

Expert in Fertility Appreciation: The Creighton Model Practitioner

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■ The Creighton Model system of natural family planning (NFP) is useful in achieving pregnancy, avoiding pregnancy, and detecting some gynecologic disorders. NFP practitioners support the client in using NFP. Because the effectiveness of NFP is related to the teaching process and to teacher expertise, clients choosing NFP may be best served by referral to a certified NFP practitioner for instruction. *JOGNN*, 30, 386–391; 2001.

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As in other areas of nursing and medicine, the body of knowledge related to natural family planning (NFP) has expanded during the last 30 years. NFP is popularly regarded as an ineffective method to avoid pregnancy, despite research that demonstrates the opposite (Trent & Clark, 1997). To be practiced effectively, NFP must be well taught, well understood, and correctly applied by the couple (Fehring, Lawrence, & Philpot, 1994; Seidman, 1997). Researchers have shown that many women are poorly informed about their fertility, specifically about when in a cycle they are fertile (Seidman, 1997). Despite recognized benefits, few family planning programs offer NFP and few provide fertility awareness education (Arevalo, 1997). Because the effectiveness of NFP depends on knowledge of fertility as well as behavioral modification, teaching of the method can be time consuming. Ways to streamline NFP teaching have been explored, with a variety of opinions on the best approach. Health care providers whose patients desire NFP may refer them to a qualified practitioner.

Since the introduction of the Creighton Model, the role of the NFP practitioner has evolved as well. The method taught by the NFP practitioners is the Creighton Model, a standardization of the Billing's ovulation method, based on a woman's observations and interpretation of biomarkers that differentiate the phases of fertility and infertility in the menstrual cycle. In the process of caring for clients, the NFP practitioner participates in health promotion and maintenance, risk awareness through health-related teaching, identification of menstrual cycle aberrations, and appropriate referral.

Background

Worldwide, more than 35 million couples use NFP (United Nations, 1996). The Creighton Model was introduced in 1980 as a standardized modification of the Billings method. Early on the developers of the model perceived the need for standardization of terminology, documentation, and professional education of Creighton Model medical consultants, educators, and practitioners. Standardization is important because it allows for a common structure, provides for a common language in the use of the method, facilitates research-based improvements in the method, and allows for transfer of care. Prospective research trials, carried out at five institutions, have demonstrated a method effectiveness of 99.5% and a use effectiveness of 96.8% for avoiding pregnancy (Hilgers & Stanford, 1998).

The Creighton Model

NFP is based on the premise that there is a fertile phase and an infertile phase of the menstrual

cycle. Biomarkers used to differentiate these phases include the observation of the characteristics of vaginal bleeding (menstrual and intermenstrual) and of external mucus discharge, presence of vulvar dryness, peak day, and prepeak and postpeak phases of the cycle. These observations are made from the external vulva. Each time a woman uses the toilet, she wipes the vulva and vestibule and makes a three-part observation (perceived sensation through wiping, observing the tissue for the presence or absence of mucus, and finger testing for stretchability and color if mucus is present). External observations correlate with biophysical changes that occur in the endocervical mucus as ovulation approaches (Hilgers, Abraham, & Cavanaugh, 1978). Observations are then documented on a NaPro tracking chart, using the vaginal discharge recording system (VDRS) abbreviations. Depending on the three-part observation, the client then decides the meaning of the observation in relation to fertility and hormonal changes and assigns a colored stamp reflecting the observations made that day. See Table 1 for a glossary of terms associated with the Creighton Model.

Because the Creighton Model is a holistic approach to reproductive health, teaching of the method is not limited to teaching the physical symptoms of fertility and infertility. Although some women chart their cycles only for the gynecologic health benefits, the model is couple centered. Part of this holistic approach to NFP is to discuss the various aspects of human intimacy as well as reproductive anatomy, physiology, and fertility. Surveys of couples who use NFP indicate that communication in the relationship is increased, building intimacy and enhancing the marriage. Periods of abstinence from genital contact create opportunities for a couple to explore the emotional, intellectual, and spiritual aspects of sexuality (Geerling, 1995).

Human sexuality is not limited to genital intercourse. In the teaching of the Creighton Model, sexual activity is described as a holistic concept that encompasses the various ways human beings interact. That is, human beings are sexual 100% of the time, but only a small portion of time is spent in genital activity. The acronym SPICE was developed as a part of the Creighton Model to express this concept. "S" represents the spiritual aspect of sexuality and increases intimacy through spiritual sharing, such as prayer, meditation, scripture study, and reflection. "P" represents the physical component of sexuality. This includes, but is not exclusive to, the genital aspects of sexuality. Physical intimacy is developed in many nongenital ways, including back rubs, foot massages, creative cuddling, and simple hand-holding as examples. "I" is for the intellectual aspect of sexuality and could include reading and discussing a book, taking a class together, or problem solving an issue. "C" represents communica-

TABLE 1
Glossary of Creighton Model Terminology

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| <p>NaProTECHNOLOGY A specialized body of knowledge based on evaluation of cervical mucus patterns, bleeding patterns, patterns of dryness, and menstrual cycles used to diagnose and treat conditions such as infertility, miscarriage, pregnancy maintenance, unusual bleeding and irregular cycles, hormonal irregularities, premenstrual syndrome, and ovarian cysts, in harmony with a woman's fertility.</p> <p>NaProTracking A chart used by the woman/couple and her health care provider to monitor her menstrual cycles for diagnosis, treatment, and family planning decisions.</p> <p>Natural Family Planning Educator (NFPE) One who directs or participates in educational programs to prepare NFP practitioners.</p> <p>Natural Family Planning Medical Consultant (NFPMC) A physician with specialized education in NaProTECHNOLOGY.</p> <p>Natural Family Planning Nurse Practitioner (NFPNP) A nurse practitioner with specialized education in NaProTECHNOLOGY.</p> <p>Natural Family Planning Practitioner (NFPP) A health care professional who provides fertility care services in the Creighton Model system.</p> <p>Prepeak Phase The first day of menses through and including the peak day.</p> <p>Postpeak Phase The first day after the peak day through the last day of the menstrual cycle.</p> <p>Peak Day The last day of clear, stretchy, or lubricative mucus.</p> <p>Reproductive Category One of ten developmental states (regular cycles, long cycles, total breastfeeding, weaning breastfeeding, post-pill, premenopause, postpartum and not breastfeeding, postabortion, infertility, pregnant).</p> <p>Vaginal Discharge Recording System (VDRS) Standard abbreviations used to describe external observations made throughout the menstrual cycle.</p> |
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tion and/or creativity and can be expressed verbally or nonverbally. Communication about the day's fertility or infertility must take place for successful use of the Creighton Model. The ability to communicate about fertility often leads to enhanced communication in other areas. Creativity may be expressed in projects accom-

plished together or for one another. Humor often is part of creative expression. "E" is for the emotional aspect of sexuality. Feelings are expressed, shared, and respected. This type of intimacy builds trust and enhances the relationship. As a communication tool, couples may develop SPICE lists for one another's use. One approach to use of the SPICE list begins with the statement "I feel loved by you when. . . ." The sentence is completed with one or two items under the spiritual, physical, intellectual, communicative/creative, and emotional categories. The couple develop the list separately and then share it with each other. SPICE lists are emphasized as being especially useful during times of fertility for the couple desiring to avoid pregnancy. During times the couple chooses to avoid genital contact, they can explore other areas of sexual contact. Couples report increased communication and closeness in their relationship when this is practiced, as they discuss areas that may not have been shared before. In a study of spiritual well-being, self-esteem, and intimacy among couples using NFP, Fehring and Lawrence (1994) found that NFP couples felt this method helped them gain a greater fertility awareness; increased their communication, self-control, and confidence; helped them share responsibility; enhanced their relationship with God; and provided them with more ways of expressing their intimacy.

Educational Components

The importance of the teaching process in the success of NFP cannot be overemphasized. Ryder (1993), citing worldwide research, noted that effectiveness rates varied, depending on the teacher's experience and the couple's motivation to avoid pregnancy. Geerling (1995) acknowledged that effective use of NFP requires education beyond that which can be provided during a typical office visit and recommended referral of those clients who desire NFP to qualified instructors in the various methods of NFP. Accurate use of NFP requires detailed instruction specific to the method chosen and supervised monitoring for an extended length of time (Trent & Clark, 1997). Seidman (1997) and Huevo (1997) considered the question of whether competent NFP instruction could be provided in multimethod family planning practice. Factors affecting the commitment to provide NFP services include the effectiveness, cost, attitude, technical competence of service providers, education strategies, and approaches for providing services. Huevo acknowledged that service providers in many multimethod programs have a negative attitude toward NFP that is due to the perceptions that the method is ineffective and time consuming to teach and that clients are not interested in an ovulation detection method. According to the International Medical Advisory Panel

(IMAP) of the International Planned Parenthood Federation (IPPF), however,

Periodic abstinence may be the choice for individuals and couples who cannot or do not want to use other methods of fertility regulation for a variety of reasons. Therefore, it is important that family planning associations provide information on this method. They should assist clients who want to use this method either by teaching the technique or referring to the appropriate service facility. (IPPF, 1996, pp. 1-2)

To attain the goal of providing NFP to clients, family planning service providers can train staff members, use specialized NFP instructors, or refer clients to NFP teaching centers (Huevo, 1997).

Providers need to maintain a teaching and counseling relationship with each client until the client demonstrates competency in the method and the ability to practice it autonomously. This usually requires four to six contacts and teaching sessions in the initial 2 to 3 months. Couples using the Creighton Model are encouraged to follow up every 2 weeks for the first 2 months and then at regular intervals, for a total of eight times during the 1st year of use or as long as needed. In this era of health care reform, it would be the rare office or clinic that could accommodate such intensive instruction without a specially prepared NFP practitioner added to the staff.

Entry into the Creighton Model program occurs with an introductory session. This is a slide presentation designed to address an audience with a variety of needs. Motivations for learning the Creighton Model include the desire to achieve or avoid pregnancy; for health problems, such as infertility or treatment of premenstrual syndrome (PMS); or fertility appreciation. The introductory session has been developed to introduce couples to the use of the Creighton Model but not to teach them the specific details of the method. The session includes slides outlining the purpose of the session, a review of reproductive anatomy and physiology, the NaPro tracking charting examples, and the effectiveness of the method. Effectiveness and use of the method require personalized follow-up. Materials to begin use of the method are given to the couple or woman once the first private appointment is scheduled. Actual teaching of the method occurs during the individualized sessions.

Objectives of the individualized sessions include (a) assessing the client's observations, (b) assessing the client/couple's understanding of the terminology used in making the mucus observations, (c) verifying the client/couple's charting of the observations, (d) assessing the client/couple's knowledge of the fertile and infertile phases of the menstrual cycle, (e) verifying knowledge of the concepts of SPICE, and (f) assessing

intention and use. At each session, the NFP practitioner uses an assessment and management tool to (a) review and assess observations on the chart, (b) review method instructions, (c) assess special circumstances (such as early and delayed ovulation), (d) teach differentiation of various discharges (arousal fluid and seminal fluid) and feminine hygiene, (e) give instructions pertinent to reproductive category (see definitions), (f) obtain a personal evaluation of the method (confidence, satisfaction), (g) evaluate the congruence of the couple's intention with actual use of the method as well as receptivity to pregnancy, and (h) address questions.

Each client/couple is given a user manual to review. To assist the teaching process, a picture dictionary of the ovulation method that defines the external observations throughout the menstrual cycle is used. In addition, as clients become more proficient in the use of the method, they are shown NaPro tracking chart examples and asked to judge them at different points for fertile and infertile times depending on the intention to achieve or avoid pregnancy. Clients indicate that this teaching increases their confidence in their ability to make accurate observations and judgments about the fertile and infertile phases of the menstrual cycle.

Role of the NFP Practitioner

Clinical utility of fertility appreciation goes beyond avoiding pregnancy. One of the benefits of using the tracking chart is that it helps to identify some gynecologic disorders characterized by commonly found aberrations in the menstrual cycle. The NFP practitioner analyzes the gynecologic chart in a variety of ways (see Table 2) as well as teaches the client/couple how to use the information to achieve or avoid pregnancy. Abnormalities that may be identified through the chart include infertility, vaginitis, cervicitis, ovarian cysts, inadequate luteal phase, fibroids, polyps, and possibly pathology of the endometrium and cervix. Referrals are made to appropriate health care providers for diagnosis and treatment.

The sample chart (see Figure 1) demonstrates a typical cycle of a woman with normal fertility and a woman with an inadequate luteal phase. The chart also can serve as a record for PMS symptoms and the woman's response to treatment. The couple's communication and relationship may be enhanced, as they understand that the emotional changes of PMS are related to hormonal changes in the woman.

An example of the clinical utility of gynecologic charting is in the care of infertile couples. A common practice is to ask the woman who has been trying to become pregnant to keep basal body temperature (BBT) graphs. Not every woman has a classic biphasic pattern demonstrating ovulation, however. It has been known for more than 20 years that changes in mucus patterns correlate

TABLE 2
NaProTracking Chart Review

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| Assess accuracy of vaginal discharge recording system abbreviation and stamp use |
| Assess the application of peak day |
| Analyze characteristics of bleeding pattern for length, crescendo, decrescendo, amount, and color |
| Analyze length and quality of mucus cycle |
| Analyze prepeak and postpeak phase length |
| Evaluate cycle compared with the woman's usual pattern |
| Assess congruence of intention and use of fertile and infertile days for genital activity |
| Evaluate need for referral for cycle patterns consistent with disorders such as infertility, cervicitis, luteal phase defect, vaginitis, and premenstrual syndrome |

with the time of ovulation (Hilgers et al., 1978). Compared with BBT measurement, the identification of the peak mucus symptom seems to be a better method of determining ovulation (Dunson, Baird, Wilcox, & Weinberg, 1999; Guida et al., 1999; Hilgers & Bailey, 1981).

The most sensitive indicator of ovulation available to the lay public is urinary measurement of luteinizing hormone (LH) (Guida et al., 1999). Typically, ovulation predictor kits or test sticks are used with a monitor (costing approximately \$200) and cost approximately \$20 per cycle. However, valuable information can be gained by assessing the mucus cycle for peak day, length of prepeak and postpeak phases, and the presence of limited and dry mucus cycles (Dunson et al., 1999; Hilgers, 1991). Charting also facilitates precise timing of serum hormonal testing. Charting of the menstrual cycle biomarkers seems a logical step in infertility care.

Early identification of symptoms is another example of the benefit of gynecologic charting. A woman who knows her pattern is more aware of changes in her body. These changes may appear in the gynecologic chart and aid in the identification of a problem. NFP practitioners are educated to interpret gynecologic charting for the purpose of referral as well as for teaching the client about fertility. Low progesterone and anovulatory cycles are common in the perimenopausal years. With accurate identification of these patterns in the chart, a woman can be treated more easily. A woman also may notice a change in the quality of her life—irritability, headaches, and hot flashes. When a woman records these symptoms in her chart regularly, it is much easier to identify patterns in these symptoms and their timing in the menstrual cycle.

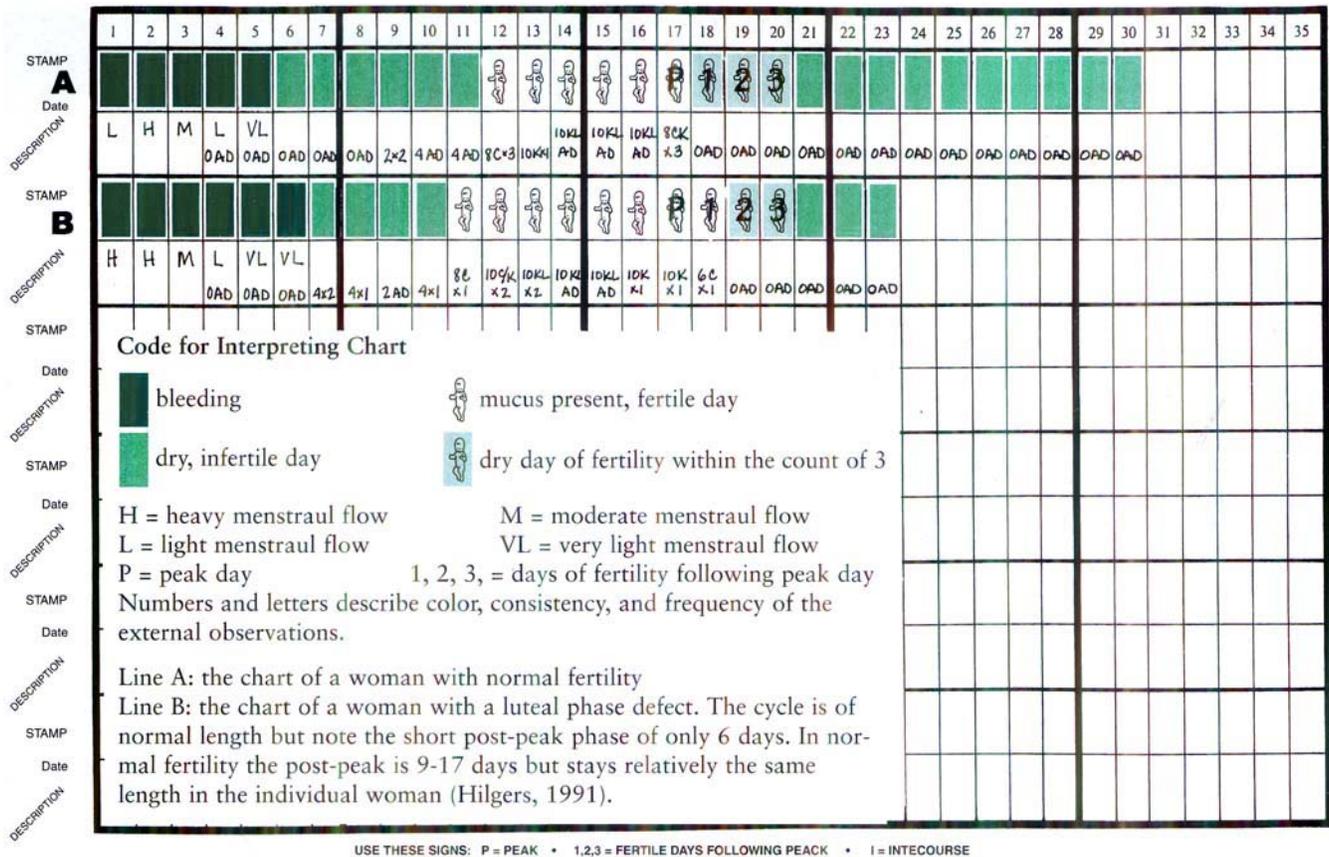


FIGURE 1

Sample NaPro tracking chart.

Note. Reprinted with permission from the Pope Paul VI Institute, A National Institute for the Study of Human Reproduction, Omaha, NE. The chart has been adapted for publication. In the original, the dark green boxes are red.

Related health issues are discussed during individual sessions. For example, women trying to achieve a pregnancy can be advised about preconception issues such as folic acid supplementation through prenatal vitamins. The nature of the private sessions lends itself to clients sharing information about issues, such as sexual abuse, previous sexual relationships, and grief from pregnancy loss or infertility. The NFP practitioner provides emotional support and referrals to appropriate community resources.

Qualifications and Certification

Registered nurses, physicians, and other allied health professionals are eligible to take the Creighton Model Educational Program. To become an NFP practitioner, the student completes two educational phases, separated by a 6-month supervised practicum. Another 7-month supervised practicum begins with the close of the second educational phase. At the completion of the 13-month training program, the student completes a final examination. After a period of practice, the student may then apply for certification by the American Acad-

emy of Natural Family Planning (AANFP). A list of NFP practitioners in a specific geographic area may be obtained by contacting the Pope Paul VI Institute, 6901 Mercy Rd., Omaha, NE 68106-2604; telephone: (402) 390-6000; Web site: popepaulvi.com.

Community Outreach

The NFP practitioner is an expert in teaching fertility appreciation. These health educators, with current and accurate information about NFP, can teach school and church groups and in hospital outreach programs. The material can be adapted for use with preteens, teenagers, and college students. Community outreach is available for mother-daughter and father-son groups. Sexuality and fertility are topics that need to be understood by males and females when appreciating sexuality from a holistic perspective. These programs emphasize the communication of accurate information on sexuality and fertility through topics such as "Learning Respect and Growing Up," "Our Bodies Are Changing," and "Preparing for Motherhood" (or Fatherhood) (Van Epps, 1999). These programs are presented with the goal of

introducing the children to the information and giving the parents support to discuss the topic comfortably with their children. The material presented is age appropriate, targeted to groups of girls ages 10 to 12 and 13 to 14 years and boys ages 12 to 15 years. The presentation uses a panel that includes teenagers who assist in answering anonymous questions.

Reimbursement

The cost of learning the Creighton Model system is relatively low (less than a year's supply of oral contraceptives) but varies depending on the geographic location and the type of site in which the care is delivered. A typical approach is to charge the client/couple a one-time fee that covers the introductory session, materials, and all visits during the 1st year. A number of insurance companies reimburse for services depending on their policies regarding family planning services. ICD-9 Diagnostic Codes used for family planning advice or avoiding pregnancy (V25.09) may be reimbursed. Typically, CPT codes differ by the procedure or services provided and are billed according to the time spent with an individual or group. Therefore, the CPT code would depend on whether the woman/couple had attended an introductory session or an individual follow-up session.

Summary

The Creighton Model system is used to achieve or avoid pregnancy and to aid in detecting and treating infertility and other gynecologic disorders. Because it involves decision making by the man and the woman and explores many dimensions of sexuality, its use usually has a profound impact on the couple's relationship and on the family. Because the effectiveness of NFP is related not only to the teaching process but also to the expertise of the provider, clients expressing interest in the Creighton Model are best served by being referred to a certified NFP practitioner. Nurses who are aware of the benefits of the system can make appropriate referrals and maintain continuity of care for the client.

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