

## CLINICAL REVIEW

## Fertility Awareness-Based Methods: Another Option for Family Planning

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**Modern fertility awareness-based methods (FABMs) of family planning have been offered as alternative methods of family planning. Billings Ovulation Method, the Creighton Model, and the Symptothermal Method are the more widely used FABMs and can be more narrowly defined as natural family planning. The first 2 methods are based on the examination of cervical secretions to assess fertility. The Symptothermal Method combines characteristics of cervical secretions, basal body temperature, and historical cycle data to determine fertility. FABMs also include the more recently developed Standard Days Method and TwoDays Method. All are distinct from the more traditional rhythm and basal body temperature methods alone. Although these older methods are not highly effective, modern FABMs have typical-use unintended pregnancy rates of 1% to 3% in both industrialized and nonindustrialized nations. Studies suggest that in the United States physician knowledge of FABMs is frequently incomplete. We review the available evidence about the effectiveness for preventing unintended pregnancy, prognostic social demographics of users of the methods, and social outcomes related to FABMs, all of which suggest that family physicians can offer modern FABMs as effective means of family planning. We also provide suggestions about useful educational and instructional resources for family physicians and their patients. (J Am Board Fam Med 2009;22:147–157.)**

Fertility awareness-based methods (FABMs) of family planning are methods that use physical signs and symptoms that change with hormone fluctuations throughout a woman's menstrual cycle to predict a woman's fertility. The unifying theme of FABMs is that a woman can reduce her chance of pregnancy by abstaining from coitus or using barrier methods during times of fertility. Natural family planning (NFP) is a subset of FABMs that specifically excludes concurrent use of all other forms of contraception, including barriers, as a supplement to the observation for fertile signs; pregnancy is avoided through abstinence alone.<sup>1</sup>

Several factors contribute to a woman's fertility. An ovum survives up to 24 hours after ovulation

unless it is fertilized, leaving a finite time for sperm to reach the egg. Sperm have short life spans after ejaculation without hospitable cervical mucous, which is present only in the periovulatory period. In optimum conditions, the typical maximum life span of sperm is 5 days, leaving a fertile window of approximately 6 days.<sup>2,3</sup> Although FABMs may be used to achieve pregnancy, that discussion is beyond the scope of this review.

FABMs are diverse. They include the older calendar ("rhythm")- and basal body temperature-based methods and the newer methods that assess cervical mucous or a combination of signs and symptoms (which include the older methods). The former are generally not considered to be highly effective.<sup>4</sup> The newer methods compare favorably with conventional contraceptives (Tables 1 and 2). It is not certain where providers and patients obtain their information about FABMs. Anecdotal evidence suggests that in the United States instruction is not often available through physician providers, occasionally through hospital programs, and more often available from faith-based groups.

When provided with positive information about FABMs more than 1 in 5 women in the United

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**Table 1. Conventional Birth Control: Method and User Effectiveness Rates**

Method	Women with Unintended Pregnancy Within 1 Year of Use (%)		Women Continuing Use at 1 Year (%)
	Typical Use	Perfect Use	
None	85	85	
Spermicide	29	18	42
Withdrawal	27	4	43
Cervical cap			
Parous	32	26	46
Nulliparous	16	9	57
Sponge			
Parous	32	20	46
Nulliparous	16	9	57
Diaphragm	16	6	57
Condom			
Male	15	2	53
Female	21	5	49
Combined pill and minipill	8	0.3	68
Evra patch	8	0.3	68
NuvaRing	8	0.3	68
Depo-Provera	3	0.3	56
Lunelle	3	0.05	56
Intrauterine device			
Copper T	0.8	0.6	78
Mirena	0.1	0.1	81
Norplant and Norplant-2	0.05	0.05	84
Female sterilization	0.5	0.5	100
Male sterilization	0.15	0.10	100

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States expressed interest in using one of these methods to avoid pregnancy.<sup>36,37</sup> However, only 1% to 3% percent of US women are currently using an FABM for this purpose.<sup>36,38</sup> Despite an improved understanding of the science underlying FABMs, rates of use have declined to 11% from 22% of married couples in 1955.<sup>37,39</sup> This decline is multifactorial. Clinicians and patients frequently perceive a difficulty in learning the methods.<sup>36,40,41</sup> Many women also believe FABM are not efficacious.<sup>36,40,41</sup> Many physicians do not have the knowledge to teach their patients about these methods. One geographically limited study found that physicians have significant knowledge deficits about FABMs<sup>41</sup> and that they generally know less about these methods than do nurse midwives.<sup>42</sup> Another survey of NFP users showed that only 1% of them came to use those methods because of the advice of medical practitioners.<sup>43</sup>

## Outcomes

There has been considerable debate about the soundness of the research on FABMs' effectiveness. Some research methods make comparison between FABMs and other contraceptive methods difficult. There are few randomized controlled studies of FABMs; existing randomized trials were judged to be of insufficient quality to draw any valid conclusions.<sup>44</sup> Many recent studies of modern FABMs included only self-selected patients, which is more consistent with clinical practice.<sup>5,11</sup> Early FABM investigations usually excluded data from the "learning phase" (typically 3 cycles), skewing the data in favor of FABMs. More recent studies include this period in their data.<sup>5,11</sup>

In addition, FABMs are unique in that they can also be used for achieving pregnancy. Pregnancy rates are therefore reported in categories of perfect-use (method-related) pregnancies, achieving-

**Table 2. Fertility Awareness-Based Methods Based on Life Table Analysis<sup>4–35</sup>**

Method	Women with Unintended Pregnancy Within 1 Year of Use (%)			Women Continuing Use at 1 Year (%)	Women with Unintended Pregnancy Caused by Unprotected Intercourse on Days Known Fertile Days (%)
	Typical Use	With Barrier Backup*	Perfect Use		
Calendar					
Rhythm <sup>†</sup>	25		0.1–9		
Standard days <sup>‡</sup>	12	5.7	4.8	46 <sup>§</sup>	7.8
Basal body temperature			1		
Cervical mucous					
TwoDays	13.7	6.3	3.5	52.7 <sup>  </sup>	7.3
Billings Ovulation <sup>¶</sup>	10.5–22.3	NT	0.5	30.4–99.5	15.4
Creighton/NaProEducation Technology	17.1**	NT	0.5	79.8–88.7	12.8
Symptothermal <sup>¶¶</sup>	0.2–20 <sup>††</sup>	0.45–2.3*	0.3	51.7–92.5	8.96
Lactational amenorrhea <sup>‡‡</sup>			2	NA	NA

\*Fertility awareness-based methods defined more specifically as natural family planning do not report this data because it is considered abandonment of the method. Data is included where available.

<sup>†</sup>Estimated (definitive data not available).

<sup>‡</sup>Limited to women with <2 cycles in 1 year outside of the 26- to 32-day range.

<sup>§</sup>Twenty-eight percent discontinued because of 2 cycles outside 26- to 32-day range or 1 cycle longer than 42 days.

<sup>||</sup>Because of secretions >14 days or cycles <5 days (these are indicators of other potential health concerns), 15.7% asked to leave by study protocol. This loss also included women with cycles >42 days (n = 30) because of the cost of follow-up as well as women who failed to log symptoms for at least 12 cycles (n = 12).

<sup>¶</sup>Typical use variable by study. More recent international studies show progressively lower unintended pregnancy rates and higher continuation rates.

\*\*Overall pregnancy rate. Studies included women wishing to achieve pregnancy and made no attempt to distinguish planned vs unplanned pregnancies. Pregnancies resulting from intercourse on days known to the couple as fertile were counted as achieving related. Avoiding related pregnancies were 3.2% overall.

<sup>††</sup>Lower typical failure rate with double-check method compared with single-check method.

<sup>‡‡</sup>Perfect-use rate is for first 6 months only. LAM is ineffective as birth control if not used properly.

NT, not taught; NA, not applicable; LAM, Lactational Amenorrhea Method.

related pregnancies, and typical-use pregnancies. The achieving category allows for the proper classification of women who change their minds mid-cycle about wanting to avoid pregnancy; they would be labeled as typical-use pregnancies in contraceptive trials that categorize women based on their decision to avoid pregnancy at the beginning of each cycle. On the other hand, the achieving category includes women who engage in coitus at a time when they know they are fertile even if their intention is to avoid pregnancy. Recent FABM studies typically report all 3 of these categories, with some variation in the achieving-related category. The 2 most useful for comparison are the perfect-use and typical-use pregnancy rates.

There have been attempts to characterize women who are successful (likely to persist in using the methods as described) with FABMs; however, no consistent positive predictors across studies have

been found.<sup>45,46</sup> Successful use is probably determined in part by societal attitudes regarding sexual behavior and sexuality, religious beliefs, and personal characteristics of the woman choosing to use them, such as interest in alternative medicine and the support of her partner. Most studies of FABMs included predominantly women who are in long-term and stable relationships. Most users of FABMs in US studies have been Roman Catholic, in a long-standing committed relationship, white, have a high school education or higher and a gross income more than \$20,000 per year.<sup>9,46</sup> Although uncommonly used in the United States, as many as 20% of married women in other countries use one of these methods.<sup>47</sup>

The lowest pregnancy rates associated with FABMs are achieved by women who choose to use these methods and have been properly instructed in how to do so. International studies suggest poverty-

**Table 3. Percentage of Original Study Group Discontinuing Various Fertility Awareness-Based Methods at 12 Months or 13 Cycles by Study<sup>6,10,11,21</sup>**

Reason	SDM (%)	TDM (%)	CrM (%)	BOM (%)
Completed study	45.6	52.7	—	—
Eliminated by study protocol	28.0	15.7	—	—
Told risk of pregnancy would be high	0.2	—	—	—
Did not like the method	0.2	1.8	0.7	—
Did not trust the method	1.7	1.8	0.7	—
Partner did not like the method	2.1	2.0	0.7	3.0*
Planning pregnancy	2.1	2.2	—	5.0*
To use other FABM	—	—	0.7	—
To use artificial method	—	—	4.5	20.1*
Difficulty avoiding genital contact	—	—	0.7	—
Other voluntary reason	4.0	10.4	4.6	1.0*
Lost to follow up	7.1	4.4	—	16.3*
Pregnancy	9.0	10.4	— <sup>†</sup>	16.0*
Medically induced infertility	—	—	0.3	—
Unknown	—	0.2	—	—

Data not reliably available for Rhythm, Basal Body Temperature, and Symptothermal methods.

\*Billings Ovulation Method–India trial: data reported at 21 ordinal months. Overall discontinuation rate at 12 months was 24%. Individual reasons were not reported for this time frame.

<sup>†</sup>Creighton Model did not remove participants from study for pregnancy because studies were designed to evaluate both pregnancy-achieving and pregnancy-avoiding behaviors.

SDM, Standard Days Method; TDM, TwoDays Method; CrM, Creighton Model; BOM: Billings Ovulation Method, —, data not available.

stricken populations have lower rates of typical-use pregnancy when using FABMs, in some cases approaching 0%.<sup>5,12</sup> Poverty may be a significant motivator for successful FABM use because the cost of raising a child is high and access to conventional contraceptives is limited.<sup>48</sup> However, studies in the United Kingdom, Italy, and Germany report similarly low rates of pregnancy,<sup>13–16</sup> even in younger unmarried populations.<sup>19</sup> Some international studies have also included women of diverse religions (including Hindus, Muslims, and Buddhists); races; and socioeconomic status. The success of these other demographic groups coupled with insufficient knowledge about FABMs in the medical community in the United States suggests American white, upper-middle class, and Catholic women are more likely to use FABMs in part because they have more access to information about these methods.<sup>48</sup> Lack of support from the husband and physical separation of the partners are thought to be predictors of FABM failure or discontinuation.<sup>17</sup> Reasons for discontinuation of some FABMs are summarized in Table 3.

All FABMs are physiologically compatible with the use of barrier methods. Use of barriers during fertile periods reduces the overall undesired preg-

nancy rate with typical use of the Standard Days and TwoDays methods but also increases perfect-use pregnancies.<sup>10,21</sup> Conversely, studies examining symptothermal methods have shown no significant differences in method- and typical-use pregnancies with or without use of barriers while still maintaining low unintended pregnancy rates.<sup>19,20,49</sup> NFP methods stress that the use of barriers is abandonment of the method.<sup>26,50,51</sup>

## Benefits and Harms

The lack of medical side effects and the low cost of FABMs are implicit benefits, but the social effects deserve some examination. Modern NFP methods are associated with a lower incidence of induced abortion.<sup>43,45</sup> They are also associated with a US divorce rate lower than that among the general US population.<sup>43</sup> One nonrandomized survey found the ever-divorced rate among NFP users was 2 in 1000 if they had never used other forms of contraception. Four percent of those who had used non-NFP types of contraception previously had been divorced.<sup>43</sup> In the same year, 10.8% of the general population identified themselves as presently divorced, with a divorce rate of 4.1 in 1000 per

year.<sup>52,53</sup> Catholics who do not use NFP have divorce rates similar to those of the general population, suggesting that religion alone does not account for this difference.<sup>43</sup> The difference may be attributable to the methods or to selection bias, although neither has been clearly established. These effects have not been studied in FABMs.

Proponents of modern NFP often endorse improved communication, sexual interactions, deeper intimacy and respect for partners, and other aspects of psychosocial-spiritual well-being with NFP use. Evidence is insufficient to evaluate this claim, which is based on a single nonrandomized survey of NFP users.<sup>43</sup> Subsequent confirmation studies examining well-being have methodological flaws, such as incomplete reporting of data and mismatched comparison groups, making it difficult to assess the validity of these statements on a population level.<sup>54,55</sup> Most couples continuing to use NFP have mixed feelings about the methods, but responses are primarily positive.<sup>56</sup> These effects have not been studied in FABMs.

Another concern voiced about FABMs is the potential for decreased frequency of intercourse. Studies have found that coital frequency varies greatly by country, ranging from 2.6 to 8.9 acts per month; the worldwide average is approximately 5.5 acts per month among all couples. FABM users have an average monthly coital frequency of 5.1 acts per month.<sup>57</sup> Standard Days Method (SDM) and TwoDays Method (TDM) users average 5.5 and 5.6 acts per month, respectively.<sup>58</sup> The timing of intercourse does shift with the use of FABMs, becoming more frequent during identified nonfertile days. There is a small trend of increased frequency of intercourse as the users become more comfortable with their chosen method.<sup>58</sup> Although perceived lack of spontaneity of intercourse is raised as a concern related to FABM use, this aspect of FABMs has not been adequately studied.

## Calendar Methods

The Rhythm Method (RM), introduced in the 1920s before the availability of hormonal methods of contraception, was the first FABM. At its inception, it was believed to be one of the most effective methods of birth control.<sup>4,59</sup> The effectiveness of RM has never been precisely determined. The few existing RM studies used different rules about when not to have intercourse or did not report these

rules.<sup>59</sup> Studies of RM often included individuals who reported using intercourse rules inconsistent with any validated calendar method.<sup>45,60</sup> It is not clear whether this misuse of the method came from a lack of formal information, lack of proper instruction, or whether the instructions were difficult to understand.

One type of traditional RM is practiced by counting days in a cycle, with the beginning of menstruation being day 1 for each cycle. Days 12 to 19 (inclusive) are considered fertile. The difference between the longest and shortest of the previous 8 to 12 cycles are subsequently added as additional fertile days at the beginning of the fertile time. This method was initially reported to be so effective that there were no pregnancies for more than 54,000 acts of coitus when the method was used properly.<sup>61,62</sup> A meta-analysis later reported total unplanned pregnancy rates of 15% to 18.3%.<sup>59</sup>

Effective use of the RM is hindered by events that affect the length and regularity of the menstrual cycle, including the use of hormonal contraceptives, recent pregnancies or childbirth, breastfeeding, menarche or menopause, inherent cycle variation, or illness. More pregnancies result when cycles are irregular. RM typically overestimates the fertile period, and accurate history of the menstrual cycles of the previous 8 to 12 months is necessary for use of the method. Without data about past cycles it is not considered reliable for avoiding pregnancy.<sup>62</sup>

One modern user-friendly calendar method is the SDM. It is applicable for women with cycles consistently between 26 and 32 days (inclusive). It differs from previous calendar methods in that historical data are not needed to calculate the fertile window. Days 8 to 19 (inclusive) are considered fertile for all users of this method. Two or more cycles outside of the 26- to 32-day range within 1 year contraindicate SDM use, which excluded 28% of the original sample from further participation in the study.<sup>21</sup> Color-coded cycle beads, essential to SDM practice, help with tracking fertile and infertile days and are available for \$12 per a kit, including instructions. Use of SDM is also limited during variable menstrual cycles.<sup>21</sup>

## Basal Body Temperature

Basal body temperature (BBT) elevation, another older method, retrospectively identifies fertility.



The luteinizing hormone surge, which stimulates ovulation, is associated with a 0.5- to 1°F- (0.3- to 0.6°C-) rise in BBT measured with highly standardized methods. BBT can be taken orally, vaginally, or rectally with a sensitive thermometer; the same site should be used daily. BBT is measured on awakening at approximately the same time every morning, before getting out of bed or doing any other activity. At least 6 hours of uninterrupted sleep the preceding night is necessary for accurate measurement. BBT remains elevated throughout the luteal phase secondary to higher progesterone levels. The woman is assumed to have ovulated after observing 3 consecutive days of temperature elevation. Pregnancy is avoided by abstaining from the beginning of menstruation until 3 to 4 days after the rise in BBT. All subsequent days until the beginning of her next menses are considered infertile.<sup>63</sup>

Because sperm survive 5 days, BBT alone does not predict ovulation far enough in advance to identify all the potentially fertile days; it predicts only peak fertility, so thus the need to abstain from the beginning of menstruation. Many other factors also limit the use of BBT. Some women ovulate without a clear rise in BBT.<sup>22</sup> Alcohol consumption, late nights or oversleeping, disrupted sleep, travel, time zone differences, holidays, shift work, stress, illness, gynecologic disorders and medications can all lead to inaccurate basal temperature measurement.<sup>22</sup> Moreover, the biphasic shift of BBT has been found to vary up to 1 day before and 3 days after actual ovulation.<sup>22,63</sup> Extensive reviews of BBT have been conducted elsewhere.<sup>4,23,24</sup>

## Cervical Secretion Methods

Studies have found cervical secretion characteristics to be highly predictive of ovulation and can therefore be used to avoid pregnancy.<sup>64,65</sup> Studies conducted by the World Health Organization indicate that 93% of women, regardless of their education level, are capable of identifying and distinguishing fertile and infertile cervical secretions.<sup>66</sup>

Three main cervical secretion methods exist and are described below. All the methods involve noting the presence or absence of cervical secretions, usually recommended to be checked both at midday and early evening when women are less likely to have sex. Women are further asked to

characterize the secretions as to color, texture, and stretch, the detail depending on the method of instruction. Fertile cervical secretions are clear, wet, slippery, stretching and changing in quality. They are often compared with egg whites. Infertile secretions are unchanging and generally dry, sticky, cloudy, and do not stretch. Menstruation is considered fertile because menses can mask the signs of cervical secretion, as can sexual fluids. Therefore, a day of abstinence after coitus occurring between menstruation and ovulation is required to interpret secretion signs. Hence, every other day between menstruation and the onset of the fertile phase is available for intercourse. One identifies peak fertility retrospectively when fertile secretions begin to return to a basic infertile pattern. It is safe to have intercourse without restrictions on the fourth day after peak fertility until the onset of the next menses. Any bleeding or cervical changes that interrupt the basic infertile pattern are potentially fertile.<sup>50,51</sup>

The Billings Ovulation Method (BOM) was the first described and allows women to describe secretions “in their own words” with a focus on changes in cervical characteristics. It has undergone refinement since studied in the United States.<sup>5,50</sup> In a study undertaken in India, pregnancy rates among perfect and all users of this method were 1.1% and 2% to 10.5%, respectively, at 12 months.<sup>5,6</sup> In the US study (1975 to 1977), method- and typical-use pregnancies were 1% and 16%, respectively.<sup>25</sup> The World Health Organization study of 1981 calculated typical-use pregnancies of 22.3%, with 15.4% caused by a conscious departure from method rules.<sup>17</sup> A randomized trial in China reported typical-use pregnancy with BOM as 0.5% when used to avoid pregnancy and had higher adherence than the copper intrauterine device to which it was compared. However, the data has not been published for peer review in English and the BOM Association reports that women unable to identify fertile cervical secretions were excluded.<sup>67</sup> Discontinuation rates were 0.5% and 24% at 12 months in China and India, respectively, and 44% at 2 years in the United States.<sup>5,6,25</sup>

A distinct method, the Creighton Model (CrM), also called NaProTechnology, is more standardized in the way secretions are characterized, using pictures and precise words to describe them.<sup>8,9,51</sup> The male partner is responsible for charting and

interpreting the data, a step supporters believe encourages sharing responsibility for family planning and facilitates communication and relationship building. The effectiveness of the CrM has improved since its introduction in 1980, presumably because of improved methods of instruction.<sup>8,9</sup> CrM instructors must be certified in a year-long program accredited by the American Academy of Natural Family Planning and are asked not to prescribe other forms of birth control. Standardized patient instruction involves 8 one-hour sessions over the course of 1 year, 5 of them in the first 3 months.<sup>51</sup> CrM users are instructed that conscious departure from the method rules resulting in intercourse on method-predicted fertile days implies that they are no longer using the method for avoiding pregnancy but for achieving pregnancy. All pregnancies resulting from such actions are thus classified as achieving-related pregnancies without distinguishing between intended or unintended pregnancies. Although the argument of classifying pregnancies based on the “objective behavior of the patient” has merit, it is inconsistent with the majority of other family planning investigational methods, which would report some of these pregnancies as unintended or unplanned. CrM studies are “in vivo” and include women who are not trying to avoid pregnancy. Comparison of the typical use of CrM to other methods is therefore difficult, and reported data of overall pregnancies is probably an overestimate of unintended pregnancies. Method-related pregnancies, however, are comparably reported.<sup>8,9</sup>

The TDM is a simpler method that can be taught during a routine office visit. The woman is taught to identify cervical secretions of any type regardless of their characteristics. She then is instructed to ask herself, “Did I notice any cervical secretions today?” If the answer is no, she then asks, “Did I notice any cervical secretions yesterday?” If the answer is no, then intercourse is unlikely to result in pregnancy. If the answer to either of the 2 questions is “yes,” then intercourse has a high probability of resulting in a pregnancy. The same preovulatory cervical secretion check rules described above apply. There are no restrictions on coitus when cervical secretions meet the 2-days rule after peak fertility and until the onset of the next menstruation.<sup>10,68</sup>

All cervical methods are theoretically compatible with cycles of any length and variable hormonal

states. However, they have not been studied in depth because of the expense of following women with longer cycles and medical concerns with shorter cycles.<sup>10,50,51</sup>

## Symptothermal Method

The Symptothermal Method combines BBT, cervical methods, cervical position, and/or historical cycle data to prospectively and retrospectively identify the peri-ovulatory period. In its most effective form, 2 signs are used to “double check” each phase as confirmation for the couple that the woman is unlikely to be fertile.<sup>20,26</sup> The method has a 0.4% pregnancy rate when used as described.<sup>4,14</sup>

Typical-use unplanned pregnancy rates have been reported as low as 1% to 3% in Europe and India.<sup>7,12–16,19,20</sup> However, unplanned pregnancy rates as high as 13% to 20% have also been reported for typical users of the Symptothermal Method.<sup>4</sup> Critics warn that combining signs and symptoms can overestimate the fertile phases by a couple of days or more. On the other hand, because there is no requirement to abstain every other day before the fertile phase, the total abstinence time is approximately equivalent to cervical secretion methods. There is a trend of increased intercourse among couples who use barrier back-up methods concurrently. This trend, however, may be confounded because women using barrier backup are generally younger.<sup>49</sup>

## Breast Feeding

Lactational amenorrhea results in a 2% pregnancy rate when used under 3 conditions. The first is that the lactating woman is supplying at least 90% of the infant’s calories through breastfeeding at intervals no longer than every 4 hours during the day and every 6 hours at night, but ideally more frequently. Second, she has not resumed her menses. Third, she is in the first 6 months postpartum. Such women may not need additional contraception, therefore avoiding the controversy of taking hormones while breastfeeding.<sup>4,27–33</sup> The pregnancy rate increases to 5% in working women even if they express their milk every 4 hours, suggesting that the suckling of the infant contributes substantially to the contraceptive effect.<sup>4,34</sup> Beyond 6 months, the likelihood of ovulation preceding menses in-

**Table 4. Educational and Instructional Resources for Fertility Awareness-Based Methods<sup>69</sup>**

Organization	Website	Book/Home/Online Course	Method
Georgetown Institute of Reproductive Health	<a href="http://www.irh.org">http://www.irh.org</a>	Refer to website	Standard Days and TwoDays Methods
Couple to Couple League International	<a href="http://ccli.org">http://ccli.org</a>	The CCL Home Study Course, ~\$75	Symptothermal Method
The Billings Ovulation Method Association	<a href="http://www.boma-usa.org">http://www.boma-usa.org</a>	The Billings Method, ~\$20	Billings Ovulation Method
American Academy of FertilityCare Professionals	<a href="http://www.aafcp.org">http://www.aafcp.org</a>	Refer to website	Creighton Model
One More Soul	<a href="http://www.omsoul.com">http://www.omsoul.com</a>		Search for providers of multiple methods
Marquette University Institute for Natural Family Planning	<a href="http://www.marquette.edu/nursing/NFP/Model.shtml">http://www.marquette.edu/nursing/NFP/Model.shtml</a>		Marquette Model*
Northwest Family Services	<a href="http://www.nwfs.org/nfp.htm">http://www.nwfs.org/nfp.htm</a>	Refer to website	Symptothermal Method*
Family of the Americas Foundation	<a href="http://www.familyplanning.net">http://www.familyplanning.net</a>		Ovulation Method*

Information from reference cited above and indicated websites.

\*Not specifically discussed in the text.

CCL, Couple to Couple League.

creases with time, raising the probability of conception.

The low pregnancy rate of lactational amenorrhea, in addition to the many other benefits of breastfeeding, may be another reason for women to consider strict breastfeeding. Cultural and work-related constraints may be barriers inhibiting more widespread use of the method. Women not wanting to conceive again or with regimented spacing ideas need adequate education to identify signs of returning fertility (mainly more than 6 months postpartum, return of menses, or supplementation of the infant's calories from sources other than maternal breast milk) so that they are prepared to switch to another method without delay. Modern FABMs, with the exception of SDM, are appropriate for this purpose.<sup>21,62</sup>

### Fertility Awareness-Based Instruction and Resources

The SDM and TDM are conducive to physician office-based instruction because they are simple to teach and ordinarily can be taught during a standard 15-minute clinic appointment. Information

about instruction or becoming a certified instructor in FABMs/NFP can be found through the method specific web sites (Table 4); many of these are faith-based groups. Some practices employ a teacher to whom they can refer patients. Additional courses are often offered through local churches, particularly if they are Catholic, and can sometimes be found at local hospitals.

### Conclusion

The available evidence suggests that FABMs, based largely on assessing cervical mucous, can provide effective contraception. Although these methods have not gained wide use, modern FABMs can be mastered by most motivated couples. Physicians' and other medical personnel's limited knowledge of and experience with the methods inhibits broader use. Physicians should offer FABMs as a reasonable choice for family planning because there are no absolute contraindications. A woman's informed decision to use such methods should be supported with accurate information and referral to a certified provider. Instruction is available in many commu-



**Table 5. Key Recommendations for Practice**

Clinical Recommendation	Evidence Rating	References
Modern FABMs of family planning have similar unintended pregnancy rates in self-selected users compared with other conventional methods.	B	4-17, 20, 21, 27-34
Couples interested in using FABMs of family planning should be referred to an instructor certified in the patient's method of choice for adequate instruction.	C	4-17, 20, 21, 27-34
Frequency of intercourse is not decreased among couples using the modern FABMs of TwoDays and Standard Days methods compared with those using conventional family planning methods.	B	58
Women who are physically separated from or lack the support of their male partner are less likely to use the methods properly and more likely to discontinue use of an FABM.	C	17

FABM, fertility awareness-based method.

nities and from online courses. Some of these methods can be taught during a single session.

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