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Maternal and Child Survival Program

Formative Research to Identify Factors that Impact the Use of Sexual and Reproductive Health Services by First-Time/Young Parents in Two Regions of Madagascar

Authors:
Sandrine Andriantsimietry
Justin Ranjalahy Rasolofomanana
Susan Igras
Melanie Yahner
Laza Noeliarivelo
Anja Ranjalahy Rasolofomanana
Jean Pierre Rakotovao
Marc Eric Razakariasy
Rachel Favero
Haingo Ralaison

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The Maternal and Child Survival Program (MCSP) is a global initiative funded by the United States Agency for International Development (USAID) to introduce and support high-impact health interventions in 24 priority countries with the ultimate goal of ending preventable child and maternal deaths within a generation. MCSP supports programming in maternal, newborn, and child health, immunization, family planning and reproductive health, nutrition, health systems strengthening, water/sanitation/hygiene, malaria, prevention of mother-to-child transmission of HIV, and pediatric HIV care and treatment. MCSP will tackle these issues through approaches that also focus on household and community mobilization, gender integration, and eHealth, among others.

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Abbreviations

ANC	antenatal care
BHC	basic health center
CHW	community health worker
DH	district hospital
DRH	district referral hospital
FGD	focus group discussion
FP	family planning
FT/YPs	first-time/young parents
IDI	in-depth interview
MCSP	Maternal and Child Survival Program
MNH	maternal and neonatal health
PNC	postnatal care
SRH	sexual and reproductive health
USAID	United States Agency for International Development

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Executive Summary

Background and Rationale

In Madagascar, childbearing begins early in a woman's life. By the age of 19, 57.3% of women have already become mothers or pregnant. Rapid-repeat pregnancy is frequent among younger mothers, that is, among mothers of ages 15–19, the median number of months between births is 25.1, compared with 32.7 among all women of reproductive age.[1] Madagascar's maternal mortality ratio of 478 maternal deaths per 100,000 live births[1,2] has not changed for over 10 years. United Nations Population Fund in Madagascar estimates that nearly one-third of maternal mortality in Madagascar may be among adolescents aged 15–19 years.[3] The 2008–2009 Madagascar Demographic and Health Survey reported a national contraceptive prevalence rate of 40% for any method, with lower rates for youth.[1] Twenty-five percent of women aged 15–19 years and 37% of women aged 20–24 years—and in traditional, civil, or church-sanctioned unions—were using family planning (FP) methods. Use of modern contraceptive methods was 17% for women aged 15–19 years and 28% for women aged 20–24 years.

Health consequences of early pregnancy and childbirth in mother and child are well documented in lower- and middle-income countries. Early pregnancies increase the risk of maternal mortality; young women under 20 years of age are two times more likely to die in childbirth than women who are over 20 years of age. Women below 15 years of age are five times more likely to die in childbirth than women who are over 20 years of age. Children of adolescent mothers have a 34% higher risk of death in the neonatal period and a 26% higher risk of death by 5 years of age.[4]

There is a clear need for interventions to connect pregnant girls and women and young parents to health services, ensuring the uptake of maternal and newborn care (MNC) and antenatal care (ANC) services, as well as ensuring healthy timing of the next pregnancy. Yet, globally, few models and best practices for reaching first-time/young parents (FT/YPs) exist. In Madagascar, the United States Agency for International Development's (USAID's) global Maternal and Child Survival Program (MCSP) is developing and testing an intervention to increase access to and use of essential ANC, MNC, and FP services that will concurrently create enabling environments and strengthen youth assets, so first-time mothers, fathers, and mothers- and fathers-to-be understand their sexual and reproductive health (SRH) choices and access services that are responsive to their needs. The first step in pursuing this intervention is to conduct formative research to identify factors that influence FT/YP's access to and use of SRH services at individual, family, and community levels, as well as within health services.

Formative Research Objectives

Primary research question: For FT/YPs, what factors influence their intention to seek services and to use ANC, MNC, and FP (including postpartum FP) services at relevant times over the course of their reproductive lives?

Subquestions:

1. What important social factors operating at family, peer, and community or institutional levels influence FT/YPs to seek services and to use ANC, MNC, and FP services at appropriate moments in their reproductive lives?
2. How does the young couple's communication and decision-making in relation to SRH influence their intentions to seek and use services at appropriate moments in their lives?
3. What are the primary sources of ANC, MNC, and FP information for FT/YPs?
4. What are the experiences of FT/YPs who receive ANC, MNC, and FP services?
5. What are local health facilities' responses to FT/YPs seeking services?

FT/YPs were defined as women and men aged 15–24 years, who have one or two children or are pregnant (first or second pregnancy), and who may or may not be in a traditional, civil, or church-

sanctioned union. FT/YPs or the term young parents are used interchangeably throughout this document.

Methodology

This research used a logical framework to capture SRH behavior of young parents, by multiple levels of influence. Five levels of influence were included: individual, couple, family, community, and health system. This approach allows the clarification of positive influences that lead young parents to change behavior and the identification of negative influences that prevent them from changing their SRH behavior.

Research Methods

The study used four data collection methods:

- *Compilation of SRH service data from facility registers* contributed in understanding the extent of services available to young parents and in creating a descriptive profile of young parents who currently access ANC, MHC, and FP services. Data were compiled from all study facilities from the previous 6 months.
- *Focus group discussions (FGDs)* were conducted with FT/YPs who did not use (or who had limited use of) SRH services for their last pregnancy and childbirth, parents and kin of FT/YPs, and community health workers (CHWs).
- *In-depth interviews (IDIs)* were conducted with FT/YPs who used SRH services during their last pregnancy and childbirth, influential nonfamily adults, and health care providers.
- *Health facility rapid assessments* were conducted using a checklist to understand the extent of the availability and quality of ANC, MNC, and FP services in all six facilities.

Findings

Findings by Level of Influence

Individual Level

On an individual level, the young men and women who participated in the study have very limited knowledge of SRH services. A small number of young parents from Vakinankaratra mentioned the importance of attending ANC during pregnancy. Likewise, they talked about preparing for the child's arrival, but their understanding of such preparation was mostly logistic. The need for and importance of umbilical cord care was mentioned by many young parents in the two study regions, although actual practices were not always sound. A few young men in Vakinankaratra talked about the benefits of exclusive breastfeeding for the young mother and her baby.

Young parents feel that the best time to have a second child is 2–6 years after the birth of the first child. Young parents base this estimation on the following observations: the first child grows well; the young mother is in good health; and the family has a stable or prosperous economic situation.

Young parents in both regions have no or limited knowledge of birth planning, and nearly all describe harmful practices during and after pregnancy, such as: doing manual labor during pregnancy to make the cervix open and reduce pain during delivery; and giving sugared water to newborns. In Menabe, specifically, incorrect knowledge largely derives from the influence of traditional birth attendants, who are known as *matrones*, on FT/YPs who do not have contact with the health system (nonusers of SRH services).

Another limiting factor noted with many nonusers of SRH services in Menabe is that any form of preparation for the baby's arrival is forbidden; due to customs and habits, reinforced by the precarious economic situation of the families, young parents are inclined to wait until the baby is born and expected to survive before preparing for its arrival.

Very few FT/YPs are exposed to SRH messages; for young parents, primary sources of information on SRH include their family (especially the mother or mother-in-law), community (neighbors or friends), and CHWs or health workers of specific projects, such as those sponsored by Marie Stopes International. Other FT/YPs received information from the media, including posters displayed in health centers or radio shows aired in collaboration with public or private health facilities. A few young fathers used their Internet-based smartphones to inform themselves about pregnancy. A few CHWs reported that they need more information about ANC and FP to perform their work.

Couple Level

During pregnancy, young fathers reported that their first priority is to stabilize their financial situation so that they may assume marital and economic duties to support their partners. Despite good intentions, support provided by the young father is not necessarily financial since he can seldom afford it. Instead, the help provided by the young father comes in the form of psychological and moral support through advice, encouragement, and companionship during the pregnancy. Sometimes, they express encouragement by self-adjusting their behavior (coming home on time, no longer drinking alcohol). Support from the father also includes encouragement for his partner to attend ANC and postnatal care (PNC) at the health facility, reminding her of appointments and sometimes accompanying her. In addition, young fathers help their partners by doing household chores and running errands in her place. This type of help is provided at all stages from pregnancy to delivery. In nearly all cases, young fathers are especially involved in transporting the young mother-to-be from home to the health center.

Young mothers are more opinionated regarding the place of delivery than their male partners. Most young mothers report that they decide the place of delivery because their interests are concerned. They decide on their own or often with the help of their mother, mother-in-law, or sister. Involvement of young fathers in determining the place of delivery is mixed; some allow their partners to decide the place of delivery because they think they have the knowledge required to decide, with some young fathers reporting that they participate in the discussion as responsible husbands and fathers. On the other hand, some young fathers felt it reasonable to allow their parents to decide the place of delivery and to fully rely on their opinion. Educated young fathers are more inclined to encourage their partners to deliver at a health facility.

Several criteria are considered when trying to decide the place of delivery, the most decisive ones being: quality of the delivery services; provider skills; safety (low risk of complications and death); costs; distance/proximity of the health facility; and quality of the relationship with providers. Family influences—primarily those of mothers, mothers-in-law, and sisters—and past experiences with a health facility or, in more frequent cases, the *matrone*, weigh significantly in the decision-making. It also depends on how close they are to these influencers, how discreet they are, and how close they live to a health facility.

Several factors may trigger FT/YPs to discuss pregnancy spacing, for instance, the enduring precariousness of the child's health, blatant instability of their family's economic situation, resumption of menstrual periods after the delivery, and a deep wish to improve things for their family. Sometimes, the young parents' discussion can be triggered by external pressure from parents or close relations.

Couples discuss steps to be taken to procure a modern FP method, relevant advice to seek, and any constraints relating to the FP method to consider. They also discuss side effects that they fear will happen from using modern FP methods. Fears of the young father are also addressed, especially his suspicions that the woman may want to use FP in order to be unfaithful.

FT/YPs did not report having open or comprehensive discussions on the decision to use FP. Young mothers are more inclined and determined to use FP, whereas many young fathers vehemently question the validity of using modern FP methods and are opposed to their partners using these methods.

Most young mothers are adamant that they are the ones who make the decision on using an FP method (alone or with the guidance and influence of their mothers, CHWs, or neighbors). Sometimes, they decide without asking their partner's opinion; they consider that pregnancy, delivery, and child care affect them

first and foremost, and the decision about using a FP method should be similar. Young mothers seem inclined to use FP methods and have a few fears about side effects.

Many young fathers fully leave FP-related decisions to the woman, believing that ensuring the health of the child and couple is the woman's job. However, other young fathers use their position as heads of household and breadwinners to pressure young mothers to not use FP methods; these young fathers report jealousy and a fear of side effects.

Family Level

Family members who are most frequently mentioned as providing help from pregnancy to delivery, during baby care, and in selecting an FP method are the young mother's mother, mother-in-law, and sister. They are present nearly throughout all these steps, whether together or in turn. Other close relatives help the FT/YPs but to a lesser extent; these include the grandmother, the father-in-law or father, and other close relations.

During pregnancy, the support provided by the mother, mother-in-law, or sisters consists of providing guidance and psychological support to the young mother and replacing the young mother in performing daily chores that she can or should no longer perform. Sometimes, the young mother's sister or mother goes to ANC with the young mother or refers her to a CHW for adequate pregnancy monitoring. When they can, the parents help by providing the necessary supplies and offering various gifts (e.g., financial donation, farmable land).

On the day of delivery, the mother, mother-in-law, or sister continues to provide encouragement and psychological support to the young mother. Depending on family habits, family members encourage the young mother to deliver at the health facility or with a *matrone*—most often the latter. Preparing supplies and meals, washing laundry, and running various errands are all entrusted to close relations. Transportation of the future young mother to the health center is generally entrusted to men (e.g., father, father-in-law, or husband) who also assume responsibility for arranging safe travel to the hospital in areas with high crime rates.

The mother or mother-in-law are the main postpartum helpers of FT/YPs. Their contributions come in various forms: encouraging young parents to follow the instructions of the *matrone* or midwife; keeping the mother warm; closely monitoring the young mother's diet so that she produces quality breast milk; following up on important aspects relating to the young mother's or child's health (immunizations, PNC); and teaching all aspects of baby care to the young mother.

Regarding the demand for or choice of FP method(s), the contribution of the family (especially the mother, mother-in-law, or sister) consists of asking the provider about specifics of the FP method, advising or orienting the young mother on informing herself through the CHWs or CSBs, or contributing to cover service costs. Some family members encourage the use of FP methods by sharing positive testimonies of their past experiences.

Community Level

Different community members are available at different levels to help FT/YPs with their needs. *Matrones*, CHWs, and midwives are frequently mentioned as being sought from pregnancy to delivery. Female neighbors and friends were also identified among community members who help young parents.

During pregnancy, FT/YPs receive advice, typically pertaining to healthy feeding and exercising for pregnant women, from nearly all community members. Midwives and *matrones* are especially appreciated for all forms of prenatal care, which is perceived as important.

At delivery, *matrones* and midwives are among the key support providers as they help the young mother deliver and provide any necessary medicine (midwife) or traditional medicines (*matrone*). Both register each birth with the commune. Birth registration is a system jointly initiated by public health facilities and the commune to limit recourse to *matrones;* however, *matrones* also use this system. Although *matrones* offer a range of services spanning from pregnancy to traditional FP, they are mainly present at delivery. Other

community members are present to facilitate delivery, for example, CHWs share information with FT/YPs on delivery-related services available at health facilities. Other CHWs provide transportation, such as a cycle rickshaw, to transport pregnant women from their homes to health centers. Sometimes, neighbors and friends help by providing company.

After delivery, young mothers receive support for baby care from their female friends and CHWs. CHWs participate in teaching breastfeeding to young mothers while friends provide various home care to the baby. Stronger involvement of CHWs, physicians, and midwives with young parents is noted when FT/YPs chose an FP method. They sensitize nonuser young parents to FP, encourage the use of FP methods, and explain existing offers. In doing so, some CHWs explain how FP is not hazardous. Sometimes, they assist in monitoring by reminding users of the date of their next contraceptive injection. However, CHWs lack information and evidence to counter rumors and misconceptions that prevent many FT/YPs from using FP.

Health Center Level

Most young parents attended an ANC visit in the first 16 weeks, but few completed four visits. ANC attendance varies by facility; in Bemanonga and Miandrivazo, less than 20% of girls aged 10–14 attended the first ANC visit.

Only 30.5% of women seen at ANC delivered at the health facility. During the FGDs and IDIs, many young mothers reported that the only reason they attended ANC services was to avoid being rejected by the health facility in case they had complications.

Specific barriers and facilitating factors related to the use of each SRH service are described below.

Antenatal care

ANC service users appreciate all activities involving careful assessment of maternal and child health (i.e., blood pressure measurement, weighing, communication of the estimated date of delivery, information on the growth of the baby, satisfactory answers to all questions, and provision of advice). The provision of medicines and administration of immunizations are appreciated and encourage ANC attendance. Young parents who are in contact with the CHWs or are exposed to ANC messages are more inclined to attend ANC services.

Some nonusers of ANC services, including those who used the services of *matrones*, are nevertheless convinced of the benefits of ANC for the mother and child. Further, the positive influence of previous use of SRH services by a close relation or family member promotes a positive attitude toward ANC.

However, ANC service users are especially critical of the long waiting times on ANC days, especially when they notice that the person in charge does other tasks while patients are waiting. Young fathers who use ANC services (as caretakers) highlight cases where the health worker is away for a long time when the FT/YPs have dedicated a full day and traveled a long distance to attend ANC. They are also unhappy with the lack of explanations during visits, especially when the provider gives vague answers or fails to address the patient's actual concerns.

Young mothers who use ANC services reported that providers, especially trainees (midwife, nurse), are stern and unfriendly. Trainees are, overall, perceived as new and inexperienced. Young mothers who use ANC services share other dissatisfactions linked with the taste of iron tablets, fear (or taboo) of injections, and the travels required by ANC, which they deem excessively frequent.

Some young mothers do not attend ANC because they are young and are ashamed of being seen at the health facility by the community. Other FT/YPs, due to a lack of information or knowledge on the usefulness and purpose of ANC, are not convinced of the necessity of ANC. In addition, the pressing influence of the spouse or family (mainly the mother or mother-in-law) who prefer the *matrone*, poses a strong barrier to many young parents wanting to attend ANC visits. For some FT/YPs, this is exacerbated by fears resulting from rumors on the potential side effects of tetanus toxoid-containing vaccinations or the pressure of some religious denominations regarding immunization.

Delivery

FT/YPs who use services at the health facility are satisfied because they are convinced that the management of delivery is better and offers the guarantee of lower risks. They are appreciative of the comfort provided by the management of delivery, range of advice provided, and services to accommodate young parents. They believe that the care provided allows for the prevention of infections and postpartum hemorrhage. They also appreciate that delivery at the health facility reduces the risk of death for the mother and baby; the health facility can properly manage complications as it has all required medicines, and it has practitioners who perform surgery. However, though they may be convinced, FT/YPs often do not deliver in facilities because of pressure from their parents or family to continue to use *matrones*.

The major complaints about delivery services at the facility include: the midwife makes them wait a long time even though delivery seems imminent; delivery management is partially or fully overseen by a trainee; there is a stock-out of important medicine at a critical moment of the delivery; the cost of delivery at the health facility is high or is liable to increase according to contingencies or required referrals; and costs are not fixed (e.g., cost changes according to the sex of the baby—more expensive for boys).

Three barriers to the use of facility-based delivery services were consistently cited:

1. Many FT/YPs and influential individuals interviewed felt that the risk of complication at delivery or during out-of-facility monitoring is extremely low. This perception results from confidence in the skills and knowledge of *matrones* or the pressing influence of close relations (e.g., mothers) who are accustomed to using *matrones'* services.
2. A second barrier—for nonusers of SRH services who are nevertheless convinced of the importance of delivering at the health facility—are financial or logistical, or both.
3. Thirdly, FT/YPs are ashamed to show up in front of the provider without essential items for the baby or mother (diapers, clothes, etc.).

Family Planning

Young parents who use FP services are convinced that modern FP methods are effective. Most appreciate the peace of mind resulting from the use of an effective FP method and are happy that a range of methods is available to facilitate their choice. Free access to and accessibility of FP methods, as well as the quality of the reception by the provider, feature among the criteria determining use or nonuse of FP methods. Many young parents who do not use FP and use *matrone* services follow the *matrone's* advice to use traditional methods to prevent a subsequent pregnancy.

Among young mothers, the main barriers to FP use are primarily due to misperceptions of FP methods. Some think that FP methods shorten life or cause more or less significant disturbances, such as "cooling the womb" and causing frigidity and discomfort during sexual relations. Some mentioned financial grounds for not using FP methods or tradition that prohibits the use of injections. Some FT/YPs who use FP methods become reluctant to continue due to side effects. Others are unhappy with a recent increase in cost, while some others reported that the provider gave little or no explanation to help youth understand their FP method options and potential side effects.

Recommendations

Programs targeting FT/YPs should use a socioecological approach to engage key influencers of young parents, particularly mothers and mothers-in-law, in addition to engaging young mothers and fathers directly and building the capacity of the health system to provide services that are friendly and attractive to young people.

Individual/Couple

- Engage both young mothers and young fathers, addressing gender norms, building capacity for couple communication, and encouraging positive male involvement in postpartum FP and parenting.
- Use messaging to emphasize the benefits of health service use, particularly in the reduction of risk, to mother and baby. Challenge attitudes and social norms that stigmatize pregnant adolescents and young mothers.

Family

- Ensure that individuals with significant influence over young parents' decisions, particularly mothers and mothers-in-law, have accurate information about safe delivery; PNC, including postpartum FP for healthy timing and pregnancy spacing; and newborn care.

Community

- Ensure that all CHWs are trained in FP counseling and equipped with short-acting methods.
- Build the capacity of CHWs to sensitize youth on the use of SRH services (messages should be oriented to CHWs having correct knowledge on SRH and on the importance and benefits of using SRH services).

Health System

- Ensure that health services are friendly and welcoming to young people through a whole-site training that addresses provider attitudes and beliefs. Specifically:
    - To mitigate concerns about the skills of providers in training, entrust the first ANC visit to an experienced health care provider who, where necessary, introduces young parents to a trainee. This experienced health care provider ensures effective supervision of the trainee.
    - Encourage attendance at subsequent ANC visits. Develop a delivery preparedness plan in the ANC card, with monitoring to be ensured by CHWs to encourage delivery at the facility.
    - Assess the causes of stock-outs of medicines, FP methods, vaccines, and other products, and determine actions that need to be taken to ensure full and consistent supply of all services.
    - Build on the "cycle-rickshaw-ambulance" component of the Madagascar Community-Based Integrated Health Project to address emergency transportation in rural and peri-urban areas.
    - Establish specific service days and hours for youth.
    - Provide information on the price of services, and ensure that there is transparency in pricing.
    - Train health workers on correctly and consistently completing SRH registers, and establish a system for routine analysis and application of register data.

Introduction

Context

In Madagascar, childbearing begins early: 57.3% of women have already become mothers or are pregnant by the age of 19.[5] Rapid-repeat pregnancy is frequent among younger mothers; among mothers aged a 15–19, the median number of months between births is 25.1, compared with 32.7 among all women.[5] Health consequences of early pregnancy and childbirth in mother and child are well documented in lower- and middle-income countries. Early pregnancies increase the risk of maternal mortality; young women under the age of 20 are twice as likely to die in childbirth as women over the age of 20, and women below the age of 15 are five times as likely to die in childbirth. Children of adolescent mothers have a 34% higher risk of death in the neonatal period and a 26% higher risk of death by 5 years of age.[6]

With the implementation of the new Roadmap for Accelerated Reduction of Maternal and Neonatal Mortality in Madagascar 2015–2019, Madagascar confirms its resolve to offer better health to its population by alleviating the burden of maternal and child mortality. The strategy involves reaching out to young parents (mothers, fathers, couples) to provide them with relevant knowledge, skills, and motivation to make decisions about their health.

There is a clear need for interventions to connect young pregnant women and parents to health services, ensuring the uptake of maternal and newborn care (MNC) and antenatal care (ANC) services as well as ensuring healthy timing of a subsequent pregnancy. Yet, globally, there exist few models and better practices for reaching first-time/young parents (FT/YPs). A significant gap in facility and community responses to parents aged 15–24 was identified through a 2014 international consultation on young parents, which was organized by the Evidence-to-Action Project that was funded by the United States Agency for International Development (USAID), as part of a global literature review on the state of programs for young parents.[7]

In Madagascar, USAID's global Maternal and Child Survival Program (MCSP) is developing and testing an intervention to increase access to and use of essential ANC, MNC, and family planning (FP) services that will concurrently: create enabling environments; strengthen youth assets to allow first-time mothers, fathers, and mothers- and fathers-to-be to realize their sexual and reproductive health (SRH) goals, and access services that are responsive to their needs. The first step involved is to conduct formative research to identify factors at individual, family, and community levels, as well as within health services, which influence FT/YPs' access to and use of SRH services. The main research question was: **What factors influence FT/YPs' intention to seek and use ANC, MNC, and FP (including postpartum FP) services at relevant times in their reproductive lives?**

In this study, first-time/young parents (FT/YPs) were defined as: women and men aged 15–24, who have one or two children or are pregnant (first or second pregnancy), and who may or may not be in a traditional, civil, or church-sanctioned union. FT/YPs and the term young parents are used interchangeably.

The results of this research will enhance existing data and inform various stakeholders involved with the health of Malagasy youth on the individual, family, community, and service factors that influence the seeking and use of SRH services. In particular, the results will serve as a basis and reference for the design of the next MCSP intervention to improve the health facility's response to the needs and expectations of young parents regarding SRH services. The recommendations in this report will guide and justify the strategic decisions of the intervention.

Research Objectives and Methodology

Objectives

The primary research question was: for FT/YPs, what factors influence their intentions to seek SRH services and to use ANC, MNC, and FP (including postpartum FP) services at relevant times in their reproductive lives?

Subquestions included:

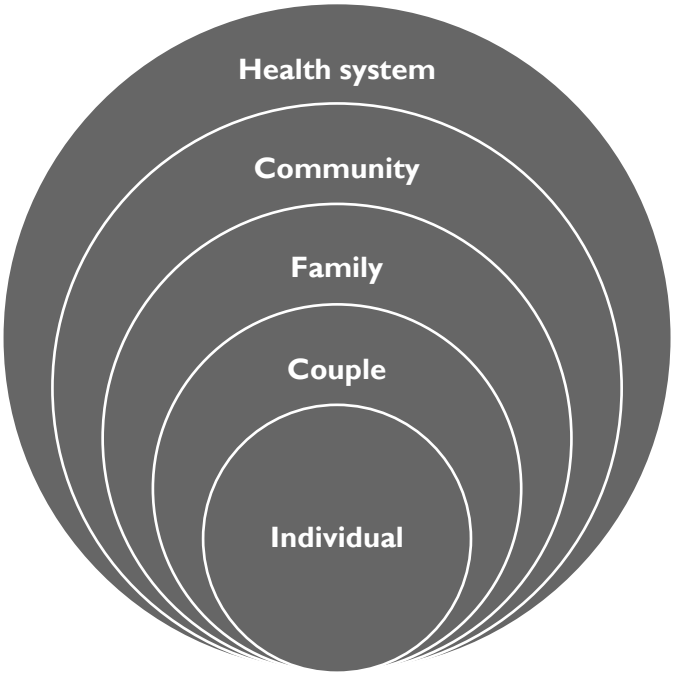
1. What are important social factors operating at family, peer, and community or institution levels that influence FT/YPs to seek services and to use ANC, MNC, and FP services at appropriate moments in their reproductive lives?
2. How does the young couple's communication and decision-making regarding SRH influence their intentions to seek and use services at appropriate moments in their lives?
3. What are primary sources of information on ANC, MNC, and FP for FT/YPs?
4. What are the experiences of FT/YPs who receive ANC, MNC, and FP services?
5. What are the local health facility responses to FT/YPs seeking services?

Methodology

Design

This formative research is a descriptive and cross-sectional study to support the development of an effective intervention. The theoretical framework chosen to guide the formative research approach and questions is the ecological model, in particular, the ecological framework for adolescent health[8] (Figure 1). This model recognizes levels of social and institutional influences on individuals that can lead or create barriers to permanent individual behavioral changes. This research was approved by the National Ethics Committee of Madagascar and by the Ethics Committee of The Johns Hopkins University in the United States. The study detailed the characteristics of young parents aged 15–24, both individuals and couples, as users of SRH services. It provides a better understanding of the interests, behaviors, needs, and strengths/opportunities among family, peers, and community, which influence young parents' decisions and actions.

Figure 1. Ecological model of levels of influence for first-time/young parents (FT/YPs)



The study was conducted in three sites in the two regions of Menabe and Vakinankaratra. These three sites are representative of the different environments (urban, peri-urban, and rural), and the data gathered will inform on the prospective differences among young parents in these areas. The six health facilities selected for research were:

1. Menabe region: district hospital (DH) I in Miandrivazo, peri-urban basic health center (BHC) II in Bemanonga, and rural BHC II in Ankilizato
2. Vakinankaratra region: DH I in Betafo, peri-urban BHC II in Andranomanelatra, and rural BHC II in Ankazomiriotra.

The primary research participants were young parents aged 15–24, both users and nonusers of SRH services. To better understand the factors studied and the implications for use of SRH services, parents or relatives of young parents aged 15–24, influential people from the community, community health workers (CHWs), and SRH service providers were also sampled.

Participants had to meet these eligibility criteria to be in the study: i) living within 10 km of the health facilities selected for the study; ii) giving consent to participate; iii) for minors, having a parent or guardian authorize consent; and iv) being unrelated to other participants.

Each study group had specific eligibility criteria:

- ***Young parents:*** aged 15–24 (with two distinct age groups: 15–17 and 18–24 years), with one or two children or pregnant with the first or second child, either married or unmarried
- ***Parents/influential persons of young parents:*** parent or relative of a young parent aged 15–24 with one or two children or pregnant with the first or second child
- ***Influential community members:*** categories of people cited by young parents using SRH services as being influential to them
- ***CHWs:*** provider of health education in the communities served by health facilities selected for study
- ***Health care providers:*** most experienced providers of health services (ANC, maternal and neonatal health, or FP) in the health facilities selected for the study

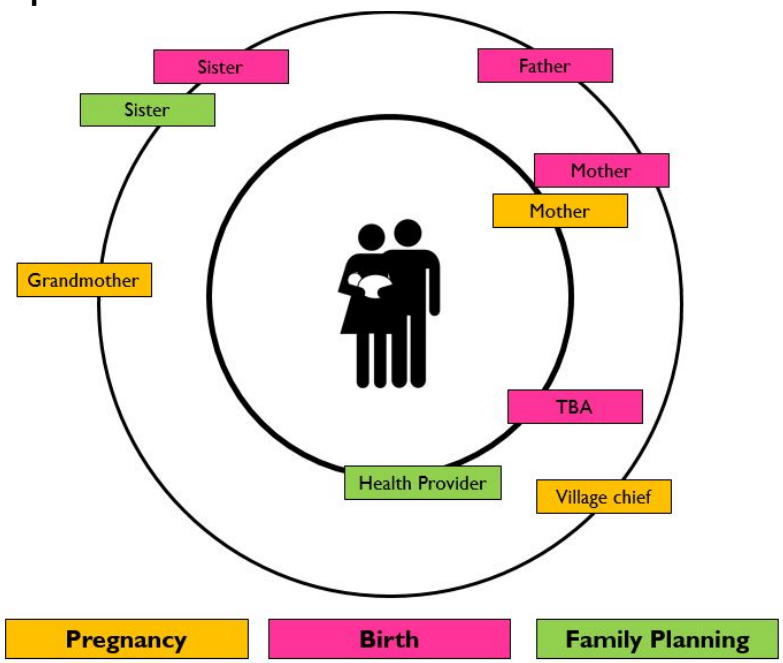
Data were collected in June 2016. Data were collected in two phases to allow for a rapid analysis of data gathered from the influence mapping effort, in order to inform the selection of influential individuals for participation in the study. The activities undertaken during the first phase were: collection of registers; focus group discussions (FGDs) with CHWs; interviews with SRH providers; and interviews with young parents aged 15–24 who were SRH clients (identified in facility ANC visits or MNH registers selected for the study). A rapid analysis of the interviews with young parents allowed for identification of their family, friends, and other persons they see as influential in the community for SRH-related questions. After the rapid analysis, the activities undertaken during the second step were: interviews with influential persons; FGDs with young parents aged 15–24 who were SRH clients; and FGDs with parents/relatives of young parents.

Data collection methods and tools included:

- ***Health facility register reviews collected service statistics*** to help understand to what extent services are reaching young parents, as well as to create a descriptive profile of young parents who are currently accessing ANC, MNC, and FP services. Data from the previous 6 months were compiled from all facilities participating in the study.
- ***FGDs with FT/YPs who did not use SRH services*** explored perceptions of young couples who did not use SRH services, and the support that young couples receive from their family and others for pregnancy, childbirth, and pregnancy spacing. The FGD guides used a participatory method of asking participants to respond to a vignette about a young couple.
- ***FGDs for CHWs*** identified the organization and training of CHWs and probed on the use of SRH services by young parents.

- *FGDs with parents and other influential kin of FT/YPs* identified the roles and responsibilities of the family in supporting young parents and the use of SRH services by young parents. The FGD guide used a participatory process to engage participants in a discussion about family members who supported FT/YPs and their specific roles.
- *In-depth interview (IDI) guides for FT/YPs who used SRH services* identified: household context (age of couple, number of children, household members, etc.); people who supported pregnancy, childbirth, and FP use (identified through the use of participatory influence mapping process); support of the mother by father, couple dynamics; experiences with SRH service use (satisfaction, suggestions); and barriers to SRH service use for young mothers and mothers-to-be. The IDI guides used a participatory influence mapping process to identify individuals who were influential during FT/YP's pregnancy and experience as new parents. Interviewers used a piece of paper with two concentric circles and a set of post-it notes in three different colors to represent different SRH stages or SRH services. Participants were asked to identify individuals (e.g., aunt, friend) who were helpful or influential during their pregnancy. The facilitator helped the participant write the individual's name on a post-it note; participants placed these labels on the paper, and the placement of the label in relation to the proximity to the center of the concentric circles corresponded to how helpful that person was to them. The process was repeated using post-it notes of different colors for childbirth and FP services; see Figure 2 for a sample of a completed influence map.
- *IDIs for health service providers* explored their experience with the service delivery context, service for young parents, and problems affecting new or young parents.
- *IDIs with influential individuals identified their role in community and support of young* people and couples, community views on FT/YPs, and issues facing FT/YPs.

Figure 2. Sample completed influence map from in-depth interviews with FT/YPs



Data Collection

Data were collected by two teams, each composed of a female supervisor/team lead and four researchers—two women and two men—working in parallel. The Principal Investigator and Coprincipal Investigator supervised the work along with the local MCSP team and the Head of the Adolescent Sexual and Reproductive Health Service within the Ministry of Public Health Family Health Directorate. The supervisors/team leads and researchers had prior experience in applied qualitative health research and IDI/FDG as well as prior training on research protocols and ethics. They actively participated in pretesting the data collection tools.

Recruitment of Participants

Health care providers who provided SRH services were recruited for participation; when more than one provider at a facility provided SRH services, the more senior staff was recruited. FT/YPs who had used SRH services were purposively selected from facility registers (ANC, MNC, and FP registers) in consultation with health care providers from a list of potential participants identified from registers based on client age data. Phase 2 participants (FT/YPs and family/kin, and influential community members) were identified and recruited in collaboration with CHWs. The research team determined the categories of community members to interview, based on preliminary results from IDIs with FT/YPs, and then collaborated with CHWs to identify and recruit individuals for participation in Phase 2.

Young parents aged 15–24 who were not using SRH services (24 FGDs), parents/relatives of young parents (4 FGDs), and CHWs (4 FGDs) met the eligibility criteria and participated in the FGD. A total of 32 FGDs were organized in two regions (see Table 1). Four different FGD guides were used, according to the target group category.

Table 1. Breakdown of focus group discussions by target group and health facility

Participant groups and data source		Region 1: Menabe						Region 2: Vakinankaratra						Total	
		DRH II Miandrivazo		BHC II peri-urban Bemanonga		BHC II rural Ankilizato		DRH II Betafo		BHC II peri-urban Andranomanelatra		BHC II rural Ankazomiriotra			
		FGD	Part	FGD	Part	FGD	Part	FGD	Part	FGD	Part	FGD	Part	FGD	Part
1	Young/expectant mothers aged 15–17	1	7	1	8	1	5	1	8	1	8	1	8	6	44
2	Young/expectant mothers aged 18–24	1	7	1	7	1	7	1	8	1	8	1	8	6	45
3	Young/expectant fathers aged 15–17	1	8	1	7	1	6	1	8	1	7	1	8	6	44
4	Young/expectant fathers aged 18–24	1	8	1	7	1	5	1	8	1	7	1	8	6	43
5	CHWs linked to the BHC	-	-	1	8	1	7	-	-	1	8	1	8	4	31
6	Influential parents/relatives	-	-	1	8	1	8	-	-	1	8	1	8	4	32
	Total number of FGD participants													239	
	Total number of FGDs													32	

Note: basic health center (BHC); community health worker (CHW); district referral hospital (DRH); focus group discussion (FGD); individual in-depth interview (IDI); participants (part)

Key informants interviewed during the study included: 24 young parents, aged 15–24 years, who were SRH clients during their last pregnancy or delivery and were identified through SRH registers; eight SRH providers (ANC, MNH, FP); and 12 influential persons in the community (see Table 2). An IDI with a provider from DH Betafo was replicated because the original respondent, while the most experienced at the facility, did not provide SRH services.

Table 2. Breakdown of in-depth individual interviews by participant type and health facility

Participant groups and data source		Region 1—Menabe			Region 2—Vakinankaratra			Total IDI
		DRH II Miandrivazo	BHC II peri-urban Bemanonga	BHC II rural Ankilizato	DRH II Betafo	BHC II peri-urban Andranomanelatra	BHC II rural Ankazomiriotra	
1	Young/expectant mothers aged 15–17	1	1	1	1	1	1	6
2	Young/expectant mothers aged 18–24	1	1	1	1	1	1	6
3	Young/expectant fathers aged 15–17	1	1	1	1	1	1	6
4	Young/expectant fathers aged 18–24	1	1	1	1	1	1	6
5	Providers	2	1	1	2	1	1	8
6	Influential persons	2	2	2	2	2	2	12
	Total number of participants							44
	Total number of IDIs							44

Note: basic health center (BHC); district referral hospital (DRH); individual in-depth interview (IDI); participants (part)

The interview and discussion guides, recruitment scripts, and consent forms were developed, pretested, and finalized ahead of time and then approved by two ethical committees.

Interviews and group discussions were audio-recorded and were 25–75 minutes and 60–120 minutes in duration, respectively. Notes were also taken during the IDIs and FGDs. After each activity, a summary of collected data was prepared. The summaries allowed for discussion of possible data saturation by comparing new and already collected data. The IDIs and FGDs were carried out inside or on the health facility compound, the commune office, or at the participant's home.

Quantitative research: collection of registers and health facility rapid assessment

In each facility participating in the study, all ANC, delivery, postnatal care (PNC), and FP registers were compiled for young women aged 15–24 years who were seen in the last 6 months. Due to the collaboration between BHC II Miandrivazo (supervisor for ANC, months 1–7) and DH I Miandrivazo (supervisor for ANC from month 9 to delivery), BHC II Miandrivazo was also considered for the collection of registers. A rapid assessment of each of the six facilities was also conducted to identify the availability and quality of ANC, MNH, and FP services.

Data Analysis

An analysis plan was developed based on Blum's socioecological model.[8] For the qualitative component, the code guide was designed with reference to the analysis plan and incorporated all questions from the IDI and FGD guides. As mentioned above, analysis of the IDI with young parents aged 15–24 years started in the field to identify relatives and community members they found most influential for answering SRH-related questions A daily debriefing was also conducted to summarize the main findings from each IDI and FGD. Each IDI and FGD was transcribed in Malagasy and then translated into French.

The French transcripts were coded by three analysts using the Atlas.ti 7 software. Influence mapping schemes from the IDIs with young parents and FGDs with parents/relatives were also studied. Emerging themes were added as they became apparent. The coding outputs were interpreted to answer the research questions, highlighting the specificities of each type of respondent and specifying the notable differences according to age, gender, and place of residence. The main results have been included in this report. For the quantitative component, a descriptive analysis of register data and the rapid analysis of health facilities were carried out. Quantitative data were categorized by the corresponding qualitative themes and are presented in the Results Section of this report.

Study Limitations

Gathering and analyzing register data were limited by the partial availability of registers (e.g., no PNC registers at BHC II Ankazomiriotra) and data (e.g., no age data, no data on FP side effects—even if the registers had space designated to record such data).

Qualitative research identified key factors influencing the use of SRH services by young parents. However, it did not allow for ranking of factors in the order of importance (which a quantitative survey can provide) in order to prioritize response strategies.

This formative research provides insight on influential factors in the two regions of Menabe and Vakinankaratra. The proposed recommendations arising from the results of the research apply to the two regions as part of a pilot intervention and are not systematically applicable to other regions.

Results

General Context

Profile of Young Parents

The average age of young parents encountered in this formative research was 19, and most became sexually active at an early age (between 12 and 13) (see Table 3). From an economic perspective, it is important to note that six out of 10 of these young parents are farmers. Although they have been farming since childhood, they do not know how to manage their own business and are "beginner and dependent" managers. Income generated from agriculture is seasonal and limited, accounting for the very precarious economic situations in which these young parents live. Additionally, most FT/YPs are not significantly involved in events or associations outside the home.

Table 3. Sociodemographic characteristics of young parents

	SRH users (n=24)	SRH nonusers (n=176)	Total (n=200)	P-value
Age (years)				**0.69ω**
Mean	18.92	19.17	19.14	
SD	2.7	2.9	2.87	
Education (%)				**0.06***
No education	0.0	9.09	8.0	
Primary (1–4 years of study)	16.67	36.93	34.5	
Secondary (5–9 years of study)	79.17	52.27	55.5	
CESS (10–12 years of study)	4.16	1.14	1.5	
University	0.0	0.57	0.5	
Profession (%)				**0.99***
Student	8.33	9.09	9.0	
Service	4.17	5.11	5.0	
Business	20.83	16.48	17.0	
Agriculture	58.33	61.36	61.0	
Other	8.33	7.95	8.0	
Marital Status (%)				**0.29***
Single	0.0	0.0	0.0	
Married or common-law	100.0	95.45	96.0	
Separated	0.0	0.0	0.0	
Divorced	0.0	0.0	0.0	
Widowed	0.0	0.0	0.0	
Other	0.0	4.55	4.0	

*Pearson's χ^2

ω Two-sample t-test with equal variances

Note: Certificat d'Enseignement Secondaire Supérieur (Certificate of Higher Secondary Education, [CESS]); standard deviation (SD)

In most cases, young parents start life as a couple following an unexpected pregnancy. About half of the young parents attended the same school and met between the beginning of middle school and high school. The others met at church, work, the market, during festivities (funeral rites, soccer), or in the neighborhood. A minority met through a relative, usually an older brother or sister. In general, parents and youth have little-to-no communication about SRH before the pregnancy. Usually, the pregnancy was unintended, and they are unprepared for it, and the young parents are often forced by one or both sets of parents to enter into union. Nearly all young parents maintain relationships with their family and the community. Cases where they are cut from their family are rare; none are cut from the community.

Almost all young parents are surrounded by family and community. However, the connection (even cohabitation) with the family or the community does not automatically involve mutual support; it is conditional, based on their financial capacity, the quality of their communication, and the physical or moral strength of their relatives.

Most young parents who participated reported having no social life because they do not have the time. A minority belong to sport clubs, scout groups, church choirs (different denominations: Catholic, Protestant, Lutheran, Evangelical, Pentacostal), and professional or cooperative associations (agriculture and animal husbandry).

Profiles of Influential Persons, Community Health Workers (CHWs), and Health Care Providers

As shown in Table 4, the mean age *for parents and relatives* of young parents (n = 32) who participated in the study was 43.84 years (± 14.3) compared with the mean age of 35.5 years (± 10.3) among *influential persons* (n = 12) in the community. Influential persons had received more education. While most parents and relatives were farmers (75%), influential persons were more likely to be working in the service sector (63.64%).

Table 4. Profiles of parents, relatives, and persons who influence young parents

	Parents and relatives (n=32)	Influential persons (n=12)	Total (n=44)	P-value
Age (years)				**0.073ω**
Mean	43.84	35.5	41.57	
SD	14.3	10.36	13.75	
Education (%)				**0.000***
No education	6.25	0.0	4.55	
Primary (1–4 years of study)	28.12	0.0	20.45	
Secondary (5–9 years of study)	65.62	50.0	61.36	
CESS (10–12 years of study)	0.0	0.0	4.55	
University	0.0	16.67	9.09	
Professional Training	0.0	33.33		
Profession (%)				**0.002***
Student	0.0	0.0	9.0	
Service	9.38	63.64	5.0	
Business	9.38	0.0	17.0	
Agriculture	75.0	27.27	61.0	
Other	6.22	9.09	8.0	
Marital Status (%)				**0.707***
Single	0.0	0.0	0.0	
Married or common-law	81.25	66.67	77.27	
Separated	6.25	8.33	6.82	
Divorced	0.0	0.0	0.0	
Widowed	6.25	8.33	6.82	
Other	0.0	0.0	0.0	

*Pearson's χ^2

ωTwo-sample t-test with equal variances

- no data

Note: Certificat d'Enseignement Secondaire Supérieur (Certificate of Higher Secondary Education, [CESS]); standard deviation (SD)

As shown in Table 5, the average age of CHWs (n=31) was 44.9 years (± 44.9), and they worked an average of 9 years. They were mostly married (83.87%) and had achieved the level of secondary education (67.7%). They also worked as farmers (70.97%).

Table 5. Profile of community health workers (CHWs)

	CHW (n=31)
Age (years)	
Mean	44.9
SD	11.48
Number of years as CHW (years)	
Mean	9.06
SD	8.23
Education (%)	
No education	0.0
Primary (1–4 years of study)	22.6
Secondary (5–9 years of study)	67.7
CESS (10–12 years of study)	9.7
University	0.0
Professional Training	0.0
Profession (%)	
Student	3.23
Service	9.68
Business	16.13
Agriculture	70.97
Other	3.23
Marital Status (%)	
Single	3.23
Married or common-law	83.87
Separated	9.68
Divorced	0.0
Widowed	3.23
Other	0.0

Note: Certificat d'Enseignement Secondaire Supérieur (Certificate of Higher Secondary Education, [CESS]); community health worker (CHW); standard deviation (SD)

As shown in Table 6, for SRH service providers, five out of eight provided three types of services (ANC, MNH and FP) while the others provided only one of these services.

Table 6. Profiles of health care providers and sexual and reproductive health (SRH) service providers

	Health providers, SRH providers (n=8)
Age (years)	
Mean	37.38
SD	11.01
Training (%)	
No education	0.0
Primary (1–4 years of study)	0.0
Secondary (5–9 years of study)	12.5
CESS (10–12 years of study)	0.0
University	37.5
Professional Training	50.0
Profession (%)	
Student	37.5
Service	100.0
Business	37.5
Agriculture	12.5
Other	0.0
Service Provided (%)	
ANC	87.5
Delivery and PNC	87.5
FP	75.0

Note: antenatal care (ANC) ; *Certificat d'Enseignement Secondaire Supérieur* (Certificate of Higher Secondary Education, [CESS]); family planning (FP); postnatal care (PNC); sexual and reproductive health (SRH); standard deviation (SD)

Attitudes of Young Parents Faced With Becoming a Parent

Attitudes of Young Parents Facing Pregnancy

In spite of these fears, all young parents, regardless of their young age and precarious economic conditions, consider pregnancy a happy event as it epitomizes a "personal achievement." Pregnancy also means that the family lineage is continuing, so it is seen as a blessing or even an asset for the young parents and the family as a whole.

In various interviews, fear was a predominant sentiment expressed by FT/YPs in facing pregnancy and parenthood. Young mothers feared judgment from friends and community, particularly when the pregnancy occurred out of wedlock. They also feared their parents' reprimand and abandonment by their partner. They feared the physical changes that come with pregnancy, adverse outcomes during childbirth, and the impact of the pregnancy on their future. Both young mothers and young fathers expressed apprehensions about their ability to care and provide financially for their child. Young fathers indicated a tendency to shy away from responsibility; many questioned the child's paternity and expressed feeling forced to grow up and enter a marriage or similar union.

"It is shocking to society that a very young child is pregnant."
–Young mother, aged 18–24, FGD with rural nonusers of SRH services, Vakinankaratra

"I was afraid because I was still in sixth grade ; I was pregnant while still in school. My parents were very demanding, very strict. What scared me was how to tell them I was pregnant. That's what made me anxious. But I had to tell my parents. They forced the person who got me pregnant to marry me, and we were obviously married."
–Young mother, aged 15–17, FGD with rural nonusers of SRH services, Menabe

Specific Attitudes Young Parents Faced with Their First Pregnancy

Young mothers reported concerns due in particular to physical changes (fatigue or chronic weakness, weight loss, etc.), discomfort (vomiting, intolerance to certain odors, headaches, frequent need to urinate, etc.), and other sensations experienced during pregnancy (feeling like two people in one—the mother and the baby, need for space, laziness, frequent sleep, difficulty breathing, difficulty sitting down, etc.).

> *"When the child moves, I panic. I cry all the time"*
> –Young mother, aged 15–17, FGD with peri-urban nonusers of SRH services, Menabe

On account of a lack of information, young mothers also worried about childbirth due to fear of pain or possible death from complications because of their young age. This fear were accentuated if they were a child, faced childbirth alone, or if the couple could not afford to deliver at a hospital. Further, some young mothers reported fear of having a cesarean section.

Young mothers also frequently reported fearing their partner/husband's reaction to pregnancy (rejection or acceptance/support). Some young mothers reported that they were afraid to remain alone on a daily basis (while the husband works). Others have considered abortion or suicide because of their distress, and still others are concerned their child will not be the desired sex.

Many young fathers expressed a desire to verify the child's paternity because, according to them, many women are frivolous and unfaithful. Some young fathers were concerned about having to leave their parents, and they were also concerned about the health of their wives and their young age.

Positive Attitudes of Young Parents about Pregnancy

Despite fears and hesitations, FT/YPs agreed that having a child was a positive, exciting life event. They viewed their child as a successor, a blessing, a wealth, a companion, a pillar who maintains the family's honor. Pregnancy also means that the family's lineage continues. FT/YPs agree that their parents are surprised but happy to have a grandchild, an heir who will take care of them in their old age and in case of illness.

> *"It's nothing to have a first child; it's the first treasure."*
> —Young father, aged 18–24, FGD with urban nonusers of SRH services, Menabe

In addition, young parents noted that when these ideal conditions are present, pregnancy is a positive experience: husband works; couple is legally married; parents are informed; couple has the blessings of their parents; pregnancy was desired and previously agreed upon; and the couple loves each other.

Problems of Young Parents

Difficulties Related to Being Too Young

FT/YPs faced particular challenges due to their age; in particular, young couples were described as lacking an understanding of what it means to commit to living as a couple. Frequently, FT/YPs start life as a couple following an unexpected pregnancy; often, they have had little-to-no prior communication about SRH and are unprepared for pregnancy, parenthood, or couplehood. Few have the skills to successfully communicate with their partners. Young couples are confused in the absence of appropriate support and advice since they do not share the same vision of the home, and most are not prepared to manage their pregnancy and childbirth.

> *"Even an insignificant problem can become unbearable for the young couple. A glass that falls and breaks can cause a major argument."*
> –IDI with an urban influential person, Vakinankaratra
>
> *"They just got married; they do not understand anything yet."*
> –IDI with a rural influential person, Menabe

Some young mothers felt ashamed to go to the health center because of their age. Others felt that they had an immature body that was not adapted to have a normal delivery. Another group lacked knowledge to prepare for delivery and to care for the baby.

> *"Often when these minors give birth, their mothers go with them because they do not even know how to hold their child."*
> –IDI with an urban SRH service provider, Menabe

Further, young mothers may struggle to transition into their new role as mother and of taking care of their child, including breastfeeding. Community and family members report that some young mothers prefer going out for fun to taking care of the new baby.

> *"She wants to continue to live like a young person, yet she has a baby."*
> –IDI with a rural influential person, Menabe

Young fathers were often seen as too young to handle their responsibilities as a father. They may turn to alcohol (or drugs), act possessively toward their wives, be unfaithful, and have difficulty growing up. Many young fathers feel forced to marry.

> *"He becomes a father without wanting to."*
> –IDI with a rural influential person, Vakinankaratra

Local Customs Related to SRH

In the Menabe region in particular, young mothers are victims of local customs such as arranged marriage and intermarriage. These customs promote sexual activity at a young age and are encouraged by parents.

> *"As soon as they begin to develop breasts, they are forced to live apart."*
> –IDI with a rural influential person, Menabe

Participants noted that consequences of these local customs on young mothers include: physical harm if partner is much older; frequent early pregnancies; loveless marriage with a high probability of separation; and likelihood to abandon children. Problems associated with successive births among young mothers are reported; they result in fatigue, rapid aging, illness, and sometimes death. This is mainly due to late, irregular, or incomplete use of ANC; sometimes, ANC services are not available.

Yet, despite the age of the young, expectant mother, their own parents consider pregnancy to be rewarding because it is an honor for the family.

In Menabe, young men may offer a *tako-maso* or *ala-fady* (dowry) to several sets of parents and maintain multiple relationships simultaneously. The community and the family do not prevent this practice and do not blame the young man because he has already paid a dowry. There are also young fathers who abandon their wives and children.

> *"There are some who have up to five partners; it's happening here"*
> –IDI with a rural, influential person, Menabe

Subsistence and Survival

Many young fathers are unemployed and have a great deal of difficulty providing for their families. The extent of the problem has led some influential persons in Menabe to believe that it causes young men to steal and become *malaso* (thieves). This could also be one of the reasons for abandoning young women. Some young couples are completely dependent on their parents, becoming a burden to them. Many couples still live with their parents due to the absence of steady pay. The only options that young people have for sources of income are agriculture, animal husbandry, or opening a small business.

"This is the majority of cases here ; young people do daily work. They will use what they received for the day to meet their daily needs. They will try to survive on a meager salary of two thousand Ariary (note: less than USD 1; USD 1=MGA 3,000)."
–IDI with a rural influential person, Vakinankaratra

It should be noted that if the young mother is not married, or if her husband does not work or does not assume his paternal responsibilities, too much responsibility is placed on the young mother's shoulders.

Rejection from Parents or Family

One of the problems observed with some young couples is that they are rejected by their parents, so they lack assistance from or very little involvement with their parents and the extended family.

"'Follow your husband!' They say!"
–IDI with an urban influential person, Vakinankaratra

Some young mothers are beaten by their own mothers; others are employed by their own mothers as housemaids. Sometimes, young mothers find that parents interfere too much in the couple's decisions, especially on the issue of FP use. Some parents force the couple to abort. And even if the young man and girl agree to get together, the repercussions can sometimes be violent.

"The parents beat her to such an extent that she aborted and the girl fell seriously ill. And besides, when she came here, this girl was really terrified."
–IDI with an urban SRH service provider, Vakinankaratra

Family and Community Perceptions

Stigmatization of Young Parents

Community perceptions and attitudes are positive when FT/YPs are over the age of 20; they are perceived as mature, independent youth ready for parenthood. However, when young people become parents before turning 18, perceptions and attitudes are negative. Community members stigmatize young FT/YPs and address them as immature, incapable, and dependent. FT/YPs reported feeling hated and disrespected by the community and friends, articulating an unfulfilled desire to be respected as an adult and as a parent. This stigmatization was reported to be more pronounced in Vakinankaratra. They are also said to be too eager to have children while their studies are incomplete and they are still in the "folly" of youth. The boys are specifically viewed as fiery, delinquents, and thugs who have not stopped following their whims. The girls are accused of having lost their virginity in any old way. Second, they are treated as "dependents," needing their parents' help to settle arguments, not yet be able to support the household, and, as such, becoming an extra burden for parents.

"You're still in eighth grade, and you're going to get married!"
–Young father, aged 15–17, FGD with rural nonusers of SRH, Menabe

Third, participants described young parents as "incapable:" family and community members feared that young expectant mothers would not be able to push out the baby because their bodies are too small, ill-adapted for childbirth, and their organs are not properly formed. They would be unable to manage the household (do household chores, manage finances) and take care of themselves and their children.

The consequences of this stigmatization can be dramatic: some young girls do not leave the house or prefer to live in the remote countryside during their pregnancies, returning to the community once they have given birth. Some young parents feel hated and disrespected because of their situation and their young age; despite their status as parents, they are called by a nickname, or son/daughter of "first name of one of the parents," or "*kala* + first name."

"I would like to be treated in the same way as other mothers. The neighbors do not treat me like that. Sometimes, I feel ashamed. I say call me "mother of [child's name], or do you not know the name of my child? I hate to be called 'little J ...' Call me mother of ..." The neighbors do not consider me a mother; they still see me as a teenager."
–Young mother, aged 15–17, FGD with urban nonusers of SRH services, Menabe

"Kisoa gasy, kely veta » (kinky/perverted), frivolous, rebellious, ratsy taiza (poorly raised), scatterbrained, a thug…People talk in a low voice behind your back or say bad things about you."
–Young father, aged 18–24, FGD with urban nonusers or SRH services, Vakinankaratra

Young Parents' Perceptions of Their Parents

Young mothers and fathers agreed that their own parents were generally surprised but happy to have a grandchild, an heir who will take care of them in their old age. Their parents, however, often believed that the couple must formalize the relationship and that they had to plan a marriage to prevent young parents from separating. Young fathers confirmed that parents play a major role in pressuring couples to marry with or without their consent.

Young people report confidence that their parents would not abandon them but rather support them until they become completely independent, giving them advice and encouragement when faced with challenges. Young mothers, in particular, find that parents support them because they fear that their child will be rejected by the in-laws or young father. Their parents fear that the young mother will not be able to deliver the baby or that she cannot tolerate the drugs.

Parents are concerned about the future of young parents who are in a precarious economic situation. Some young parents reported that their own parents were disappointed because they thought their child was sensible but then she or he quit school suddenly due to the pregnancy.

Young fathers often question the child's paternity and believe that their parents will support them in investigating the truth of the pregnancy by looking for evidence about the duration of the relationship, places frequented, the girl's family, and the relationship between the two adolescents.

"My parents will say, 'Is it really you who did this, or is she going out with another man?'"
–Young father, aged 15–24, FGD with rural nonusers of SRH services, Vakinankaratra

Friends' Perceptions

Young parents are particularly affected by encouragement from friends. Young fathers especially appreciate their friends' help with finding work and their encouragement to improve their behavior by giving up infidelity and alcohol. They appreciate advice specific to their situation, such as the need to quit school to deliver and take care of their child. Young girls especially appreciate praying with friends.

Despite examples of positive influence, young parents find that the vast majority of friends are deceitful, mocking, and critical of them. Friends encourage the young expectant mother to abort or encourage the young expectant father to pressure the girl to abort. Echoing pressure from parents, some friends urge young fathers to marry their partners.

"Two of my friends who live next door and already have children said, 'Do not be in a hurry to have children, have an abortion.' They said 'take medication that will kill it (note: the embryo).' And I actually took the medicine they advised, something very bitter, and I was scared, and I said, 'I'd rather give birth.' My grandmother found out about it and said, 'If you have an abortion, I'll take you to the police station.' And I was afraid."
–Young mother, aged 15–17, FGD with urban nonusers of SRH services, Vakinankaratra

Many friends mock and discourage young parents by saying that the young, expectant father's or mother's youth is over.

"You're stuck, you'll never get anywhere, and you're tsy afa-bela (no longer free)."
–Young father, aged 18-24, FGD with rural nonusers of SRH services, Vakinankaratra

Other friends criticize young parents for not waiting for the right moment, saying that they are too young and impatient.

"She's underage just like us but pregnant."
–Young mother, aged 18–24, FGD with urban nonusers of SRH services, Vakinankaratra

Young mothers especially feel intensely belittled and criticized by their peers, saying their friends would treat them as oblivious, stubborn, frivolous, and disrespectful to their parents as single mothers. Young mothers admit that there are hypocritical friends who pretend to encourage but, in reality, are mocking behind their backs. Some girls hide their pregnancy from friends and outsiders for fear of witchcraft.

Health System Capacity

Health Facility Capacity and Availability of SRH Services

Table 7 provides a general overview of the capacity of health facilities in the study and the availability of SRH services in these facilities.

Table 7. Overview of the capacity of health facilities and availability of services

	Menabe			Vakinankaratra		
	BHC Ankilizato	BHC Bemanonga	DH Miandrivazo	BHC Ankazomiriotra	BHC Andranomanelatra	DH Betafo
Hours	*	***	***	*	***	***
Infrastructure and logistics	*	*	**	*	*	*
Staff	**	**	***	***	**	***
Availability of ANC services	***	**	***	***	*	***
Availability of MNH services	*	**	*	**	*	***
Availability of FP services	*	**	*	*	*	*
Child vaccination (in the facility or in the field, including bacilli Calmette-Guérin)	***	***	*	**	**	*
Sexually transmitted infection screening and treatment	***	***	***	***	***	***
Laboratory (screening tests, including rapid diagnostic tests)	*	*	*	*	*	***

* unsatisfactory
** average
*** satisfactory
Note: antenatal care (ANC); basic health center (BHC); district hospital (DH); family planning (FP); maternal and neonatal health (MNH)

Hours: The two rural BHCs are only open 5–8 hours per day while the other health facilities are open 24 hours.

Infrastructure and logistics: There are no hospital beds in three of the BHC II (Ankilizato, Bemanonga, and Andranomanelatra) facilities. Five out of six facilities, unlike DH Miandrivazo, do not have modes of communication, ambulances, and incinerators.

Staff: Three of the BHC IIfacilities (Ankilizato, Bemanonga, and Ankazomiriotra) have 2–3 health care providers (including one physician) each, compared with 4–7 health care providers in the other health facilities.

Availability of ANC services: One or two services are not provided at the DH Miandrivazo, BHC Ankazomiriotra, DH Betafo, and BHC Ankilizato. At BHC Bemanonga and BHC Andranomanelatra, 3–6 services are lacking, respectively. The least available services include monitoring pregnancies for women with hypertension and distribution of misoprostol to prevent postpartum hemorrhage for home births.

Availability of MNH services: The only service not available at DH Betafo is caesarian section. This procedure is not available in any of the six facilities. BHC Bemanonga and BHC Ankazomiriotra are lacking three services. The other health facilities do not provide 4–5 services. Misoprostol is not available in five out of six facilities. Only half of the health facilities allow for choice in birthing position.

Availability of FP services: BHC Bemanonga does not provide three contraceptive methods while the other health facilities are lacking 4–7 services. Male and female sterilizations are not available in any facility. Emergency contraception and the female condom are available in half of the facilities.

Rapid Assessment of Health Facilities Based on the "Youth-Friendly Health Facility" Criterion

Table 8 summarizes the rapid assessment of the current situation in the health facilities studied, based on the youth-friendly health facility criterion.[10]

Table 8. Rapid assessment of health facilities based on the criterion of a youth-friendly health facility

	Menabe			Vakinankaratra		
	BHC Ankilizato	BHC Bemanonga	DH Miandrivazo	BHC Ankazomiriotra	BHC Andranomanelatra	DH Betafo
Hours designated for adolescents (all services)	*	*	*	*	***	*
Procedures for adolescents	*	*	*	*	*	*
Costs—special rates for adolescents	*	*	*	*	*	*
Infrastructure and logistics—ensuring privacy during reception and care of adolescents	*	*	*	*	*	*
Staff trained on reception and care of adolescents	**	*	*	**	**	*
Preventive services for adolescents	**	**	*	**	**	*
Curative services for adolescents	***	***	***	***	***	***
Other services for adolescents	*	*	*	*	*	*
FP services for adolescents	*	**	**	*	*	**
Hours designated for adolescents (for FP)	*	*	*	*	*	*
Location convenient for adolescents	***	***	***	***	***	***
Youth involvement (in activity planning and implementation)	*	*	*	*	*	*
Policy—youth-friendly	*	*	*	*	*	*

* unsatisfactory
** average
*** satisfactory
Note: basic health center (BHC); district hospital (DH); family planning (FP)

Mapping of Influence on and Support to Young Parents

Individual Level: Knowledge and Practices

Knowledge about the Birth Plan

For all young mothers who are SRH nonusers and who say they have heard about a birth plan, it is because that information is included in the various physical, material, financial, and other preparations made during pregnancy to ensure that childbirth goes smoothly. No mother reported that it was a "personal plan determining where and with whom the delivery will take place, established with the woman during pregnancy, and communicated to the husband/partner and, where applicable, to the family."

> *"I have not heard of a birth plan because I gave birth with a matrone. I see her when I'm not doing well…"*
> –Young mother, aged 15–17, FGD with peri-urban nonusers of SRH services, Menabe

Knowledge and Practice for a Safe Pregnancy

The best practices for a safe pregnancy, as mentioned by young nonusers of SRH services, were to attend ANC at the facility to monitor the baby's health, get information on the due date, or to prevent and treat maternal illness. This practice was cited more frequently in Vakinankaratra. Also mentioned were: taking preventive antimalarial medicine; sleeping under a mosquito net; having a healthy diet that supports the baby's growth; doing regular and moderate physical activity; benefiting from clean morning air; and avoiding medications and any stress.

> *"If you want your pregnancy to go to term, you have to have prenatal check-ups to know how the baby's health is evolving. And you need an ultrasound to know if the baby is alive or dead."*
> –Young mother, aged 15–17, FGD peri-urban nonusers of SRH services, Vakinankaratra

However, potentially harmful practices related to seeing a *matrone* (traditional birth attendant) were also found in both regions. The young mothers of Menabe provided more details on this subject and cited the following as practices: being massaged by the *matrone* (in case of fatigue, illness, to be in shape), drinking infusions prepared by the *matrone* (preventive/curative), showering with water containing medicinal plants for abdominal pain, and applying an herbal paste on the forehead to treat headaches. Some young mothers spoke about needing to work hard to open the cervix and to reduce the feeling of pain during childbirth.

> *"The matrone gives you medicinal leaves, saying 'make an infusion with these and drink it so you don't get sick.'"*
> –Young mother, aged 15–17, FGD with rural nonusers of SRH services, Menabe

Knowledge and Practices on Birth Preparation

For young mothers, birth preparation includes: supplies (medical and miscellaneous supplies, baby kit, and food); the mother's physical and psychological preparation; finances for the impending birth ("MGA 4,000 to MGA 8,000, or a chicken to thank the midwife"); spiritual preparation (prayer); and not working hard. Division of responsibilities regarding care of the unborn child is also discussed by the couple. It should be noted that in Menabe, unlike Vakinankaratra, there is little or no preparation for childbirth as customs require young mothers to wait to see that the newborn is alive before investing in the birth.

> *"They have to get ready for the baby; they buy what they need. They also have to be prepared to care for the child, that is, the responsibilities concerning the child that the couple decides together."*
> –Young mother, aged 18–24, FGD with peri-urban nonusers of SRH services, Menabe

Knowledge and Practices about Baby Care

According to young fathers aged 18–24, young mothers who do not use SRH services have limited ability to take care of their first child in the days after delivery and consistently ask for advice from parents, family, or neighbors. Young mothers, however, shared correct knowledge about frequent breastfeeding after cleansing the breasts, boosted by the mother having a healthy and rich diet. Exclusive breastfeeding

was cited as an important component of baby care by some young fathers from Vakinankaratra. Closely monitoring the baby's health, giving it good hygiene, keeping it warm, showing it affection, and carrying it properly were also mentioned.

Apart from providing water, sweetened water, or tea to the baby when breast milk is deficient, incorrect knowledge stems from seeing a *matrone* and may prove harmful to the mother and child. This includes giving preventive medicines to the mother for quality breast milk and giving so-called preventive infusions to fight malaria and to provide energy to the baby.

This care is continued during the child's first month of life and other practices are added. Immunizing the child (including bacille Calmette-Guérin vaccine) is cited by both SRH clients and nonusers of SRH services. In contrast, practices differ when the child is sick: a young mother who is an SRH client will take her child who has a fever to the facilities, while the nonuser will use plants to reduce the fever.

> *"... Everything is healed, even the large navel (note: umbilical hernia). He is given totonga(leaves) to eat because he whines when he hurts. They are leaves...we cook and give them to the baby to soften his belly, so that it's not rigid. We carry him on our backs for a week, and he's cured."*
> –Young mother, aged 18–24, FGD with peri-urban nonusers of SRH services, Menabe

Umbilical Cord Care

Young mothers were asked about knowledge of umbilical cord care best practices. Those who had used SRH services referred only to putting alcohol on the navel to dry it. For nonusers of SRH services, the *matrone* performs and/or advises on the care, which may include: the application of a makeshift clamp, alcohol or homemade rum, an ointment provided by the *matrone*, or a bandage (gauze and tape) to the navel; avoid hitting the navel or getting it wet; check that it is healing; and not let the baby cry for long to prevent the navel from swelling. Note that some young mothers reported doing nothing to care for the navel and others reported having the navel checked at the facility even if they did not give birth there.

> *"Yes, even though I had my baby with a traditional matrone, it doesn't matter, we had the cord checked here; my mother-in-law took him and I stayed at home."*
> –Young mother, aged 18–24, FGD with rural nonusers of SRH services, Vakinankaratra

Young Parents' Knowledge about the Right Time to Have a Second Child

In general, young mothers think about pregnancy spacing when their menses resume. Young parents believe that spacing from 2–6 years is appropriate between the first and second child. The benchmarks for the ideal time to have the second child are after: i) the couple's autonomy and growth, and the first child's education; ii) the young mother achieves good health and age; and iii) household financial situation is good.

> *"It's already complicated with one, so two would be more complicated. You would have to wash his clothes full of poop because he would still go in his pants, all the while you are pregnant."*
> –Young mother, aged 15–17, FGD with peri-urban nonusers of SRH services, Menabe

> *"The uterus and internal organs need to return to normal before having another child. As such, the child is viable, there is no risk of miscarriage."*
> –Young mother, aged 15–17, FGD with urban nonusers of SRH services, Vakinankaratra

> *"You need money to take care of the first one before you think of having a second. You can't feed your family now, and you want to have a second child?"*
> –Young mother, aged 15–17 years, FGD with urban nonusers of SRH services, Menabe

Young mothers were aware of the importance of spacing births for the good of the first child, the mother, and the child to come. The young mother is more inclined and willing to use FP because she is more aware of the responsibilities of caring for children and maintaining a home. This was not the case

for young fathers who discussed pregnancy spacing in a general way without necessarily being aware of the consequences on the child and the woman.

SRH information Received by Young Parents and Information Needs

A lack of information was identified as a factor blocking the use of SRH services. Moreover, in the two regions, several young parents who are SRH clients say they have not been exposed to any messages. Several young parents say they have received ANC information (every month, from the third month of pregnancy, etc.) and maternal and neonatal care at the facility.

Some have heard that it is necessary to give birth in the hospital to avoid dying while in the care of a *matrone*. Several report the need to space pregnancies using a contraceptive method to avoid problems.

> *"The reason for giving birth in a hospital is so that people don't go to a matrone because the hospital has always existed and to avoid the loss of human life with a matrone."*
> –Young father, aged 15–17, FGD with rural nonusers of SRH services, Vakinankaratra

The sources of information cited by young parents included facility-based providers (through group awareness sessions, individual conversations, or consultations), the CHWs in the *fokontany* (villages), workers from Marie Stopes International, family (including parents and stepmother), community (neighbors, friends), and media (telephone) (see Table 9).

Table 9. Information needs identified by young parents

Family planning	Pregnancy/antennal care	Other
Young couples What is the ideal number of children? What is FP? How does it work? What are the advantages of FP? What are the side effects of FP? Can we have a child after using FP? ***Young mothers*** What are side effects of contraceptive methods? ***Young fathers*** Which contraceptive methods are not reversible? Are there FP methods that involve men?	***Young couples*** When should I have the first ANC visit? ***Young mothers*** What should I do if my period is late? Where should I go for health care during pregnancy?	***Young couples*** Should I go to the health facility for a prenatal visit? Why does my baby need to be weighed? Why don't CHWs care for adults? ***Young mothers*** Why does my baby refuse to eat?

Note: antenatal care (ANC); community health workers (CHWs); family planning (FP)

Couple Level: Support, Communication and Decision-Making

Support Provided by the Husband

During Pregnancy

Young fathers reported that as soon as the pregnancy is announced or confirmed, they start to look for work to support young expectant mothers and/or seek material and financial help from parents. Young mothers verified that their partners can be an important source of financial and material support.

> *"My husband helps me financially and also for the baby's diapers."*
> –Young mother, aged 18–24, FGD with rural nonusers of SRH services, Vakinankaratra

They also provide moral and psychological support to their young wives, giving them special attention to instill a calm and tolerant atmosphere in the home, and by giving them daily support (hygiene, household chores, meal preparation, and doing physical exercise together). Throughout the pregnancy, they try to provide young mothers adequate, proper, and complete nutrition and accompany them on morning walks to get fresh air.

"I need to help my wife because carrying a baby is really important. I have to help her take care of the child in her belly. And I have to monitor her. I have to help her because she's my wife, she shouldn't wear herself out."
–Young father, aged 15–17, FGD rural nonusers of SRH services, Menabe

Young fathers reported that they educate themselves about health-related topics and ask for advice (by telephone or by asking questions to relatives, friends, neighbors, or facility staff). They encourage (sometimes force) the young mother to go to the BHC for ANC, accompany her so that she does not feel alone or for safety reasons, and monitor and remind her of the ANC appointment dates. Some also talk about stretching the cervix as the due date approaches through having regular sex. They provide money for transport (or take her themselves) and buy what is needed (baby kit, thermos, etc.) for the delivery.

"I'm really happy to accompany my wife. Going to the ANC visits with her to boost her morale, she must know that her husband won't abandon her even if he works. She will be a little more relieved knowing she's not having the baby alone. As spouses, we must help one another."
–Young father, aged 15–17, FGD with urban nonusers of SRH services, Vakinankaratra

"When she was pregnant, I gave her the message about attending ANC. And now we talk about health on the phone. I looked at that and it said that at three months we need ANC. And I made her come here when she was three months pregnant."
–Young father, aged 18–24, IDI urban SRH client, Vakinankaratra

During Delivery

Participants reported that fathers are usually present and empathetic during childbirth to help the young mother, but the fathers were almost always surrounded by his parents and/or parents-in-law and other relatives. The husband provides and manages the finances for childbirth when he has the capacity; otherwise, it is provided by the parents and parents-in-law.

"Being her husband, I helped her with all of the expenses, food, clothes. I've spent the most money."
–Young father, aged 15–17, IDI urban SRH clients, Menabe

Care of the Baby

Young fathers' contributions to baby care were reported to include frequent reminders to the woman to breastfeed the baby, getting up at night to take care of the baby and change the diapers, and accompanying the young mother during PNC. For other topics, the young fathers mentioned their own practices, speaking theoretically about what Bernard (the young father from the story in the discussion guide) should do.

"He also came with me to the BHC for vaccinations."
–Young mother, aged 18–24, IDI rural SRH clients, Vakinankaratra

Decision-Making on the Place of Birth

As shown in Table 10, decision-making is varied: some decisions are made as a couple, while others involve only the young mother or only the young father.

Table 10. Determinants of place of delivery chosen and person who provides support

Determinants of place of delivery chosen	Determinants of person who provides support
• Quality of care to mother and baby • Provider's competence • Safe delivery (less risks) • Costs • Constraints and distance • Relationship with the provider • Prior influences and experiences	• Experiences and quality of aid and support • Level of intimacy with the person • Discretion • Presence or proximity of the person *The people young mothers most often choose to help them during delivery include the mother, sister, mother-in-law, parents, and in-laws.*

Family Level: Support Persons and Their Role

Family Members Who Support Young Parents

It is primarily the parents who provide support (mainly mother or mother-in-law) and husband (or partner). The other people who help young parents are: siblings (step-siblings, in-laws); either the eldest or the younger, depending on the help needed; *dady* (grandmother) (who is also often the birth attendant); aunts (some are *matrones*); uncles; and cousins.

Family Support

The following quotes illustrate family support to young parents from pregnancy to birth:

> *"My mother made me take a walk every morning and also advised me: 'Go get a massage from the matrone, it's not expensive."*
> –Young mother, aged 18–24, FGD with urban nonusers of SRH services, Menabe

> *"Mothers and sisters can also give her reassurance: 'Don't be discouraged, you have to get through it.'"*
> –Parent/relative, rural FGD, Menabe

> *"I have already gone with my little girl to give birth, and I know very well what childbirth is, and it's painful. So I said to him: 'When you have a child, you have to talk to the doctor, go see a midwife to guide you because I don't know what to advise you.'*
> –Parent/relative, peri-urban FGD, Vakinankaratra

> "Parents give financial support. Sometimes childbirth occurs during the months when they have no money, during the hot season... So they help financially if the birth takes place at that time."
> **Parent/relative, peri-urban FGD, Menabe**

Most young parents who used health services reported at least one option for financial support, including contributions from all relatives (parents, elder brother, elder sister, mother-in-law), neighbors, friends (one or more), and whoever is able to provide the money when needed. In general, families who see a *matrone* do not have this option of financial support.

The support may be "one-time" or "constant" and is more often constant when coming from the mother and mother-in-law.

> *"Sometimes it's very difficult to breastfeed due to sores on your breasts. This happens with the first birth, and she doesn't like to breastfeed. For this, it's important to go to a doctor for care to be able to breastfeed the child. That's how I help her. "*
> –Parent/relative, rural FG, Menabe

> *"My aunt and sister-in-law are CHWs, and they have made me aware of birth spacing and practicing FP!"*
> –Young mother, aged 15–17, IDI with rural SRH client, Menabe

No major differences were noted between the situation experienced by parents and relatives when they became parents for the first time and the experience of current young parents. As with current young parents, the mother (or mother-in-law) was the most supportive, regardless of the option chosen for monitoring pregnancy and childbirth (facility-based provider or matrone).

Although some parents are willing to engage in discussions with adolescents and young parents about "becoming a parent" and "the ideal time to have a second child," their ability to engage with them is often limited as adolescents and young parents are more willing to listen to society (modern) and the media (movies, series, Internet) than their parents. It is only when they become parents that young people become close with their own parents and are relatively more inclined to discuss this with them.

Only a small minority of parents and relatives recommend SRH services to young parents, particularly in a public facility (BHC), after a positive experience. In effect, the majority engage a matrone. A minority will not recommend SRH services due to dissatisfaction with them or the price (very long wait even without lines, verbal abuse, costly referral to the DH due to car rental), and another small minority is likely to recommend SRH services subject to approval of and the financial means available to young parents.

Community Level: Influential Persons and Their Roles

Community Members Who Support Young Parents

Young parents identified the following as supplemental sources of help during pregnancy and childbirth: *Matrones*, health personnel (doctor, midwife, nurse, trainee), CHWs, nuns, choir leaders, peers, neighbors, friends of the mother, friends and former classmates, school teachers, and bosses.

Community Support from Pregnancy to Birth

Support from community members during pregnancy was often described as providing various tips for a healthy pregnancy (diet, exercise, etc.). However, the assistance provided by the matrone and ANC providers, through traditional or modern health care, was perceived as particularly important.

> *"The matrone said we should eat salt and take medication. She cooks us remedies for the baby to avoid complications during childbirth it would seem...Apart from the remedies and advice, she gives massages to soothe the muscles around the baby...It's to soften the muscles, so as not to weaken the young mother during childbirth...That's how she helps."*
> –Young mother, aged 18–24, FGD with peri-urban SRH clients, Menabe

Before childbirth, CHWs inform young parents and their parents about services the facility offers. Neighbors (who may also be CHWs, in some cases) and friends provide transport via their nonmotorized vehicles and accompany the young mother to the hospital.

> *"It was the CHW who helped us out because the contractions started at night...He lent us the rickshaw to transport her!"*
> –Young father, aged 15–17, IDI with peri-urban SRH client, Menabe

On the day of delivery, the midwife and/or *matrone*, as the case may be, assist the young mother with the delivery and provide the necessary traditional medicines or remedies. The midwife provides encouragement and listens attentively to the young mother; one young mother described the midwife's role as "she listens to the pain and seeks a solution to remedy it." The midwife may provide a birth kit (cloth for diapers, soap, and a bag inscribed, "delivering at a health facility ensures a healthy mother and child"). The midwife and the *matrone* take care of the birth registration with the health administration.

> *"What the midwife did was very encouraging. She never did anything that would upset me, she only did what I liked. Like, "This isn't painful, it's like this or that'... And she gave me two injections ... it seems that this is what made the baby come out quickly. She said 'we're going to do this quickly, so you're going to give birth very quickly...'"*
> —Young mother, aged 15–17, IDI with peri-urban SRH client, Menabe

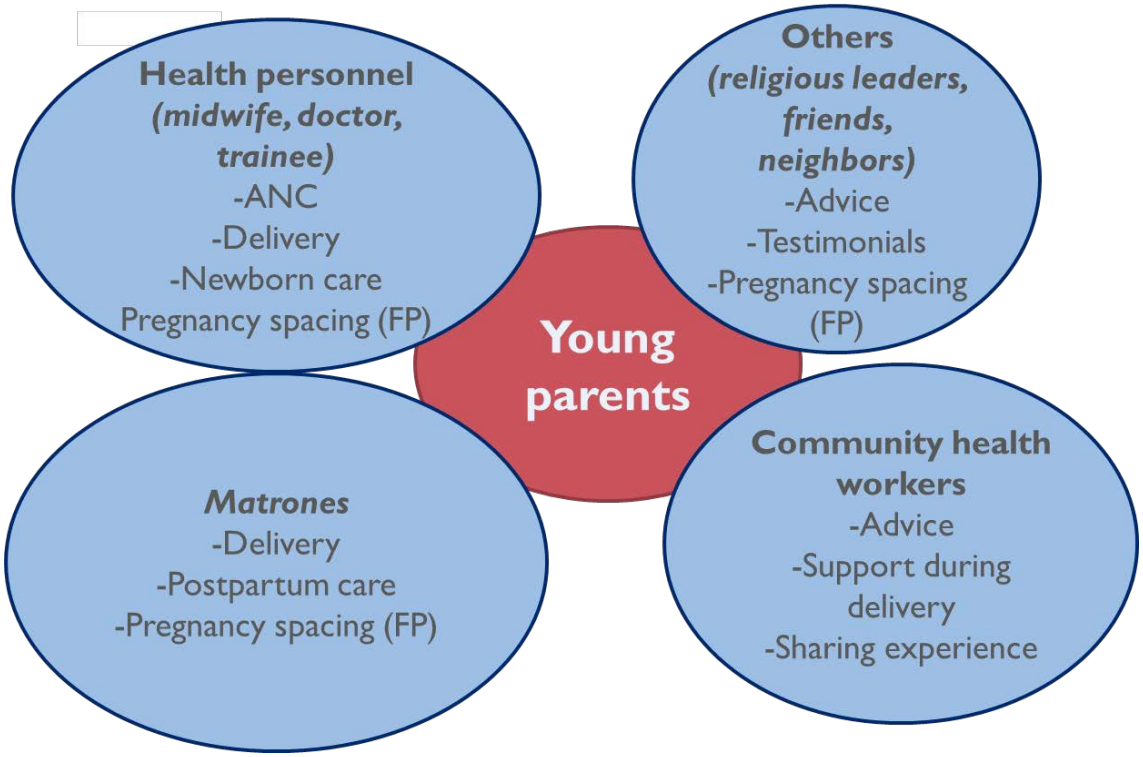
The day after the birth, the CHW teaches the new mother to breastfeed. Friends take care of the baby and support daily tasks, such as cooking, housework, and drawing water.

CHWs' Influence on the Decision to Space Pregnancies or Use FP

CHWs were reported as particularly influential in the decision to use FP, including providing information about methods, reminding about injection dates for injectable FP users, explaining that FP is not dangerous, and advising the FP user (see Figure 4). Advice on appropriate methods is provided by the facility-based providers, midwives, or CHWs while regular monitoring of use is done by the facility-based providers. Sometimes, the neighbors are influential by sharing their experiences of the positive impact that the use of contraceptive methods has had on their relationships.

> "It's the CHW who prompted us to practice [FP]."
> **Young father, aged 18–24, IDI with peri-urban SRH client, Menabe**

Figure 4. Mapping community influence and support for maternal and neonatal health



Note: antenatal care (ANC); family planning (FP)

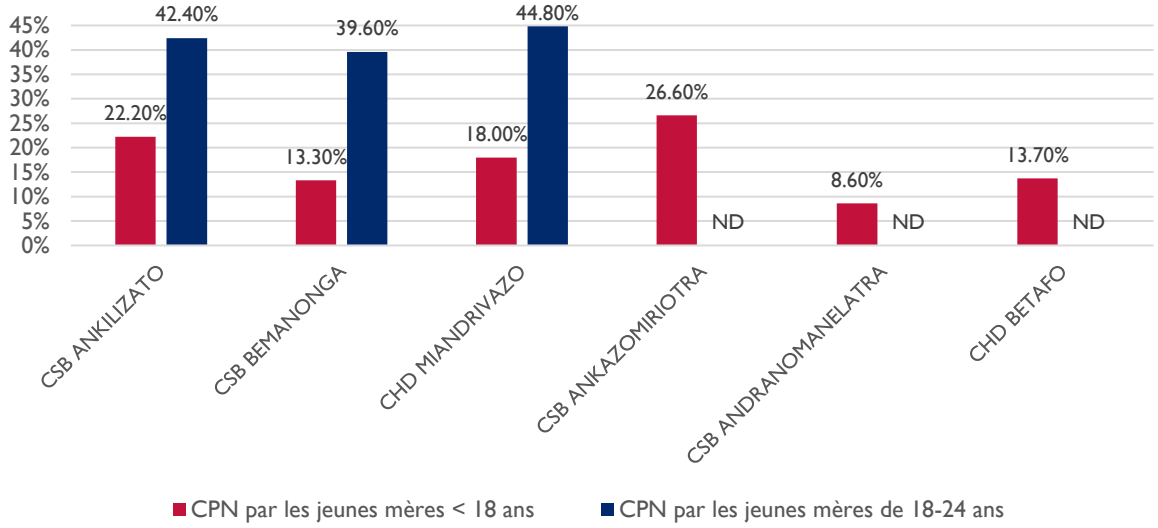
Health-System Level

Use of ANC Services by Young Parents

Most young mothers reported that they had between three and five ANC visits, compared with six ANC visits for some. ANC visits were usually made every month, sometimes not starting until the 6th month of pregnancy. The BHC was the most common type of facility visited, and several young mothers were seen by a provider-in-training (nurse, midwife) at their first ANC visit through to delivery. Others were seen by a trained midwife.

The ANC records compiled for women aged 15–24 over the last 6 months in the six health facilities of the study show that a total of 4,370 antenatal consultations were recorded (see Figure 5). About four out of ten ANC visits were made by women under the age of 25. Women under the age of 18 accounted for 15.7% of ANC visits; this percentage does not vary much in the two regions. **ANC attendance is well below the national average for women under the age of 20 (80.9%) and those aged 20–34 (83.4%).**[9]

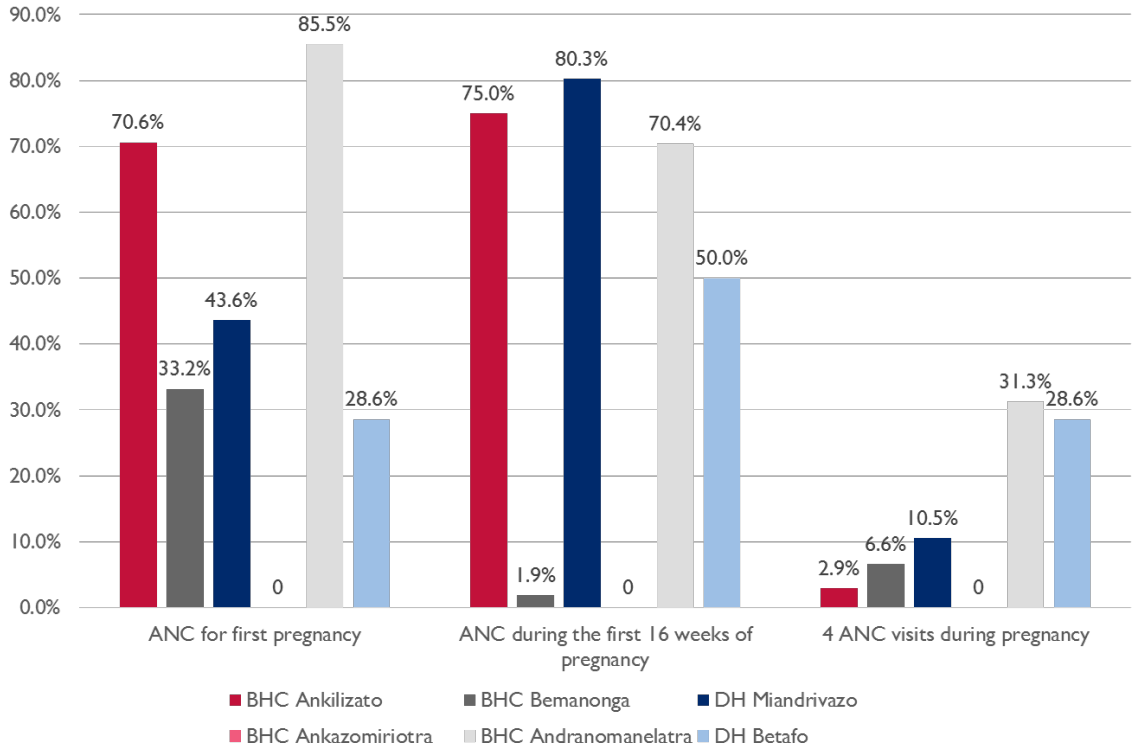
Figure 5: Rate of antenatal care service use in the last 6 months by young mothers aged 15–24



Note: centre hospitalier (district hospital, [CHD]); *centre de santé basique* (health center, [CSB])

Among women under the age of 18, ANC during the first pregnancy (49.2%) was well below the national average of 85.4% (all ages) (see Figure 6).[9] The same applies to the proportion of those who completed four ANC visits (12.2% compared with 51.1% for the national average).[9] In contrast, early ANC visits (at less than 4 months of pregnancy) was better at all six health facilities (56.0%) in the study compared with the national average (28.7%, all ages).[9] It should be noted that data collected for the study only covered the last 6 months. It is, therefore, possible that the women involved had not completed their ANC visits until after the data collection.

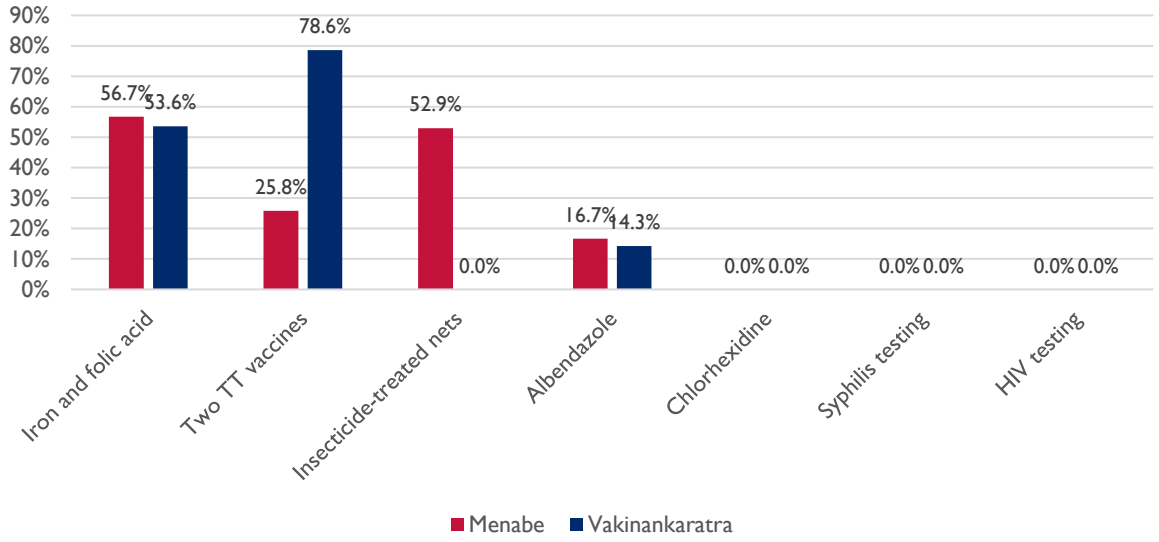
Figure 6: Antenatal care service use by young mothers under 18 in the last 6 months prior to the study



Note: antenatal care (ANC); basic health center (BHC); district hospital (DH)

For services received during ANC in the last 6 months by young mothers under the age of 18 who completed four ANC visits, Figure 7 indicates that in the six health facilities in the study, **young mothers did not receive the full package of available services, such as: iron** (available in the six facilities) **and folic acid** (available in five facilities); **tetanus toxoid-containing vaccinations** (available in the six facilities); **and distribution of long-lasting insecticidal nets** (available at three facilities). Chlorhexidine was not provided and no syphilis screening tests were performed during any of the ANC visits made by pregnant women under the age of 18 in the last 6 months. The same applies for HIV testing except for BHC Bemanonga (8% of ANC visits made by women under the age of 18). It should be noted that the data for all (or part of) these services were not available for some facilities.

Figure 7: Services received by young mothers under 18 years of age who completed four antenatal care visits



Note: tetanus toxoid-containing vaccine (TT)

According to young mothers, services received during ANC visits were considered supportive because they made it possible to determine the health status of the mother and baby. These services include: blood pressure; temperature; weight; due date estimation; tetanus toxoid-containing vaccination; uterine height measurement; fetal heartbeat detection; medicine (iron tablets, antimalarials, etc.); bloodwork; vaginal examination; nutritional advice; counseling on use of a long-lasting insecticidal net; reminder of next ANC appointment; and health monitoring if there are problems.

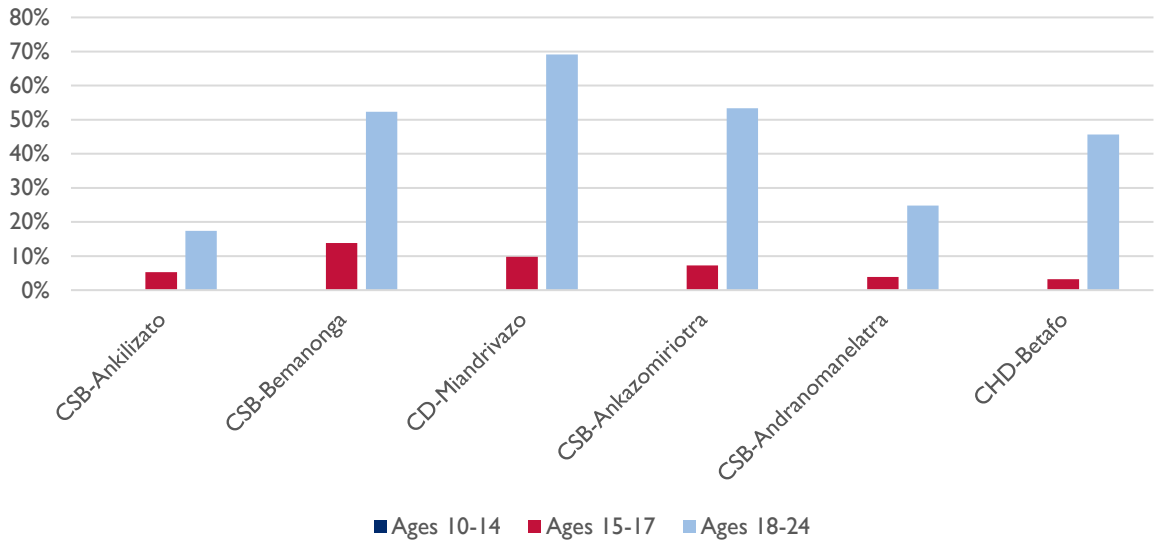
Young Parents' Experiences Using MNH Services

The birth registers compiled on young mothers aged 10–24 for the last 6 months, from the six health facilities in the study, reported a total of 1,334 women who gave birth. Of these women, 46% are under the age of 24 (0.1% from 10–14, 6% from 15–17, and 40% from 18–24).

Health workers noted a significant discrepancy between the number of pregnant women attending ANC every month and the number of women delivering at the facility on a monthly basis. This was confirmed by the data collected from the registers that showed only 30.5% of women attending ANC gave birth at the facility (see Figure 8). The providers assumed this is due to two main reasons: i) other than *matrones*, retired midwives could be competition; and ii) trainees scare away pregnant women (rumors about several newborn and maternal deaths under the care of trainees).

> *"The problem, and what astonishes me, is that with more than 100 women attending ANC per month, there are barely more than 20 or 15 who give birth at the hospital every month. I noticed an imbalance between the numbers of those who are "at term" and those who give birth at the maternity ward the same month. And I do not understand where the rest of these women go to give birth."*
> –IDI with urban provider, Menabe

`Figure 8: Use of delivery services by young mothers aged 10–24 during the last 6 months



Note: centre hospitalier (district hospital, [CHD]); *centre de santé basique* (health center, [CSB])

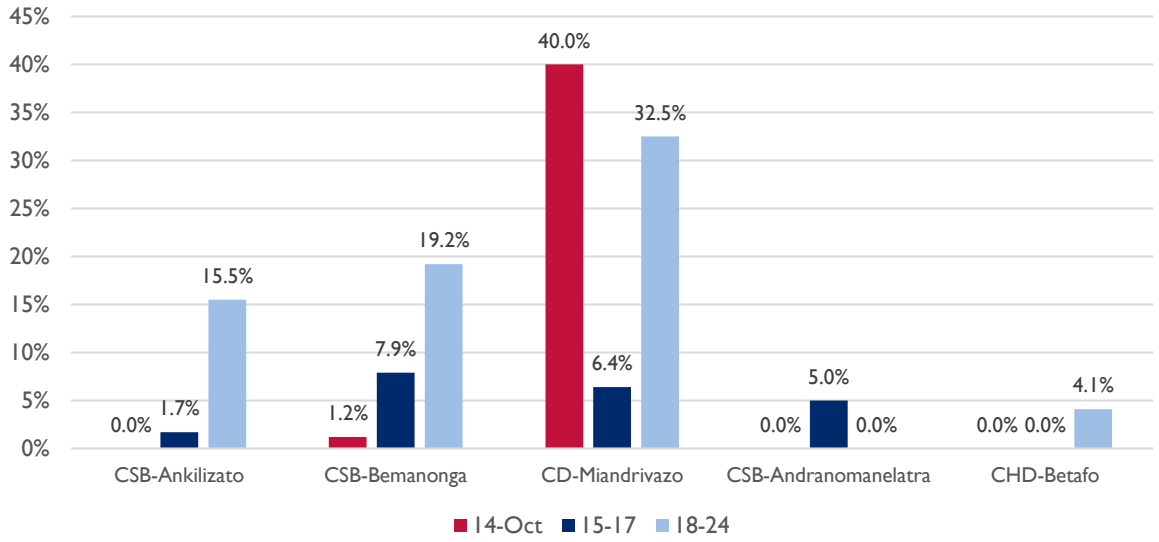
For PNC visits, the registry data compiled reported that all women who gave birth at the six health facilities in the study had at least one PNC visit, except for 22% of women who had given birth because their data were not available. Thirty-five percent of PNC visits were made in the first 6 hours after delivery. One percent of PNC visits were made in the first 6 weeks after delivery, and 64% of PNC visits were made in the first 6 weeks after delivery.

Young mothers received PNC in the same facility where they gave birth. Services were provided by a doctor or midwife. These included navel care, baby care (especially for specific illnesses such as a respiratory infection), and care for the mother. Then the young mothers returned to the facility between 7 and 15 days after delivery so that their child could receive the bacille Calmette-Guérin vaccine. The qualitative results show that for some young mothers who were resting after their childbirth, it is the parents, sister, or sister-in-law who brought the baby to the facility for the bacille Calmette-Guérin vaccine.

FP Practices of Young Parents

Data on FP methods used were collected for 10–24 year olds in the six health facilities in the study. In total, 7,052 FP cases were recorded in the last 6 months (see Figure 9). Data collected at BHC Ankazomiriotra were not included in the analysis due to the unavailability of age data for FP users. In addition, a single FP client may have used FP services more than once in the previous 6 months. Depo-Provera (injectable contraceptive) was the method most used (about 89%) by young clients. Other methods used were: oral contraceptives by about 6% of young women in both age groups; implants by 4.49%; and lactational amenorrhea method by 0.35% of those over the age of 18. The contraceptive methods not mentioned (condoms, intrauterine devices, CycleBeads, etc.) were not used by any client aged 15–24 in the last 6 months, even if they were available.

Figure 9: Use of family planning services by young mothers aged 10–24 during the 6 months preceding the study



Note: centre hospitalier (district hospital, [CHD]); *centre de santé basique* (health center, [CSB])

Note: Data were not available for BHC II Ankazomiriotra, and no adolescents under the age of 18 used contraceptive methods at DH Betafo during the 6 months prior to data collection. The FP registers did not note side effects of or referrals for other methods.

Influence of the Gender and Age of Young Parents on Accessing and Receiving Services

All available services were reported to be offered to young parents but with even more advice (for a safe pregnancy, psychological preparation for childbirth, etc.) to the younger parents. Pregnant women under the age of 18 were considered "at risk" by health workers and received more attention (e.g., checking the width of the pelvis, more information and advice, more mental preparation, etc.), even if the services offered were identical regardless of their age. Young people, in general, and several young parents in particular, were impressed and intimidated by an SRH health care provider of the opposite sex (e.g., a young mother does not like being examined by a male provider during ANC, a young father refuses to talk about his sexually transmitted infection with a female health care provider). Young pregnant women under the age of 18 and adolescent mothers are often ashamed of going to the facility because they fear criticism from others and admonishment from health care providers.

When men accompany their wives and/or children to the facility, health care providers report that they try to show approval to encourage him to continue his involvement in his to be involved in the health of his family. The health care provider thanks the father and provides him with appropriate advice. Similarly, most of the time, if the man or the couple comes for FP services, providers reported that they explain the benefits of FP to his wife's health and their life as a couple and to the family, as well as the benefits of various contraceptive methods, in order to convince him to use FP. These male-focused efforts are explained by the fact that health workers find that male involvement in family health and adherence to FP is still mixed.

Provider misconceptions may influence service provision. In Menabe, one provider claimed to be reluctant to offer Depo-Provera to young lactating mothers and those who have not yet had children. The reasons mentioned were: milk drying up while breastfeeding; a long-term delay in the return of fertility that caused problems—psychological and within the couple. (For very young clients, health care providers proposed: abstinence first, then CycleBeads, and only if necessary, a hormonal method).

Satisfaction of Young Parents with SRH Services

The satisfaction of young parents using SRH services was measured using a Likert scale with the following items: **1 = very satisfied; 2 = satisfied; 3 = dissatisfied; and 4 = very dissatisfied.**

Table 11 summarizes the average of the results by item for each facility in the study.

Table 11. Satisfaction level of young parents who use sexual and reproductive health services

	Menabe				Vakinankaratra				Total
	BHC II Ankilizato	BHC II Bemanonga	DRH I Miandrivazo	Subtotal	BHC II Ankazomiriotra	BHC II Andranomanelatra	DRH I Betafo	Subtotal	
ANC services									
Reception	2.25	2.00	2.25	2.17	1.75	1.75	3.25	2.25	2.21
Courteousness of provider	1.00	1.00	1.25	1.08	1.50	1.25	1.50	1.42	1.25
Efficacy of provider's explanations	1.00	1.25	1.25	1.17	1.50	1.50	2.00	1.67	1.42
Prescribed medicines received	1.00	1.00	1.00	1.00	1.00	1.50	1.50	1.33	1.17
Cost of visit	1.00	1.25	2.00	1.42	1.50	1.75	2.00	1.75	1.58
Overall satisfaction	1.50	1.25	1.50	1.42	1.50	1.50	1.75	1.58	1.50
Delivery and PNC services									
Reception	1.00	1.50	1.50	1.36	1.33	1.50	1.00	1.29	1.33
Courteousness of provider	1.33	1.00	1.75	1.36	1.00	2.00	1.50	1.50	1.41
Efficacy of provider's explanations	1.00	1.00	1.00	1.00	1.33	2.00	2.00	1.71	1.28
Prescribed medicines received	1.00	1.00	1.00	1.00	1.67	1.50	2.00	1.71	1.28
Cost of visit	1.33	1.50	1.75	1.55	1.33	1.50	1.00	1.29	1.44
Overall satisfaction	1.00	1.25	1.50	1.27	1.33	1.50	1.50	1.43	1.33
FP services									
Reception	1.50	1.00	1.25	1.25	2.00	1.00	1.00	1.25	1.25
Courteousness of provider	1.50	1.50	2.00	1.67	3.00	1.50	2.00	2.00	1.75
Efficacy of provider's explanations	1.25	1.00	1.50	1.25	3.00	1.50	1.00	1.75	1.38
Prescribed medicines received	1.50	1.00	1.25	1.25	2.00	1.50	2.00	1.75	1.38
Cost of visit	1.00	1.75	1.00	1.25	3.00	1.00	1.00	1.50	1.31
Overall satisfaction	1.00	1.75	2.00	1.58	2.00	1.00	1.00	1.25	1.50

Note: antenatal care (ANC); basic health center (BHC); district referral hospital (DRH); family planning (FP); postnatal care (PNC)

In general, young parents said they are more than satisfied (mean score of 1.50) with ANC services. This was mainly due to satisfactory monitoring of health, as reflected through various information (stress, weight, due date, baby's growth, satisfactory response to all expectations, etc.),

counseling, and provision of medicines and vaccines. On the other hand, young parents considered the waiting time to be long. In addition, some young fathers (especially those aged 18–24) criticized the absence of the health care provider and lack of explanations during the consultation. Concerns raised by the young mothers included: harshness on the part of certain providers; receiving care from a less-qualified trainee; taste of the iron tablet; injections they did not like; length of time spent at the facility for ANC; travel to and from ANC; hastiness of the provider on the busiest ANC days.

For delivery and PNC services, young parents were also more than satisfied (mean score of 1.33), in general. The elements rated as satisfactory included: safe delivery attributed to better care; comfort of and proximity to the facility; free advice on diet; and easier access to the birth certificate. However, they were critical of being seen by a trainee (nurse or midwife), an experience that could deter a young mother from giving birth at a facility, even after completing all required ANC visits. Other unsatisfactory elements were: waiting too long to be seen by the midwife (even though she is busy); major drug stock-outs; and high cost of hospital delivery (minimum of MGA 11,000, the cost varying depending upon the sex of the baby, travel, medication, and food prices).

> *"I was close to giving birth at midwife's house because it seemed like trainees assist with birth here, and we don't know if she knows how to do it or not. In the end, I gave birth here."*
> –Young mother, aged 18–24, IDI with urban SRH clients, Vakinankaratra

For use of FP services, young parents were generally satisfied (mean score of 1.50). The elements rated satisfactory were: *effectiveness* in preventing pregnancy and spacing births; *peace of mind* resulting from FP use; option of *different methods* and *option of choosing* the right one; *free or affordable (MGA 500–3,000 per quarter);* and *good reception*. Unsatisfactory elements were contraceptive *side effects*, need for a small *incision* for the implant, and, in some cases, *absence/scarcity of explanations* about FP. An increase in the cost of injectables (from MGA 300 to 1,500) was criticized. Note that young parents who are the most motivated (because they are aware of the benefits affecting their quality of life) persevere, and if they were intolerant to a certain method, they resorted to another method.

Incentives and Disincentives of Young Parents Who Are Nonusers of Sexual and Reproductive Health Services

Factors that promote or prevent useof sexual and reproductive health services

SRH Services	Factors that promote use	Factors that prevent use
ANC	• Convinced of the benefits of ANC for regular health monitoring of mother and baby • Seeing a CHW and/or exposure to awareness messages • Positive family influence	• Young age of expectant mothers and shame • Lack of information (or knowledge) about ANC and its services and resulting lack of faith in ANC • Negative influence from partner and family • Family tradition/practice of seeing a *matrone* • Rumors, particularly about skills of trainees and side effects of vaccines • Religious beliefs
Delivery	• Awareness of safe delivery (less risk of death) • Good care • Appropriate care (prevention of puerperal infection or hemorrhage) • Option for surgery if necessary • Availability of required medicine • Opportunity for management of complications	**Motivations to deliver with a *matrone*:** • Reduced risk awareness about complications and death • Confidence in the *matrone's* abilities • Family influences • Financial constraints and limited logistics

SRH Services	Factors that promote use	Factors that prevent use
PNC	• Health checkup for mother and baby (growth, umbilicus, sick care) • Get information on baby care (breastfeeding, nutrition) • Vaccination for baby	• No help to take care of the baby • Young mother being tired, sick and busy • Fear of provider being harsh • Perception that PNC is not needed because baby seems to be healthy • Distance to the facility • Bad weather and its effects (closed road, etc.) or unforeseeable circumstances • Mother forced to rest by her family, seeing *matrone* if needed
FP	• Existing child already small and having another could put his health at risk • Poverty and aspirations for a better life	• Unsupportive family (partner, mother-in-law, grandparents) • Conservative mentality (a belief that many children are gift from God), especially in Menabe • Misperceptions that FP use would shorten lifespan, cause side effects, cool the uterus, reduce sexual desire, make sex uncomfortable • Concern that young fathers will be unfaithful • Intolerance to and lack of appreciation of certain contraceptive methods • Preference for the calendar method due to lack of familiarity with FP (some young fathers) • Lack of financial resources • Getting an injection is taboo for some rural young parents • Heeding the *matrone's* advice (about contraceptives) in the absence of FP in rural areas
Other perceptions of young parents about SRH services, according to CHWs	• Quality of reception and care in public facility, but cost is higher • Lower but random costs (varying and unexpected) and improved but more critical reception in public facility • Provision of ANC in a public facility is a plus	• Unaffordable costs • Fear of being seen and treated by a provider of the opposite sex • Fear of vaccines and injections • Limited hours of operation • Distance from the facility and lack of security • Religion: refusal of services (vaccines and others) due to spiritual beliefs and religious restrictions • Availability of *matrone* as another option that meets needs

Illustrative Quotes

"Where we're from, there aren't a lot of girls who go there. They don't go to the hospital much since the matrones here are all very competent. They provide ANC, delivery. Most pregnant women where we're from don't go to the hospital."
–Young father, aged 18–24, FGD with peri-urban nonusers of SRH services, Menabe

"This is what scares me…what happened to me when I was sick…I was stuck with needles here for five days. It was a trainee who gave them to me. He gave the needle through a vein, then the vein blew and he removed the needle. Then, he tried again and searched for another vein. This is what scared me."
–Young mother, aged 18–24, FGD with urban nonusers of SRH services, Menabe

"It's true, it's tiring to have too many children. To get a good education, you have to space pregnancies. And if the husband or wife decide to, they'll use FP, because even if it's God who gives them children, spacing is good for them!"
–Young father, aged 18–24, FGD peri-urban nonusers of SRH services, Menabe

"Some (young mothers) are motivated, come to the health center to get information, but, in the end, don't get confirmation (note: authorization) from the husband and don't come back."
–SRH service provider, IDI, peri-urban, Menabe

"We don't dare use that [FP] because it seems deadly to use."
–Influential person, IDI, urban, Vakinankaratra

Conclusion and Recommendations

Conclusion: Summary of Factors that Motivate or Prevent Use of SRH Services by Young Parents, by Level of Influence

Level of influence	ANC services	MNH services	FP services
Individual level	• There is no knowledge of a birth plan among young mothers who are nonusers of SRH services. • There is a mix of correct and incorrect knowledge (practices advised by the *matrone*) for a safe pregnancy. • Birth preparedness is practiced in Vakinankaratra but not usually in Menabe (waiting for the actual birth).	• There is incompetence among young mothers to provide care to the first baby, needing advice and support. • There is mixed knowledge of frequent and correct breastfeeding, and poor knowledge of exclusive breastfeeding is noted. • There is harmful influence of the *matrone* on baby care.	• Young mothers are mostly aware of the usefulness of spacing pregnancies and wait a few years before having the second child. • Young fathers have more theoretical knowledge about the subject.
Couple level	• Young fathers provide physical, moral, financial, and material support during pregnancy. • Some young fathers seek information and advice about health, they encourage and accompany young mothers during ANC at the BHC, and they give reminders about ANC appointments.	• Final decision about place of delivery is usually made by young mothers (assisted by partner or parents). • Young educated fathers appear to be more supportive of delivery at the facility. • Young fathers participate in the birth by accompanying expectant mothers to the place of delivery (the BHC or DH) and supported by parents, relatives, or members of the community.	• An unstable household financial situation triggers the couple to think (2–9 months after birth) about spacing pregnancies and using FP. • Final decision is made by the woman (the most concerned about childbirth and its effects), according to the large majority of mothers and half of the fathers. • Male opinion is desired and respected by a minority of young mothers and imposed on the young mothers by half the fathers. • Young fathers with a higher level of education are more favorable toward FP use.

Level of influence	ANC services	MNH services	FP services
Family level In general, parents replicate their own experiences (support received) with young parents.	• Mother, mother-in-law, and sister are most influential. They encourage and/or accompany the young mother to the BHC for ANC, engaging with a CHW and monitoring overall health. • Other family support may include advice and sharing experiences (mother and mother-in-law), daily tasks (mother, mother-in-law and sister), and material and financial support (parents and all). • Very young mothers are heavily dependent on parental support from pregnancy to delivery and beyond.	• Parents are influential in advising the place of delivery and having the birth take place at a facility, *but only a small minority of parents who had a positive experience at a facility would recommend the use of a public facility.* • Parental support (counseling and care) is expected and effective for the care of the infant and young mother, but positive parental influence is less obvious for PNC.	• Parents and relatives are less influential than members of the community regarding the decision to space pregnancies. However, the mother remains active in advising on and/or accompanying the young mother for FP services when she has made the decision.
Community level	• *Matrones* and health care providers (midwife, doctor, CHWs) are the ones who provide support through traditional or modern prenatal care. • There is a high frequency of mixed practices (*matrone* and ANC at the facility). • Other community members (religious leaders, friends, neighbors) give advice.	• CHW is very active (advice and support during delivery). • *Matrone* or midwife helps expectant mothers give birth. • Secondary support: other community members support and help young parents and the family, each at their level.	• CHW is very influential for raising awareness among young parents about using an FP method to space births. • Young mothers also listen to testimonials from neighbors.

Level of influence	ANC services	MNH services	FP services
Service level The six health facilities in the study do not attract enough young parents.	• Almost all ANC services are available at rural BHC II and urban DH. There is limited availability of: monitoring pregnancies for women with hypertension; and distributing misoprostol for the prevention of postpartum hemorrhage for home deliveries. • Young women are received at ANC without discrimination, and young expectant mothers under18 years of age are considered at risk (they receive more advice on prevention of complications during pregnancy and preparing for childbirth). • In the health facilities in the study, four out of 10 ANC visits involve young mothers under the age of 25. For young mothers under 18 years of age, slightly less than half (49.2%) attend ANC for the first pregnancy, a little more than half (56.0%) attend ANC early, and only 12.2% of pregnant women completed four ANC visits. Facilitating factors: adequate health monitoring, good reception, good communication, affordable costs Barriers: harshness of providers; care by a trainee seen as less competent; costs are too high for some; provider not available; or long wait and the amount of time spent at the facility for ANC (half of a day total)	• Availability of delivery services is: almost complete in 1/6 facilities; moderately available in 2/6 facilities; and more than three services not available in 3/6 facilities. • Least available services were delivery by cesarean section and misoprostol. • In the health facilities in the study, 46% of women who delivered at a facility are under 25 year of age. Only 30.6% of women attending ANC deliver at a facility while the rest use a *matrone* or retired midwife. Facilitating factors: greater likelihood of safe delivery through better care; free care and advice on baby care valued as part of PNC Barriers: receiving care from a trainee, which can deter an expectant mother from delivering at a facility Health care providers mentioned insufficient material/equipment (suction cups, resuscitation masks, etc.) and the need for an ambulance to transfer women in labor and patients.	• Availability of FP services: three out of four services are lacking at BHC; and five to seven services are lacking at DH. • FP services are available for adolescents and young unmarried persons in five out of six health facilities (except BHC II Ankilizato). Contraceptive methods most frequently available for adolescents and young people include male condoms and combined oral contraceptives. Stock-outs were only brought up in two DH. • Designated areas and special hours for FP are not available for adolescents and youth. • In the health facilities in the study, 16% of FP users were young people under the age of 25. Young parents said they started FP between 6–9 months after delivery. The majority of adolescents used Depo-Provera. Other contraceptive methods used were: Lo-Femenal/estrogen-progestin pills, ovrette/progestin pills, implants and, lastly, lactational amenorrhea method. Facilitating factors: effectiveness, resulting peace of mind; availability of different methods and option of choosing the right one; free or affordable cost; and good reception. Barriers: side effects; small incision for implant; and lack of/scarcity of explanations for FP, in some cases.

Summary of Similarities and Differences by Region, Setting and Type of Structure, or Gender

Similarities / differences	ANC	Delivery and PNC	FP
Regions: Vakinankaratra versus Menabe			
Similarities	• There is mixed use of ANC both at the facility and with a *matrone*. • Support (family and community) is generally similar.	• Delivery with a *matrone* is also common.	• CHW is influential for raising awareness about FP.
Differences	• Vakinankaratra: there is more stigmatization of pregnant minors (especially if single, student, unemployed). • Menabe: in general, there is more sexual precocity and openness due to customs. • More frequent use of a *matrone* for various SRH services in Menabe.	• Birth preparedness is practiced in Vakinankaratra but not in Menabe (waiting for the actual birth).	Menabe: • Children are considered gifts from God, and mothers-in-law and grandparents are more conservative and reticent about FP. • There is early use of FP by young girls to protect themselves from early pregnancy. • *Matrone* is involved, providing traditional support.
DH (urban) versus BHC (peri-urban and rural)			
Similarities	• There are no significant differences in the capacities of health facilities and available SRH services.	• Neonatal complications were reported at the DHs and BHC II in Ankilizato.	• For all SRH services and for FP in particular, health facilities do not attract enough young people.
Differences	• The CHW plays an important role raising awareness and encouraging young parents to go to the facility (ANC, delivery, or FP). CHWs are only used in *fokontany* (villages) served by BHCs. • Number of qualified health personnel and number of beds in DHs differ.	• Maternal complications were noted in the DHs. • Four times more maternal and neonatal deaths were observed in the DH in Miandrivazo (Menabe) compared to those in the BHC II.	
Young fathers versus Young mothers			
Similarities	• Individually, young fathers are as poorly prepared as young mothers to cope with pregnancy and childbirth. They are very dependent on their parents.	• Same incompetence exists about baby care, even if young mothers are naturally more involved (breastfeeding). • There is equal knowledge about baby care.	• Information needs are similar (FP and ANC, CHW activities).
Differences	• Young, educated fathers, are supportive of facility use. • Young mothers are more dependent on husbands or parents for using SRH services.	• Decision-making on place of delivery rests more often with young mothers (alone, with spouse or parents). Few young fathers are involved.	• Young mothers are more convinced about FP.

Recommendations

In addition to engaging young mothers and fathers directly and building the capacity of the health system to provide services that are friendly and attractive to young people, programs targeting FT/YPs should use a socioecological approach to engage key influencers of young parents, particularly mothers and mothers-in-law.

Individual/Couple

- Engage both young mothers and young fathers, addressing gender norms, building capacity for couple communication, and encouraging positive male involvement in postpartum FP and parenting.
- Use messaging to emphasize the benefits of health service use, particularly in the reduction of risk, to mother and baby. Challenge attitudes and social norms that stigmatize pregnant adolescents and young mothers.

Family

- Ensure that individuals with significant influence over young parents' decisions, particularly mothers and mothers-in-law, have accurate information about safe delivery; PNC, including postpartum FP for healthy timing and pregnancy spacing; and newborn care.

Community

- Ensure that all CHWs are trained in FP counseling and equipped with short-acting methods.
- Build the capacity of CHWs to sensitize youth on the use of SRH services (messages should be oriented to CHWs having correct knowledge on SRH and on the importance and benefits of using SRH services).

Health System

- Ensure that health services are friendly and welcoming to young people through a whole-site training that addresses provider attitudes and beliefs. Specifically:
    - To mitigate concerns about the skills of providers in training, entrust the first ANC visit to an experienced health care provider who, where necessary, introduces young parents to a trainee. This experienced health care provider ensures effective supervision of the trainee.
    - Encourage attendance at subsequent ANC visits. Develop a delivery preparedness plan in the ANC card, with monitoring to be ensured by CHWs to encourage delivery at the facility.
    - Assess the causes of stock-outs of medicines, FP methods, vaccines, and other products, and determine actions that need to be taken to ensure full and consistent supply of all services.
    - Build on the "cycle-rickshaw-ambulance" component of the Madagascar Community-Based Integrated Health Project to address emergency transportation in rural and peri-urban areas.
    - Establish specific service days and hours for youth.
    - Provide information on the price of services, and ensure that there is transparency in pricing.
    - Train health workers on correctly and consistently completing SRH registers, and establish a system for routine analysis and application of register data.

Collaborations

- Establish a collaborative system involving multiple community actors (CHWs, *matrones*, local authorities), and specify the distribution of maternal and child survival roles and responsibilities.
- Collaborate with faith-based institutions to convey information on SRH services to young couples receiving prenuptial counseling, as well as youth in general.
- Collaborate with microfinance institutions to propose a health funding system for target groups.
- Collaborate with security forces to define secured routes to allow villagers to safely access health facilities.

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