Family Planning Needs during the First Two Years Postpartum in Madagascar

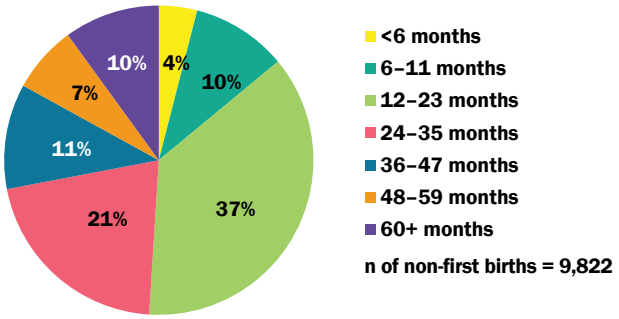
This analysis is based on the 2008–09 Demographic and Health Survey (DHS) data from Madagascar. It summarizes key findings related to birth and pregnancy spacing, fertility return, unmet need for and use of family planning (FP), and contact with key services for women during the period from the last birth through two years postpartum.

Because research findings demonstrate improved perinatal outcomes for infants born 36–59 months after a preceding birth, experts made recommendations to a World Health Organization (WHO) Technical Committee to advise ***an interval of at least 24 months before couples attempt to become pregnant*** in order to reduce the risk of adverse maternal, perinatal and infant outcomes.[1] In addition, rigorous analyses have found that interpregnancy (birth-to-pregnancy) intervals that are too short are associated with adverse pregnancy outcomes, increased morbidity in pregnancy, and increased infant and child mortality.[2,3]

PREGNANCY SPACING IN MADAGASCAR

Figure 1 presents data from women experiencing births in the past five years. In this analysis, only women with pregnancies that resulted in a live birth are included, and the pregnancy duration is calculated at nine months. Of these pregnancies, 4% occur within very short intervals of less than six months, 10% within short intervals of less than 12 months, and another 37% within intervals of 12–23 months. Thus, over half (51%) of all pregnancies in Madagascar occur before the recommended interpregnancy interval of at least 24 months.

Figure 1: Interpregnancy spacing among all women aged 15–49, all non-first births in the last five years



Strikingly, the 2008–09 Madagascar DHS data demonstrate a sharp decrease in infant and childhood mortality rates as the length of the interpregnancy interval increases. Infant mortality decreases from 46/1,000 for infants born with interpregnancy intervals <15 months, to 26/1,000 for infants born with interpregnancy intervals between 27 and 38 months. Similarly, higher rates of under-five mortality are evidenced for children born with interpregnancy

[1] World Health Organization. Report of a WHO Technical Consultation on Birth Spacing, Geneva, Switzerland, 13–15 June 2005.
[2] Rutstein SO. Further evidence of the effects of preceding birth intervals on neonatal, infant, and under-five-years mortality and nutritional status in developing countries: Evidence from the Demographic and Health Surveys. *DHS Working Papers, Demographic and Health Research* (41). September 2008.
[3] Kozuki N, Lee AC, Silveira MF, et al. The associations of birth intervals with small-for-gestational-age, preterm, and neonatal and infant mortality: A meta-analysis. *BMC Public Health.* 2013 ; 13(Suppl 3):S3.

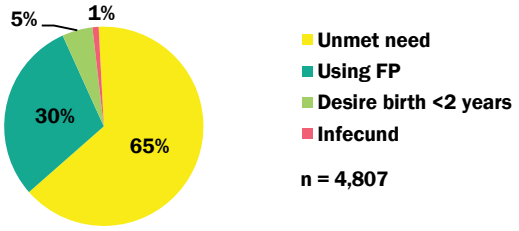
intervals of less than 15 months (124/1,000) compared with children born with interpregnancy intervals between 27 and 38 months (56/1,000).

PROSPECTIVE UNMET NEED FOR FAMILY PLANNING

Data from 4,807 women within two years of having given birth were used to examine unmet need, as illustrated below in **Figure 2**. In this analysis, unmet need for FP is defined prospectively[4] based on the woman's desired timing for her next pregnancy, if any, and her current use of contraception. Prospective unmet need based on fertility preferences looking forward is most likely to predict a woman's need for FP in the extended postpartum period.

Among Malagasy women within two years postpartum, 65% have an unmet need for FP; 30% are using a method of FP; and only 5% of women desire another pregnancy within two years.

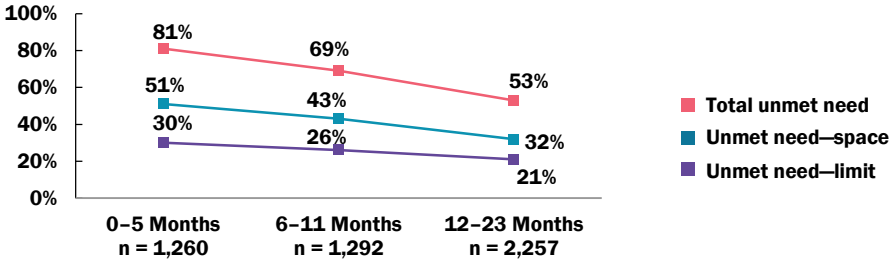
Figure 2: Prospective unmet need for FP among women within 0–23 months postpartum



UNMET NEED FOR SPACING AND LIMITING

Figure 3 demonstrates the prospective unmet need for FP by women's desires for spacing and limiting births through two years postpartum. Total unmet need decreases as the number of months post-delivery increases. Among women 0–5 months postpartum, overall unmet need is 81%. Overall unmet need decreases to 69% among women 6–11 months postpartum, and then decreases further to 53% among women 12–23 months postpartum. With regard to women's fertility desires within total unmet need, the levels of unmet need for limiting decrease throughout the two-year postpartum period, from 30% (0–5 months) to 26% (6–11 months) to 21% (12–23 months). Similarly, the unmet need for spacing also decreases over this same period, going from 51% (0–5 months) to 43% (6–11 months) to 32% (12–23 months).

Figure 3: Prospective unmet need across postpartum periods



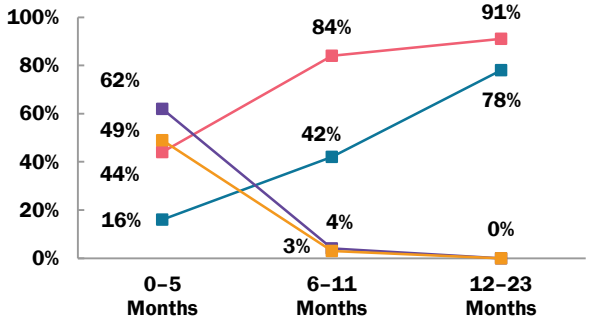
RETURN TO FERTILITY AND RISK OF PREGNANCY

The figures on the following page illustrate key factors related to return to fertility and risk of pregnancy. **Figure 4** shows that among all women 0–23 months postpartum, 44% of women are sexually active during the first six months postpartum and 16% have experienced menses return during the same period. By the second year postpartum, 91% of women are sexually active and 78% have seen menses return.

[4] The definition for prospective unmet need is based on the DHS question: "Would you like your next child within the next two years or would you like no more children?"

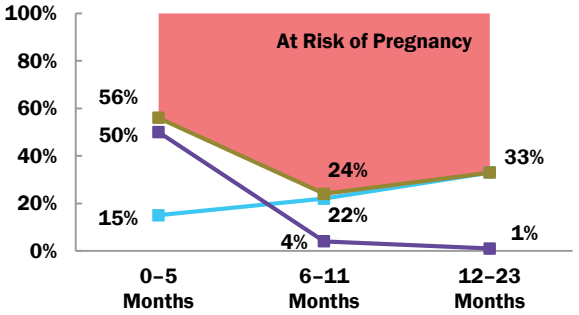
Figure 5 looks at the subset of sexually active women during the same period and illustrates how risk of pregnancy increases over time during the two years postpartum. While 44% of sexually active women are at risk of pregnancy during the first six months postpartum, this risk increases to 76% of women from 6–11 months postpartum, and then decreases to 67% of women 12–23 months postpartum.[5]

Figure 4: Factors influencing return to fertility among all women 0–23 months postpartum



Postpartum women: n = 4,807

Figure 5: Risk of pregnancy among sexually active women 0–23 months postpartum



Sexually active postpartum women: n = 3,688

Sexually active | Return to menses | Breastfeeding + Plain Water | Exclusive Breastfeeding | Modern FP use | Composite not at risk of pregnancy

METHOD MIX FOR POSTPARTUM FAMILY PLANNING USERS

Among the 1,417 postpartum family planning users, the largest proportion (48%) use injectables, followed by the pill (13%), the lactational amenorrhea method (9%), implants (4%), condoms (3%), IUDs (1%), and female sterilization (1%). The remaining 21% use traditional methods (withdrawal and periodic abstinence).

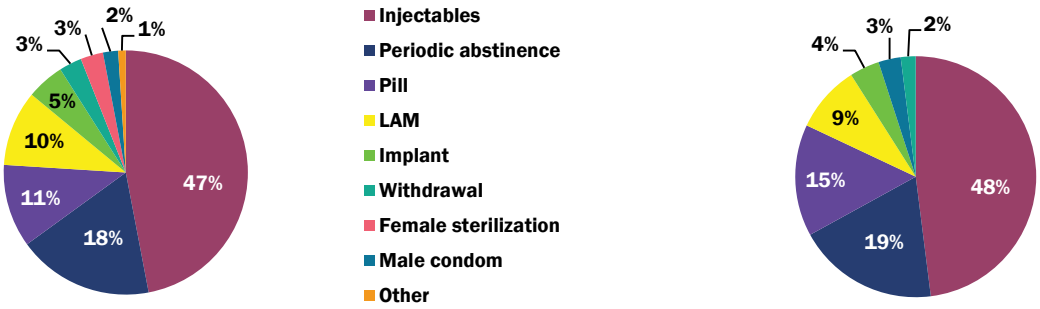
Figure 6 shows the method mix among postpartum women by their reproductive intentions. Among women who are using FP to limit, 92% are using short-acting or traditional methods, while only 8% are using long-acting or permanent methods, such as implants (5%) and female sterilization (3%). For women intending to space, the mix is also dominated by short-acting methods, with almost half (48%) using injectables. Of note is the high use of traditional methods (21%) by postpartum women who both want to limit and to space.

Figure 6: FP method use among women 0–23 months postpartum according to their intention to limit or space

Using to Limit
n = 563

Using to Space
n = 856

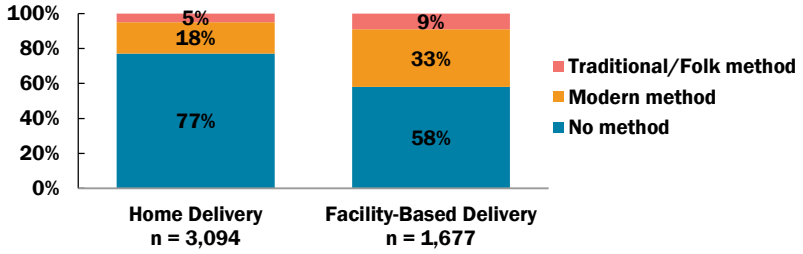
[5] The composite not-at-risk calculation includes: (1) women 0–5 months postpartum who are exclusively breastfeeding, or providing breastmilk and plain water only, or are using a modern FP method; (2) women 6–11 months postpartum who are exclusively breastfeeding and menses have not returned, or providing breastmilk and plain water only and menses have not returned, or are using a modern FP method; (3) women 12–23 months postpartum who are using a modern FP method.



CONTRACEPTIVE USE BY PLACE OF DELIVERY

According to the 2008–09 DHS, only 35% of all births in Madagascar occur at a health facility, while 64% occur at home. **Figure 7** shows that overall, 33% of postpartum women who delivered at a health facility are using a modern method of FP, compared with only 18% of women who delivered at home.

Figure 7: Uptake of family planning during the 0–23 months postpartum period by place of delivery



CONCLUSION

Over half (51%) of all non-first births in Madagascar are spaced at less than the recommended 24-month interpregnancy interval, putting women and their infants at increased risk for poor maternal and perinatal outcomes. In developing countries, if all women waited 24 months after a birth before having another child, infant deaths (<1 year) would decrease by 10%, and child deaths (ages 1–4 years) would fall by 21%.[6] This analysis demonstrates that women in Madagascar have a significant unmet need for FP during the two years after a birth. Total unmet need decreases during this period (from 81% to 53%), in part due to the higher proportion of women starting contraception as time elapses after a birth.

In Madagascar, risk of pregnancy peaks in the middle of the two-year postpartum period. While 44% of sexually active women are at risk of pregnancy during the first six months postpartum, this risk increases to 76% among women 6–11 months postpartum, and then decreases to 67% between among women 12–23 months postpartum. While sexual activity is low in the first six months after birth, by the second year postpartum more than 9 in ten (91%) of women are sexually active, amplifying the number of women at risk of pregnancy during this period.

Method mix in Madagascar relies heavily on traditional and short-term methods, with the majority of postpartum women relying on injectables (48%) and only 6% using long-acting or permanent methods (implants, IUDs or female sterilization). However, the desire to limit is still high for postpartum women (30% from 0–5 months postpartum and 21% among women 12–23 months postpartum). Also of note is the high use of traditional methods (21%) by postpartum

[6] Cleland J, Conde-Agudelo A, Peterson H, Ross J, Tsui A. Contraception and health. The Lancet. 2012 ; 380(9837):149-156.

women. Increased postpartum use of long acting methods of FP would improve postpartum women's ability to achieve both spacing and limiting fertility desires.

Perhaps reflective of access to services, women who deliver at home are much less likely to use a modern FP method than those who deliver in a health facility (18% and 33% respectively). With 64% of all births in Madagascar occurring at home, these findings demonstrate the need for increased community-based services in rural settings. **Program evidence indicates that offering postpartum family planning (PPFP) counseling during antenatal care and offering PPFP services during all maternal and child health contacts can be effective for increasing awareness of, demand for, and use of FP in this critical period.**

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