not mention the return of fertility in postabortion women, nor asked providers to explain this
- Asked providers to wait longer than is recommended before providing an IUD to women who had a septic abortion
- Did not mention any warnings regarding the postabortion use of fertility awareness methods (such as waiting to be sure that there are no infection-related secretions or that bleeding has stopped).

4.2 Outpatient services

Of the 39 establishments where an inventory of outpatient services was taken, 14 were next to a hospital. All others were stand-alone clinics, of which at least 14 were health centers or dispensaries without a bed. There were substantial variations in the size of the establishments: The number of health providers working in all shifts was eight or less in one-third of the centers, between nine and 15 in another third, and 16 or more in another third. In general, the size of public and private⁶ establishments was similar, but the three largest centers were public and had more than 34 health providers each.

According to the service statistics, workloads also tended to be similar between public and private establishments. For instance, the mean number of antenatal care check-ups reported in the last month was 119 in private establishments and 130 in public establishments. Furthermore, examples of extremely busy centers were found among both public and private centers: The outpatient services of the MSPP General Hospital in Cayes attended 700 pregnant women and provided 247 vaccinations with only 11 providers, whereas the Hospital in Pignon (a charitable institution) attended 344 pregnant women with six providers.

Family planning services (counseling and delivery of at least one method) and antenatal care were offered in all the outpatient establishments in the study. Postpartum check-ups were offered in all but two public establishments, while child vaccinations were more likely to be offered in public outlets (17 of the 20 public establishments offered it, versus 10 of the 19 private establishments). Health care for persons living with HIV (PLH) was offered in 56 percent of the centers, with no difference between public or private establishments.

⁶ From now on, we will refer to private and mixed establishments as “private”.

Regarding the family planning methods offered, most facilities offered injectables, pills, condoms, spermicides, and counseling in natural methods including the lactation amenorrhea method or LAM (see Table 2). Long-term methods were available in less than one-fourth of the establishments visited, IUDs in nine, and female sterilization and vasectomies in five.

Table 2. Contraceptive methods offered in the health centers in sample, by type of establishment (%)

Method	Type of establishment		
	Public (n=20)	Private or Mixed (n=19)	Total (n=39)
IUD	15	32	23
Pills	100	89	95
Condoms	100	89	95
Injectables	95	100	97
Implants	15	21	18
Spermicides	85	74	79
Female sterilization	10	16	13
Vasectomy	5	16	10
Natural methods (including LAM)	75	74	74

The National Family Planning and Maternal Health Norms directed that all women in antenatal care be given family planning counseling. Providers in all the private health facilities said that they offered this service, but in three of the 20 public facilities visited they did not. For PMTCT activities in antenatal care, 16 public facilities offered HIV counseling, half offered HIV testing, and one-third gave antiretroviral therapy (ART). Private facilities were more likely to offer HIV tests (74%). Syphilis tests were offered in 65 percent of the public centers and in 79 percent of the private centers (see Appendix 4).

Three-quarters of the 37 health centers that offered postpartum check-ups said that they gave family planning counseling to postpartum women, and 67 percent mentioned that they offered them contraceptive methods. In all but three centers, family planning services and postpartum check-ups were offered at the same time. In the three centers, postpartum women interested in a method had to come back at a later time.

a) Knowledge and availability of service delivery guidelines: Family planning guidelines, norms and protocols were absent in 60 percent of health centers visited. Of the 16 facilities that had some written guidelines, only two mentioned that they had the MOH norms. Two mentioned that they used protocols regarding the mechanisms of action of contraceptive methods and their side effects, and one mentioned that they used the training materials for family planning staff. The rest of the centers used materials on family planning counseling, community education, and general guidelines for a health pregnancy.

b) Information, Education and Communication (IEC) materials: Three out of every 10 health centers did not have any IEC materials that could be used during family planning counseling or that women could take home, but this deficit was particularly noticeable in public

centers (79% vs. 60%). The IEC materials most commonly found were brochures (93% of the centers that had any IEC materials) and posters explaining the contraceptive methods available (89%). Flipcharts were only found in half the centers.

c) Contraceptive methods: 41 percent of the centers had three or fewer contraceptive methods available, most commonly injectables, implants and spermicides. No differences were detected between public and private centers in the number of methods offered. Severe stock-outs were detected, in particular of injectables, pills and condoms, three of the most popular methods. Even when most centers said that they offered these products, at least one-third did not have one of them in stock on the day of the visit (see Appendix 5). Thirty-seven of the 39 centers said that they offered pills and 38 said that they offered injectables, but only 23 had the first method and 18 had the second. The problem was worse for condoms, supposedly offered in 37 centers, but in stock in only eight – only three of them public.

IUDs and implants were offered in nine and seven centers respectively, but there seemed to be fewer problems with their supplies. Of the centers that offered these contraceptives, only one did not have the methods available when the team visited (even when five centers had reported suffering recent implants stock-outs).

Box 1. Waiting areas in public outpatient services are commonly overcrowded and without enough chairs

The conditions in which pregnant women waited for their check-up was observed to be very uncomfortable. The team found waiting areas that were too small and that often lacked chairs and ventilation. If chairs were available, there were not enough for all the women who were waiting. Four centers had only three chairs and more than 20 women waiting. Many women had to wait five or more hours for their visit, standing up all the time, while in another center, five shared a chair that was meant to seat no more than three. In one of the centers, women were waiting in a dark room with no windows, where none of the light bulbs was functioning. In two other centers, women had to wait on a patio that offered no protection from the sun or rain.

In almost all the centers visited (85%) contraceptive methods were stocked in a dry place and protected from sunlight and dust. However, the methods were ordered according to their expiration date in only 67 percent and 40 percent of centers did not have a written inventory.

d) Referral mechanisms: Health providers in antenatal care were asked what they did when women were interested in receiving a contraceptive method after delivery. All providers said that they asked women to come back to the same health establishment later. Only 17 percent said that they also told women that they could obtain a contraceptive method in the hospital or clinic where they delivered. The advice to come back after delivery was matched by explicit efforts to identify the family planning needs of postpartum women in 60 percent of the centers, where they asked women during their vaccination visits if they had any reproductive health needs. In the rest of the centers this was not done, and thus women had to request family planning services themselves.

e) Staff characteristics, capabilities and aptitudes: All outpatient services visited relied mostly on professional nurses, nurse auxiliaries and health promoters to provide family planning counseling and methods. Physicians provided family planning services in only one-half of the establishments. Most of the providers interviewed were professional nurses (37%) and nurse auxiliaries (44%). Physicians represented 11 percent of the 122 providers interviewed, and the

rest were health promoters, health agents, and midwives. Their responses regarding family planning showed that:

- Health providers in public facilities were as well prepared as those in private facilities to provide postpartum family planning services.
- Nine of every 10 family planning providers (91%) had received some training on the topic during their professional life. Almost all of these had received training on at least one hormonal method (95%) and on natural methods, including LAM (91%). Only 40 percent had been trained on female sterilization, 31 percent on IUDs (83% of whom had been trained on postpartum and postabortion IUDs) and 29 percent on vasectomies.
- Most health providers involved in postpartum care (86%) knew that the return of fertility after delivery is affected by breastfeeding. Half of these providers also knew that women who do not breastfeed recover their fertility within the first four weeks after childbirth.
- Recommendations regarding optimal birth spacing are well known. Eighty-six of the providers interviewed said that they recommended postpartum women to wait before their next pregnancy. When we asked them how long they recommended to wait, three of every four (73%) said that at least 2 years and 18 percent encouraged them to wait at least three years. The 27 percent who suggested a waiting time of less than two years told women to wait between 12 and 18 months.
- Three of every 10 family planning providers did not know the three conditions of LAM. When asked to explain the conditions that must be met to use LAM successfully, 84 percent mentioned exclusive or almost exclusive breastfeeding, 75 percent mentioned that the baby needed to be younger than six months old, and 67 percent mentioned absence of menses. There were no significant differences in the knowledge of these conditions between providers in public and in private health centers.
- Two of every 10 family planning providers were unaware that combined hormonal contraceptives are contraindicated for breastfeeding women.

f) Record-keeping: All but three of the 39 facilities kept a record of the number of contraceptive users by method (broken down by new users), and all but five kept a record of the number of antenatal care clients. A smaller number kept a record of the number of users who received family planning counseling (27) and of postpartum visits (22). Public health centers had worse record-keeping systems than private centers.

4.3 PMTCT services

a) IEC materials: One-third of the 33 health centers that gave HIV and PMTCT counseling during antenatal care did not have any IEC materials to support their educational sessions; there were no differences between private and public facilities. The materials most commonly found were posters regarding HIV and PMTCT (in 16 centers) and flipcharts (in 14 centers). Seven centers had video-cassettes with HIV contents, but two of them did not have a TV or a working video-player.

b) Staff capabilities and attitudes: 59 health providers said that they gave pre or post-test HIV counseling to pregnant women (31 in public and 28 in private establishments). Ninety percent reported talking about condoms and their role in protecting against both unplanned pregnancies and HIV transmission, and a similar proportion (88 %) said that they talked about the possibility that a pregnant woman transmitted the virus to her baby during pregnancy, delivery and breastfeeding, and what could be done to prevent this. In addition, 90 percent reported talking about risk factors linked with the infection and 76 percent said that they recommended women to be tested. Providers in public facilities were more likely to emphasize the need for a test during pregnancy than providers in private facilities (90% vs. 61%). Half of the staff had received any training on family planning for women living with HIV (WLH), although this was slightly more frequent in private facilities (63% vs. 40%).

We interviewed 33 providers who provided family planning to WLH (20 in public and 13 in private facilities) and asked if they did anything special when treating these women as opposed to other clients. The most frequent response was that they encouraged women to always use condoms, even if they were using another contraceptive method (76%). Half of the providers mentioned telling women to avoid breastfeeding (and hence not to use LAM as a contraceptive method). This recommendation was changed in Haiti shortly after this study was conducted and providers are nowadays asked to promote exclusive breastfeeding among WLH (Mercier 2007).

It is noteworthy that 30 percent of these providers mentioned that they emphasized female sterilization. It was not clear whether this emphasis implied that other methods apart from the condom were discouraged. However, the service inventories indicated that, in all facilities, women could choose from an array of different methods.

Box 2. PMTCT providers say that the program needs many things to work properly: Space, more committed providers, and “better” clients

Providers of PMTCT services were asked to identify the two main problems in their institution. Forty-two percent responded that they did not have a program as such because they only did HIV tests, and 10 percent said that there were no problems. Of 51 providers who identified a problem, 42 mentioned difficulties with a lack of human and monetary resources, including lack of trained staff, insufficiently motivated providers, inadequate auditory and visual privacy during counseling, medicine stock-outs, and lack of funding.

The responses also pointed to a problem with providers' attitude and commitment, and in particular to a tendency to blame HIV-positive users and their lack of cooperation. This opinion was shared by 23 providers in different centers (both private and public) who gave answers such as *“some patients refuse to take the test,” “women do not believe that they are positive and they do not come back,” “people are ignorant and they refuse to believe that the disease exists,” “women are negligent and do not follow our instructions,”* and *“women do not understand our instructions.”* All these answers point to real problems: The information that providers gave was not clear enough to the users. They need to find a better way to transmit messages in this particular context. Also, they were not succeeding in motivating HIV-positive women to follow the treatment, so alternative ways to insure adherence should be pursued.

c) Record-keeping: Record-keeping of PMTCT-related activities can be improved in both public and private facilities. One in four facilities that gave HIV counseling during antenatal care did not keep a record of the number of clients who received this service, and one in five centers that offered HIV testing did not record the number or results of the tests.

4.4 Antenatal care services

a) Socio-demographic characteristics and fertility desires of clients: Results in this section come from 318 exit interviews with antenatal care users, 190 of them interviewed in public facilities. Most respondents were between 20 and 34 years old (81%) and 12 percent were adolescents; the majority were cohabiting (52%) or married (31%) and knew how to read and write, having attended at least some primary education (83%). Half did not have any live children, 31 percent wanted to get pregnant again but wished to wait at least 2 years, and 17 percent were not certain about their future fertility desires; half did not want to have any more children. Only 12 percent were on their first trimester and 20 percent had just attended their first antenatal check-up. Women in public facilities were more likely to be on their first pregnancy and to have some secondary education (more details on these indicators can be found in Appendix 6).

Thirty-seven percent of the pregnant women said that they would like to start using family planning in the first six months after delivery, with 14% wanting to start immediately after delivery. An additional 13 percent said that they wanted to wait until their menses returned and six percent until they weaned their baby.

b) Family planning and breastfeeding information: Even though providers in all health centers said that family planning counseling was offered to women in antenatal care, exit interviews with clients showed that women were not receiving this information. Only half the women indicated that providers explained the contraceptive methods they could use after delivery, and this proportion was significantly smaller (45%) in public than in private facilities (61%).⁷ The proportion of women that received this information increased with the number of antenatal care visits (from 37% among women during their first visit to 58% of women who had three visits or more), but at least 40 percent of the women on their third visit had not received any family planning information. Furthermore, nulliparous and primiparous women were less likely to receive counseling, compared to women who had at least two children.

Only a small number of contraceptive methods were discussed. Most of the women who had received counseling remembered having been told about injectables (89%), pills (72%) and condoms (60%), but only 36 percent had been told about implants and less than 10 percent about the IUD, female sterilization and vasectomy. As Table 3 shows, not more than 30 percent of women in public facilities remembered receiving information on optimal birth spacing, return of fertility, or where to obtain a contraceptive method. Women who received antenatal care in private facilities were more likely to receive this information, but even there, not more than 40 percent got the information.

Although not frequent, information about breastfeeding and LAM was more commonly given than information about family planning. A little less than half of the women (45%) said that they heard about LAM during their visit, but only 60 percent of these could remember the three conditions of properly using the method. One third (36%) received breastfeeding information,

⁷

However, there was important variation across establishments. Hospital Justinien, a public establishment in Cap Haitien, was the center where most women reported receiving family planning counseling (90 %), surpassing even private centers.

and practically all of them were told about the importance of exclusive breastfeeding during the first six months postpartum.

Table 3. Percent of women who received family planning, fertility and breastfeeding information during their visits, by type of establishment

Information	Type of establishment		Total (n=318)
	Public (n=210)	Private or mixed (n=198)	
Family planning counseling	45*	61*	51
Where to obtain a contraceptive method	19*	43*	29
Return of fertility	26	25	25
Knew that the return of fertility depends on breastfeeding or the return of menses ^a	32	38	34
Optimal Birth Spacing	26	36	29
Knew that recommended waiting time was 2 years or more ^b	63	70	66
LAM	44	48	45
Knew the 3 conditions of LAM ^c	69*	48*	60
Breastfeeding recommendations	26*	51*	36
How to breastfeed ^d	98*	81*	88
Exclusive breastfeeding for the first six months ^d	98	94	96

* The difference between public and private establishments is significant ($p < 0.05$)

^a Percentage estimated over those who had been told about the return of fertility; ^b Percentage estimated over those who had been told about OBSI; ^c Percentage estimated over those who had been told about LAM; ^d Percentage estimated over those who had been given breastfeeding recommendations

c) Alarm signs and special care during pregnancy: Fifty-seven percent of the women interviewed had received information about the alarm signs that would indicate the need for medical attention, but women in public centers were less likely to say they had received this information (50% vs. 67%, $p = 0.003$). When asked to name the alarm signs, around 40 percent spontaneously mentioned bleeding, and one-third mentioned swelling of the hands and legs, and abdominal or pelvic pain. One-third also mentioned that during their pregnancy they should reduce their salt intake.

d) PMTCT: Sixty-eight percent of women in antenatal care said that they had received some information about HIV and its transmission from mother-to-child. The proportion increased with the number of antenatal care visits, from 47 percent among women in their first visit to 79 percent in women who had had four or more visits. No significant differences were found in the probability of receiving HIV information in public and private centers, but disparities were found between literate and illiterate women (73% versus 50%). Practically all the women who received HIV information during antenatal care remembered being told that sexual promiscuity by themselves or their partner increased their risk of infection, and that using condoms decreased this risk.

Three-quarters of the women said that the counselor had suggested they take a test, and 83 percent had a blood test during their antenatal care visits. There was no difference between public and private facilities; however, public facilities were slightly more likely to inform

women what the blood samples were for (85% versus 75%, $p<0.07$). Around 90 percent of those who knew what they had been tested for said that they had an HIV test and 82 percent said that they had a syphilis test. This implies that 61 percent of women in antenatal care had been tested for HIV and that 55 percent had been tested for syphilis.

4.5 Services during the first six months postpartum

a) Socio-demographic characteristics and fertility desires of clients: The results in this section come from 306 exit interviews with women in the six-month postpartum period who went to the health center for any reason (184 in public and 122 in private establishments). Of these women, 64 percent were visiting for their child's vaccinations or a well-baby visit, 25 percent were seeking curative services for their baby, and six percent were seeking a post-partum check-up. One-third of the women in public facilities were in their first month postpartum and 40 percent in their second month. In private facilities, half were in their first month and 27 percent in their second month.

The socio-demographic characteristics of these women were very similar to those of women attending for antenatal care and there were no differences between women in private or public facilities (see Appendices 6 and 7). Two of the women interviewed had already become pregnant, but the majority did not want to have any more children (58%) or wanted to wait at least two years before their next pregnancy (36%).

Half of these women (55 %) had delivered in a health facility and an estimated 86 percent attended antenatal care. Women in public facilities were slightly more likely to have delivered in a health facility (59% vs. 48%, $p<0.07$).

b) Access to postpartum care: Eighty-four percent of the women had taken their babies to a health facility for vaccinations or a well-baby visit. However, only 31 percent had attended a postpartum check-up. When the remainder were asked why they had not sought post-delivery care, the two most common answers were that they did not know that they had to go to a check-up and that they were feeling fine (each mentioned by 33%).

c) Family planning services: Only one-quarter reported having received family planning information during one of their postpartum check-ups or when they took their baby to a health provider for vaccination, and eight percent had been offered a contraceptive; these proportions were slightly lower for public facilities (20% vs. 29%, and 10% vs. 5%). Even though some women also received family planning information during antenatal care (62%) or when they were in the health facility for their delivery (20%), an estimated 28 percent had not received and family planning counseling during the pregnancy-postpartum continuum. Only five percent of women who delivered in a hospital received a contraceptive method during their stay. Of those who did not, 13 percent received one during their postpartum visits, which means that 17 percent of the women had started contraceptive use by the time of the interview. The methods that these women were using were condoms (33 %), injectables (29%), LAM (7%), pills (10%), and female sterilization (6%).

We asked women who were not using a contraceptive method whether they would like to use one, and if so, when would they like to start use (Appendix 8 shows these results in a graphic form). Three-quarters said that they would like to begin in the following six months, with 21 percent of these wishing that they were already using contraception (16% of all women who were not using a method). A further 23 percent mentioned that they were waiting for their menses to return, and 8 percent that they wanted to stop breastfeeding first.

Half of the women who were not using a contraceptive method were protected from an unplanned pregnancy because they were breastfeeding almost exclusively and because their menses had not returned. However, the other half had already stopped breastfeeding or had started menstruating. This left an estimated 39 percent of the women interviewed, all of who wanted to wait at least one year before becoming pregnant again, at risk of an unplanned pregnancy (see Figure 1). This risk was significantly greater for women who were beyond their second month postpartum.⁸

Figure 1. Exposure to an unplanned pregnancy among women in the six-month postpartum period (%)

⁸ Appendix 9 shows the results of a logistic regression on the risk of unplanned pregnancy, as explained by age, literacy, time since childbirth, parity, marital status and knowledge that the return of fertility is associated to the return of fertility. Of all these variables, only age (women in the 20-34 age group) and time since birth were statistically significant.

Box 3. Women who received family planning information after delivery are more likely to starting using contraception than those receiving information during antenatal care

Women who received antenatal care were more likely to have started contraceptive use than women who did not receive antenatal care (9% vs. 18%). However, among women who received antenatal care there were no significant differences between women who received family planning information during these visits and women who did not (19% vs. 17%).

Women who received family planning information during postpartum, vaccination and well-baby visits were more likely to be using contraception than women who did not receive information at this time. In the case of women who received antenatal care and had an institutional delivery, 8 percent of women had not received family planning information were using methods, compared to 14 percent of those who received information during antenatal care or hospital stay for delivery, and with 25 percent of those who received family planning information during postpartum and well-baby visits. The difference between the first two proportions is not significant, but the difference between the second and the third is, with a $p < 0.05$.

Receiving family planning information during postpartum visits also increased the probability of contraceptive use among women who received antenatal care and did not have an institutional delivery. In this case, contraceptive use was 14 percent among those who did not receive family planning information, 18 percent among those who received family planning information only during antenatal care, and 33 percent among those who received family planning information during their postpartum visits.

4.6 Services for HIV+ women attending ICUs

a) Socio-demographic characteristics and fertility desires of clients: We interviewed 50 ICU users in 14 facilities (29 in public and 21 in private facilities). Compared with those interviewed in antenatal care and postpartum, ICU clients were less likely to be living with a male partner (the proportion of single, widowed and divorced women was larger in this group as can be seen in Appendix 10). They were also more likely to be illiterate (39 percent vs. 20 %) or to have low education levels. The overall proportion wanting to have no more children was much greater (76% vs. 58%), and half of the women with no children indicated not wanting any in the future. Only 8 of the 50 women interviewed wanted to have more children in the future, and all of them wanted to wait at least three years before their next pregnancy. Six of the women were pregnant at the time of the interview.

b) Family planning: Seven of the 50 women interviewed (14%) had never heard of family planning methods. Among those who had ever heard of contraception, 68 percent had learned of them during one of their visits to the ICU, and 67 percent had been offered a family planning method (79 percent in private ICUs and 46 percent in public ICUs). Even though more than half of the ICU clients had been offered a contraceptive method, only one-third (34%) were using contraception at the time of the interview. An additional 14 percent had used contraception at some point, but had discontinued use – all but two because they were pregnant – and the remaining 52 percent had never used family planning. All these women were sexually active.

Most of the women who were using a contraceptive obtained it at the ICU or the family planning services in the same health unit. Nine of these women were using condoms (two of them in combination with other methods), eight were using injectables, one was using pills, one Norplant, and one the calendar.

Women who were not using a contraceptive method and were not pregnant were asked if they would like to use one. Twenty-one of 26 women said that they did, and the five who did not want to did not have a regular partner. When those who wanted to use a method were asked why they were not using one, one-third said that they had requested one but had not been given it, 15 percent did not know what method to use, and the rest did not have a partner or had been told to wait before using a method because they were too weak.

Box 4. It is important to work with the couples and convince them of the importance of dual protection if condoms are to be used consistently

Forty percent of the women interviewed in the ICUs said that they had used a condom during every single sexual contact over the last year, and 20 percent had not had any sex during that period. The remaining 40 percent admitted that they had used condoms inconsistently and thus were at risk of an unplanned pregnancy or a re-infection. When asked why they did not always use condoms, women responded that their partners did not like them (82%) or that their partners did not know they had HIV (53%). Not involving their male partners in the recommendations to use condoms as a dual protection method may make it especially hard to convince them that using a condom was to protect them both, as the story below illustrates.

The need for dual protection is illustrated through the case of a 35 years old client, married, with a primary education, and four children. She and her husband had started using condoms when they found that he was HIV-positive, four years ago. After they learned of her husband's sero-positive status, she had been tested repeatedly, but her results always came back negative. Believing that she was not at risk of being infected, her husband stopped using condoms every time they had sex, which is how she got pregnant.

c) PMTCT messages: We asked ICU users (pregnant and not) whether they had received any information about the transmission of HIV from mother to child, and if so, where had they obtained it. Three-quarters had received information (72%), all of them at the ICU. Many of them had also received this information during antenatal care for their last pregnancy (58%).

We then asked those who had received PMTCT messages what they remembered. Of the 36 women, three-quarters mentioned spontaneously that HIV could be transmitted during pregnancy and childbirth if the woman does not receive proper care, and during breastfeeding. Those who did not spontaneously mention receiving this information remembered having received it when asked directly.

Thirteen of the women had a delivery within the last year, knowing that they were HIV-positive by the time their baby was born (most of them learned their status during pregnancy). We asked these women what services they had received during pregnancy and childbirth. Two had a C-section, and antiretrovirals were given to 10 women and to nine of their babies. Ten of the women had been advised not to breastfeed, but four had not followed this instruction.

4.7 Hospital services

a) Hospital characteristics: Ten hospitals (five public and five private) were included in the original sample, but we were able to complete a service inventory in only nine. Public hospitals were, in general, larger than private hospitals. Excluding the hospital of the State University of Haiti, the largest public hospital in the country, the average number of providers working in Ob-Gyn wards in public hospitals was 20 and in private hospitals it was 12. Public hospitals also had a much larger number of clients. During the seven days spent visiting five private hospitals we interviewed 23 women attending for a delivery and three who had received postabortion care. In seven days at the five public hospitals we interviewed 102 women who had had a delivery and 8 women who received postabortion care.⁹

b) Services offered: All nine hospitals offered family planning counseling to women in the postpartum and postabortion periods before discharge. Six hospitals gave counseling to all postpartum women and three only to women who requested it. In all cases counseling was given individually, after women had delivered. Postabortion family planning counseling was reportedly given to all women – individually in eight hospitals and in groups in one facility. All hospitals offered female sterilization¹⁰, and four hospitals (two of them private) offered at least one temporary method in their inpatient area (condoms were offered in all four hospitals). The rest of the hospitals had a good array of methods available, but postpartum women were referred to outpatient services if they wanted a temporary method. Pills, injectables and condoms were offered in all the hospitals, and the IUD and implants were offered in seven.

A PMTCT program seemed to be well established in all hospitals visited. The nine establishments had HIV and PMTCT counseling for women who were there to deliver; eight hospitals had HIV tests, seven had antiretroviral therapy (ART) for the mother, and six had ART for the baby. In contrast to private establishments, all the public hospitals in the sample said that they offered ART to both the mother and the child.

4.7.1 Family planning services

a) Knowledge and availability of service delivery guidelines: There were no written guidelines for family planning, delivery, postpartum, or postabortion care in five of the nine hospitals. Two public and two private hospitals said they had written guidelines or protocols; however, only two of them were able to produce these documents.

b) IEC materials: Likewise, only two public and two private hospitals had IEC materials. Brochures about LAM were found in seven hospitals, but they were not accompanied by materials showing other methods. Two hospitals had video-cassettes with family planning messages, but these were never used.

⁹ We cannot use service statistics to compare the size of public and private hospitals because public hospitals had a very bad record system and were not able to show us their reports.

¹⁰ In one hospital, sterilizations were performed by a foreign physician who visited the hospital once every six months

c) Contraceptive methods: The research team corroborated the physical existence of contraceptive stocks, in either the inpatient or outpatient areas of the hospitals. All the hospitals had at least three temporary methods available, including condoms or another method that could be used safely by breastfeeding women. There were pills and injectables in nine hospitals, condoms in eight, implants and LAM brochures in seven, IUDs in four, and spermicides in two. Although all hospitals had an array of methods available on the day of the visit, some reported having suffered stock-outs recently; four hospitals had ran out of LAM brochures in the past three months, and three had ran out of spermicides. Stock-outs of all other methods were reported in less than two hospitals each. Methods were kept and used according to their expiration date in only five hospitals; the remainder did not have a system for using the oldest stocks first. Seven hospitals kept an inventory, which they all had updated in the last two months.

d) Staff characteristics, capabilities and attitudes: In all the hospitals, postabortion and delivery services were offered in the obstetric ward and provided by the same staff. All the hospitals said that they offered family planning counseling to both postpartum and postabortion women before discharge, but staff assigned to this task were insufficient, if not absent. Three hospitals did not have any staff allocated to family planning services, and in one of the largest hospitals, only one of the 21 providers on the obstetric ward was involved in these services.

We interviewed 39 health providers in the obstetric wards, 35 of whom provided family planning services (20 in private and 15 in public hospitals). Twenty-one of these providers were professional nurses or nurse auxiliaries, 10 were Ob-Gyns, and nine were midwives. Thirty-two of these 35 providers had received some training on the topic; of these, 70 percent had been trained in counseling, and similar proportions had some instruction on LAM and on the methods' mechanism of action. More providers in private hospitals had received some training than in public hospitals.

About six out of 10 providers were knowledgeable of the recommendations in the National Family Planning Norms: 69 percent mentioned combined hormonal contraception, 54 percent mentioned injectables, and 37 percent mentioned Norplant. Knowledge was higher among providers in private hospitals than among providers in public hospitals (see Appendix 11).

Most providers of postabortion care did not know when fertility returned after a miscarriage or an abortion. Of 25 providers who responded, only 10 said that postabortion women could regain their fertility within the first two weeks, even before their menses returned. The rest said that it took between one and two months or the return of menstruation before women were fertile again. Two providers even said that fertility did not return for six months.

A similar lack of knowledge was found regarding the return of fertility after a delivery. Of 33 providers who said that they told their postpartum clients when they were at risk of becoming pregnant again, only seven said that the return of fertility was associated with breastfeeding or the return of menstruation. All others said that fertility returned between the first and fourth month postpartum, with about 70 percent saying that it returned within the first two months. Furthermore, when asked if they knew the three essential conditions of LAM, only 55 percent could mention them all.

e) Referral mechanisms: None of the hospitals visited had a well established mechanism for referring postpartum and postabortion women who could not receive contraceptives before discharge to another service source. If they could not provide the method a woman asked for, five of the nine hospitals said that they asked women to come back to outpatient services later, and one hospital sent the women to the health center or post closest to their home. All these instructions were given verbally.

f) Record-keeping: All private hospitals kept good statistics on the number of deliveries they had (disaggregated by C-sections and vaginal deliveries) and of the number of maternal deaths. Public hospitals said that they recorded these events, but none was able to show us a copy of their reports. Statistics for postabortion care were worse than those of deliveries. Six of the nine hospitals said that they kept a record of the number of women who had received postabortion care, but only one of them (a private hospital) was able to show it to us. Statistics regarding postpartum and postabortion family planning services seemed to be non-existent.

4.7.2 PMTCT services

Seven of the nine hospitals had written norms or protocols for the prevention of mother to child transmission of HIV. The two hospitals that did not have any written norms were private. All the hospitals said that they offered HIV and PMTCT counseling to women delivering, but only five (four of them private) had some IEC materials to support these activities. All seven hospitals that indicated providing ART, either for the mother or the baby, had these products in stock at the time of the visit. They also kept an updated inventory of the antiretrovirals. For the mother, four hospitals had a combination of AZT + 3TC (Combivir) and Nevirapine; two had Combivir and Efavirenz, and one had Nevirapine and AZT. The eight hospitals where HIV testing was done had the necessary materials and staff. An updated inventory was kept in seven of the eight hospitals. Of the 18 providers who counseled WLH, 12 said that they recommended the use of the condom even if they were using another contraceptive and eight said that they advised them not to breastfeed.

4.7.3 Postpartum services provided in hospitals

a) Socio-demographic characteristics and fertility desires of hospital clients: Interviews were held with 125 women who had delivered at one of the 10 hospitals just before being discharged (23 in private and 102 in public hospitals). Practically all these women had attended at least one antenatal care visit (96 %). However, a comparison of their socio-demographic characteristics (shown in Appendix 12) with those of women interviewed during antenatal care shows that these women were slightly more likely to be teenagers, single, and literate. This implies that some of the illiterate, married women who attended antenatal care did not deliver in a health facility. Similar to women attending antenatal care and health centers in the six month postpartum period, half of these women did not want to have more children. Among those who did, only one wanted to become pregnant the following year and three wanted to wait two years before their next pregnancy. The majority (80%) wanted to wait more than three years, with 54 percent wanting to wait five years or more, a fact that has very clear implications for the delivery of family planning methods in these settings.

b) Early bonding: Women were given their babies shortly after giving birth and they spent most of the time together, but they did not always breastfed immediately, even if encouraged to. Nine out of 10 women kept their babies with them most of the time, but only half said that they had breastfed within the first hour after delivery. One-quarter of the women waited eight hours or more before breastfeeding for the first time. Through observations of a small number of women, it appears that some women preferred to wait until the shock and some of the pain of childbirth had passed before breastfeeding. We followed four women through their hospital experience and they were all given their babies shortly after delivery (immediately after weighting them and cutting the umbilical cord in two cases, and when they were transferred to the postpartum ward in the other two). One of the women who received her baby after the cord was cut was encouraged to breastfeed at that time, but she did not. A little later a nurse took the baby away. Shortly after the woman was transferred to the postpartum ward, the chief nurse brought the baby back to the woman and reminded her to try to breastfeed. This time the woman obeyed. The other three women breastfed for the first time in their beds in the postpartum ward.

c) Postpartum family planning counseling, breastfeeding and optimal-birth spacing information: Only 14 percent of the women interviewed after childbirth said that a provider had explained to them the risk of a new pregnancy if they did not use a contraceptive method (see Table 4). Half of these women were told that fertility returned when they stopped breastfeeding exclusively or when their menses returned, and the other half were told that it returned almost immediately after delivery. Informing women of the return of fertility before they leave the hospital is important, as our results show that most of them have an inaccurate idea that may negatively affect their contraceptive behavior. We asked all women, independently of whether they had received this information while in the hospital to deliver or not, if they knew when the fertility returned postpartum. One-quarter said that fertility came back with their menses, 5 percent said when they stopped breastfeeding, and 29 percent said within the first three months postpartum. The rest (41%) did not know.

Table 4. Proportion of women who received information about different family planning-related topics before hospital discharge for delivery, by type of hospital (%)

Type of information	Type of hospital		Total (n=125)
	Public (n=102)	Private or mixed (n=23)	
Return of fertility	12	26	14
Optimal birth spacing	30	39	32
Family planning counseling	22	39	25
Were offered a contraceptive method	34	39	35
Where to obtain a contraceptive method	3	17	6
How to breastfeed	31	52	34
Importance of exclusive breastfeeding during the first 6 months	69	53	66
What to do in the case of breastfeeding problems	17	10	16

Three-quarters of women did not receive any family planning information during their hospital stay for delivery, and two-thirds were not asked if they would like to use a contraceptive method. Women delivering in private hospitals more likely to receive information, as were women who

had three or more children. The effect of a woman's parity on the likelihood of receiving family planning services before hospital discharge was independent of the hospital where they delivered and of their age, marital status and literacy (see Appendices 13 to 15).

Sixty-six percent of women said that they were told of the importance of exclusive breastfeeding during the first six months, and 86 percent were told how to breastfeed, but just 16 percent were told what to do if they had a problem breastfeeding. Public hospitals seem to place more emphasis than private hospitals on giving information about breastfeeding and less emphasis on family planning. When asked how long they planned to breastfeed exclusively, 79 percent of women said six months, and the proportion was significantly greater among women who had been told about its importance before leaving the hospital (87% vs. 65%, $p=0.003$), showing that the information given at this time can influence behaviors.

d) Contraceptive methods: One quarter of women left the hospital with a contraceptive method, with no significant differences between public and private hospitals (30% vs. 25 %). Of these 32 women, nine received injectables and six received Norplant, even though the national norms recommended waiting four weeks before the use of these two methods by postpartum women (MSPP 1999) and WHO suggests waiting six weeks if women are going to breastfeed (WHO 2004). Six women were sterilized; four said that they would use LAM, three that they would use condoms, three mentioned pills, and two cited the calendar method. The other two did not specify what method they would use. The IUD was not given to any women despite its suitability for the postpartum period and its cost-effectiveness. Women who left the hospitals with an artificial method were informed of the potential side effects and the reversibility of the method, and the four women choosing LAM could remember its three conditions spontaneously.

We asked women who had not received a method before discharge if they would have liked to receive one; 38 percent of them did. Those who answered negatively preferred to wait at least three months before starting contraceptive use, and 43 percent of them said that they did not want to use contraception in the next six months. Only 13 percent of those who said that they wanted to use a contraceptive method in the next six months received a referral, all of them verbal.

4.7.4 Postabortion care services

a) Socio-demographic characteristics and fertility desires: Eleven women were interviewed right before they left the hospital after receiving postabortion care (eight in public hospitals and three in private ones). Seven were 20 years or younger, and six were single. Two had never attended school and did not know how to read and write; one had some primary education; seven had some secondary education, and one had some college. Four of the women were on their first pregnancy, and one was on her second pregnancy but did not have any children. One woman had one child, one had two and two had four. All of them had heard of family planning and half did not want to get pregnant at the time they did, but only one was using a contraceptive method. When asked whether they would like to have more children in the future, eight said that they would, two wanting to become pregnant again as soon as possible. The rest wanted to wait at least three years.

b) Family planning services: Only one of the 11 postabortion clients said that the providers had told her about the immediate return of fertility after the treatment, and only three said that they received family planning counseling and were offered a contraceptive method (which they all accepted) during their hospital stay. Even more, the results show that postabortion family planning services were not consistent within hospitals.

5. CONCLUSIONS AND RECOMMENDATIONS

These results show that the family planning needs of most of the women who have access to health services during postpartum and postabortion care in Haiti are not met. Half of women interviewed immediately after delivering in a health facility said that they would like to start using contraception immediately, but only one quarter had received a method before discharge. Contraceptive services are not frequently offered in the extended postpartum period; as a result, only 17 percent of the women in the six month postpartum period were using contraception and an estimated 39 percent were already at risk of an unplanned pregnancy. The situation is similarly poor for postabortion women, whose access to subsequent health services (and hence their opportunities to obtain family planning services) may be even more limited. While health facilities in Haiti have most of the resources needed for providing postpartum and postabortion family planning services, they are not adequately organized for these tasks. We believe that these services would greatly improve if the following recommendations are followed:

- Revision of the National Family Planning and Maternal Health Norms to specify that contraceptive methods should be systematically offered to women in their antenatal, postpartum and postabortion services.
- Organization of workshops to disseminate the contents of these norms and to refresh the knowledge of health providers involved in family planning, antenatal, postpartum and postabortion care on certain topics, such as the contraceptive eligibility criteria for postpartum and postabortion women, the return of fertility after a delivery and an abortion, and the correct use of the lactation amenorrhea method.
- Inclusion of family planning counseling and the delivery of temporary methods among the responsibilities of nurses and nurse auxiliaries in Ob-Gyn wards.
- Development of a mechanism to make temporary methods available to postpartum and postabortion women before hospital discharge. One alternative is to keep a small supply of contraceptives in the station of Ob-Gyn nurses.
- Systematic Screening: Health providers – including those in health facilities and those working in the community – should systematically screen all postpartum women to detect any unmet needs for family planning. The Systematic Screening technique developed by the Population Council (a brief questionnaire that is applied by the health provider) can be easily adapted for this purpose.
- Development of information, education and communication (IEC) materials to remind health providers of the need to offer family planning counseling and methods to all women in

antenatal, postpartum and postabortion care, and to guide them through this process. Several existing materials (such as those of FHI and the WHO) could be adapted for this purpose.

- Development of IEC materials to remind women in antenatal, postpartum and postabortion care of the key aspects regarding their return to fertility and where to obtain a contraceptive method when needed. These materials could be distributed both by facilities, community workers and midwives during their home visits.
- Development of monitoring, evaluation and supervision systems to oversee the delivery of family planning services in postpartum and postabortion services. An important starting point in these efforts should be the development of a system to record service statistics in public establishments, and the strengthening of this system in private and mixed institutions. In both cases, establishments should record the number of postpartum and postabortion users that received family planning services. Systems to keep updated written inventories of contraceptive stocks should also be reinforced.

Most outpatient services have adequately implemented HIV counseling for pregnant women, and at least three-quarters of the private and mixed facilities were offering HIV testing, but there is a need to strengthen HIV testing in public establishments. We also recommend that health providers involved in PMTCT activities be sensitized regarding the cultural and socioeconomic barriers that make it difficult for many women attending for antenatal care to agree to being tested for HIV, and for those testing positive to adhere to treatment. Many providers felt that PMTCT activities were unsuccessful because of the ignorance and lack of cooperation of users.

One aspect of PMTCT that is lacking is meeting the FP needs of women living with HIV. The women living with HIV that we interviewed were disadvantaged in many aspects (for example, less likely to be living with a male partner and more likely to be illiterate). They also had important unmet needs for family planning services (only one third was using a contraceptive, despite the fact that most did not want to have children in the next three years). We recommend that efforts be made to link family planning services to the health care of these women. Successful experiences such as those of FOSREF and GHEIKO can be used as examples of the concrete actions that need to be implemented.

REFERENCES

- Adé, Emmanuel, Laurent Eustache and Jean Pierre Guengant. 1996. *Institutions et personnel de santé en Haïti 1994-1995 [Health Institutions and Personnel in Haiti 1994-1995]*. Washington, DC. The Futures Group International, POLICY Project.
- Allman, James. 1982. "Fertility and Family Planning in Haiti," *Studies in Family Planning* 13(8/9):237-245.
- Cayemittes, Michel et al. 2001. Enquête Mortalié, Morbidité et Utilisation des Services, Haïti 2000 [Mortality, Morbidity and Utilization of Services Survey, Haiti 2000]. Calverton, Maryland: Ministère de la Santé Publique et de la Population, Institut Haïtien de l'Enfance and Macro International Inc.
- Cayemittes, Michel et al. 2007. Enquête Mortalité, Morbidité et Utilisation des Services EMUS IV, Haïti 2005-2006 [Mortality, Morbidity and Utilization of Services Survey, Haiti 2005-2006]. Calverton, Maryland: Institut Haïtien de l'Enfance and Macro Internacional Inc.
- Deschamps MM et al.. 2002. "Interventions to integrate HIV counseling testing and family planning (FP) and treatment to prevent mother to child transmission," paper presented at the XIV International AIDS Conference. Barcelona, Spain, July 7-12.
- Family Health International (FHI). 2000. Contraception After Pregnancy. *Contraceptive Technology and Reproductive Health Series*.
<http://www.fhi.org/training/en/modules/AFTER/intro.htm>) Accessed November 27, 2007.
- Family Health International (FHI). 2007. *FHI-Haiti Country Profile*.
(<http://www.fhi.org/en/CountryProfiles/Haiti+main+page.htm>) Accessed August 9, 2007.
- Institut Haïtien de Statistique et d'Informatique (IHSI). 2003. IV Recensement Général de la Population et de l'Habitat (Résultats Préliminaires) [IV General Population Census (Preliminary Results)]. Port au Prince, Haïti: Éditions des Antilles S.A.
- Israel, Ellen and Sheila Webb. 2001. "Tapping community opinion on postabortion care services," *Pathfinder International Technical Guidance Series*. Watertown, MA: Pathfinder International.
- JHPIEGO. 2003. "Training in Reproductive Health (TRH) Project," *Report of Key Results Achieved in FY03*.
- Johns Hopkins Center for Global Health. 2007. *Projects in Haiti*
(http://research.hopkinsglobalhealth.org/Country.cfm?country_code=HA) Accessed November 25, 2007.
- The Maternal Health Study. Futures Group. 2002. Indices des composantes du programme maternel et néonatal [Maternal and Neonatal Programme Effort Index (MNPI)].
- Maynard-Tucker, Gisele. 1996. "Haiti: Union, Fertility and the Quest for Survival," *Social Science and Medicine* 43(9): 1379-1387.

- McQuide, Pamela and Louis-Marie Boulos. 1999. Rapport Preliminaire d’Evaluation des Equipes Mobiles de CCV/Norplant [Preliminary Report of Evaluation of Female Sterilization/Norplant Itinerant Health Teams]. Port au Prince, Haiti: Family Health International.
- Mercier, Pierre. 2007. Interview by authors, written notes, La Antigua, Guatemala, October 11, 2007
- Ministère de la Santé Publique et de la Population (MSPP). 1999. Manuel de Normes de Travail en Planification Familiale et en Soins Maternels. A L’Usage du Personnel de Santé [National Family Planning and Maternal Health Norms]. Port au Prince, Haiti: MSPP.
- Ministère de la Santé Publique et de la Population (MSPP). 2003. *Compilation des Données Sanitaires de Routine 2001 [Compilation of Health Statistics 2001]*. Port au Prince, Haiti: MSPP.
- Ministère de la Santé Publique et de la Population (MSPP). 2003b. Plan Stratégique National de réduction de la Mortalité Maternelle, Mai [National Strategic Plan for the Reduction of Maternal Mortality, May]. Port au Prince, Haiti: MSPP.
- MSPP, Institut Haïtien de l’Enfance, John Snow Incorporated Research and Training Institute, Projet Haïti Santé 2004/Management Sciences for Health. 1998. *Analyse Situationnelle des Services de la Santé de la Reproduction 1998 [Situational Analysis of Reproductive Health Services 1998]*.
- PanAmerican Health Organization (PAHO). 2002. *Country Health Profile: Haiti. Data updated for 2001*. (<http://www.paho.org/english/sha/prflhai.htm>) Accessed August 9, 2007.
- PAHO. 2006. La Santé, un droit pour tous [Health, everyone’s right].
- Pathfinder International. 1998. “Module 13: Postpartum and Postabortion Contraception.” In *Comprehensive Reproductive Health and Family Planning Training Curriculum*. (<http://www.pathfind.org/pf/pubs/module13.pdf>) Accessed January 20, 2007.
- Private Sector Partnerships for Better Health. 2007. *Our work in Haiti website*. (http://www.psp-one.com/section/technicalareas/country_work/haiti) Accessed August 9, 2007.
- Sletten, Paul and Willy Egset. 2004. “Poverty in Haiti,” *Fafo-paper* 2004:31. 27 pp.
- UNAIDS. 2007. *Haiti. Country Situation Analysis*. (http://www.unaids.org/en/Regions_Countries/Countries/haiti.asp) Accessed November 27, 2007.
- UNAIDS. 2007. *07 AIDS Epidemic Update*. UNAIDS and World Health Organization. 60 pp.
- USAID Mission in Haiti. 2007. *Data Sheet*. (<http://www.usaid.gov/policy/budget/cbj2006/lac/pdf/ht521-003.pdf>) Accessed August 9, 2007.
- The World Bank. 2007. *World Development Indicators*. Washington, D.C.
- World Health Organization (WHO). 1996. Antenatal Care. Report of a Technical Working Group. 45 pp.
- WHO. 1997. Postabortion Family Planning: A Practical Guide for Programme Managers. Geneva: WHO. 90 pp.

- WHO. 2004. Medical Eligibility Criteria for Contraceptive Use. Third Edition, Geneva: WHO.
- WHO. 2005. Practice Recommendations for Contraceptive Use, 2nd edition. Geneva: WHO.
- WHO. 2005b. Decision-Making Tool for Family Planning Clients and Providers. Geneva: WHO.
- WHO and UNFPA. 2006. Glion Consultation on Strengthening the Linkages between Reproductive Health and HIV/AIDS: Family Planning and HIV/AIDS in Women and Children. WHO/HIV/2006.02
- WHO, INFO Project and USAID. 2007. Family Planning. A Global Handbook for Providers. Geneva: WHO.

Appendix 1. Health establishments in sample, by department, type of establishment (public, private or mixed), participation in PMTCT activities, and MSH support

Department	Name of establishment	Type	PMTCT activities	MSH support
Artibonite	H. Albert Schweitzer	Private	✓	
Artibonite	H. La Providence	Public	✓	
Artibonite	Centre de Santé Pierre Payen	Private	✓	
Artibonite	Centre de Santé Dumarsais Estime	Public		
Artibonite	Centre de Santé New Testament Lacroix Perisse	Private		✓
Artibonite	H. Claire Heureuse	Public	✓	✓
Artibonite	Service Santé de 1 ^{er} Echelon, Saint Marc	Public		
Artibonite	Dispensaire Pont Sonde	Private		
Nord	H. Justinien	Public		
Nord	H. Bienfaisance de Pignon	Private		
Nord	Centre Medical Sacré Cœur de Milot	Private	✓	
Nord	Dispensaire de Limonade	Public		
Nord	Centre de Santé Fort St Michel	Private		
Nord	Centre de Santé La Fossette	Mixed	✓	✓
Nord	Clinique Medico Chirurgcal Dugue	Private	✓	✓
Nord	Centre de Santé de Dondon	Public		✓
South	H. Lumiere de Bon Fin	Private	✓	✓
South	H. General des Cayes Immaculee Conception	Public		
South	Centre de Santé St Joseph de Torbeck	Public		
South	Centre de Santé de Quatre Chemins	Public		
South	Centre Hopital Aquin	Public	✓	✓
South	Dispensaire Lumiere	Private		
South	Klinik La Fanmy	Private	✓	
South	Hosp. Communautarie Port Salut	Public	✓	✓
South	Santé Communautaire Bonne Fin	Private		
South East	H. St Michel	Public		
South East	Dispensaire de Cayes Jacmel	Public		
South East	Centre de Santé de Bainet	Public	✓	✓
South East	Centre de Santé de Marigot	Public		
South East	Clinique Christian Martinez	Private	✓	✓
South East	Dispensaire Hopital St. Joseph	Private		
South East	FOSREF	Private	✓	✓
South East	Centre de Santé des Oranges	Public		
West	H. Ste Croix	Private		
West	H. de l'Université d'Etat d'Haiti (HUEH)	Public	✓	✓
West	H. de Carrefour	Public	✓	✓
West	Centre de Santé Ste Elisabeth	Private	✓	
West	Centre de Santé Materno Infantile	Public		✓
West	Centre de Medicine Com. De Darbonne	Private		✓
West	H. Adventiste Diquini	Private	✓	
West	Portail de Leogane	Public	✓	

Appendix 2. Agreement of National Family Planning and Maternal Health Norms with key international recommendations for postpartum family planning

Key recommendations	Haiti's Norms
Recommendations to increase access	
During antenatal care (ANC):	
Discuss infant health care, breastfeeding, optimal birth spacing (OBSI), women's fertility preferences and their contraceptive options. Start these discussions in the early visits and remind of the importance of contraception during the fourth visit.	☒ Encourage women to think about their desired spacing between births ☒ Give FP information in correspondence with the limitation or spacing desires of the women ☒ Give breastfeeding information to all women in ANC ☒ Remind women of the importance of exclusive breastfeeding during the first 6 months postpartum ☒ Give this information in all ANC visits ☒ No explanation of return of fertility after delivery
Make first ANC visit before week 12	☒ Recommends first visit as soon as possible, and before 4 th month
Test for syphilis early in pregnancy and treat as needed	☒ Test in first visit
Offer HIV testing and counseling	☒ Test for HIV if possible ☒ No mention of informed consent
Help women arrange for skilled attendance at birth, and for emergency care if emergencies arise	☒ Help prepare a birth plan. Choose a skilled birth attendant is chooses birth at home, or a hospital or health center with beds if wants institutional delivery ☒ Prepare in advance what will be needed for the arrival and care of the baby
Explain danger signs during pregnancy and childbirth	☒ Give information on maternal and child care in every ANC session ☒ Help women identify danger signs
In the immediate postpartum:	
Begin breastfeeding the newborn as soon as possible- within 1 hour after delivery	☒ Breastfeeding should start within half hour after delivery ☒ Bring the baby to the women immediately after childbirth ☒ Help women breastfeed immediately after delivery
Give FP advice, in combination with breastfeeding information, within six and twelve hours following childbirth	☒ Give FP, breastfeeding and maternal and child care information in the immediate postpartum care ☒ No explanation of return of fertility after delivery
Recommend fully or nearly fully breastfeed for 6 months	☒ Promote exclusive breastfeeding
If sterilization is the method of choice, perform the procedure before the woman leaves the hospital or in the first days postpartum	☒ Recommends counseling during ANC ☒ Give method in the immediate postpartum ☒ No explanation of what to do if giving birth at home

Offer FP methods, and, if desired, provide them	☒ No mention of the offer of FP methods or their delivery during the immediate postpartum ☒ Traditional birth attendants should offer condoms
Give women who want to wait some time before starting contraceptive use an appointment for follow-up FP care or a referral to a contraceptive source near their home	☒ No mention of referrals for FP services
If FP is not given in the immediate postpartum, coordinate FP visits with an infant's immunization schedule	☒ Give a referral for first postpartum visit ☒ No mention of referrals for FP services
Extended postpartum	
Use postpartum and child health care visits to offer and provide FP services	☒ One of the goals of postpartum care is to encourage women to choose a FP method ☒ Give FP, breastfeeding and maternal and child care counseling ☒ No explicit mention of the provision of contraceptive methods
Contraceptive eligibility criteria for postpartum women	
IUDs: Provide within 48 hours of childbirth, or wait 4 weeks	☒ Mention that can be used by breastfeeding women ☒ Recommends insertion between the 2 nd and 48 th hour after childbirth. Otherwise, wait 4 weeks
Female sterilization: Provide within 7 days of childbirth, otherwise wait 6 weeks	☒ Provide within first two days or wait 6 weeks
LAM is not effective after 6 months after childbirth, menses return, or if not almost fully breastfeeding	☒ Mentions all conditions and advantages
Fertility awareness methods: Start symptoms-based methods when normal secretions have started; and calendar-based methods once she has had 3 regular menstrual cycles	☒ Difficult to identify symptoms if breastfeeding ☒ No mention of how to identify the return of normal secretions ☒ Says that periodic abstinence can be used immediately after delivery
Progestin-only pills, progestin-only injectables and implants: In fully, nearly fully or partially breastfeeding women, do not start before 6 weeks after delivery.* Can be started immediately if women are not breastfeeding.	☒ Mentions that do not affect breastfeeding, but recommends waiting 6 weeks for breastfeeding women ☒ Recommends waiting 4 weeks before use in postpartum women ☒ Recommendations for starting date and cautions in breastfeeding women vary within the document. In some parts of the document it recommends waiting 6 weeks after delivery, and in others it recommends waiting 4 weeks, without mention of breastfeeding status

Combined oral contraceptives and monthly injectables: In fully and nearly fully breastfeeding women, do not start before 6 months after childbirth.* If partially breastfeeding, do not start before 6 weeks after childbirth.* In not breastfeeding women, do not start before 21 days after childbirth.*.	☒ Suggest prescribing with caution in breastfeeding women in the first 6 months ☒ Recommends waiting some time after childbirth in not breastfeeding women ☒ Inconsistencies throughout the text in the recommendations for not breastfeeding women: In one place it recommends waiting 4 weeks after childbirth and in other 6 weeks
Vasectomy, condoms, and spermicides can be used immediately after childbirth.	☒ No mention of cautions for postpartum women

* Earlier use is not recommended unless other, more appropriate methods are not available or not acceptable (WHO, INFO Project and USAID 2007)

Source: Content analysis of National Family Planning and Maternal Health Norms

Appendix 3. Agreement of National Family Planning and Maternal Health Norms with key international recommendations for postabortion family planning

Key recommendations	Haiti's norms
Recommendations to increase access	
Recommend not to have sex until bleeding has stopped (about 5 to 7 days) to avoid an infection	☒ No explicit mention
Provide counseling in a compassionate manner and in a private and confidential environment	☒ Inform women of their condition and necessary procedures
Discuss fertility desires, and if the user wants to become pregnant again soon, recommend her to wait at least 6 months	☒ Recommend waiting before next pregnancy
Inform women about the return of fertility (2 weeks after a first-trimester abortion and 4 weeks after a second-trimester abortion or miscarriage)	☒ No explicit mention
Provide information on family planning methods, and if desired, deliver methods before discharge	☒ Give FP counseling and services
In the case that women want to wait before starting contraceptive use, provide information on where to obtain methods and offer back-up methods (abstinence, male or female condoms, spermicides and withdrawal)	☒ No explicit mention
In the case that women decide not to use a contraceptive immediately, offer condoms and oral contraceptives, along with detailed explanations, to take home and use later	☒ No explicit mention
Contraceptive eligibility criteria	
Combined oral contraceptives, progestin-only pills, progestin-only injectables, monthly injectables, implants, condoms, spermicides, and withdrawal can be started immediately in any case	☒ No mention of cautions for postabortion women
Symptoms-based fertility awareness methods can be started once women do not have infection-related secretions or bleeding due to injury to the genital tract	☒ Mentions difficulty of use in case of vaginal infections, but no explicit mention of cautions in postabortion women
Calendar-based fertility awareness methods can be started with the next monthly bleeding if there is no bleeding due to injury to the genital tract	☒ No mention of cautions for postabortion women
IUDs can be started once infection is ruled out or resolved, and any injury to the genital tract has healed. IUD insertion after a second-trimester abortion requires a specially-trained provider	☒ Can be used immediately after a non-septic abortion ☒ In septic abortions, recommends waiting 3 months after infection has been cured ☒ Do not mention other special cases or the need to be specially trained

Female sterilization can be performed immediately if infection is ruled out or resolved and there is no severe post-abortion hemorrhage or trauma to the genital tract, as long as women have approved before hand and not while sedated, under stress or in pain. Otherwise, wait until infection or other problems have been resolved.	☒ Women should be fully aware when making their decision ☒ Can be performed immediately if there are no signs of infection
--	---

Source: Content analysis of National Family Planning and Maternal Health Norms

Appendix 4. Services offered during antenatal care, by type of establishment (%)

Service	Type of establishment		
	Public (n=20)	Private or mixed (n=19)	Total (n=39)
FP counseling	85	100	92
HIV counseling	80	89	85
HIV tests	45	74	59
ART	30	32	31
Syphilis test	65	79	72
Syphilis treatment	65	74	69

Source: Service inventories in outpatient services

Appendix 5. Contraceptive method availability and stock-outs in outpatient services, by type of establishment (number of centers)

Method	Public centers (n=20)			Private centers (n=19)		
	Said they offered	Had stock-outs in last 3 months	Had the method available	Said they offered	Had stock-outs in last 3 months	Had the method available
Pills	20	4	13	17	2	10
IUDs	3	1	2	6	0	6
Implants	3	2	2	4	3	4
Injectables	19	3	8	19	1	12
Condoms	20	2	3	17	4	5
Spermicides	17	3	14	14	2	13
LAM brochures	15	7	3	14	4	6

Source: Service inventories in outpatient services

Appendix 6. Socio-demographic characteristics of women interviewed in antenatal care, by type of establishment (%)

Characteristics	Type of establishment		Total (n=318)
	Public (n=210)	Private or mixed (n=128)	
Age			
19 or younger	9	16	12
20-34	84	76	81
35 and older	7	8	7
Marital status			
Married	31	32	31
Cohabiting (not married)	53	50	52
Single, widowed and divorced	16	18	17
Literacy			
Did not know how to read and write	19	22	20
Knew how to read and write	81	78	80
Education level			
No education	18	19	17
Some primary	19	33	25
Some secondary and more	63*	48*	58
Net parity			
0 children alive	52*	39*	47
1 children alive	22*	33*	26
2 or more children alive	26	28	27
Fertility desires			
Did not want any more children	54	55	54
Did not know if they wanted to become pregnant again	7	7	/
Wanted another pregnancy	39	38	39
Wanted to wait 2 years ^a	7	13	10
Wanted to wait 3 years or more ^a	76	73	75
Did not know how long to wait ^a	17	14	15
Gestational age			
1 st trimester	15	9	12
2 nd trimester	38	40	39
3 rd trimester	47	51	49
Number of ANC visits			
1	19	21	20
2	20	25	21
3	20	13	17
4 and more	42	40	41

^a Percentage estimated over those who want to have more children

* The difference between women interviewed in public and private establishments was significantly different (p<0.05)

Source: Exit interviews with women in antenatal care

Appendix 7. Socio-demographic characteristics of women interviewed in the six months postpartum, by type of establishment (%)

Characteristics	Type of establishment		Total (n=306)
	Public (n=184)	Private or mixed (n=122)	
Age			
19 or younger	11	19	14
20-34	76	71	74
35 and older	13	10	12
Marital status			
Married	37	33	35
Cohabiting (not married)	42	43	45
Single, widowed and divorced	21	24	20
Literacy			
Did not know how to read and write	17	25	20
Knew how to read and write	83	75	80
Education level			
No education	16	19	17
Some primary	23	28	25
Some secondary and more	61	53	58
Net parity			
1 children alive	39	36	38
2 children alive	29	36	32
3 or more children alive	32	28	30
Fertility desires			
Did not want any more children	57	59	58
Did not know if they want to become pregnant again	6	1	4
Wanted another pregnancy	36	40	38
Wanted to wait 1 year ^a	7	0	4
Wanted to wait 2 years ^a	12	13	12
Wanted to wait 3 years or more ^a	81	87	84
Time since delivery			
Less than one month	29*	46*	36
1-2 months	40*	27*	35
2-3 months	14	8	12
More than 3 months	17	18	17

^a Percentage estimated over those who want to have more children

* Significant difference between public and private establishments (p<0.01)

Source: Exit interviews with women in the six month postpartum

Appendix 8. Contraceptive use and willingness to use a contraceptive among women in the six-month postpartum period

Source: Exit interviews with women in the six-month postpartum period

Appendix 9. Factors associated with the risk of an unplanned pregnancy among women in the six-month postpartum: Results of a multivariate logistic regression

Variable	Odds-ratio	Robust S.E..	p
In the first month postpartum (ref.)			
In the 2 nd month postpartum	1.102	0.320	0.739
In the 3 rd month postpartum	2.556	1.188	0.043
In the 4 th to 6 th month postpartum	2.688	1.003	0.008
19 years old or younger (ref.)			
20-34 years old	3.248	1.494	0.010
Older than 35 years old	1.567	1.022	0.491
Single, divorced or widowed (ref.)			
Married or cohabiting	0.996	0.348	0.990
Illiterate (ref.)			
Literate	0.639	0.223	0.200
Primiparous (ref.)			
Had more than one child	0.632	0.232	0.211
Did not know that the return of fertility is associated to fertility and menses return (ref.)			
Knew association of breastfeeding and fertility	0.682	0.175	0.135
N	277		
$\chi^2(9)$	20.20		

Note: Robust estimation was used because data were clustered in health establishments

Source: Exit interviews with women in the six-month postpartum period

Appendix 10. Socio-demographic characteristics of ICU users interviewed, by type of establishment (%)

Characteristics	Type of establishment		Total (n=50)
	Public (n=29)	Private or mixed (n=21)	
Age			
19 or younger	8	5	7
20-34	92	90	91
35 and older	0	5	2
Marital status			
Single	15	25	20
Married	23	15	20
Cohabiting (not married)	35	55	43
Widowed and divorced	27	5	17
Literacy			
Did not know how to read and write	38	38	38
Knew how to read and write	62	62	62
Education level			
No education	38	14	28
Some primary	21	52	34
Some secondary and more	41	33	38
Net parity			
0 children alive	28	24	26
1 children alive	24	14	20
2 children alive	20	14	18
3 or more children alive	28	47	36
Fertility desires			
Did not want any more children	79	76	76
Did not know if they want to become pregnant again	10	0	7
Wanted another pregnancy	10	24	17
Wanted to wait less than 1 year ^a	20	0	12
Wanted to wait 3 years or more ^a	80	100	88

^a Percentage estimated over those who want to have more children

Source: Exit interviews with women in ICUs

Appendix 11. Differences in the knowledge of contraindications in contraceptive methods for breastfeeding women between providers in public and private hospitals (%)

Method	Type of hospital		Total (n=35)
	Private (n=15)	Public (n=20)	
Combined hormonals	80	53	69
Norplant	55	13	54
Injectables	70	33	37

Source: Interviews with providers in inpatient services

Appendix 12. Socio-demographic characteristics of women interviewed after a delivery, by type of hospital

Characteristics	Type of hospital		Total (n=125)
	Public (n=102)	Private or mixed (n=23)	
Age			
19 or younger	21	14	20
20-34	71	72	71
35 and older	8	14	9
Marital status			
Single	24	35	26
Married	35	30	34
Cohabiting (not married)	40	35	39
Widowed and divorced	1	0	1
Literacy			
Did not know how to read and write	10	17	11
Knew how to read and write	90	83	89
Education level			
No education	7	9	7
Some primary	27	26	27
Some secondary and more	66	65	66
Net parity			
1 children alive	50	45	49
2 children alive	21	32	26
3 or more children alive	29	23	28
Fertility desires			
Did not want any more children	54	61	55
Did not know if they want to become pregnant again or when	2	9	3
Wanted another pregnancy	44	30	42
Wanted to wait less than 1 year	2	0	2
Wanted to wait 2 years	7	0	6
Wanted to wait 3 years or more	78	100	80
Did not know when she would like to get pregnant again	13	0	12

Source: Exit interviews with women who had just delivered

Appendix 13. Analysis of the relationship between receiving family planning information and being offered a contraceptive method before hospital discharge for delivery and the establishment where women delivered

To explore whether some hospitals were more likely than others to give family planning information and to offer a method before discharge for delivery, we estimated bivariate t-tests on the proportion of women who received these services. We limited the analysis to hospitals where we interviewed more than 10 postpartum women. This left us with 90 women who had delivered in 4 hospitals.

Of the four hospitals explored, Justinien seemed to be the most likely to give family planning information and offer a method. However, the sample sizes do not allow us to determine whether this difference was statistically significant.

Hospital	Proportion of women who received FP counseling	Proportion of women who were offered a method
Immaculee Conception (n=23)	17	22
Justinien (n=41)	29	41
La Providence (n=10)	20	40
HEUEH (n=16)	19	31
All hospitals (n=125)	25	35
p-value	0.68	0.41

Source: Exit interviews with women who had just delivered

Appendix 14. Factors associated with the probability of receiving family planning information before hospital discharge for delivery: Results of a multivariate logistic regression

Variable	Odds-ratio	Robust S.E..	p
19 years old or younger (ref.)			
20-34 years old	2.163	1.619	0.303
Older than 35 years old	0.358	0.482	0.446
Single, divorced or widowed (ref.)			
Married or cohabiting	1.509	0.772	0.421
Illiterate (ref.)			
Literate	0.884	0.897	0.903
Primiparous (ref.)			
Had two children	1.024	0.606	0.968
Had three or more children	2.151	0.598	0.006
n	119		
$\chi^2(6)$	37.09		

Note: Robust estimation was used because data were clustered in health establishments

Source: Exit interviews with women who had just delivered

Appendix 15. Factors associated with the probability of being offered a contraceptive method before hospital discharge for delivery: Results of a multivariate logistic regression

Variable	Odds-ratio	Robust S.E..	p
19 years old or younger (ref.)			
20-34 years old	0.570	0.330	0.332
Older than 35 years old	0.266	0.196	0.072
Single, divorced or widowed (ref.)			
Married or cohabiting	1.986	1.049	0.194
Illiterate (ref.)			
Literate	0.475	0.271	0.192
Primiparous (ref.)			
Had two children	2.776	1.396	0.042
Had three or more children	2.473	0.992	0.024
n	119		
$\chi^2(6)$	29.77		

Note: Robust estimation was used because data were clustered in health establishments

Source: Exit interviews with women who had just delivered