



# Family Planning Needs during the First Two Years Postpartum in Rwanda

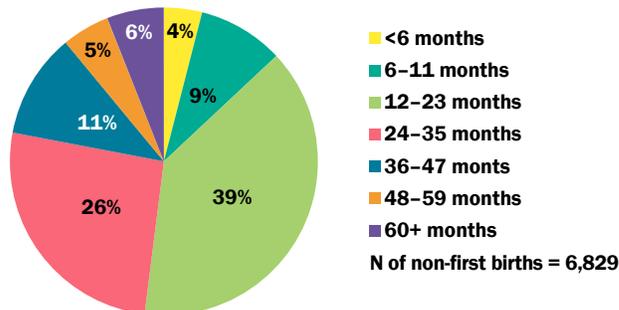
This analysis is based on the 2010 Demographic and Health Survey (DHS) data from Rwanda. It summarizes key findings related to birth and pregnancy spacing, fertility return, unmet need for and use of family planning (FP), and contact with key services for women during the period from the last birth through 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* (birth-to-pregnancy interval) in order to reduce the risk of adverse maternal, perinatal and infant outcomes.<sup>1</sup> In addition, an analysis of DHS data from 52 developing countries, which studied over 1 million births, found that birth-to-pregnancy intervals that are too short are associated with adverse pregnancy outcomes, increased morbidity in pregnancy, and increased infant and child mortality.<sup>2</sup>

## PREGNANCY SPACING IN RWANDA

**Figure 1** presents data from women experiencing non-first 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, 4% of pregnancies occur within very short intervals of less than six months following the preceding birth, 9% occur within short intervals of less than 12 months, and another 39% occur within intervals of 12–23 months. Thus, over half (52%) of all pregnancies in Rwanda occur within short intervals of less than 24 months after the preceding birth.

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



It is noteworthy that the 2010 Rwanda DHS data demonstrate a sharp decrease in infant and childhood mortality rates as the length of the birth-to-pregnancy interval increases. Infant mortality decreases by more than half, from 104/1,000 (for infants born at birth-to-pregnancy intervals <15 months) to 41/1,000 (for infants born at birth-to-pregnancy intervals between 27 and 38 months). Similarly, higher rates of under-five mortality are evidenced for children born at birth-to-pregnancy intervals of less than 15 months (156/1,000) compared with children born at birth-to-pregnancy intervals between 27 and 38 months (76/1,000).

<sup>1</sup> Report of a WHO Technical Consultation on Birth Spacing, Geneva, Switzerland, 13–15 June 2005.

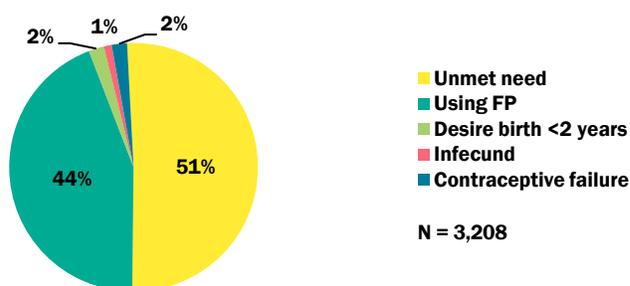
<sup>2</sup> Rutstein SO. 2008. Further evidence of the effects of preceding birth intervals on neonatal, infant, and under-five-years mortality and nutritional status in developing countries: Evidence from the Demographic and Health Surveys. *DHS Working Papers, Demographic and Health Research* (41).

## PROSPECTIVE UNMET NEED FOR FAMILY PLANNING AMONG WOMEN 0–24 MONTHS POSTPARTUM

Data from 3,208 women within two years of a birth were used to examine unmet need, as illustrated below in **Figure 2**. In this analysis, unmet need for FP is defined prospectively regarding the woman’s desired timing for her next pregnancy and her current use of a method of contraception. Prospective unmet need is based on fertility preferences looking forward because it is most likely to predict a woman’s need for FP in the extended postpartum period.

Among women within two years postpartum, 51% have an unmet need for FP; 44% are using a method of FP; and only 2% of women during this 24-month postpartum period desire another pregnancy within two years.

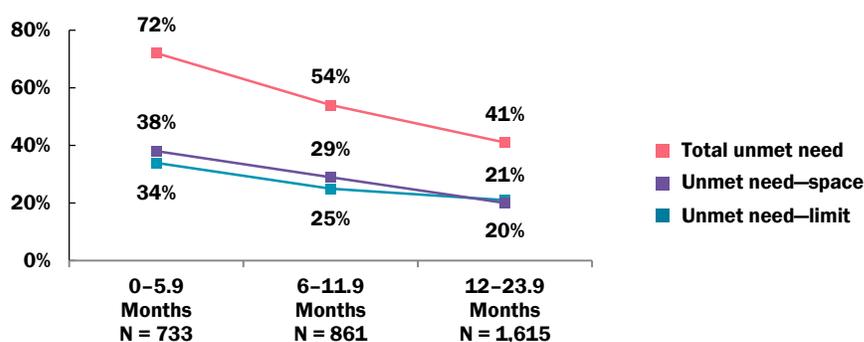
**Figure 2: Prospective unmet need for FP among women within 0–24 months postpartum**



## UNMET NEED FOR SPACING AND LIMITING

**Figure 3** demonstrates the prospective unmet need for spacing and limiting births through two years postpartum. Total unmet need decreases as the number of months post-delivery increases. From 0–5.9 months postpartum, overall unmet need is 72%. At the end of one year postpartum, overall unmet need has decreased to 54%, and then to 41% by the end of the second year. With regard to the components of total unmet need, the levels of unmet need for spacing decrease throughout the 24-month postpartum period, from 38% (0–5.9 months) to 29% (6–11.9 months) to 20% (12–23.9 months). Similarly, the unmet need for limiting decreases over this same period, going from 34% (0–5.9 months) to 25% (6–11.9 months) to 21% (12–23.9 months).

**Figure 3: Prospective unmet need across postpartum periods**

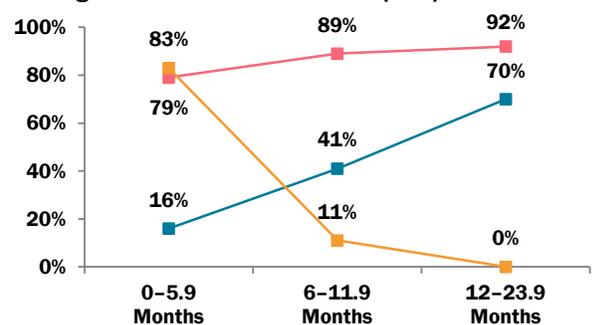


## RETURN TO FERTILITY AND RISK OF PREGNANCY

The figures on the next page illustrate key factors related to return to fertility and risk of pregnancy. **Figure 4** shows that among all women 0-24 months postpartum, 79% of women are sexually active during the first six months postpartum and 16% have experienced menses return during the same period. From 12–24 months postpartum, 92% of all postpartum women are sexually active and 70% have menses return.

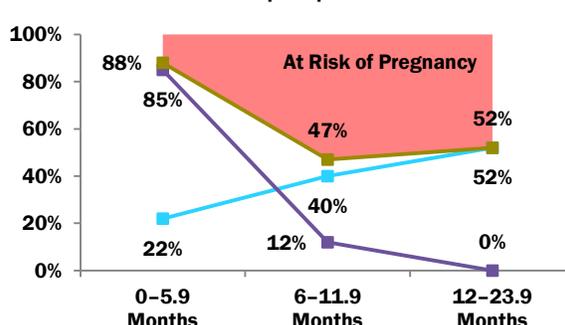
**Figure 5** looks at a sub-set of sexually active women during the same period and illustrates how risk of pregnancy increases over time during the two years postpartum. While only 12% of sexually active women are at risk of pregnancy during the first six months postpartum, this risk increases to 53% from 6–12 months postpartum, and then decreases slightly to 48% from 12–24 months postpartum. (The composite not at risk calculation looks at women who are either exclusively/predominantly breastfeeding in the first 6 months or exclusively/predominantly breastfeeding in the 6-9 month period and haven't experienced a return to menses and/or are using a method of contraception.)

**Figure 4: Factors influencing return to fertility among all women 0–24 months postpartum**



Postpartum women: N = 3,208  
 Sexually active: N = 2,823  
 Return to menses: N = 1,605  
 Exclusive BF: N = 706  
 Predominant BF: N = 730

**Figure 5: Risk of pregnancy among sexually active women 0–24 months postpartum**



Sexually active: N = 2,823  
 Using modern FP: N = 1,206  
 Predominant BF: N = 587  
 Composite not at risk for pregnancy: N = 1,635

Legend: Sexually active (red), Exclusive BF (orange), Return to menses (blue), Composite not at risk of pregnancy (green), Predominant BF (purple), Modern FP use (cyan)

## METHOD MIX FOR POSTPARTUM FAMILY PLANNING USERS

Among the 1,412 postpartum women who are using a FP method, the majority (54%) use injectables, 15% are using the pill, 7% are using condoms, 7% are using an implant, 2% are using an IUD, 1% are using female sterilization and 12% are using traditional methods (abstinence and withdrawal).

**Figure 6** shows the method mix among postpartum women by their reproductive intentions. Among women who are using FP to limit, 88% are using short-acting or traditional methods, while only 11% are using long-acting or permanent methods, such as implants (9%) and female sterilization (2%). For women intending to space, the mix is dominated by short-acting methods. Of note is the use of injectables by over half (58%) of the women who are using FP to space.

**Figure 6: FP method use among women 0–24 months postpartum according to their intention to limit or space**



## UNMET NEED BY PLACE OF DELIVERY

It is also useful to examine unmet need during the postpartum period by place of delivery. According to the 2010 Rwanda DHS, 69% of all births occur at a health facility, while 29% occur

at home. **Figure 7** below shows that among postpartum women with an unmet need to space, 85% delivered at a health facility. Similarly, among postpartum women with an unmet need to limit, 69% delivered at a health facility.

**Figure 7: Postpartum women with unmet need by place of delivery**



## CONCLUSION

Over half (52%) of all non-first births in Rwanda are spaced at less than the recommended 24 month birth-to-pregnancy interval, putting women and their infants at increased risk for poor maternal and perinatal outcomes. This analysis demonstrates that women in Rwanda have a significant unmet need for FP during the two years after a birth. Even though total unmet need decreases during this period (from 72% to 41%), the overall unmet need is still high.

In Rwanda, risk of pregnancy increases over time during the two years postpartum. While only 12% of sexually active women are at risk of pregnancy during the first six months postpartum, this risk increases to 53% from 6–12 months postpartum, and then decreases slightly to 48% from 12–24 months postpartum. Method mix in Rwanda relies heavily on short-acting methods, with the majority of women relying on injectables (54%) and only 10% using long-acting or permanent methods (implants, IUD and female sterilization). However, unmet need to limit is high for postpartum women (34% from 0–6 months and 21% from 12–24 months), demonstrating the need for increased access to long-acting and permanent methods of FP, which are highly effective methods for women to achieve their desired pregnancy spacing/limiting needs.

Additionally, women who deliver at a health facility demonstrate high unmet need for both limiting and spacing (69% and 85% respectively), further indicating a need for increased integration of postpartum FP (PPFP) services at the health facility level. Program evidence indicates that offering PPFP counseling during antenatal care and offering PPFP services during all maternal and child health contacts, such as facility-based births and immunization sessions, can be effective for increasing awareness of, demand for and use of FP in this critical period.

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