

Fertility awareness-based guidelines for postpartum women

Postpartum women are very vulnerable to pregnancy. For the health of the mother and the infant it is important that she not become pregnant again for at least 2.5-3 years, and recent research suggests that the ideal birth spacing interval is 3-5 years (Population Reports, 2002). Many postpartum women worldwide lack access to, or do not wish to use, hormonal contraceptive method. Breastfeeding women are particularly vulnerable, because they often believe (as do many health providers) that breastfeeding provides sufficient protection from pregnancy.

Fertility awareness-based methods of family planning offer instructions to help women identify their fertile window – the days each cycle when they should avoid unprotected intercourse to prevent pregnancy. These methods may be especially useful for breastfeeding women, because they do not affect the nutritional quality or quantity of milk, and do not involve transmission of exogenous hormones to the infant, but these methods can be useful also to postpartum women who do not breastfeed and who do not wish to use other modern contraception or do not have access to it.

Efforts to provide a fertility awareness-based method to breastfeeding women led to the development of LAM. LAM is based on three criteria. For a woman to be eligible to use it she should be less than six months postpartum, amenorrheic, and fully or nearly fully breastfeeding (Labbok et al., 1994). When women are more than six months postpartum, when their menstruation returns, or when they are no longer fully breastfeeding, LAM is no longer considered as effective, and they should use another family planning method if they wish to avoid pregnancy (Labbok et al., 1997).

Recognizing the need for simple effective instructions to help women correctly identify the days each cycle when they are most likely to become pregnant if they have unprotected

intercourse, the Institute for Reproductive Health, Georgetown University, developed and tested two simple fertility awareness-based methods – the Standard Days Method and the TwoDay Method. Efficacy studies show that both methods are highly effective when used correctly (Arévalo et al., 2002; Arévalo et al., 2004). However, a recent study of the theoretical efficacy of these methods and their usefulness for breastfeeding women found that they are not good options in the early postpartum months (Arévalo et al., 2003). Clearly, postpartum women who are no longer eligible to use LAM or who choose not to use LAM yet wish to use a fertility awareness-based approach to prevent or delay pregnancy, could benefit from simple, effective instructions to help them understand when they should avoid unprotected intercourse.

This presentation will describe new fertility awareness-based guidelines for postpartum women who wish to avoid pregnancy using this approach. A pilot study to assess the effectiveness and acceptability of these guidelines is underway, and preliminary results will be shared.

The characteristics of the first cycles postpartum change as fertility returns. Postpartum amenorrhea can last from five weeks to two years or more. Studies show that only about a third of *cycle 0* (the time between the birth of the child and the first postpartum menstruation) are ovulatory and can support a pregnancy (Arévalo et al., 2003). Cycle 1 (the cycle following the first postpartum menses) is usually longer and ovulation is later than subsequent cycles. As regular fertility is established cycles gradually return to normal length, as do the timing of ovulation, and hormone levels. The postpartum guidelines offer different instructions for cycle 0, cycle 1, and subsequent cycles, to allow for these changes.

To develop the postpartum guidelines we tested the theoretical efficacy of different formulae, using existing data that followed 73 breastfeeding women until they had two normal

cycles. For each phase of the guidelines we determined what the probability of pregnancy from intercourse on a given day relative to ovulation would have been if women were using the guidelines correctly, using various rules to identify the fertile period. Our goal was to determine for each cycle postpartum which formula provided the best balance between efficacy in avoiding unplanned pregnancy and length of the identified fertile period. This procedure led to the development of the following guidelines.

In cycle 0 there is no way to predict the timing of ovulation. The period when LAM is no longer applicable can be as short as several days and as long as a year or more, and its length cannot be predicted, especially if the woman continues to breastfeed. Considering the entire period fertile would make the method unacceptable for many women. However, if women have unprotected intercourse only infrequently, then the probability that such intercourse would occur on the days near ovulation would be minimal. We determine that if women have unprotected intercourse only every 10 days or more, they are very unlikely to become pregnant. Users of the guidelines in cycle 0 who are no longer eligible for LAM keep track of when they have unprotected intercourse, and count at least 10 days before having unprotected intercourse again.

Cycle 1 varies greatly in length and the timing of ovulation, but ovulation is generally later in the cycle compared to average non-postpartum cycles. We determined that the optimal formula that would provide sufficient protection from pregnancy yet allow the couple to have unprotected intercourse several days in the cycle defines the fertile window as starting on day 11 of the cycle, and ending when the woman gets her second postpartum menses. Thus, users of the postpartum guidelines in cycle 1 avoid unprotected intercourse starting on day 11.

Subsequent cycles postpartum may still be longer than average, but as ovarian activity gradually returns to normal, cycle length and the timing of ovulation are more predictable.

Postpartum guidelines users are instructed to avoid unprotected intercourse on days 8-24 of the each cycle. After the woman has three consecutive cycles that are between 26-32 days long, she is eligible to use the Standard Days Method or the TwoDay Method, if she still wishes to use a fertility awareness-based approach to avoid pregnancy.

A pilot study to establish the efficacy and acceptability of these postpartum guidelines is underway. Almost 200 users have been admitted in Guatemala and Peru. About 10% have had their first menstruation postpartum, and were therefore admitted directly to cycle 1; some 40% were admitted while still eligible to use LAM. They will move to the 10-day rule phase later; about half were admitted to the 10-day rule phase. They were all provided with client materials to help them keep track of their unprotected intercourse.

Participants in all phases keep daily coital logs, and are interviewed monthly. So far all participants find the method very acceptable and the identified fertile period easy to identify. Comprehension of the guidelines is very high after one short counseling session, and self-reported compliance is also high. The presentation will provide a failure rate for the first six months of the 10-day rule phase. We expect that most participants admitted to that phase will have menstruated by then, so we can have a good idea of efficacy. We will also show the failure rate for cycle 1, since all women admitted to that phase and some women admitted to cycle 0 will complete cycle 1 in the coming months. We will discuss acceptability of the guidelines, and share results from in depth interviews with users about their experience.

References

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