NATURAL METHODS of FAMILY PLANNING

- Joseph B. Stanford, MD, MSPH
- Visiting Investigator, NICHD, DESPR
 - University of Utah
 - American Academy of Fertility Care Professionals

Presentation

- Definition of natural family planning (NFP)
 - Avoiding pregnancy
 - Achieving pregnancy
- Scientific methods of NFP
- ◆ Use and interest
- Counseling and instruction
- ◆ Need for updated ICD-9-CM codes
 - Candidate terms
- Proposed V25 modifications
- ◆ Proposed V26 modifications

Natural Family Planning

- "Methods for planning and preventing pregnancy
- by observation of the naturally occurring signs and symptoms of the fertile and infertile phases of the menstrual cycle,
- with the avoidance of intercourse during the fertile phase if pregnancy is to be avoided."



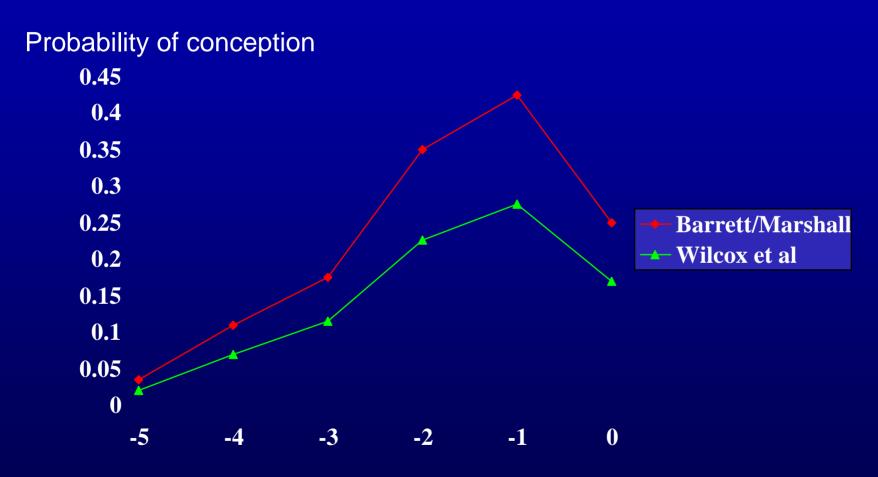
NFP has dual uses

NATURAL FAMILY PLANNING

TO ACHIEVE PREGNANCY **Procreative management**

TO AVOID PREGNANCY Family planning management

Fertile window of menstrual cycle



Human Reproduction 1999;14:1835-1839. http://humrep.oupjournals.org/cgi/content/full/14/7/1835

Scientific NFP Methods

- Biomarkers identify the fertile window
 - Vaginal mucus discharge
 - Basal body temperature
 - Cycle length
- Couples can choose:
 - Intercourse during the fertile window to conceive
 - Abstinence during the fertile window to avoid

Modern NFP Methods

- ◆ Are not the Rhythm Method
- ◆ Do <u>not</u> require regular menstrual cycles
 - except the Standard Days Method
- Can be used by women of any reproductive status:
 - irregular cycles
 - breastfeeding
 - premenopause

NFP Methods available in USA

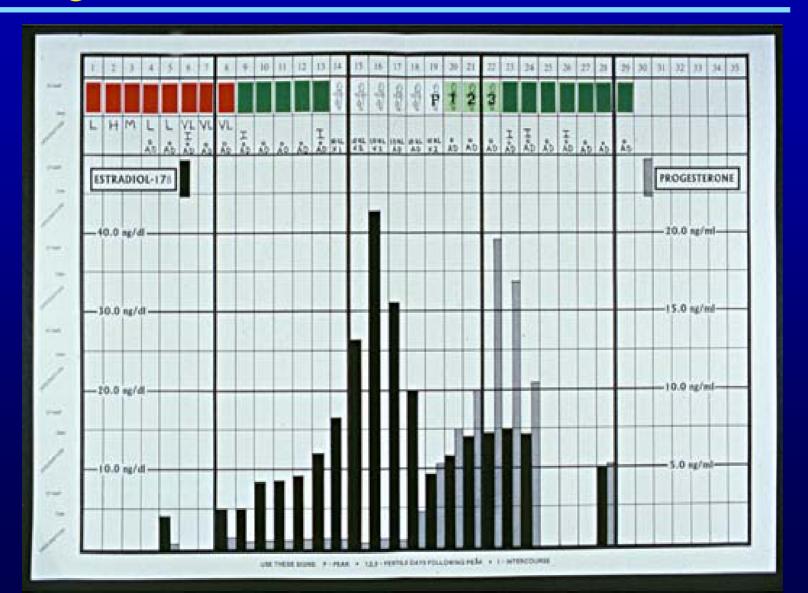
- Standard Days Method
 - calendar; regular cycles only
- ◆ Two-Day Method
 - vaginal discharge from cervical mucus
- Billings Ovulation Method
 - vaginal discharge from cervical mucus
- Creighton Model FertilityCare System
 - vaginal discharge from cervical mucus
- Sympto-Thermal Method
 - calendar, mucus, and temperature

NFP published effectiveness

	Pregnancy rates during first year of use to avoid (%)	
NFP Method	Perfect use	Typical use
Standard Days Method	5	12
Two-Day Method	4	14
Billings Ovulation Method	0.5-3	7-22
Creighton Model Fertility Care System	0.2-1.3	17-33 *
Sympto-Thermal Method	0.5-1.2	2.5-18

^{*} CrM typical use includes *planned* pregnancies; others do not

NFP chart with hormonal correlates (Creighton Model)



Who uses NFP?

- Not ascertained by national surveys
 - Questions are based on "rhythm method"
 - Modern methods are not specifically mentioned
- Instruction not captured in health services statistics (no specific ICD-9-CM code)
- Population-based survey in Missouri
 - -3% current use
 - 19% ever used to avoid
 - 25% ever used to conceive

Who is interested in using NFP?

- Population-based surveys in Missouri and Utah
 - About 25% women interested in NFP to avoid pregnancy
 - About 33% interested in NFP to conceive
 - Men also interested (40%)
 - Interest NOT associated with religion, education, age, or income

Reasons for interest in NFP

- ◆Natural
- ◆No side effects
- ◆Convenient / easy
- ◆Helps to understand body
- **♦**Low cost

Journal of Family Practice 1998; **46**: 65-71. Utah's Health Annual Review 2003; 9:40-45.

NFP Counseling and Instruction



Provided nationally and internationally by a growing number of trained physicians, nurse practitioners, and allied health professionals in a variety of ambulatory care settings.

Need for updated ICD-9-CM codes

- Current schema does not include natural methods of family planning
- Providers have used non-specific codes
 - V25.09 Other (Family planning advice)
 - V26.4 General counseling and advice (Procreative management section)
- Specific codes are needed
 - accuracy in coding of clinical services
 - assessing use (clinical practice, research, policy)

Need for updated ICD-9-CM codes

- ◆ <u>Updated schema</u> should address encounters for
 - Initiation of natural methods of family planning to <u>avoid</u> pregnancy
 - Surveillance of natural methods of family planning to <u>avoid</u> pregnancy
 - Procreative counseling and advice using natural family planning

Candidate terms

Natural family planning

- Term used by National Library of Medicine to index articles
- Term widely recognized by providers and policy
- Natural method of family planning
 - Emphasizes that multiple methods are included
- Natural method of birth regulation
 - Term not commonly used by providers of NFP
- Natural method of birth control
 - Term not recognized by providers of NFP

Need for updated ICD-9-CM codes

- Updated schema should allow for distinct comparison of natural methods of family planning with methods of contraception
 - Terminologic accuracy
 - Conceptual clarity
- ◆NFP is not a contraceptive
 - Contraceptives are agents or devices to prevent conception, such as barriers, spermicides, hormonal compounds, and intrauterine devices.

Candidate umbrella terms

Family planning

 Widely used by providers and policy makers to mean <u>all methods</u> to postpone or prevent pregnancy.

◆ Birth control

- Popular term among patients, but not widely used by providers or policy makers.
- Fertility regulation

Relationship of NFP, family planning, and contraception

FAMILY PLANNING

Natural Family Planning

Contraception

TABULAR MODIFICATION V25 Option 2(a)

Revise V25 Encounter for family planning management

V25.0 General counseling and advice

New code V25.04 Counseling and instruction

in natural family planning

Revise V25.4 Surveillance of previously

prescribed family planning methods

New code V25.44 Natural family planning

TABULAR MODIFICATION V26 Option 2(a)

V26	Procreative manager	ment

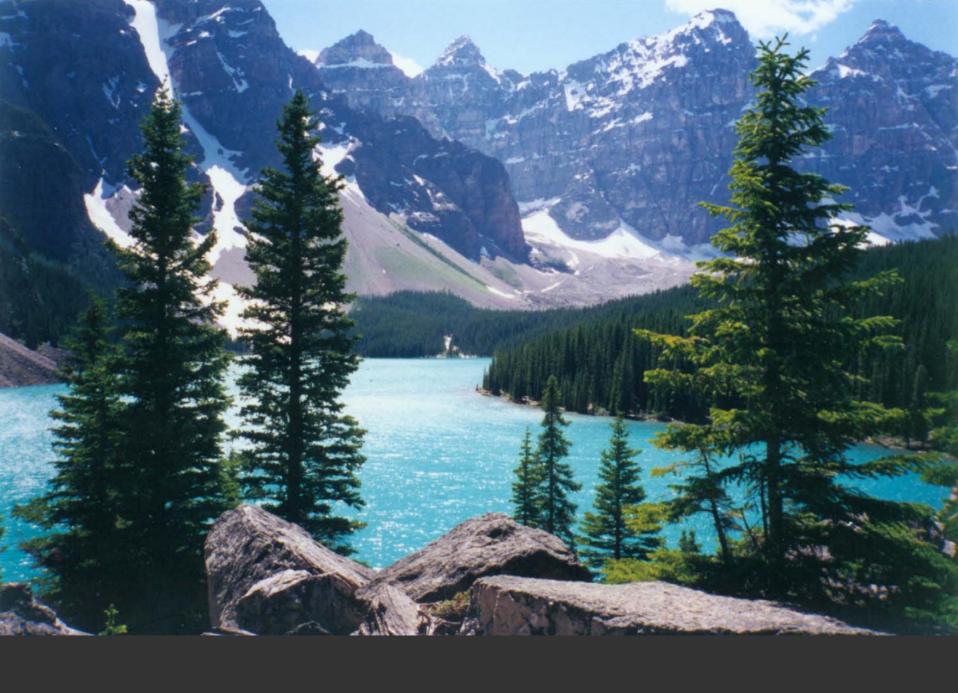
V26.4 General counseling and advice

New code V26.40 Procreative counseling and advice, unspecified

New code V26.41 Procreative counseling and instruction in natural

family planning

New code V26.49 Other procreative management counseling and advice



Selected references

- 1. Geerling JH. Natural family planning. Am Fam Physician 1995;52(6):1749-56.
- 2. Klaus H, Goebel JM, Muraski B, et al. Use-effectiveness and client satisfaction in six centers teaching the Billings Ovulation Method. Contraception 1979;19(6):613-29.
- 3. Hilgers TW, Stanford JB. The use-effectiveness to avoid pregnancy of Creighton Model NaProEducation technology: a meta-analysis of prospective trials. J Reprod Med 1998;43:495-502.
- 4. Arevalo M, Jennings V, Sinai I. Efficacy of a new method of family planning: the Standard Days Method. Contraception 2002;65(5):333-8.
- 5. European Natural Family Planning Study Groups. European multi-center study of natural family planning (1989-1995): efficacy and drop-out. Adv Contracept 1999;15(1):69-83.
- 6. Arevalo M, Jennings V, Nikula M, Sinai I. Efficacy of the new TwoDay Method of family planning. Fertil Steril 2004;82(4):885-92.
- 7. Stanford JB, Lemaire JC, Thurman PB. Women's interest in natural family planning. J Fam Pract 1998;46(1):65-71.

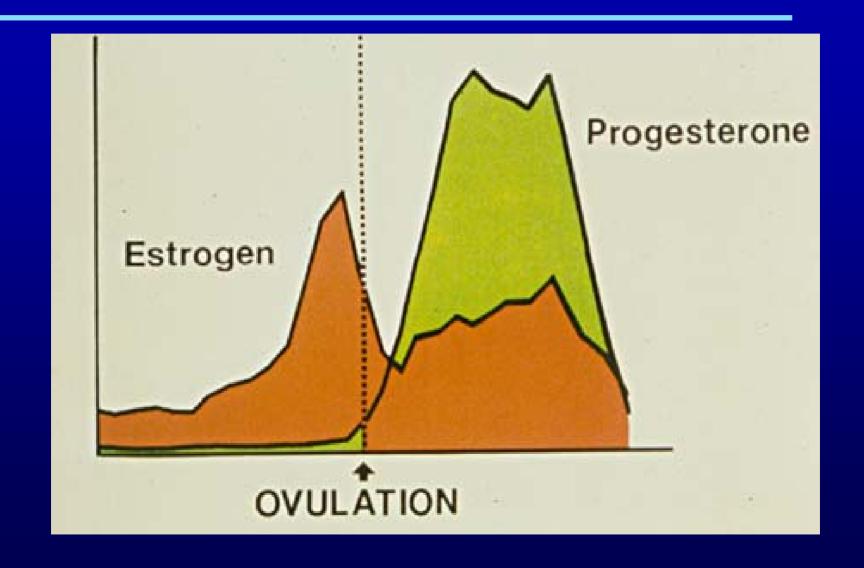
Contraception

- ◆ Contraceptive: An *agent or device* that diminishes the likelihood of or prevents conception. Includes *barrier* contraceptives, *chemical* contraceptives, *intrauterine* contraceptive devices and *oral* contraceptives (hormonal pharmaceuticals).
 - Stedman's Medical Dictionary,
 Dorland's Medical Dictionary,
 Webster's Third New International Dictionary
 of the English Language

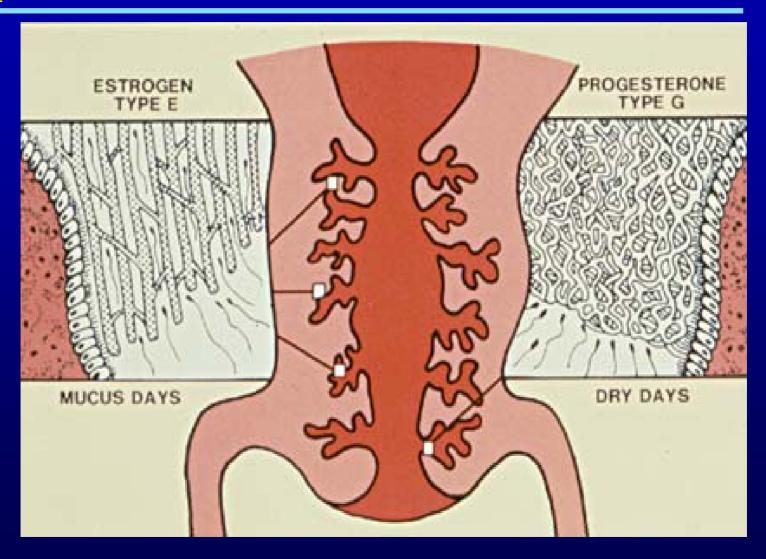
Family planning

- ◆ In the broadest sense...a means by which patients are assisted in either achieving or preventing pregnancy. However, family planning is generally defined more narrowly to include only those methods by which couples defer or prevent reproduction.
 - Essentials of Obstetrics and Gynecology,
 Hacker and Moore

Ovarian Hormones



Type E and G mucus at cervix

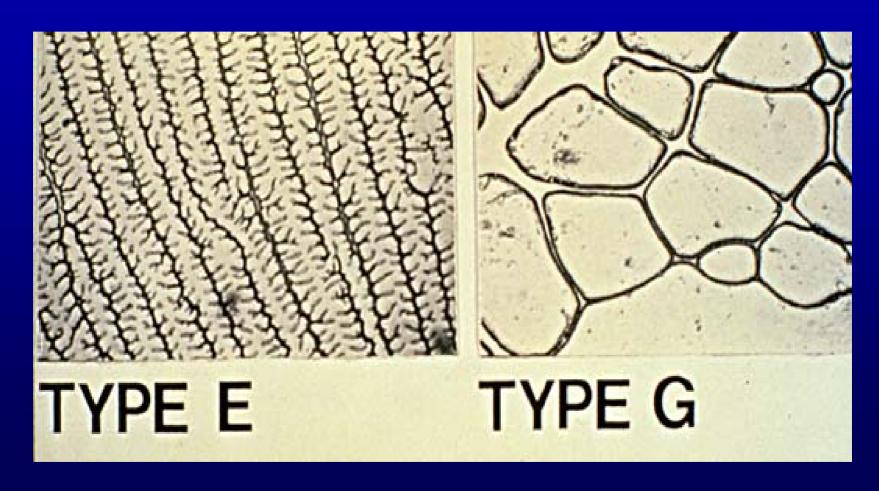


Type E and G mucus at cervix

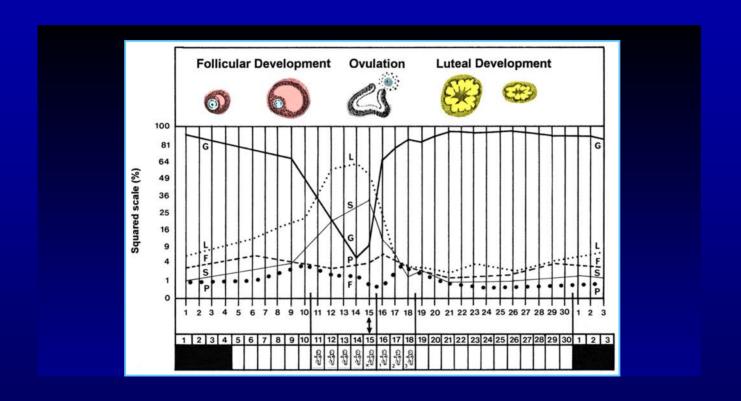


From T.W. Hilgers, MD

Type E and G mucus: light microscopy



Cervical mucus changes in response to follicular development



Adapted from Erik Odeblad, MD, PhD

NFP Methods- comments

- Standard-Days Method (SDM)
 - Only for women with cycles usually 26-32 days
- ◆ Two-Day Method (TDM)
 - Any cycle length; cannot use with continuous vaginal discharge
- Billings Ovulation Method (BOM)
 - Any reproductive status
- Creighton Model FertilityCare System (CrM)
 - Any reproductive status; standardized descriptions
- Sympto-Thermal Method (STM)
 - Multiple indicators

Pregnancy rate in NFP cycles to conceive

Location	Method	Couples	Pregnanc y Rate (%)	Comments
Germany	Sympto- thermal	346	68 at 3rd cycle, 92 at 1 year	Prospective declaration to achieve, followed by analysis of cycles with intercourse in fertile phase
New Zealand, India, Ireland, Philippines, El Salvador	Billings Ovulation Method	<869; 13% cycles	84 at 1 year	Declared intent was to avoid; analysis of "imperfect use" cycles; 1 year rate; 8/12 cycles (67%) where peak day was used
USA, Omaha	Creighton Model	50	76 in first cycle	Retrospective; excluded couples not conceiving

NFP and Infertility

- Documenting ovulation
- ◆ Timing intercourse appropriately
- Assessing abnormalities of reproductive function, assisting with diagnosis and management

Approaches to document ovulation and time intercourse

- Calendar calculations
- Basal body temperature
- Urine LH kits
- Fertility charting of vaginal discharge with NFP Method (particularly Creighton Model or Billings Method)
- Monitoring urinary estrogen metabolites

Mucus Peak

BBT

- prospectively identifies approach of ovulation
- information about cervical and ovarian function
- information about sperm survival

- retrospectively indicates occurrence of ovulation
- information about ovarian function only
- no information about sperm survival

Mucus Peak

Urine LH

- prospectively identifies approach of ovulation
- information about cervical and ovarian function
- information about sperm survival
- ◆ low cost over time

- prospectively identifies approach of ovulation within limited time frame (36 hours)
- information about ovulation only
- no information about sperm survival
- high cost for testing

Using CrM charting to assess abnormalities of reproductive function

