Contraception. 2012 Jul;86(1):12-5. doi: 10.1016/j.contraception.2011.11.009. Epub 2012 Jan 5.

A Bridge for postpartum women to Standard Days Method®: I. Developing the Bridge.

Sinai I, Cachan J.

Source

Institute for Reproductive Health, Georgetown University, Washington, DC 20008, USA. sinaii@georgetown.edu

Abstract

BACKGROUND:

A new fertility-awareness-based Bridge was developed for postpartum women starting with their first postpartum menses and until they are eligible to use the Standard Days Method®. This article describes the development of the Bridge and theoretical efficacy.

STUDY DESIGN:

Analysis of a preexisting data set collected in 1986-1990 was performed. Seventy-three breastfeeding women in Australia, Britain and Canada were followed starting 42 days postpartum until they had at least two potentially fertile cycles. We used these data to calculate the theoretical probability of pregnancy from intercourse on different days of the cycle relative to ovulation for postpartum women following the instructions of the Bridge.

RESULTS:

The fertility-awareness-based family-planning Bridge is theoretically effective for postpartum women until they reestablish cycle regularity and can start using the Standard Days Method.

CONCLUSION:

The Bridge can potentially be effective for postpartum women until they are eligible to use the Standard Days Method. Results from an efficacy study of the Bridge are described in a companion article.

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PMID: 22225840

Contraception. 2012 Jul;86(1):16-21. doi: 10.1016/j.contraception.2011.11.008. Epub 2012 Jan 5.

A Bridge for postpartum women to Standard Days Method®: II. Efficacy study.

Sinai I, Cachan J.

Source

Institute for Reproductive Health, Georgetown University, Washington, DC 20008, USA. sinaii@georgetown.edu

Abstract

BACKGROUND:

In a companion article, we described the development of a new fertility-awareness-based Bridge for postpartum women starting with their first postpartum menses and until they are eligible to use the Standard Days Method®. This article presents the results of an efficacy trial to test the Bridge.

STUDY DESIGN:

This was a prospective, nonrandomized, multicenter study following 157 women for up to 9 months. Participants were aged 18-39 years, had menstruated at least once since their baby was born, and wished to avoid or delay pregnancy using a fertility-awareness-based approach. Acceptability and correct use were examined. Life table pregnancy rates were calculated to assess method effectiveness.

RESULTS:

The typical-use failure rate is 11.2 for 6 months of Bridge use.

CONCLUSION:

The Bridge can offer significant protection from pregnancy for postpartum women who prefer using a fertility-awareness-based approach to avoiding pregnancy but are not yet eligible to use the Standard Days Method. Counseling should emphasize the importance of following the Bridge guidelines for it to be effective.

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PMID: 22225842

Contraception. 2004 Jan;69(1):9-14.

A comparison of the fertile phase as determined by the Clearplan Easy Fertility Monitor and self-assessment of cervical mucus.

Fehring RJ, Raviele K, Schneider M.

Source

College of Nursing, Institute for Natural Family Planning, Marquette University, Clark Hall, PO Box 1881, Milwaukee, WI 53201-1881, USA. richard.fehring@marquette.edu

Abstract

The purpose of this study was to compare the fertile phase of the menstrual cycle as determined by the Clearplan Easy Fertility Monitor (CPEFM) with self-monitoring of cervical mucus. One-hundred women (mean age = 29.4 years) observed their cervical mucus and monitored their urine for estrogen and luteinizing hormone metabolites with the CPEFM on a daily basis for 2-6 cycles and generated 378 cycles of data; of these, 347 (92%) had a CPEFM peak. The beginning of the fertile window was, on average, day 11.8 (SD = 3.4) by the monitor and day 9.9 (SD = 3.0) by cervical mucus ($r = 0.43$, $p < 0.001$). The average first day of peak fertility by the monitor was 16.5 (SD = 3.6) and by cervical mucus 16.3 (SD = 3.7) ($r = 0.85$, $p < 0.001$). The mean length of the fertile phase by the monitor was 7.7 days (SD = 3.1) and by cervical mucus 10.9 days (SD = 3.7) ($t = 12.7$, $p < 0.001$). The peak in fertility as determined by the monitor and by self-assessment of cervical mucus is similar but the monitor tends to underestimate and self-assessment of cervical mucus tends to overestimate the actual fertile phase.

PMID: 14720613

Contraception. 1999 Dec;60(6):357-60.

A fixed formula to define the fertile window of the menstrual cycle as the basis of a simple method of natural family planning.

Arévalo M, Sinai I, Jennings V.

Source

Institute for Reproductive Health, Georgetown University, Washington, DC, USA.
arevalom@gunet.georgetown.edu

Abstract

A significant number of women worldwide use periodic abstinence as their method of family planning. Many of them use some type of calendar-based approach to determine when they should abstain from unprotected intercourse to avoid pregnancy; yet they often lack correct knowledge of when during their menstrual cycle they are most likely to become pregnant. A simple method of natural family planning (NFP) based on a fixed formula to define the fertile window could be useful to these women. This article reports the results of an analysis of the application of a fixed formula to define the fertile window. A large existing data set from a World Health Organization study of the Ovulation Method was used to estimate the theoretical probability of pregnancy using this formula. Information about the variable probability of pregnancy on different cycle days relative to ovulation also was considered in the analysis. Results suggest that a fixed formula in which days 8-19 of the menstrual cycle are considered to be the fertile window would provide the appropriate basis of a simple, effective, family planning method.

PMID: 10715371

Eur J Obstet Gynecol Reprod Biol. 1976;6(2):63-6.

A prospective field trial of the "ovulation method" of avoiding conception.

Ball M.

Abstract

124 couples were recruited between May 1973 and July 1974 for a prospective study of the effectiveness of observation of the cervical mucus (the ‘ovulation method’) as a means of avoiding conception. 2 couples with 9 cycles were lost to follow-up; the remaining 122 couples contributed 1626 cycles of observation and experienced 21 unplanned pregnancies. This gives an overall unplanned pregnancy rate of 15.5 per 100 women years.

PMID: 985763

Lancet. 1972 Oct 14;2(7781):813-6.

A trial of the ovulation method of family planning in Tonga.

Weissmann MC, Foliaki L, Billings EL, Billings JJ.

Abstract

In the ovulation method the woman defines the fertile and infertile days of her menstrual cycle by interpreting the cervical-mucus pattern. Clinical studies have shown that in all women the occurrence of fertility is accompanied by a characteristic mucous secretion, which allows the woman to recognise the days when conception is likely. This information provides a "natural" method of family planning, and a trial of its potential value was undertaken in a Pacific Island community. The method proved to be both acceptable and successful. Altogether 282 women used the ovulation method for a total of 2503 months, with one case of method failure and two cases of user failure.

PMID: 4116246

J Am Acad Nurse Pract. 1996 Oct;8(10):461-6.

A comparison of the ovulation method with the CUE ovulation predictor in determining the fertile period.

Fehring RJ.

Source

Marquette University College of Nursing Milwaukee, Wisconsin 53201-1881, USA.

Abstract

The purpose of this study was to compare the CUE Ovulation Predictor with the ovulation method in determining the fertile period. Eleven regularly ovulating women measured their salivary and vaginal electrical resistance (ER) with the CUE, observed their cervical-vaginal mucus, and measured their urine for a luteinizing hormone (LH) surge on a daily basis. Data from 21 menstrual cycles showed no statistical difference ($T = 0.33$, $p = 0.63$) between the CUE fertile period, which ranged from 5 to 10 days (mean = 6.7 days, SD = 1.6), and the fertile period of the ovulation method, which ranged from 4 to 9 days (mean = 6.5 days, SD = 2.0). The CUE has potential as an adjunctive device in the learning and use of natural family planning methods.

PMID: 9305046

N Z Med J. 1996 May 24;109(1022):189-91.

A study of the lactational amenorrhoea method of family planning in New Zealand

women.

France MM.

Source

New Zealand Association of Natural Family Planning, Auckland.

Abstract

AIM:

To evaluate the acceptance and efficacy of the lactational amenorrhoea method of family planning in breastfeeding clients attending clinics of the NZ Association of Natural Family Planning.

METHODS:

Mothers who were fully breastfeeding their babies, were amenorrhoeic and were early postpartum were offered for the purpose of family planning either lactational amenorrhoea method or the usual fertility awareness charting method. The clients who chose lactational amenorrhoea method were contacted at monthly intervals to check if they continued to meet the lactational amenorrhoea method criteria of fully breastfeeding and amenorrhoea. The fertility awareness group followed the normal practice of clinic visits for instruction until they became autonomous users. The status of both groups were assessed at 6 months postpartum when lactational amenorrhoea method users were advised to adopt another family planning method.

RESULTS:

Of 149 breastfeeding clients, 110 met the lactational amenorrhoea method criteria. Seventy chose lactational amenorrhoea method, the majority (56.7%) because of its simplicity. Thirty (48.6%) of initial lactational amenorrhoea method users were able to use the method for the full 6 months postpartum period. None of the women conceived while using lactational amenorrhoea method.

CONCLUSION:

For mothers who choose to fully breastfeed and who maintain a state of amenorrhoea lactational amenorrhoea method is an effective means of avoiding pregnancy during the first 6 months postpartum.

PMID: 8657386

Rev Panam Salud Publica. 2010 Aug;28(2):80-5.

Adding the Standard Days Method® to the

contraceptive method mix in a high-prevalence setting in Peru.

Arévalo M, Yeager B, Sinai I, Panfichi R, Jennings V.

Source

United States Agency for International Development, Dhaka, Bangladesh.

Abstract

OBJECTIVE:

To determine what contribution the Standard Days Method® (SDM) makes to the contraceptive mix offered by regular health services in areas of Peru where contraceptive prevalence rates (CPR) are already high.

METHODS:

SDM was added to the family planning methods offered by the Ministry of Health in two provinces in Peru in September 2002. Retrospective interviews were conducted in March-June 2004 with 1 200 women who had chosen SDM as their contraceptive method and had used it for 2-20 months. Data were also obtained from the databases of the participating health services. The evaluation covered SDM demand, whether or not clients were switching to SDM from other modern methods, and SDM continuation and effectiveness.

RESULTS:

Demand for SDM stabilized at 6% of all new family planning users. Most users had not been using any reliable contraception at the time they started using SDM. About 89% of those who began using SDM at least 6 months before the interview were still using it at 6 months. The 12-month typical use pregnancy rate was estimated to be around 10.0 per 100 women years.

CONCLUSIONS:

Adding SDM to a program's existing contraceptive method mix can increase coverage even in an already high-CPR setting. Most women who choose SDM do not switch from any other modern family planning method. Continuation compares well with other modern user-directed methods. SDM effectiveness, when offered in regular service delivery circumstances, compares well to efficacy trial findings.

PMID: 20963273

J Reprod Med. 2009 Mar;54(3):165-70.

Cohort comparison of two fertility awareness methods of family planning.

Fehring RJ, Schneider M, Barron ML, Raviele K.

Source

Marquette University College of Nursing, P.O. Box 1881, Milwaukee, WI 52301-1881, USA. richard.fehring@marquette.edu

Abstract

OBJECTIVE:

To determine if an electronic hormonal fertility monitor aided method (EHFM) of family planning is more effective than a cervical mucus only method (CMM) in helping couples to avoid pregnancy.

STUDY DESIGN:

Six hundred twenty-eight women were taught how to avoid pregnancy with either the EHFM (n=313) or the CMM (n = 315). Both methods involved standardized group teaching and individual follow-up. All pregnancies were reviewed and classified by health professionals. Correct use and total unintended pregnancy rates over 12 months of use were determined by survival analysis. Comparisons of unintended pregnancies between the 2 methods were made by use of the Fisher exact test.

RESULTS:

There were a total of 28 unintended pregnancies with the EFHM and 41 with the CMM. The 12-month correct use pregnancy rate of the monitor-aided method was 2.0%, and the total pregnancy rate was 12.0%. In comparison, the 12-month correct use pregnancy rate of the CMM was 3.0%, and the total pregnancy rate was 23.0%. There was a significant difference in total pregnancies between the 2 groups ($p<0.05$).

CONCLUSION:

EFHM is more effective than CMM. Further research is needed to verify the results.

PMID: 19370902

World Health Popul. 2012;14(1):44-51.

Engaging men in family planning services delivery: experiences introducing the Standard Days Method® in four countries.

Lundgren R, Cachan J, Jennings V.

Source

Institute for Reproductive Health, Georgetown University, Washington, DC, USA. lundgrer@georgetown.edu

Abstract

Family planning is often regarded as the woman's responsibility, but there is growing recognition of the need to involve men in family planning programs. Since 2001, the fertility-awareness-based Standard Days Method® (SDM) has been introduced in more than 30 countries, providing a natural, effective birth control option. SDM requires the cooperation of the male partner, and its introduction created an opportunity to test innovative strategies to engage couples in family planning. Such strategies included couple counselling, outreach activities that encouraged men to participate in family planning and integration of family planning into traditionally male programs. Due to the SDM's intrinsic characteristics as a couple method, SDM providers are sensitized to the importance of exploring other critical sexual and reproductive health topics, including intimate partner violence, HIV, sexuality and partner communication. This paper presents several case studies describing how men were engaged in SDM introduction activities in four countries.

PMID: 23135072

Fam Pract Res J. 1994 Sep;14(3):237-49.

Interest in natural family planning among female family practice patients.

Stanford JB, Lemaire JC, Fox A.

Source

Department of Family and Preventive Medicine, University of Utah School of Medicine, Salt Lake City 84132.

Abstract

OBJECTIVE:

Although modern methods of natural family planning (NFP) are effective both to avoid and to achieve pregnancy, relatively few women use these methods. It is not known whether this is due primarily to lack of interest or to other factors. We therefore explored the level of interest in NFP among female family practice patients.

METHODS:

We mailed information about NFP to 400 female patients between ages 21 and 42 and conducted follow-up interviews by telephone. We excluded 162 women for whom we could not obtain accurate addresses or phone numbers, 68 women we could not reach by telephone, 67 women who were not currently at risk of pregnancy, and 15 women for other reasons. Twenty-eight women refused to participate in the study. Sixty women completed telephone interviews.

RESULTS:

Forty-three percent of respondents (n = 60) were interested in learning more about NFP, 24% said they were likely to use NFP to avoid pregnancy, and 32% were likely to use NFP to achieve pregnancy. Younger women and women who were Christian but not Catholic and not of a major Protestant denomination were more interested in NFP.

CONCLUSION:

Some female family practice patients are interested in learning and using NFP.

PMID: 7976475

Niger Postgrad Med J. 2010 Dec;17(4):287-90.

Knowledge and practice of family planning among antenatal care attendees at Nnewi, south east Nigeria.

Igwegbe AO, Ugboaja JO, Monago EN.

Source

Department of Obstetrics and Gynaecology, Nnamdi Azikiwe University, Teaching Hospital, P.M.B 5025, Nnewi, Nigeria. tigwegbe@yahoo.com

Abstract

AIMS AND OBJECTIVES:

Entrenching an effective family planning program has being a major challenge in Sub Saharan Africa. Determining the knowledge, attitude and practice of family planning among the women is very necessary in order to achieve success. The aim of this study iS to determine the knowledge, and practice of family planning among antenatal women in Nnewi, South East, Nigeria. A descriptive cross sectional study of 356 women attending antenatal clinic at Nnamdi Azikiwe University Teaching Hospital, Nnewi, Nigeria was carried out over a 5-month period.

MATERIALS AND METHODS:

With the aid of pre-tested interviewer-administered semi structured questionnaires, information on biosocial characteristics, knowledge of, and practice of family planning as well as sources of information on family planning were obtained from the respondents. Data was analysis was done with Epi info statistical package, version 3.5.2 (2008)

RESULTS:

Three hundred and forty (95.5%) of the respondents knew about family planning out of which 260 (76.5%) had ever used a modern method. The male condom (256; 75.3%) and the natural method (Billings method) (150; 44.1%) were the commonly known methods. Also the commonest used methods were the male condom (144; 55.4%) and Billings method (96; 36.9%). Birth spacing (248; 72.9%) and limiting births (138, 40.6%) were mainly identified as the benefits of family planning and only 6 (1.7%) of the respondents identified family planning as being important in the reduction of maternal mortality. The major sources of information on family planning were health workers (224; 65.9%) and the radio (126; 37.1%).

CONCLUSION:

The knowledge and practice of family planning has improved among our women. However, the methods commonly used are those associated with high failure rates. Family panning program managers should recognize this limitation. There is need for public sensitization on the correct use of the Billings method and the male condom. Ultimately, our women should be encouraged to accept the more reliable methods of family planning.

PMID: 21809606

Rev Gaucha Enferm. 2011 Sep;32(3):516-23.

[Knowledge, acceptability and use of the Billings natural family planning method].

[Article in Portuguese]

Uchimura NS, Uchimura TT, Almeida LM, Perego DM, Uchimura LY.

Source

Departamento de Medicina da Universidade Estadual de Maringá (UEM), Maringá, Paraná, Brasil. nuchimura@pop.com.br

Abstract

This is an observational quantitative and analytical study aimed at verifying the knowledge, acceptability and use of natural family planning (NFP) by patients in a university hospital from July to November, 2008. The data were collected using a structured questionnaire and analyzed with the softwares Excel and Statistica 8.0. Of the 113s women interviewed, 70 (62%) accepted the method and 1 (0.9%) used it routinely. Acceptance was higher among those who wished to become pregnant in the future compared to those who did not wish it. Acceptability was statistically significant (p = 0.0147) among the 28 (80%) non-contraceptive users compared to 42 (53.8%) who used some contraceptive method. Factors such as age, education, number of living children and religion were not statically associated with the acceptability of NFP. The Billings ovulation method has an adequate acceptability, but has a low actual use because of the lack of information by health professionals of its real effectiveness and applicability.

PMID: 22165398

Arch Fam Med. 1999 Sep-Oct;8(5):391-402.

Pregnancy probabilities during use of the Creighton Model Fertility Care System.

Howard MP, Stanford JB.

Source

Fertility Care Services, Covenant Health System, Lubbock, Tex., USA.

Abstract

OBJECTIVE:

To evaluate pregnancy probabilities during use of the Creighton Model Fertility Care System (CrMS).

DESIGN:

Couples who began use of the CrMS were entered into this observational cohort study. Follow-up included detailed reviews of use of the CrMS. Pregnancy probabilities were calculated with

both net and gross life-table analysis through 18 months.

SETTING:

A natural family planning service delivery program based at an urban hospital in Houston, Tex.

SUBJECTS:

A group of 701 couples who received instruction in the CrMS were entered into the study. Most couples (93%) were engaged or married. Most women were white (83%), between the ages of 20 and 34 years (88%), and college graduates (58%).

MAIN OUTCOME MEASURE:

Pregnancies were classified based on a detailed evaluation involving the pregnant woman (usually with her partner).

RESULTS:

At 12 months, the following net pregnancy probabilities were found per 100 couples: method-related pregnancies, 0.14; pregnancies caused by user and/or teacher error, 2.72; pregnancies caused by achieving-related behavior (genital contact during a time known to be fertile), 12.84; unresolved pregnancies, 1.43; and total pregnancies, 17.12. Pregnancy probabilities were similar when stratified by the following reproductive categories: uncomplicated regular cycles, long cycles, discontinuing oral contraceptives, breastfeeding, and other.

CONCLUSIONS:

Pregnancy probabilities of the CrMS compare favorably with those of other methods of family planning. Most pregnancies result from genital contact during a known fertile time. Women need not have regular cycles to use the CrMS successfully.

PMID: 10500511

J Gynecol Obstet Biol Reprod (Paris). 1998 Mar;27(2):174-80.

[Prospective study of the efficacity of a recent symptomatic-thermal method of natural family planning].

[Article in French]

de Leizaola MA.

Source

Fédération Francophone pour le Planning Familial Naturel, Couple-Amour-Fécondité, asbl, Belgique.

Abstract

A Belgian pilot-study conducted in the framework of the prospective European multi-center study (University of Düsseldorf) tried to establish the use-effectiveness (a sine qua non condition for its acceptance in Europe) of natural family planning.

MATERIAL AND METHODS:

84 participants provided data (sympto-thermal chart and related information) on 1,750 cycles where family planning intention was to avoid a pregnancy. The average age of the women was 32 years. A contraceptive method (mainly oral contraceptives) was employed previously by 61% of them. The sympto-thermal method used by the test group highlights the beginning and the end of the menstrual cycle's fertile period by a double check. As to the start of the fertile period, the criteria are: a calculation on the length of the previous twelve cycles and the first sign of mucus at either the vulva or the cervix. Indicators of the end of this phase are: the third day of high temperature and the fourth evening after either the peak mucus day or the peak cervix day. 75% of the women involved generally use the cervical auto-palpation.

RESULTS:

No method failure at all has been detected. Two unplanned pregnancies occurred due to user failure. The total Pearl index for the study was 1.4. When examining only those cycles (85% of the reported cycles) where no protected sexual intercourse occurred during the fertile phase, practical efficacy of the method analysed was 1.8 according to Pearl index. Furthermore, taking into account protected and unprotected sexual intercourse occurred during the fertile phase, we observed that sexual abstinence was practised during the "risk" period of 75% of the cycles.

CONCLUSIONS:

The results of this test study demonstrate the practical efficiency of a modern natural family planning method. The high level of cycles during which periodic abstinence was employed testify to the acceptability of the method used.

PMID: 9599764

J Fam Plann Reprod Health Care. 2012 Jul;38(3):157-66. doi: 10.1136/jfprhc-2011-100116. Epub 2011 Aug 20.

The Standard Days Method: an addition to

the arsenal of family planning method choice in Ethiopia.

Bekele B, Fantahun M.

Source

HIV/AIDS Care and Support Program, Tigray Region, Ethiopia. birbek@yahoo.com

Abstract

BACKGROUND AND METHODOLOGY:

The Standard Days Method ® (SDM) is a fertility awareness-based method of family planning that helps users to identify the fertile days of the reproductive cycle (Days 8-19). To prevent pregnancy users avoid unprotected sexual intercourse during these days. A cross-sectional community-based study was conducted from December 2007 to June 2008 in four operational areas of Pathfinder International Ethiopia. A total of 184 SDM users were included in the study. Quantitative and qualitative methods of data collection were used. The aim of the study was to examine the experience of introducing the SDM at community level in Ethiopia.

RESULTS:

Of the 184 participants, 80.4% were still using the SDM at the time of the survey, with 35% having used it for between 6 and 12 months, while 42% had used it for more than a year. The majority (83%) knew that a woman is most likely to conceive halfway through her menstrual cycle, and nearly 91% correctly said that the SDM does not confer protection from sexually transmitted infections/AIDS. A substantial majority (75%) had correctly identified what each colour-coded bead represents in the CycleBeads ®, and an aggregate of 90.5% of women practised all the elements of correct use.

DISCUSSION AND CONCLUSIONS:

This study demonstrates the importance of the SDM in increasing the availability and accessibility of family planning, and the potential to improve family planning method choice and method mix by expanding use of the SDM.

PMID: 21857028

Reprod Contracept. 1999;10(3):163-9.

The application of Billings for fertility regulation method during the period of

breastfeeding.

Jin B, Jiang G, Pan Z, Yan J, Peng S, Lu R.

Abstract

This study was conducted to collect information about breast-feeding practices in one of China's district and to encourage mothers to adopt the Billings ovulation method for fertility regulation. Cervical mucus was monitored in 61 breast-feeding mothers during 244 months. Urinary estrogen and/or pregnanediol were measured and recorded in 15 breast-feeding mothers. Within 6 months postpartum, 97.14% of the cervical mucus was consistent with normal menstrual cycles. The level of urinary estrogen averaged 0.08 mcmol/24 hours in fully breast-feeding mothers compared to 0.14 mcmol/24 hours in partially breast-feeding mothers. The peak level average was 0.21 mcmol/24 hours in bottlefeeding mothers. The pregnanediol level confirmed ovulation in bottle-feeding mothers. The average levels of cut-off and the period of ovulation in 6 bottle-feeding mothers were 7 mcmol/24 hours and 9 mcmol/24 hours, respectively. Measurements of urinary estrogen and pregnanediol levels all matched with cervical mucus appearances.

PMID: 12349463

Contraception. 2002 Oct;66(4):231-5.

Accuracy of the peak day of cervical mucus as a biological marker of fertility.

Fehring RJ.

Source

Marquette University, College of Nursing, Institute for Natural Family Planning, Milwaukee, WI 53201-1881, USA. richard.fehring@marquette.edu

Abstract

The (PD) peak day of cervical mucus is an important biologic marker for the self-determination of the optimal time of fertility in a woman's menstrual cycle. The purpose of this article is to provide evidence (literature and empiric) for the accuracy of the PD of cervical mucus as a biologic marker of peak fertility and the estimated day of ovulation. An analysis of data from four published studies that compared the self-determination of the PD of cervical mucus with the urinary luteinizing hormone (LH) surge was conducted. The four studies yielded 108 menstrual cycle charts from 53 women participants. The 108 cycles ranged in length from 22 to 75 days (mean 29.4 SD 6.0). Ninety-three of the 108 cycles had both an identified PD and LH surge.

Data charts showed that 97.8% of the PD fell within +/-4 days of the estimated day of ovulation. Use of a standardized mucus cycle scoring system indicated that the peak in cervical mucus ratings was highest on the day of the LH surge. Self-determination of the PD of cervical mucus is a very accurate means of determining peak fertility and a fairly accurate means of determining the day of ovulation and the beginning of the end of the fertile time.

PMID: 12413617

Contraception. 2002 Oct;66(4):231-5.

Accuracy of the peak day of cervical mucus as a biological marker of fertility.

Fehring RJ.

Source

Marquette University, College of Nursing, Institute for Natural Family Planning, Milwaukee, WI 53201-1881, USA. richard.fehring@marquette.edu

Abstract

The (PD) peak day of cervical mucus is an important biologic marker for the self-determination of the optimal time of fertility in a woman's menstrual cycle. The purpose of this article is to provide evidence (literature and empiric) for the accuracy of the PD of cervical mucus as a biologic marker of peak fertility and the estimated day of ovulation. An analysis of data from four published studies that compared the self-determination of the PD of cervical mucus with the urinary luteinizing hormone (LH) surge was conducted. The four studies yielded 108 menstrual cycle charts from 53 women participants. The 108 cycles ranged in length from 22 to 75 days (mean 29.4 SD 6.0). Ninety-three of the 108 cycles had both an identified PD and LH surge. Data charts showed that 97.8% of the PD fell within +/-4 days of the estimated day of ovulation. Use of a standardized mucus cycle scoring system indicated that the peak in cervical mucus ratings was highest on the day of the LH surge. Self-determination of the PD of cervical mucus is a very accurate means of determining peak fertility and a fairly accurate means of determining the day of ovulation and the beginning of the end of the fertile time.

PMID: 12413617

Am J Public Health. 1997 Mar;87(3):338-43.

Adverse outcomes of planned and unplanned pregnancies among users of natural family

planning: a prospective study.

Bitto A, Gray RH, Simpson JL, Queenan JT, Kambic RT, Perez A, Mena P, Barbato M, Li C, Jennings V.

Source

School of Hygiene and Public Health, Johns Hopkins University, Baltimore, Md 21205-2179, USA.

Abstract

OBJECTIVES:

The purpose of this study was to determine prospectively whether unplanned pregnancies are associated with adverse pregnancy outcomes among users of natural family planning.

METHODS:

Women who became pregnant while using natural family planning were identified in five centers worldwide: there were 373 unplanned and 367 planned pregnancies in this cohort. The subjects were followed up at 16 and 32 weeks' gestation and after delivery. The risks of spontaneous abortion, low birth-weight, and preterm birth were estimated after adjustment by logistic regression.

RESULTS:

The women with unplanned pregnancies were more likely to be at the extremes of age, to report more medical problems before and during the index pregnancy, and to seek antenatal care later in gestation than the women with planned pregnancies. However, women with planned pregnancies reported a higher rate of spontaneous abortion in previous pregnancies (28.8%) than did women with unplanned pregnancies (12.9%). There were no significant differences in the rates of spontaneous abortion, low birthweight, or preterm birth between the two groups.

CONCLUSIONS:

No increased risk of adverse pregnancy outcomes was observed among women who experienced an unplanned pregnancy while using natural family planning.

PMID: 9096531

Gynecol Endocrinol. 1997 Jun;11(3):203-19.

An overview on the effectiveness of natural

family planning.

Guida M, Tommaselli GA, Pellicano M, Palomba S, Nappi C.

Source

Department of Obstetrics and Gynecology, School of Medicine, University Federico II, Naples, Italy.

Abstract

Recent years have witnessed important developments in natural family planning (NFP), which is based on the observation of fertile and infertile periods of the menstrual cycle, so that the couple is able to know when sexual intercourse may lead to a pregnancy. A review of the main studies regarding the effectiveness of NFP showed a decrease in the Pearl Index and life table values from the early 1980s to date, indicating that progress both in the teaching and in the application of these contraception, methods has been achieved. The main cause of lack of success seems to be the misapplication of NFP rules, whereas the errors due to the method itself are few. Furthermore, it seems that the symptothermal method might give better results than the ovulation method, even though no comparative study has been carried out, and that the first studies on the lactational amenorrhea method show encouraging results. Finally, it seems that NFP is best suited for 'spacers' of pregnancies, rather than for 'limiters'. Indeed, the former are more likely to show good compliance, since the sexual abstinence periods are limited and an unwanted pregnancy is not regarded as a completely negative event.

PMID: 9209901

Contraception. 1996 Nov;54(5):319-21.

An updated basal body temperature method.

Frank E, White R.

Source

Emory University School of Medicine, Dept. of Family and Preventive Medicine, Atlanta, GA 30303-3219, USA.

Abstract

Basal body temperature (BBT) readings are handicapped as fertility predictors by exogenous influences on women's temperatures, many of which could be adjusted for by the presence of a non-cycling control. We, a married, cohabiting couple, tracked our BBTs for two months. We found substantial temperature covariability. When there were difficult-to-explain changes in the female partner's temperature, similar changes in the male partner's temperature suggested that

these fluctuations were not attributable to ovulation. Additionally, a clear mid-cycle widening of our temperature gap suggested that ovulation had occurred. This is a limited trial of a new method. However, the potential for substantially improving the accuracy and usefulness of a globally utilized method, coupled with its inexpensiveness, ease, and painlessness, call for a larger study.

PMID: 8934068

Adv Contracept. 1997 Jun-Sep;13(2-3):269-72.

Approaches for incorporating ovulation detection devices and home kits into learning NFP--implications for service delivery.

Kirkman RJ.

Source

Department of Obstetrics and Gynaecology and Reproductive Health Care, University of Manchester, Withington, UK.

Abstract

This paper presents demographic data about use of NFP in Europe and the factors which have been identified as influencing that very low use level. Experience with a new ovulation detection device in clinical trials and observations of its over-the-counter promotions is discussed in the context of what is already known about how to maximize uptake of contraception in main-stream service provision. Some suggestions are offered as to appropriate means of encouraging women who are using artificial methods or no method to understand enough about their natural fertile cycle to consider NFP as an acceptable option.

PMID: 9288345

Stud Fam Plann. 1995 Nov-Dec;26(6):338-49.

Assessing family planning service-delivery practices: the case of private physicians in Jamaica.

Hardee K, Clyde M, McDonald OP, Bailey W, Villinski MT.

Source

Service Delivery Research Division, Family Health International, Research Triangle Park, NC 27709, USA.

Abstract

This report presents the results of a study of the family planning service-delivery practices of private physicians in Jamaica. All 367 private physicians in Jamaica who offer family planning services, counseling, or referral were included in the survey. The study revealed that a client seeking services might be given a method by one provider and not by another, and that the methods clients use are likely to be influenced by the providers' preferences. Private physicians in Jamaica are in need of access to current international guidance on contraceptive methods and service practices.

PMID: 8826073

MCN Am J Matern Child Nurs. 2005 Sep-Oct;30(5):290-6; quiz 297-8.

Basal body temperature assessment: is it useful to couples seeking pregnancy?

Barron ML, Fehring RJ.

Source

Center for Fertility Education, School of Nursing, Saint Louis University, St. Louis, MO, USA. barronml@slu.edu

Abstract

Advanced practice nurses in primary care settings are often asked to give appropriate advice to couples seeking pregnancy. This article examines the issue of basal body temperature (BBT), a time-honored way to establish the presence of ovulatory cycles, and asks if BBT is an outdated recommendation. The article also reviews the benefits and limitations of recommending BBT to couples seeking pregnancy in light of recent fecundity research.

PMID: 16132004

MCN Am J Matern Child Nurs. 2005 Sep-Oct;30(5):290-6; quiz 297-8.

Basal body temperature assessment: is it

useful to couples seeking pregnancy?

Barron ML, Fehring RJ.

Source

Center for Fertility Education, School of Nursing, Saint Louis University, St. Louis, MO, USA. barronml@slu.edu

Abstract

Advanced practice nurses in primary care settings are often asked to give appropriate advice to couples seeking pregnancy. This article examines the issue of basal body temperature (BBT), a time-honored way to establish the presence of ovulatory cycles, and asks if BBT is an outdated recommendation. The article also reviews the benefits and limitations of recommending BBT to couples seeking pregnancy in light of recent fecundity research.

PMID: 16132004

Contraception. 2008 Mar;77(3):147-54. doi: 10.1016/j.contraception.2007.11.001.

Being strategic about contraceptive introduction: the experience of the Standard Days Method.

Gribble JN, Lundgren RI, Velasquez C, Anastasi EE.

Source

BRIDGE Project, Population Reference Bureau, Washington, DC 20009, USA. jgribble@prb.org

Abstract

BACKGROUND:

Many national and institutional family planning policies explicitly include fertility awareness-based methods among the method options that should be made available, but these methods are often not offered for a variety of reasons. After testing the efficacy of the Standard Days Method (SDM), which is a fertility awareness-based method that identifies Days 8-19 of the menstrual cycle as fertile for women with cycles lasting between 26 and 32 days, pilot studies were conducted to introduce it into programs.

STUDY DESIGN:

Through 14 pilot studies around the world, ministries of health, family planning associations and community development organizations introduced the SDM. Follow-up interviews with users and other data collection methodologies were used to track user characteristics and experiences. Supervision data and simulated clients assessed the effects on service delivery.

RESULTS:

The SDM appeals to a broad range of women throughout the world. Clients report using abstinence or condoms to manage the fertile days. Both men and women report high levels of satisfaction with the method. The cross-study first-year failure rate of 14.1 pregnancies per 100 woman-years of use is similar to typical-use rates found in the SDM efficacy trial.

CONCLUSIONS:

The results of the pilot studies offer guidance for scaling up service delivery of the SDM. Condom counseling can help many users manage the fertile window effectively. Because out-of-range cycles can lead to method failure, users must understand the importance of tracking cycle length and be willing to switch to another method when the SDM is contraindicated. Community providers can offer the method; within clinical settings, SDM counseling typically takes no more time than allowed in most program norms. Training providers to address alcohol use and gender-based violence improves SDM method use and contributes to better quality of care.

PMID: 18279683

Adv Contracept. 1994 Sep;10(3):195-204.

Billings natural family planning in Shanghai, China.

Xu JX, Yan JH, Fan DZ, Zhang DW.

Source

Shanghai Municipal Family Planning Commission, People's Republic of China.

Abstract

With cervical mucus, or Billings, method of family planning, a woman learns to recognize the characteristics of her cervical mucus that identify the fertile phase in her menstrual cycle. She and her partner abstain from sexual activity during a period from the first indication of mucus until four days after the mucus peak day, which includes ovulation. They also abstain during menses, because mucus can be confused with menstrual bleeding. This method of family planning is used widely, worldwide, by couples seeking a natural, reliable method of family

planning. Between July 1988 and May 1990, 688 couples of child-bearing age, most of whom were parous, used the Billings method for contraception. Five hundred and fifty of these couples used the method for more than 12 months. Efficacy, continuation rates, and discontinuation rates were analyzed using life-table analysis for 10,175 woman-months of data collected. The net cumulative discontinuation rates per 100 women at 12 and 18 months were 19.85 and 34.58, respectively, resulting in continuation rates of 80.15 and 65.42. The discontinuation rates per 100 women for method-related reasons at 12 and 18 months were 1.61 and 2.84, respectively, while the discontinuation rates for unintended pregnancy were 1.02 and 1.18. During the study, 67 subjects volunteered to have vaginal smears taken from the upper part of the vaginal wall for cytologic examinations, and among them serum and urine LH levels were measured in 10 subjects and urinary estrogen and progesterone were assayed in 35 cases. These tests related other indications of the menstrual cycle to the ability of the women to judge ovulation by cervical mucus. Our research suggests that further investigation of the Billings method is warranted and that careful planning and organization are needed to disseminate the method more broadly.

PMID: 7863845

Eur J Obstet Gynecol Reprod Biol. 2006 Mar 1;125(1):72-8. Epub 2005 Sep 8.

Cervical mucus secretions on the day of intercourse: an accurate marker of highly fertile days.

Scarpa B, Dunson DB, Colombo B.

Source

Department of Applied Statistics and Economics, University of Pavia, Pavia, Italy.

Abstract

OBJECTIVE:

To provide estimates of the probabilities of conception according to vulvar mucus observations classified by the woman on the day of intercourse.

STUDY DESIGN:

Prospective cohort study of 193 outwardly healthy Italian women using the Billings Ovulation Method. Outcome measures include 161 conception cycles and 2594 non-conception cycles with daily records of the type of mucus and the occurrences of sexual intercourse.

RESULTS:

The probability of conception ranged from 0.003 for days with no noticeable secretions to 0.29 for days with most fertile-type mucus detected by the woman. The probability of most fertile type mucus by day of the menstrual cycle increased from values <20% outside of days 10-17 to a peak of 59% on day 13.

CONCLUSION:

Regardless of the timing of intercourse in the menstrual cycle, the probability of conception is essentially 0 on days with no secretions. This probability increases dramatically to near 30% on days with most fertile-type mucus, an association that accurately predicts both the timing of the fertile interval and the day-specific conception probabilities across the menstrual cycle.

PMID: 16154254

Stat Methods Med Res. 2006 Apr;15(2):161-80.

Cervical mucus symptom and daily fecundability: first results from a new database.

Colombo B, Mion A, Passarin K, Scarpa B.

Source

Dipartimento di Scienze Statistiche, University of Padova, Via C. Battisti 241, 35121 Padova, Italy. colber@stat.unipd.it

Abstract

With the collaboration of Italian centres providing services on natural family planning, a prospective study collected data on 2755 menstrual cycles of 193 women. A database was constructed using information on the daily characteristics of cervical mucus and episodes of intercourse. Taking the day of peak mucus as a conventional marker of ovulation, the database identified the length (12 days) and location of a 'window' of potential fertility, the highest level of conception probability being confined to the central five to six days. Univariate analysis provided evidence of the impact on fecundability of the woman's age and the basic infertile pattern of a cycle. Several analytical approaches highlighted the relationship between daily mucus characteristics and levels of fecundability

PMID: 16615655

Hum Reprod. 2001 Nov;16(11):2278-82.

The relationship between cervical secretions and the daily probabilities of pregnancy: effectiveness of the TwoDay Algorithm.

Dunson DB, Sinai I, Colombo B.

Source

Biostatistics Branch, MD A3-03, National Institute of Environmental Health Sciences, PO Box 12233, Research Triangle Park, NC 27709, USA. dunson1@niehs.nih.gov

Abstract

BACKGROUND:

The TwoDay Algorithm is a simple method for identifying the fertile window. It classifies a day as fertile if cervical secretions are present on that day or were present on the day before. This approach may be an effective alternative to the ovulation and symptothermal methods for populations and programmes that find current natural family planning methods difficult to implement.

METHODS:

We used data on secretions from a large multinational European fecundability study to assess the relationship between the days predicted to be potentially fertile by the TwoDay Algorithm and the day-specific probabilities of pregnancy based on intercourse patterns in 434 conception cycles from the study.

RESULTS:

The days around ovulation that had the highest fecundability were the days most likely to be classified as fertile by the TwoDay Algorithm. In addition, intercourse on a particular day in the fertile interval was twice as likely to result in a pregnancy if cervical secretions were present on that day or the day before.

CONCLUSIONS:

The TwoDay Algorithm is effective, both in identifying the fertile days of the cycle and in predicting days within the fertile interval that have a high pregnancy rate. Our data provide the first direct evidence that cervical secretions are associated with higher fecundability within the fertile window.

Comment in

- TwoDay Algorithm in predicting fertile time. [Hum Reprod. 2002]

PMID: 11679504

Contraception. 2000 Feb;61(2):121-9.

Characteristics of women associated with continuing instruction in the Creighton Model Fertility Care System.

Stanford JB, Smith KR.

Source

Department of Family and Preventive Medicine, University of Utah, Salt Lake City, Utah 84132, USA. jstanford@dfpm.utah.edu

Abstract

Effective use of natural family planning is strongly dependent upon adequate instruction. The Creighton Model Fertility Care System (CrMS) has a standardized protocol for instruction of new users that includes individual follow-up visits in the first year of use. This study evaluated the number of follow-up visits completed by new CrMS users from eight CrMS centers in the United States. Four follow-up visits were completed by 75.7% of women. Women who continued instruction were more likely to be educated, Catholic, and white, and to have a more challenging reproductive status (discontinuing oral contraceptives, or breastfeeding). These results suggest that the number of follow-up visits needed varies among new CrMS users. Future research should address the optimal length of instruction for adequate use of the CrMS by women with different characteristics and needs.

PMID: 10802277

J Midwifery Womens Health. 2012 Jan-Feb;57(1):35-42. doi: 10.1111/j.1542-2011.2011.00107.x.

Clinician perceptions of providing natural family planning methods in Title X funded clinics.

Kelly PJ, Witt J, McEvers K, Enriquez M, Abshier P, Vasquez M, McGee E.

Source

School of Nursing, University of Missouri-Kansas City, 2464 Charlotte Street, Kansas City, MO 64108, USA. kellypj@umkc.edu

Abstract

INTRODUCTION:

Natural family planning (NFP) methods are effective for contraception with proper and consistent use. However, only 1% of patients at federally funded Title X family planning clinics select NFP as a contraceptive method. The goal of this study was to understand from clinicians' perspectives the barriers and facilitators to providing NFP methods.

METHODS:

Six telephone focus groups were conducted with 29 clinicians from Title X clinics across the United States and Puerto Rico. A hermeneutic method was used to analyze data for related themes.

RESULTS:

The overarching theme from the study was that participants had a strong desire to teach their patients how their bodies work and to empower them to learn to control fertility. Four subthemes emerged: patient misinformation and misunderstanding about fertility; provider ideas about ideal types of candidates for NFP; inconsistent patient teaching strategies; and lack of time to teach NFP methods.

DISCUSSION:

There is a need for increased NFP training for providers and efficient NFP patient teaching strategies to meet the needs of patients with limited knowledge about fertility.

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PMID: 22251910

Cochrane Database Syst Rev. 2004 Oct 18;(4):CD004860.

Fertility awareness-based methods for contraception.

Grimes DA, Gallo MF, Grigorieva V, Nanda K, Schulz KF.

Source

Family Health International, P. O. Box 13950, Research Triangle Park, North Carolina 27709, USA. dgrimes@fhi.org

Abstract

BACKGROUND:

"Fertility awareness-based methods" (FAB) of family planning "involve identification of the fertile days of the menstrual cycle, whether by observing fertility signs such as cervical secretions and basal body temperature, or by monitoring cycle days. FAB methods can be used in combination with abstinence or barrier methods during the fertile time" (WHO 2000). Several names have been used to describe this approach to contraception, including "rhythm," "natural family planning" and "periodic abstinence." Fertility awareness-based methods can be used with abstinence from sexual intercourse. Alternatively, they can be used with barrier contraceptives or withdrawal during presumed fertile times.

OBJECTIVES:

We retrieved and analyzed all randomized controlled trials that examined any fertility awareness-based methods used for contraception.

SEARCH STRATEGY:

We searched the computerized databases Cochrane Central Register of Controlled Trials (CENTRAL), MEDLINE, POPLINE, EMBASE, and LILACS (each from its inception to January, 2004) for randomized controlled trials of fertility awareness-based methods. We examined the reference list of each trial as well as that of review articles.

SELECTION CRITERIA:

We included all randomized controlled trials in any language that compared any fertility awareness-based methods for contraception with a placebo; another method, including an alternative fertility awareness-based method; or fertility awareness-based methods used in conjunction with another contraceptive.

DATA COLLECTION AND ANALYSIS:

We assessed all titles and abstracts found for inclusion. We evaluated the methodological quality of the trials for potential biases by qualitatively assessing the study design; randomization method; allocation concealment; blinding; premature discontinuation rates; and loss to follow-up rates. Because of methodological weaknesses, we could not enter the trial results in RevMan, calculate measures of association, or aggregate data.

MAIN RESULTS:

Because of poor methods and reporting, pregnancy rates could not be determined. A trial in Colombia found similar numbers of pregnancies among women randomized to the ovulation and symptothermal methods. In contrast, a companion trial in Los Angeles observed more pregnancies in the group assigned to the ovulation method. In the two U.S. trials, recruitment of participants was unexpectedly difficult; this aspect was not mentioned in the report from Colombia. Continuation rates were poor. In the two larger trials, most participants discontinued their assigned method before entering the observation phase of the trial.

REVIEWERS' CONCLUSIONS:

The comparative efficacy of fertility awareness-based methods of contraception remains unknown. Despite intensive training and ongoing support, most participants in these trials discontinued prematurely. Contraceptive methods should be properly evaluated, preferably in randomized controlled trials, before adoption and dissemination.

PMID: 15495128

Stud Fam Plann. 1999 Mar;30(1):43-53.

Coitus-dependent family planning methods: observations from Bangladesh.

Gray A, Chowdhury JH, Caldwell B, al-Sabir A.

Source

Institute for Population and Social Research, Mahidol University, Thailand.

Abstract

Some coitus-dependent methods of family planning, such as withdrawal, periodic abstinence, and the condom, require male involvement for their use, and using these methods in combination has proved to be sensible. An investigation of why male and female respondents in a survey conducted in Bangladesh often gave conflicting answers about which methods they were currently using, particularly about "traditional" methods and condoms, showed that inconsistency in their reports arose because these methods are used in combination to such an extent that they are difficult to distinguish. In order to obtain reliable responses about these methods, a survey approach different from the long-established one is required.

PMID: 10216895

Bull N Y Acad Med. 1996 Summer;73(1):92-104.

Contraceptive development and better family planning.

Segal SJ.

Source

World Health Organization, New York, NY, USA.

Abstract

This paper deals directly with the role of contraception in family planning. Indirectly, it establishes the importance of contraception in helping women achieve their desired fertility. This is perhaps the most important issue because this reproductive freedom enables women to achieve the hopes and aspirations they have for themselves and for their families.

PMID: 8804742

J Nurs Scholarsh. 2003;35(2):171-6.

Couples' views of the effects of natural family planning on marital dynamics.

Vande Vusse L, Hanson L, Fehring RJ, Newman A, Fox J.

Source

Nurse-Midwifery Program, College of Nursing, Marquette University, P.O. Box 1881, Milwaukee, WI 53201-1881, USA.

Abstract

PURPOSE:

Natural Family Planning (NFP) requires periodic abstinence and partner cooperation to prevent pregnancy. The aim of this study was to learn about the effects of modern NFP methods on marital relationships.

DESIGN:

Descriptive survey.

METHODS:

Questionnaires were mailed to 1,400 randomly selected couples known to use NFP and residing in the United States of America; 334 couples (24%) responded. Content analysis was used to identify meanings and themes. Numeric analyses were used to determine frequencies.

FINDINGS:

Nearly two-thirds of the qualitative comments were positive. Four themes were identified in the positive responses: relationship enhancements, knowledge improvements, spirituality enrichments, and method successes. Three negative themes were identified: strained sexual interactions, worsened relationships, and method problems. Although about one-fourth of the comments indicated that NFP presented challenges, the majority (74%) found it beneficial, often resulting in stronger bonds, better communication, and improved knowledge.

CONCLUSIONS:

NFP had more positive than negative effects and its use warrants further consideration.

PMID: 12854299

Adv Contracept. 1994 Mar;10(1):27-32.

Current status of natural family planning in Granada (Spain).

Barranco E, Sanchez MJ, Garcia I, Soler F, Chica MD.

Source

Departamento de Obstetricia, Hospital Universitario de Granada, Spain.

Abstract

In Spain the use of natural family planning (NFP) is limited. In Barcelona, CODIPLAN, an NFP planning center, has offered natural methods to potential users for a number of years. In Granada and Jaén, information provided by health professionals on fertility awareness is now gaining importance. In 1989, a seminar introduced NFP in Granada; the program has been very active since. Two courses were run for teachers and for health personnel, and we took part in the practical training of providers of alternative medical care through two programs organized by the University of Granada. We also gave talks on local radio and television programs, presented updating sessions at daycare centers, and gave health education classes at primary and secondary schools. The international seminar on NFP in March, 1992 was organized jointly by the University and the City Council. The proceedings will be published by the University of Granada. In 1990, under the scientific auspices of the Natural Family Planning Department at the

Zaidin Medical Center, we started a program of training and follow-up for NFP users via an on-going seminar on NFP. In Granada and Jaén, NFP methods are now available to the general population and to health personnel.

PMID: 8030450

Gynecol Endocrinol. 2005 Jun;20(6):305-12.

Determination of the fertile window: reproductive competence of women--European cycle databases.

Frank-Herrmann P, Gnoth C, Baur S, Strowitzki T, Freundl G.

Source

Department of Gynaecological Endocrinology and Reproductive Medicine, University of Heidelberg, Vossstrasse 9, D-69115 Heidelberg, Germany. petra.frank-hermann@web.de

Abstract

OBJECTIVES:

The objective of the present paper is to review the main results of recent European cycle databases on ovulation detection and determination of the fertile window performed by the women themselves.

METHODS:

The ongoing German Long-term Cycle Database currently comprises 32788 prospectively collected cycle charts of 1551 women, the I European Cycle Database (10 countries) 1328 women/19048 cycles, the II European Cycle Database (six countries) 782 women/6724 cycles, and the World Health Organization Database (one European country) 234 women/2808 cycles. The women record cycle parameters (cervical mucus changes, temperature rise, etc.), family planning intention and sexual behavior.

RESULTS:

With the symptothermal method of natural family planning it has become possible to determine the fertile window in order to avoid pregnancy with a method effectiveness of 0.3%. According to a small sub-study, the ovulation time observed by the women themselves correlates closely with ovulation detected by ultrasound and measurement of luteinizing hormone (correlation within 1 day in 89% of the 62 cycles). Fertility awareness methods can be integrated into the

management of sub-fertility. They seem to shorten the time to pregnancy.

CONCLUSIONS:

Self-observation of the fertile window puts women into a position to develop a high level of reproductive competence that could be used much more in different areas than is currently the case.

PMID: 16019378

Contraception. 1996 Dec;54(6):339-43.

Development of new formulas to identify the fertile time of the menstrual cycle.

Lamprecht VM, Grummer-Strawn L.

Source

Institute for Reproductive Health, Georgetown University, Washington, DC 20007, USA.

Abstract

The calendar method is perceived to be less effective than other methods of family planning. A large existing data set was used to determine how well the fertile time is identified using the traditional calendar method formula and to determine if better formulas could be developed to identify the fertile time more accurately and require less abstinence. We compared the traditional formula with three alternatives, two of which were developed for this analysis. All three alternative formulas performed better than the traditional formula in identifying the presumed fertile time. The result of our analysis is a summary table which can be used to select the best rules for testing the effectiveness of the calendar method.

PMID: 8968662

Am J Med Genet. 1996 Dec 18;66(3):365-6.

Down syndrome and natural family planning.

James WH.

Comment on

- Down syndrome is not increased in offspring of natural family planning users (case control analysis) [Am J Med Genet. 1995]

PMID: 8985502
Adv Contracept. 1997 Jun-Sep;13(2-3):215-28.

Effects of timing of conception on birth weight and preterm delivery of natural family planning users.

Barbato M, Bitto A, Gray RH, Simpson JL, Queenan JT, Kambic RT, Perez A, Mena P, Pardo F, Stevenson W, Tagliabue G, Jennings V, Li C.

Source

Centro Ambrosiano Metodi Naturali CAMEN Milan, Italy.

Abstract

OBJECTIVE:

Various birth defects and untoward perinatal outcomes have been claimed to be associated with pregnancies conceived by gametes aged in vivo before fertilization. Thus, these outcomes were systematically assessed in pregnancies occurring in natural family planning (NFP) users. Our international multicenter cohort study of NFP pregnancies (n = 877) is by far the largest systematic study designed to assess pregnancy outcome and is of sufficient power to allow us to address the concern of low birth weight (< 2500 g) and preterm delivery (< 37 weeks gestation).

STUDY DESIGN:

In addition to gathering baseline medical data, evaluation was performed at 16 weeks, 32 weeks and at term. Data were collected in a systematic cohort fashion, verified by the five collaborating international recruiting centers, and analyzed by investigators in the US. Most recruiting center principal investigators are obstetrician-gynecologists and, if not, have integral relationships with such specialists. Standard criteria could thus be applied within and among centers. In our cohort, birth weight was recorded accurately at delivery. Almost all of the deliveries occurred in hospitals; thus, data should be quite reliable. Neonatal examination for anomalies was usually conducted immediately after delivery, when birth weight was recorded.

RESULTS:

Analysis of risk factors for low birth weight and preterm delivery showed that this population had a low risk profile. Low birth weight infants (< 2500 g) and preterm deliveries were increased among women with a history of either prior low birth weight or preeclampsia in the index pregnancy. However, mean birth weight was unaffected by the timing of conception vis à vis ovulation or pregnancy history. Mean birth weight for the 877 singleton NFP pregnancies was

3349.6 g. The risk of preterm delivery was increased among older women who drank alcohol, but there were no significant effects of timing of conception vis à vis ovulation on preterm delivery. Results held when analysis was stratified according to whether NFP was being used for contraception or to achieve pregnancy.

CONCLUSIONS:

Our data do not appear to show striking differences between 877 NFP pregnancies and the general obstetric population. The timing of conception vis à vis ovulation does not exert significant effects on the birth weight or preterm delivery of resulting pregnancies, a reassuring finding for NFP users.

PMID: 9288339

J Obstet Gynecol Neonatal Nurs. 2007 Mar-Apr;36(2):152-60.

Efficacy of cervical mucus observations plus electronic hormonal fertility monitoring as a method of natural family planning.

Fehring RJ, Schneider M, Raviele K, Barron ML.

Source

Institute for Natural Family Planning, Marquette University, College of Nursing, Milwaukee, WI 53201-1881, USA. richard.fehring@marquette.edu

Abstract

OBJECTIVE:

To determine the effectiveness of an electronic hormonal fertility monitor plus cervical mucus monitoring to avoid pregnancy.

DESIGN:

A 12-month prospective clinical efficacy trial.

SETTING AND PARTICIPANTS:

One hundred ninety five (195) women (mean age 29.8 years) seeking to avoid pregnancy with a natural method at 5 clinical sites in 4 cities.

INTERVENTION:

Each participant was taught to track fertility by self-observation of cervical mucus and an electronic monitor that measures urinary levels of estrone-3-glucuronide and luteinizing hormone.

MAIN OUTCOME MEASURES:

Correct- and typical-use unintended pregnancy rates.

RESULTS:

There were a total of 26 unintended pregnancies, 3 with correct use. With 1,795 months of use, the correct-use pregnancy rate was 2.1% per 12 months of use (i.e., 97.9% effective in avoiding pregnancy when rules of the method were always followed) and the imperfect-use pregnancy rate was 14.2% per 12 months of use (i.e., 85.8% effective in avoiding pregnancy when rules of the method were not always followed and all unintended pregnancies and months of use were included in the calculations).

CONCLUSIONS:

Correct use of an electronic hormonal fertility monitor with cervical mucus observations can be as effective as other fertility awareness-based methods of natural family planning. Comparative studies are needed to confirm this conclusion.

PMID: 17371516

Fertil Steril. 1999 Nov;72(5):900-4.

Efficacy of methods for determining ovulation in a natural family planning program.

Guida M, Tommaselli GA, Palomba S, Pellicano M, Moccia G, Di Carlo C, Nappi C.

Source

Department of Obstetrics, Gynecology and Physiopathology of Reproduction, University of Naples Federico II, Italy. pellican@unina.it

Abstract

OBJECTIVE:

To evaluate the efficacy in ovulation detection of methods used in natural family planning in comparison with pelvic ultrasonography.

DESIGN:

Prospective analysis of ovulation detection by natural family planning methods and ultrasonography.

SETTING:

Natural family planning clinic, Department of Obstetrics and Gynecology, University of Naples "Federico II".

PATIENT(S):

Forty healthy women who were highly motivated to use natural family planning.

INTERVENTION(S):

None.

MAIN OUTCOME MEASURE(S):

Transvaginal ultrasonographic findings, urinary LH levels, salivary beta-glucuronidase activity, salivary ferning levels and characteristics of cervical mucus, and BBT.

RESULT(S):

Urinary LH level determination yielded a 100% correlation with the simultaneous ultrasonographic diagnosis of ovulation. Mucus sensations and characteristics yielded a 48.3% correlation when simultaneously evaluated with ovulation. Beta-glucuronidase levels yielded a 27.7% correlation. The salivary ferning test had a 36.8% ovulation-detection rate the day of ovulation, but 58.7% of results were uninterpretable. Body temperature measurements yielded a 30.4% correlation with the simultaneous ultrasonographic diagnosis of ovulation.

CONCLUSION(S):

Measuring urinary LH levels is an excellent method for determining ovulation. Although variations in mucus characteristics and basal body temperature correlate somewhat with ovulation, the length of the fertile period is overestimated with these methods. The salivary ferning test and measurement of beta-glucuronidase levels are not good methods for home ovulation testing.

Comment in

- Approaches to natural family planning. [Fertil Steril. 2000]

PMID: 10560997

Eur J Contracept Reprod Health Care. 2010 Oct;15(5):380-1; author reply 381-2. doi: 10.3109/13625187.2010.507889.

Efficacy of natural family planning methods.

Freundl G.

Comment on

- Efficacy of contraceptive methods: A review of the literature. [Eur J Contracept Reprod Health Care. 2010]

PMID: 20863262

MCN Am J Matern Child Nurs. 2008 Nov-Dec;33(6):348-54. doi: 10.1097/01.NMC.0000341254.80426.32.

Efficacy of the Marquette Method of natural family planning.

Fehring RJ, Schneider M, Barron ML.

Source

College of Nursing, Marquette University, Milwaukee, WI, USA.
Richard.fehring@marquette.edu

Abstract

PURPOSE:

To determine the effectiveness of the Marquette Method (MM) of natural family planning (NFP) as a method of avoiding pregnancy.

STUDY DESIGN AND METHODS:

This was a 12-month retrospective evaluation of the MM system of NFP. Two hundred and four women (mean age, 28.6 years) and their male partners (mean age, 30.3 years) who sought to learn a method for avoiding pregnancy with the MM from four clinical sites were taught to track their fertility by self-observation of cervical mucus, by use of an electronic monitor that measures urinary levels of estrone-3-glucuronide and luteinizing hormone, and by use of basal

body temperature. All unintended pregnancies were evaluated by professional nurses as to whether they were intended or not. Pregnancy rates over 12 months of use were determined by survival analysis.

RESULTS:

There were a total of 12 unintended pregnancies, only 1 with correct use. The 12-month "correct use" pregnancy rate was 0.6 (i.e., 99.4% effective) and the "typical use" (total pregnancy rate) was 10.6 (i.e., 89.4% effective) per 100 users.

CLINICAL IMPLICATIONS:

When used correctly, the MM system of NFP is an effective means of avoiding pregnancy. The efficacy of the MM system includes proper preparation of the professional nurse NFP teachers.

PMID: 18997569

Fertil Steril. 2004 Oct;82(4):885-92.

Efficacy of the new TwoDay Method of family planning.

Arévalo M, Jennings V, Nikula M, Sinai I.

Source

Institute for Reproductive Health, Georgetown University, Washington, DC 20008, USA.

Abstract

OBJECTIVE:

To test the efficacy of the TwoDay Method, a new fertility awareness-based method of family planning that provides women with simple instructions to identify the days each cycle when they are most likely to become pregnant. Users avoid unprotected intercourse on days when cervical secretions are present on that day or on the day before, to prevent pregnancy.

DESIGN:

Prospective, nonrandomized, multicenter study.

SETTING:

Five culturally diverse sites in Guatemala, Peru, and the Philippines.

PATIENT(S):

Four hundred fifty women, aged 18-39 years, wishing to use a fertility awareness-based method to prevent or delay pregnancy.

INTERVENTION(S):

Study participants were followed for up to 13 cycles of method use.

MAIN OUTCOME MEASURE(S):

Life table pregnancy rate.

RESULT(S):

The first-year pregnancy rate was 3.5 (pregnancies per 100 women/years) with correct use of the method (pregnancies and cycles with no intercourse on identified fertile days), 6.3 with use of a backup method on the fertile days, and 13.7 including all cycles and all pregnancies in the analysis.

CONCLUSION(S):

The TwoDay Method offers a valuable addition to the services that reproductive health and other programs can offer. Its efficacy compares well with that of other coitus-dependent family-planning methods; it is easy to teach, learn, and use; and it can address the need of women for simple, accurate instructions for identifying their fertile days.

PMID: 15482764

Stud Fam Plann. 1990 Nov-Dec;21(6):327-34.

Efficacy of three variations of periodic abstinence for family planning in Indonesia.

Thapa S, Wonga MV, Lampe PG, Pietojo H, Soejoenoes A.

Source

Program Evaluation Division, Family Health International, Research Triangle Park, NC 27709-3950.

Abstract

A prospective study to determine the efficacy of three alternative guidelines for the practice of periodic abstinence (PA) for family planning was conducted in Indonesia. The three methods

studied were the Billings ovulation method, the Dorairaj modified mucus method, and a local version of the mucus method. For each method, the study encompassed a three-month learning phase and an additional 12-month effectiveness phase. Data from a total of 850 acceptors showed that, despite some variations in the sociodemographic characteristics of the acceptors, the Billings ovulation method had the lowest (10.4 per 100 women) and the local mucus method had the highest (26.5 per 100 women) overall life-table discontinuation rates in the effectiveness phase. One-year life-table unplanned pregnancy rates ranged from 2.5 per 100 women for the Billings method to a high of 11.5 per 100 women for the local method acceptors. Unplanned pregnancy was the main reason for termination.

PMID: 2075623

Adv Contracept. 1999;15(1):69-83.

European multicenter study of natural family planning (1989-1995): efficacy and drop-out. The European Natural Family Planning Study Groups.

[No authors listed]

Abstract

BACKGROUND:

Effectiveness studies in natural family planning (NFP) published over the past 20 years have shown a wide range of contraceptive efficacy and acceptability. This seems to be due in part to different NFP methodologies. Consequently, we decided to carry out an effectiveness study in Europe to examine one group of the most widely spread NFP methods, the symptothermal methods.

METHODS:

Between 1989 and 1995, 15 NFP groups from 10 European countries participated in a prospective European multicentre study. This paper reports on 1328 women aged between 19 and 45 years and willing to participate for at least 12 cycles. Two types of symptothermal methods were mainly used, the symptothermal double-check methods (1046 women, 16865 cycles of exposure, 34 unintended pregnancies) and the symptothermal single-check methods (214 women, 1495 cycles of exposure, 13 unintended pregnancies). The study was an observational study with prospectively collected data. The pregnancy rates, drop-out rates and lost-to-follow-up rates are presented separately for both subgroups according to the Kaplan-Meier method.

RESULTS:

For the double-check methods, there was an unintended pregnancy rate of 2.61% at the end of the first 12 cycles of use (standard error or SE 0.55%), a drop-out rate for difficulties or dissatisfaction of 3.9% (SE 0.69%) and a lost-to-follow-up rate of 3.1% (SE 0.62%). In the single-check group, there was a total of 13 unintended pregnancies at the end of the first 12 cycles of study participation, giving an unintended pregnancy rate of 8.5% (SE 2.52%), a drop-out rate for difficulties or dissatisfaction of 3.0% (SE 1.76%) and a lost-to-follow-up rate of 23.4% (SE 4.35%). No pregnancy was observed in women over 40 years of age. Most pregnancies occurred because of deliberate unprotected intercourse in the fertile phase ('user failure').

CONCLUSIONS:

The symptothermal double-check methods have proved to be effective family planning methods in Europe. The low drop-out-rate for difficulties or dissatisfaction with NFP shows the good acceptability.

PMID: 10794048

Adv Contracept. 1999;15(1):69-83.

European multicenter study of natural family planning (1989-1995): efficacy and drop-out. The European Natural Family Planning Study Groups.

[No authors listed]

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PMID: 10794048

J Fam Plann Reprod Health Care. 2005 Apr;31(2):123-7.

Expanding family planning options: offering the Standard Days Method to women in Istanbul.

Kalaca S, Cebeci D, Cali S, Sinai I, Karavus M, Jennings V.

Source

School of Medicine, Department of Public Health, Marmara University, Istanbul, Turkey. sibelkal@superonline.com

Abstract

BACKGROUND:

This study introduced the Standard Days Method (SDM), a fertility awareness-based method of family planning, to couples in a region of Istanbul, Turkey who were using a method of low effectiveness or no family planning method. The objective was to determine potential demand for, and satisfaction with, the SDM.

METHODS:

A total of 657 couples were selected by systematic sampling and offered the SDM. Those accepting this method were interviewed 1 and 3 months after starting the SDM.

RESULTS:

Some 47% of the participants were satisfied with the method and intended to continue using it.

CONCLUSIONS:

Potential demand for the SDM was 80.3% (278/346 eligible women) among couples who were using a method of low effectiveness or no family planning method. Our results suggest that adding the SDM to the contraceptive method mix may benefit Turkish women.

PMID: 15921552

Adv Contracept. 1997 Jun-Sep;13(2-3):275-81.

Expanding the availability and improving delivery of natural family planning services and fertility awareness education: providers' perspectives.

Arévalo M.

Source

Georgetown University Medical Center, Department of Obstetrics and Gynecology, Washington, DC 20007, USA.

Abstract

Despite the recognized benefits for clients and programs of providing natural family planning (NFP) services, few family planning programs offer NFP and few provide fertility awareness education. Furthermore, many non-governmental organizations (NGOs) that provide only NFP

actually reach a very small percentage of the potential NFP users in the areas they serve. This paper discusses the results of interviews with selected family planning providers that were conducted to explore reasons why NFP and fertility awareness education are not offered in their programs, and with NFP providers to get their opinions on how to improve service delivery. The interviews were structured around some of the lessons learned from the successful incorporation of the lactational amenorrhea method (LAM) into several multimethod family planning programs. There is agreement that the need for NFP services* is far from being met and that most clients lack the information and skills they could learn through fertility awareness education. The providers interviewed also acknowledged that offering these services would improve the quality of reproductive health services in general. Presented here are some ideas about why these services are not offered, as well as suggestions for integrating NFP and fertility awareness education into existing family planning programs.

PMID: 9288346

J Obstet Gynecol Neonatal Nurs. 2001 Jul-Aug;30(4):386-91.

Expert in fertility appreciation: the Creighton Model practitioner.

Barron ML, Daly KD.

Source

St. Louis University School of Nursing, MO 63104, USA.

Abstract

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.

PMID: 11461022

Contraception. 2003 Apr;67(4):253-8.

Factors influencing the choice to use modern natural family planning.

Mikolajczyk RT, Stanford JB, Rauchfuss M.

Source

Department of Obstetrics and Gynaecology, Otto-von-Guericke-University, Magdeburg, Germany. mikolajczyk723@compuserve.de

Abstract

A discrepancy exists between the interest in modern methods of natural family planning (NFP) and their actual use in developed countries. To explore reasons for this discrepancy, we analyzed data from a questionnaire administered to postpartum women in Berlin (n = 223) and Cracow (n = 233). Knowledge of NFP, past use of NFP and expected effects of abstinence on the partnership were independently associated with interest in using NFP, but not the choice to do so among those interested. Desire for future pregnancies, importance of religious belief and location in Cracow were independently associated with the choice to use NFP among those interested. Perceived accuracy of observation to identify the fertile time and acceptance of own body were independently associated with both interest in and choice to use NFP. Frequency of intercourse had no effect on interest. These results suggest that increased access and cultural support would likely lead to a higher prevalence of NFP use in developed countries.

PMID: 12684143

Am J Obstet Gynecol. 1991 Dec;165(6 Pt 2):2060-2.

Factors related to autonomy and discontinuation of use of natural family planning for women in Liberia and Zambia.

Kambic RT, Gray RH.

Source

Department of Population Dynamics, School of Hygiene and Public Health, Johns Hopkins University, Baltimore, MD 21205.

Abstract

From 1983 to 1988, natural family planning programs were conducted in Liberia and Zambia. In Liberia 1055 and in Zambia 2709 women used natural family planning to avoid pregnancy. These users could become pregnant, discontinue use of the method, or become autonomous users. Women who changed intention did not stop use of natural family planning and were not treated as discontinuations. In a multivariate analysis, client's age, breastfeeding status, employment, urban/rural residence, time of registration in the program, and visit intensity were significantly associated with the outcomes. The most consistent association was that women who

entered the programs in the later time periods were more likely to become autonomous users and less likely to discontinue use of the method or to experience an accidental pregnancy.

PMID: 1755471

Contraception. 2004 Jan;69(1):9-14.

A comparison of the fertile phase as determined by the Clearplan Easy Fertility Monitor and self-assessment of cervical mucus.

Fehring RJ, Raviele K, Schneider M.

Source

College of Nursing, Institute for Natural Family Planning, Marquette University, Clark Hall, PO Box 1881, Milwaukee, WI 53201-1881, USA. richard.fehring@marquette.edu

Abstract

The purpose of this study was to compare the fertile phase of the menstrual cycle as determined by the Clearplan Easy Fertility Monitor (CPEFM) with self-monitoring of cervical mucus. One-hundred women (mean age = 29.4 years) observed their cervical mucus and monitored their urine for estrogen and luteinizing hormone metabolites with the CPEFM on a daily basis for 2-6 cycles and generated 378 cycles of data; of these, 347 (92%) had a CPEFM peak. The beginning of the fertile window was, on average, day 11.8 (SD = 3.4) by the monitor and day 9.9 (SD = 3.0) by cervical mucus ($r = 0.43$, $p < 0.001$). The average first day of peak fertility by the monitor was 16.5 (SD = 3.6) and by cervical mucus 16.3 (SD = 3.7) ($r = 0.85$, $p < 0.001$). The mean length of the fertile phase by the monitor was 7.7 days (SD = 3.1) and by cervical mucus 10.9 days (SD = 3.7) ($t = 12.7$, $p < 0.001$). The peak in fertility as determined by the monitor and by self-assessment of cervical mucus is similar but the monitor tends to underestimate and self-assessment of cervical mucus tends to overestimate the actual fertile phase.

PMID: 14720613

Eur J Contracept Reprod Health Care. 1997 Jun;2(2):131-46.

Fertility awareness and natural family planning.

Pyper CM.

Source

Department of Public Health & Primary Care, Institute of Health Sciences, Oxford, UK.

Abstract

Information about fertility awareness helps to fulfil the broader definition of the services many family planning clinics offer. Although information about natural family planning is requested by a small number of clients seeking family planning advice, many more clients benefit from information about fertility awareness. Fertility awareness is far more than just basic reproductive anatomy and physiology; fertility awareness involves understanding basic information about fertility and reproduction, being able to apply it to oneself, and being able to discuss it with a partner or with a health professional. Fertility awareness is fundamental to understanding and making informed decisions about reproductive health and sexual health. If clients have a better understanding of fertility awareness, they are in a stronger position to make informed decisions about how they wish to manage their reproductive and sexual health, for example: (1) Fertility awareness information is used to help couples to plan pregnancies as well as to avoid them. This can be helpful to couples who are having difficulty conceiving, for the timing of intercourse or for the timing of some of the sub-fertility investigations. (2) The information is also useful when helping couples to understand how each method of family planning works--how the family planning method interrupts normal fertility, how the method will fail if not used correctly, and how fertility returns when the method is discontinued. (3) Women who are fully breastfeeding value the knowledge about reduced fertility, as do women during the perimenopausal years who value being given clear information about their declining fertility. (4) When counselling couples about the importance of avoiding sexually transmitted diseases it is important they understand sexually transmitted diseases may damage their fertility. (5) Couples who choose only to use a barrier method during the time they think the woman is fertile are a group who do not readily identify themselves to family planning providers. These couples often do not have adequate information about fertility awareness. Advances in technology and the understanding of ovulation, ovum and sperm survival have confirmed that the guidelines used to teach fertility awareness and natural family planning effectively identify the fertile phase of the menstrual cycle. Serial ultrasound studies on the ovaries during the menstrual cycle have confirmed the accuracy of the hormonal assays in pinpointing the likely time of ovulation. Ultrasound studies have also shown that subjective observations of the alterations in cervical mucus and the basal body temperature rise are accurate indicators of the fertile phase. Research on the chances of conception on each day of the menstrual cycle, using hormonal assays to estimate the time of ovulation, was carried out in 1994 by Weinberg and Wilcox. Their results showed that the timing of sexual intercourse, in relation to ovulation, strongly influences the chance of conception. Conception only occurred during a 6-day interval that ended on the estimated day of ovulation. The chances of conception fell to zero 24 hours after ovulation. Several different methods of natural family planning are taught; some methods depend on only using one of the indicators of fertility, others are based on two or more indicators. The main indicators of fertility are: observing the cervical mucus, recording the basal body temperature, palpating the cervix and a calculation based on the cycle length. Research studies performed using a combination of the indicators of fertility show that the failure rate using a combination is less than most of the

studies which use a single indicator. In each case the method failure is far lower than the user failure. (ABSTRACT TRUNCATED)

PMID: 9678103

Adv Contracept. 1991 Jun-Sep;7(2-3):301-11.

Fertility awareness in the 1990s--the Billings Ovulation Method of natural family planning, its scientific basis, practical application and effectiveness.

Hume K.

Source

World Organization of the Ovulation Method (Billings), Billings Family Life Center, Victoria, Australia.

Abstract

Early methods of natural family planning (calendar rhythm, basal body temperature, and symptothermal) are briefly mentioned and dismissed as unsatisfactory for fertility regulation at our present state of knowledge of female reproductive physiology. Cervical mucus patterns, which reflect ovarian hormone levels, are shown to be accurate markers of the fertile and infertile phases of a woman's menstrual cycle. Interpretation of these patterns forms the basis of the Billings Ovulation Method of natural family planning. Extensive laboratory and clinical studies have shown this method to be on a sound scientific footing, that it is applicable to all phases of a woman's reproductive life, and that women readily understand and are able to teach other women the meaning of these patterns as experienced by changing sensations at the vulva and changing characteristics of any visible mucus. The simple rules which have been formulated for postponing and achieving pregnancy are given. Field trials of this non-invasive method for fertility regulation in both developing and developed countries show that the rules are readily understood by participants. In the most recent trials, it has been shown that the method-related pregnancy rate is less than 1 per 100 woman years, which compares more than favorably with other contraceptive techniques.

PMID: 1950726

Aust N Z J Obstet Gynaecol. 1997 Aug;37(3):350-2.

Fertility awareness in women attending a

fertility clinic.

Blake D, Smith D, Bargiacchi A, France M, Gudex G.

Source

Fertility PLUS, National Women's Hospital, Auckland, New Zealand.

Abstract

Eighty women attending for consultation at a tertiary referral fertility unit over a 3-month period were surveyed for their knowledge of fertility awareness and how they used this information to enhance their chances of conception. It was hypothesized that less than 50% of the subjects had an adequate understanding of when the fertile time occurred in their menstrual cycle. A questionnaire was completed anonymously by each subject and these were scored in 3 categories for fertility awareness by 2 independent Natural Family Planning teachers. Scores ranged from 0 for women who had no concept of fertility awareness, to 6 for women who were highly aware. The results showed that 26% (N = 21) of subjects had a score of 4 or greater which was considered as having an adequate understanding. The hypothesis was accepted, giving reason for concern about the effectiveness of consumer education at all levels of fertility investigation.

PMID: 9325525

J Am Board Fam Med. 2009 Mar-Apr;22(2):147-57. doi: 10.3122/jabfm.2009.02.080038.

Fertility awareness-based methods: another option for family planning.

Pallone SR, Bergus GR.

Source

Departments of Family Medicine and Psychiatry, University of Iowa, Iowa City, USA. stephen-pallone@uiowa.edu

Erratum in

- J Am Board Fam Med. 2009 Sep-Oct;22(5):596.

Abstract

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.

PMID: 19264938

Contraception. 2005 Aug;72(2):85-90.

Fertility awareness-based methods for contraception: systematic review of randomized controlled trials.

Grimes DA, Gallo MF, Grigorieva V, Nanda K, Schulz KF.

Source

Family Health International, Research Triangle Park, NC 27709, USA. dgrimes@fhi.org

Abstract

CONTEXT:

Fertility awareness-based (FAB) methods of family planning estimate the fertile days of the menstrual cycle whether by observing fertility signs such as cervical secretions and basal body temperature or by monitoring cycle days. The efficacy and acceptability of these methods are unclear.

METHODS:

We retrieved and analyzed all randomized controlled trials that examined any FAB method used for contraception.

RESULTS:

Because of poor methods and reporting, pregnancy rates could not be determined. A trial in Colombia found similar numbers of pregnancies among women randomized to the ovulation and symptothermal methods, but a trial in Los Angeles observed more pregnancies in the group assigned to the ovulation method. In the two American trials, recruitment of participants was unexpectedly difficult. Continuation rates were poor.

CONCLUSION:

Despite intensive training and ongoing support, most participants in these trials discontinued prematurely. The comparative efficacy of these methods remains unknown. However, with the ovulation and symptothermal methods, pregnancies appear to be common; method continuation rates are low.

PMID: 16022845

Int Fam Plan Perspect. 2006 Jun;32(2):94-100.

Fertility awareness-based methods of family planning: predictors of correct use.

Sinai I, Lundgren R, Arévalo M, Jennings V.

Source

Institute for Reproductive Health, Georgetown University, Washington, DC, USA. irh@georgetown.edu

Abstract

CONTEXT:

Fertility awareness-based methods of family planning help women identify the days of the menstrual cycle when they are most likely to become pregnant. To prevent pregnancy, women avoid unprotected intercourse on these days. Efficacy of these methods may be improved if the users most likely to engage in unprotected intercourse on fertile days can be identified and counseled.

METHODS:

Quantitative and qualitative data from efficacy studies of the Standard Days Method and the TwoDay Method of family planning, in which 928 women each contributed up to 13 cycles of method use, were examined. Multinomial logit analysis was used to compare characteristics of women who occasionally had unprotected intercourse on fertile days with those who consistently used their method correctly. The reasons participants gave for having unprotected intercourse on

fertile days were also examined.

RESULTS:

Only 23% of women had unprotected intercourse on their fertile days in one or more of the cycles they contributed to the study. The method and study site appear to have the most significant effect on correct use. Earning an income was associated with increased odds of unprotected intercourse on fertile days; higher quality of housing was associated with decreased odds. The results confirm the importance of partner cooperation for correct method use.

CONCLUSION:

There was no clear profile of clients for whom these family planning methods would be inappropriate. However, programs offering these methods may help couples overcome potential difficulties in correct method use by including male partners and encouraging their participation in counseling sessions.

PMID: 16837390

Adv Contracept. 1994 Mar;10(1):33-6.

Fertility control by natural methods. Analysis of 218 cycles.

Chica MD, Barranco E.

Source

Centro de Salud de San Felipe, Jaén, Spain.

Abstract

We have started to teach natural family planning (NFP) in our health centers. We have studied 218 cycles in 14 women using NFP to space or avoid pregnancies for an average of 15 months per woman. All women were taught the symptothermal method, and used temperature, mucus, calculations and cervix modifications; temperature, calculations and mucus; or mucus alone, as signs of fertility. Usually they kept track of signs of fertility in each cycle; temperature taking was frequently limited to the periovulatory period, when they noted changes in their mucus. User couples belonged to a middle-lower economic group, for whom motivation was not religious or ethical. Good information is essential in deciding to use NFP. Women who are satisfied users often inform other women. User couples easily become autonomous and acquire the required level of knowledge, abandoning methods they relied on previously. Autonomy is welcomed by these women.

PMID: 8030451

Vital Health Stat 23. 2005 Dec;(25):1-160.

Fertility, family planning, and reproductive health of U.S. women: data from the 2002 National Survey of Family Growth.

Chandra A, Martinez GM, Mosher WD, Abma JC, Jones J.

Source

Division of Vital Statistics, U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics, Hyattsville, Maryland, USA.

Abstract

OBJECTIVE:

This report presents national estimates of fertility, family planning, and reproductive health indicators among females 15-44 years of age in the United States in 2002 from Cycle 6 of the National Survey of Family Growth (NSFG). For selected indicators, data are also compared with earlier cycles of the NSFG.

METHODS:

Descriptive tables of numbers and percentages are presented and interpreted. Data were collected through in-person interviews of the household population 15-44 years of age in the United States between March 2002 and March 2003. The sample included 7,643 females and 4,928 males, and this report focuses on data from the female sample. The overall response rate for the Cycle 6 NSFG was 79 percent, and the response rate for women was 80 percent.

RESULTS:

Given the range of topics covered in the report, only selected findings are listed here. About 14 percent of recent births to women 15-44 years of age in 2002 were unwanted at time of conception, an increase from the 9 percent seen for recent births in 1995. Among recent births, 64 percent occurred within marriage, 14 percent within cohabiting unions, and 21 percent to women who were neither married nor cohabiting. The overall rate of breastfeeding initiation among recent births increased from 55 to 67 percent between 1995 and 2002. About 50 percent of women 15-44 had ever cohabited compared with 41 percent of women in the 1995 survey; the percentage of women currently cohabiting also increased, from 7 to 9 percent between 1995 and 2002.

PMID: 16532609

Contraception. 1996 Feb;53(2):69-74.

Field trial of billings ovulation method of natural family planning.

Bhargava H, Bhatia JC, Ramachandran L, Rohatgi P, Sinha A.

Source

Division of Reproductive Health and Nutrition, Indian Council of Medical Research (ICMR), Ansari Nagar, New Delhi.

Abstract

There are couples with unmet family planning needs and couples who do not use any modern method, yet they desire to space or avoid pregnancies. Many of them look for safe and effective options like the natural family planning methods. The Billings Ovulation Method based on single index cervical mucus parameter is one such option. The present multicentre trial conducted in India has shown an encouraging use-effectiveness of the method, indicating method failure as low as 1.5 +/- 0.3 and use-failure 15.9 +/- 0.8 per 100 users at 21 months. The method continuation rates have also been as high as 88.3/100 users at 6 months and 52.0/100 users at 21 months.

PMID: 8838482

Contraception. 2001 Sep;64(3):149-53.

Further analysis of the theoretical effectiveness of the TwoDay method of family planning.

Jennings V, Sinai I.

Source

Institute for Reproductive Health, Georgetown University, 3800 Reservoir Rd. NW, Washington, DC 20007, USA.

Abstract

This article validates the theoretical effectiveness of a simple approach to identify the fertile window of the menstrual cycle. The TwoDay method identifies all days in the cycle in which the

woman notices cervical secretions, and the days immediately following these days, as the period in which the woman should consider herself fertile. Women who use this method are counseled to avoid unprotected intercourse on these days. The theoretical effectiveness of the TwoDay method was tested previously by applying the method rules to the menstrual cycles of women from a large data set from the World Health Organization (WHO). For the current study, we administered the same analysis to a data set from an Italian Ovulation Method center. These data are better suited for the analysis than were the WHO data because they identify all days with secretions. Results suggest that the method can be highly effective in helping women to identify correctly the days on which they should avoid unprotected intercourse if they do not wish to become pregnant, although some users may identify a few days as fertile that actually are not.

PMID: 11704093

Adv Contracept. 1997 Jun-Sep;13(2-3):303-9.

Gender, sexuality and communication issues that constitute barriers to the use of natural family planning and other fertility awareness-based methods.

Diaz M.

Source

Centro de Pesquisas e Controle Das Doencas Materno-Infantis de Campinas, CEMICAMP, Brazil.

Abstract

Fertility awareness-based methods of family planning are rarely offered through reproductive health services in Latin America, despite evidence that many women use them. Providers state that clients do not want these methods, but provider-bias is evident. Providers overestimate the difficulty of learning and using fertility awareness-based methods, and they underestimate their efficacy. Both providers and clients have difficulty dealing with sexuality (which is central to fertility awareness-based methods). Many providers lack gender sensitivity, 'worsening' the unequal relationship between providers and clients. Experience has shown that when fertility awareness-based methods are well provided, they can have a positive effect on sexuality, self-understanding, and equality in the couple's relationship.

PMID: 9288349

Science. 2010 Sep 24;329(5999):1603. doi: 10.1126/science.1197080. Epub 2010 Sep 16.

Global development. Family planning and the Millennium Development Goals.

Cates W Jr, Abdool Karim Q, El-Sadr W, Haffner DW, Kalema-Zikusoka G, Rogo K, Petruney T, Averill EM.

Source

FHI, Research Triangle Park, NC 27713, USA.

Comment in

- Family planning: looking beyond access. [Science. 2011]

PMID: 20847233

Eur J Obstet Gynecol Reprod Biol. 2010 Dec;153(2):124-30. doi: 10.1016/j.ejogrb.2010.06.015. Epub 2010 Jul 23.

High-tech family planning: reproductive regulation through computerized fertility monitoring.

Genuis SJ, Bouchard TP.

Source

Department of Obstetrics and Gynecology, University of Alberta, Edmonton, Alberta, Canada T6K 4C1. sgenuis@ualberta.ca

Abstract

Issues related to family planning have profound public health significance as they directly impact individuals, couples, and families throughout the world. A new method of family planning is now available using a computerized fertility monitor that accurately measures urinary surges in estrone-3-glucuronide (E3G) and luteinizing hormone (LH) prior to ovulation, thus identifying the short-lived fertile phase of the cycle and providing women with the choice to achieve or avoid conception. As well as ease of use and instruction, hand-held computerized fertility monitors are accurate and effective and can be used indefinitely. An algorithm for computerized monitoring is presented for use in situations of infrequent or irregular ovulation such as with polycystic ovarian syndrome and the post-partum period. Hormone-based fertility monitoring is

compared to other computerized fertility monitoring techniques. A case series of seven reports reflecting varied clinical backgrounds and medical histories demonstrates broad-based success and high satisfaction with computerized monitoring for regulation of reproductive potential. Limitations of fertility monitoring are also discussed.

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PMID: 20655652

Contraception. 1999 Apr;59(4):271-5.

Incidence of irregular cycles among Mayan women who reported having regular cycles: implications for fertility awareness methods.

Burkhart MC, de Mazariegos L, Salazar S, Hess T.

Source

Population Council, New York, New York 10017, USA. popcounc@guate.net

Abstract

Despite the low contraceptive prevalence among the Mayan population of Guatemala, past research has found interest in natural methods. A calendar rhythm method with a simple blanket rule would appear to be preferable to more complicated methods. Under a blanket rule, the number of days of abstinence is predetermined and all couples are instructed to abstain during the same interval of the menstrual cycle. However, regular menstrual cycles may be key to successful practice of a calendar method. A database of 880 cycles of 301 women of the Guatemalan highlands was analyzed to determine the length and regularity of menstrual cycles in this population.

PMID: 10457873

Stud Fam Plann. 1994 May-Jun;25(3):162-75.

Integrating the Lactational Amenorrhea Method into a family planning program in Ecuador.

Wade KB, Sevilla F, Labbok MH.

Source

Institute for Applied Social and Policy Research, Claremont Graduate School, CA 91711-4168.

Abstract

This paper reports the results of a 12-month implementation study documenting the process of integrating the Lactational Amenorrhea Method (LAM) into a multiple-method family planning service-delivery organization, the Céntro Médico de Orientación y Planificación Familiar (CEMOPLAF), in Ecuador. LAM was introduced as a family planning option in four CEMOPLAF clinics. LAM was accepted by 133 breastfeeding women during the program's first five months, representing about one-third of postpartum clients. Seventy-three percent of LAM acceptors were new to any family planning method. Follow-up interviews with a systematic sample of 67 LAM users revealed that the method was generally used correctly. Three pregnancies were reported, none by women who were following LAM as recommended. Service providers' knowledge of LAM resulted in earlier IUD insertions among breastfeeding women. Relationships with other maternal and child health organizations and programs were also established.

PMID: 7940621

Afr J Reprod Health. 2007 Aug;11(2):60-8.

Introducing the standard days method: expanding family planning options in Rwanda.

Blair C, Sinai I, Mukabatsinda M, Muramutsa F.

Source

'Institute for Reproductive Health, Georgetown University, 4301 Connecticut Ave., NW Washington, DC 20008, USA. irbinfo@georgetown.edu

Abstract

The Standard Days Method is a simple fertility awareness-based method of family planning that helps women identify the days each cycle when they are most likely to conceive. Couples who wish to prevent pregnancy avoid unprotected intercourse on these days. The method was introduced in 13 sites in Rwanda, a nation with a high level of unmet need for family planning. This was the first time the method was introduced into regular service delivery, without the rigorous follow-up of a study setting. Users of the Standard Days Method were identified from clinic records and participated in interviews and focus groups. Community workers were also

interviewed. Results confirm that the Standard Days Method is easy for providers to teach and for clients to learn and correctly use. The method attracts couples who are new to family planning, and is a valuable addition to the method mix offered in Rwanda.

PMID: 20690288

Am Fam Physician. 2012 Nov 15;86(10):1-2.

Is natural family planning a highly effective method of birth control? No: natural family planning methods are overrated.

Greenberg GM.

Comment on

- Is natural family planning a highly effective method of birth control? Yes: natural family planning is highly effective and fulfilling. [Am Fam Physician. 2012]

PMID: 23157152

Am Fam Physician. 2012 Nov 15;86(10):1-2.

Is natural family planning a highly effective method of birth control? Yes: natural family planning is highly effective and fulfilling.

Warniment CB, Hansen K.

Comment in

- Is natural family planning a highly effective method of birth control? No: natural family planning methods are overrated. [Am Fam Physician. 2012]

PMID: 23157153

J Biosoc Sci. 2006 Nov;38(6):763-77.

It's all in the timing: coital frequency and fertility awareness-based methods of family

planning.

Sinai I, Arévalo M.

Source

Institute for Reproductive Health, Georgetown University, Washington, DC, USA.

Abstract

Fertility awareness-based methods of family planning help women to identify the days of the cycle they should avoid unprotected intercourse to prevent pregnancy. Therefore using fertility awareness-based methods influences the timing of sexual activity, which may affect the nature of the sexual relationship. Data are used from the clinical trials of two fertility awareness-based methods--the Standard Days Method and the TwoDay Method--to determine the frequency and timing of intercourse during the cycle, and the determinants of coital frequency. The mean coital frequency of study participants was similar to that reported by users of other methods. Results suggest that coital frequency increases with consecutive cycles of method use. At the same time the frequency of intercourse during the identified fertile days and during menses decreases. This evidence implies a behavioural change as couples get more experience using their method and communicating about the fertile days. Coital frequency was also influenced by the method used and by the study sites. Potential differences between the methods and sites that may contribute to this effect are discussed.

PMID: 17029661

Health Care Women Int. 2008 May;29(5):527-38. doi: 10.1080/07399330801949632.

Jordanian women's experiences with the use of traditional family planning.

Khalaf IA, Abu-Moghli F, Callister LC, Rasheed R.

Source

University of Jordan Faculty of Nursing, Amman, Jordan.

Abstract

The United Nations Population Fund (UNFPA) and the Hashemite Kingdom of Jordan Ministry of Health (MOH) have identified the importance of strengthening national capacity through the integration of reproductive health (RH) services into the primary health care system. It is reported that a high percentage of Jordanian women use traditional family planning (TFP) methods, frequently using them incorrectly. Our purpose in this qualitative descriptive study was

to explore the issues and challenges related to the use of TFP among Jordanian women. Six focus groups with women of childbearing age (18-44 years of age; n = 51) were held in the northern, central, and southern regions of Jordan. Study participants used traditional methods such as withdrawal, periodic abstinence, and breastfeeding. Often TFP methods were used incorrectly, resulting in a high failure rate with unplanned pregnancies occurring within short inter pregnancy intervals. Women preferred using TFP because of side effects experienced while using modern family planning (MFP) methods, misconceptions, and lack of correct information about MFP methods. Husbands often declined to use condoms but supported the use of TFP methods. Women indicated that they have unmet needs for family planning and that they would consider using MFP methods if accurate information was available at health centers. They emphasized the importance of competent and knowledgeable health care providers (HCPs) who contribute to decision making regarding use of family planning.

PMID: 18437598

J Obstet Gynaecol. 2006 Aug;26(6):555-60.

Knowledge, attitude and practice of natural family planning methods in a population with poor utilisation of modern contraceptives.

Audu BM, Yahya SJ, Bassi A.

Source

Departments of Obstetrics and Gynaecology, University of Maiduguri, Nigeria.
bmak190@yahoo.com

Abstract

Sub-Saharan Africa has one of the highest fertility rates in the world, which is further promoted by the low utilisation of modern contraceptive methods. Yet, many communities claim to have traditional methods of family planning that pre-date the introduction of modern contraceptives, implying that contraception is a culturally acceptable norm. It was therefore postulated that the study population would have a high level of awareness and practice of natural methods of family planning. We aimed to obtain an insight into the extent and correctness of knowledge about natural family planning methods, and its practice as a guide to the general acceptance of contraception as a concept. Pre-tested structured questionnaires were administered to women of childbearing age in households properly numbered for primary healthcare activities. The level of awareness of natural family planning methods was significantly less than awareness for modern methods of contraception. The awareness rate for rhythm method, lactational amenorrhoea method and coitus interruptus was 50.7%, 42.1% and 36.1%, respectively. For all three national family planning methods, there is a steady decline between awareness, correct description of method and utilisation, a difference that was statistically significant in all cases. The

sociodemographic factors of the responders had varying influence on utilisation of all three natural family planning methods studied. Rural dwellers practised the lactational amenorrhoea method significantly more often than urban dwellers. Significantly more Muslims than Christians with four children or more practised coitus interruptus or the rhythm method, while the use of lactational amenorrhoea method was significantly increased with the number of living children in both religious groups. There is a relatively low level of awareness of natural family planning methods in the study population, poor utilisation and wrong use of methods. Therefore, improving the correct level of information on natural family planning methods is likely to improve the use of both natural family planning and modern contraceptive methods.

PMID: 17000506

Adv Contracept. 1997 Jun-Sep;13(2-3):249-54.

Main-streaming NFP into the Department of Health of the Philippines: opportunities and challenges.

Infantado RB.

Source

Department of Health, San Lazaro Compound, Santa Cruz, Manila, Philippines.

Abstract

In 1994, the Department of Health (DOH) of the Philippines issued a circular which reaffirmed natural family planning (NFP) as one of the basic services to be offered in all government family planning service sites and urged family planning workers to develop competence in teaching NFP methods. Although the circular represented a major policy breakthrough for the main-streaming of NFP it found the department without the capability or experience to directly provide NFP services. The two approaches the department is taking to respond to this new policy initiative are described in this paper. The selection of these approaches was influenced by the devolution of central government authority to local government units. The approaches include developing department capability in NFP training, service provision and service installation and creating a supportive program and policy environment. DOH partnership with an NFP non-government organization (NGO) has been critical in developing NFP capability within the government sector, particularly in NFP training and service installation.

PMID: 9288342

Pediatrics. 2006 Nov;118(5):2245-50.

Menstruation in girls and adolescents: using

the menstrual cycle as a vital sign.

American Academy of Pediatrics Committee on Adolescence; American College of Obstetricians and Gynecologists Committee on Adolescent Health Care, Diaz A, Laufer MR, Breech LL.

Abstract

Young patients and their parents often are unsure about what represents normal menstrual patterns, and clinicians also may be unsure about normal ranges for menstrual cycle length and amount and duration of flow through adolescence. It is important to be able to educate young patients and their parents regarding what to expect of a first period and about the range for normal cycle length of subsequent menses. It is equally important for clinicians to have an understanding of bleeding patterns in girls and adolescents, the ability to differentiate between normal and abnormal menstruation, and the skill to know how to evaluate young patients' conditions appropriately. Using the menstrual cycle as an additional vital sign adds a powerful tool to the assessment of normal development and the exclusion of pathological conditions.

PMID: 17079600

Hum Reprod. 2004 Apr;19(4):889-92. Epub 2004 Feb 27.

Mucus observations in the fertile window: a better predictor of conception than timing of intercourse.

Bigelow JL, Dunson DB, Stanford JB, Ecochard R, Gnoth C, Colombo B.

Source

Department of Biostatistics, University of North Carolina at Chapel Hill, Chapel Hill, NC, USA.

Abstract

BACKGROUND:

Intercourse results in a pregnancy essentially only if it occurs during the 6-day fertile interval ending on the day of ovulation. The strong association between timing of intercourse within this interval and the probability of conception typically is attributed to limited sperm and egg life times.

METHODS:

A total of 782 women recruited from natural family planning centres in Europe contributed prospective data on 7288 menstrual cycles. Daily records of intercourse, basal body temperature and vaginal discharge of cervical mucus were collected. Probabilities of conception were estimated according to the timing of intercourse relative to ovulation and a 1-4 score of mucus quality.

RESULTS:

There was a strong increasing trend in the day-specific probabilities of pregnancy with increases in the mucus score. Adjusting for the mucus score, the day-specific probabilities had limited variability across the fertile interval.

CONCLUSIONS:

Changes in mucus quality across the fertile interval predict the observed pattern in the day-specific probabilities of conception. To maximize the likelihood of conception, intercourse should occur on days with optimal mucus quality, as observed in vaginal discharge, regardless of the exact timing relative to ovulation.

PMID: 14990542

Eur J Contracept Reprod Health Care. 2002 Jun;7(2):96-9.

Natural contraception using the Billings ovulation method.

Attar E, Gokdemirel S, Serdaroglu H, Coskun A.

Source

Division of Reproductive Endocrinology and Infertility, Istanbul Medical School, Istanbul University, Turkey.

Abstract

OBJECTIVE:

The Billings ovulation method (BOM) is a medical model of a natural procreation education method based on scientific observation of the changes in the cervical mucus. In this study we examined Turkish women's interest in accurate usage of cervical mucus changes in determining the ovulation time.

METHOD:

Fifteen regularly cycling women monitored their fertility patterns in 30 cycles using the BOM

and urine luteinizing hormone (LH) kits. At the end ofeach cycle, the cervical mucus monitoring chart and LH kits were collected from the subjects and analyzed.

RESULTS:

The cervical mucus symptoms defined a potential fertile period of 10 days' average length, with the 'peak' mucus characteristic occurring at a mean of day 13.65 +/- 2.62 of the cycle. The duration ofthe LH surge, as observed in early morning urine samples, averaged 5 days, with the peak occurring at a mean of day 13.40 +/- 2.58 of the cycle. Data indicated that there was a strong correlation between LH in the urine and the peak in self-observed, cervical-vaginal mucus (p = 0.001).

CONCLUSION:

This study proved that women can distinguish patterns of ovulation and anovulation by self-detection of variations in cervical mucus characteristics, and that urinary LH levels strongly correlate with ovulation.

PMID: 12201328

Adolesc Med Clin. 2005 Oct;16(3):603-16.

Natural contraception.

Breuner CC.

Source

Adolescent Medicine Section, Department of Pediatrics, Children's Hospital and Medical Center, 4800 Sand Point Way NE, Seattle, WA 98105, USA. cora.breuner@seattlechildrens.org

Abstract

This article discusses some complementary and alternative medicine options for contraception, including natural family planning and plant-derived hormonal contraception. Primary care providers are crucial resources for advice and recommendations about these options. The discussion will include medical evidence to support or refute these methods, potential dangers of these interventions, and additional resources for those who want to learn more.

PMID: 16183542

Adv Contracept. 1997 Jun-Sep;13(2-3):155-65.

Natural family planning effectiveness:

evaluating published reports.

Lamprecht V, Trussell J.

Source

Institute for Reproductive Health, Georgetown University, Washington, DC 20007, USA.

Abstract

OBJECTIVE:

To equip the reader with the tools necessary to evaluate studies of natural family planning (NFP) effectiveness found in the literature and to make recommendations for future NFP effectiveness studies.

DESIGN:

Current standards to evaluate contraceptive method effectiveness are reviewed. A framework for evaluating reports on NFP is presented.

RESULTS:

Most NFP studies found in the literature are flawed in design and do not calculate pregnancy rates correctly. The results from the few well-designed studies are presented.

DISCUSSION:

Many factors influence NFP effectiveness, and these factors must be considered when evaluating published studies and designing future studies.

PMID: 9288333

Adv Contracept. 1995 Jun;11(2):165-72.

Natural family planning effectiveness in Belgium.

De Leizaola-Cordonnier A.

Source

Fédération francophone pour le planning familial naturel, Bruxelles, Belgium.

Abstract

The aim of the study was to check, in a European environment, the practical efficiency and the acceptability of a recent natural family planning (NFP) method. This method includes a double check to detect the beginning as well as the end of the fertile phase of the menstrual cycle. Up to now, 71 women of reproductive age have been registered. They agreed to provide their symptothermal charts and related information. Average age is 32 years. Average fertility is 2 children/woman. Fifty-nine percent of the participants have a professional occupation. The same percentages are found in those accepting a contraceptive method (oral contraceptives or intrauterine devices). Until today 1240 cycles (103 women-years) of experience have been gathered. The average participation was 17.5 cycles/woman. No method failure has been reported. One unintended pregnancy due to unprotected sexual intercourse during the fertile phase occurred (user failure). Overall Pearl Index (PI) was 0.96. In 84% of the cycles, no protected intercourse was reported (NFP only). According to PI, practical efficiency of the NFP method analyzed was 1.31. Sexual abstinence during the fertile phase was found in 71.4% of the cycles.

PMID: 7491857

Adv Contracept. 1997 Jun-Sep;13(2-3):191-8.

Natural family planning in New Zealand: a study of continuation rates and characteristics of users.

France M, France J, Townend K.

Source

New Zealand Association of Natural Family Planning, Milford, Auckland, New Zealand.

Abstract

This study has determined long-term continuation rates of clients who attended clinics of the New Zealand Association of Natural Family Planning and became autonomous users. It has also identified factors which might influence the continuation of NFP use. A total of 509 female subjects, 452 of them with their male partners, were enrolled in the study at the beginning of clinic teaching. Once autonomous they were sent questionnaires at 6-monthly intervals for a period of 24 months. Time out was allowed for pregnancy. The number of female subjects entering the 2-year follow-up phase of the study was 406 (79.8%). Of these 164 completed 2 years of use with 102 (20% of study entrants) using NFP and 62 (12.2%) using fertility awareness in combination with a barrier method. Subjects for whom NFP was their first family planning method, who were Catholic or who gave religion as their reason for choosing NFP were more likely to continue long-term use. The majority of subjects (> 90%) were highly satisfied

with NFP use, with the most common reasons for satisfaction being self-awareness, freedom from drugs, naturalness and effectiveness. The difficulties reported related to abstinence and cycle interpretation.

PMID: 9288337

Lancet. 1995 Jul 22;346(8969):233-4.

Natural family planning in the 1990s.

Ryder B, Campbell H.

Source

Department of Endocrinology, City Hospital NHS Trust, Birmingham, UK.

Comment in

- Natural family planning. [Lancet. 1995]
- Natural family planning. [Lancet. 1995]
- Natural family planning. [Lancet. 1995]
- Natural family planning. [Lancet. 1995]
- Natural family planning. [Lancet. 1995]

PMID: 7503859

J Obstet Gynaecol Can. 2010 Jul;32(7):673-8.

Natural family planning: physicians' knowledge, attitudes, and practice.

Choi J, Chan S, Wiebe E.

Source

Department of Family Practice, University of British Columbia, Vancouver, BC.

Abstract

OBJECTIVE:

To assess physicians' knowledge, attitudes, and practice with respect to four evidence-based natural family planning (NFP) methods: Standard Days, cervical mucus, basal body temperature, and the lactational amenorrhea method.

METHODS:

We undertook a cross-sectional survey of a random sample of family physicians and all gynaecologists in British Columbia (n = 460) who have women of reproductive age in their practice, as well as all affiliated residents (n = 239). Main outcome measures were (1) physicians' attitudes towards NFP and their perceptions of its effectiveness; (2) the relationship between physicians' demographic factors, their personal experience or beliefs, and their attitudes and knowledge; and (3) how these factors affect the counselling physicians offer their patients.

RESULTS:

The survey response rate was 44%. Only 3% to 6% of physicians had correct knowledge of the effectiveness in perfect use of the NFP methods cited in this study. Fifty percent of physicians who responded mention NFP to their patients as an option for contraception, and 77% of physicians mention NFP as an option to couples trying to conceive. Family physicians and residents were much more likely than gynaecologists or gynaecology residents to mention NFP during counselling. Older physicians were more likely to mention NFP than younger physicians and also had more personal experience with NFP.

CONCLUSION:

Most physicians in our study underestimated the effectiveness of NFP methods, and only a small proportion of physicians provide information about NFP during contraceptive counselling. Physicians need better understanding of modern methods of NFP to provide evidence-based contraceptive counselling to selected highly motivated patients who prefer NFP as a contraceptive choice.

PMID: 20707956

Contraception. 1997 Apr;55(4):233-7.

Natural family planning: suitability of the CUE method for defining the time of ovulation.

Moreno JE, Khan-Dawood FS, Goldzieher JW.

Source

University of Texas, Health Science Center at Houston, Department of Biochemistry 77030, USA.

Abstract

The purpose of this study was to compare the CUE method for family planning with the Ovulation Detection Method for defining the fertile phase of the menstrual cycle. We evaluated 42 cycles from 10 women in Monterrey, Mexico, who were monitored by basal body temperatures, urinary LH, pelvic ultrasound, and the CUE monitor. The fertile phase of the cycle was adequately defined in all cycles using the CUE method, and in 35 cycles (83.3%) by the Ovulation Method. Using our protocol, the period of recommended abstinence with the CUE method is 9 days and with the Ovulation Method 11 days. The CUE method accurately defines the fertile phase of the menstrual cycle, thus improving the predictability of ovulation for women who use natural methods of birth control.

PMID: 9179455

Reproductive Health Matters. 1994 May;2(3):63-7.

Natural Family Planning: Values and Evaluations.

James Trussell, Anne Jewell, J. J. Billings, Michael B. Howitt Wilson, Kevin Hume, Gavin Jarvis, Colleen Norman, Erik Odeblad and Celia Pyper.

Abstract

This article responds to statements made in the Earth Summit in Rio in 1992 that the world is threatened by overpopulation and that the Catholic Church is opposed to birth control and therefore poses a threat to solving overpopulation problems. It argues that modern methods of natural family planning, which are approved by the church, are cheap, effective, without side effects and may be particularly acceptable to and efficacious among people in areas of poverty.

Source: http://www.jstor.org/stable/3775603

Adv Contracept. 1997 Jun-Sep;13(2-3):179-89.

Natural family planning with and without barrier method use in the fertile phase: efficacy in relation to sexual behavior: a German prospective long-term study.

Frank-Herrmann P, Freundl G, Gnoth C, Godehardt E, Kunert J, Baur S, Sottong U.

Source

NFP Study Group, University of Düsseldorf, Germany.

Abstract

A large prospective long-term study with users of natural family planning (NFP) methods has been conducted to analyze the relation between unintended pregnancy rates and sexual behavior with special reference to barrier method use in the fertile phase. Seven hundred and fifty eight NFP beginners, 19-45 years of age, 14870 cycles, 28 unintended pregnancies were studied. Of the couples, 54.2% use NFP only or predominantly and 45.9% use mixed methods (additional barrier method use in the fertile phase in 55.7% of the cycles). The overall pregnancy rate after 12 cycles of exposure is 2.2% according to the actuarial method. There is no significant difference between NFP users and mixed methods users and also no significant effect of duration of use in the first 5 years of exposure. During "perfect use" the pregnancy rate at 12 months is 0.63%. When only protected intercourse takes place in the fertile phase the pregnancy rate is 0.45%. The symptothermal method of NFP is most unforgiving for imperfect use (unprotected intercourse in the fertile phase). However, it is extremely effective when either abstinence or protected intercourse is used in the fertile phase.

PMID: 9288336

Lancet. 1995 Sep 16;346(8977):774; author reply 775-6.

Natural family planning.

Diamond I.

Comment on

- Natural family planning in the 1990s. [Lancet. 1995]

PMID: 7658890

Arch Med Res. 2000 Nov-Dec;31(6):599-604.

Natural fertility in northeastern Mexico.

Cerda-Flores RM, Dávila-Rodríguez MI.

Source

Departamento de Genética de Poblaciones, Centro de Investigación Biomédica del Noreste (CIBIN), Instituto Mexicano del Seguro Social (IMSS), Administración de Correos #4, Apdo. Postal #20, 64720 Monterrey, Nuevo León, Mexico. ricardocerda@hotmail.com

Abstract

BACKGROUND:

The aims of this study were as follows: 1) to describe the fertility of a sample of Mexican women (> or =45 years of age, married, not using any family planning methods, and residing in the Mexican state of Nuevo León); 2) to determine whether or not the distribution of completed family size fits the negative binomial distribution, as in other populations studied in the world, and 3) to assess the association between fertility and 10 explanatory variables.

METHODS:

A sample of 410 women was interviewed at and selected from seven medical units of the Instituto Mexicano del Seguro Social (IMSS). The women were grouped by their year of birth (1896-1925 and 1926-1955) and birthplace [persons whose four grandparents were born in northeastern Mexico (NE) and outside northeastern Mexico (Not-NE)]. A binomial negative distribution analysis was assessed. Multiple linear regression was used to assess association between fertility (transformed by the use of inverse hyperbolic sines) and 10 explanatory variables, including age at marriage, heterozygosity, individual admixture, wife's education, husband's education, wife's occupation, husband's occupation, and couple's residence zone, birth year, and birthplace.

RESULTS:

Completed fertility was only associated with age at marriage. This population showed a fertility pattern similar to those described in Venezuelan and Brazilian populations in 1950 and 1940, respectively.

CONCLUSIONS:

We conclude that before worldwide family planning programs, fertility was determined mainly by natural selection forces.

PMID:11257328

Can Fam Physician. 2012 May;58(5):e267-74.

Natural procreative technology for infertility and recurrent miscarriage: outcomes in a Canadian family practice.

Tham E, Schliep K, Stanford J.

Source

Department of Family and Community Medicine, University of Toronto, Ontario, Canada.

Abstract

OBJECTIVE:

To study the outcomes of women with infertility or miscarriage treated with natural procreative technology (NaProTechnology or NPT), a systematic medical approach to promoting conception in vivo; and to compare the outcomes with those previously published from a general practice in Ireland.

DESIGN:

Retrospective cohort study.

SETTING:

An urban Canadian primary care practice in which the physician had a part-time practice in NPT.

PARTICIPANTS:

Couples with infertility or recurrent miscarriage who received treatment in the practice between August 2000 and July 2006.

INTERVENTION:

All couples were taught to identify the fertile time of their menstrual cycles using the Creighton Model FertilityCare System (CrMS) and completed a standard NPT evaluation. Many also received additional medical treatment to enhance conception in vivo.

MAIN OUTCOME MEASURES:

Live birth was the primary outcome; secondary outcomes included conceptions, multiple births, low birth weight, and prematurity.

RESULTS:

A total of 108 couples received NPT and were included in the analysis, of which 19 (18%) reported having 2 or more previously unexplained miscarriages. The average female age was 35.4 years. Couples had been attempting to conceive for a mean of 3.2 years. Twentytwo participants (20%) had previously given birth; 24 (22%) had previous intrauterine insemination; and 9 (8%) had previous assisted reproductive technology. The cumulative adjusted proportion of first live births for those completing up to 24 months of NPT treatment was 66 per 100 couples, and the crude proportion was 38%. The cumulative adjusted proportion of first conceptions was 73 per 100 couples, and the crude proportion was 47%. Of the 51 couples who conceived, 12 couples (24%) conceived with CrMS instruction alone, 35 (69%) conceived with

CrMS and NPT medical treatment, and 4 (8%) conceived after additional surgical treatment. All births were singleton births; 54% were born at 37 weeks' gestation or later; and 78% had birth weights of 2500 g or greater.

CONCLUSION:

Natural procreative technology in a family physician's office was effective in treating infertility and miscarriage with outcomes that were comparable to those in an NPT general practice in Ireland. Larger multicentre prospective studies to compare NPT directly to other forms of infertility treatment are warranted.

PMID: 22734170

J Midwifery Womens Health. 2006 Nov-Dec;51(6):471-7.

New approaches to fertility awareness-based methods: incorporating the Standard Days and TwoDay Methods into practice.

Germano E, Jennings V.

Source

Georgetown University, Washington, DC 20008, USA. elaine.germano@verizon.net <elaine.germano@verizon.net>

Abstract

Helping clients select and use appropriate family planning methods is a basic component of midwifery care. Many women prefer nonhormonal, nondevice methods, and may be interested in methods that involve understanding their natural fertility. Two new fertility awareness-based methods, the Standard Days Method and the TwoDay Method, meet the need for effective, easy-to-provide, easy-to-use approaches. The Standard Days Method is appropriate for women with most menstrual cycles between 26 and 32 days long. Women using this method are taught to avoid unprotected intercourse on potentially fertile days 8 through 19 of their cycles to prevent pregnancy. They use CycleBeads, a color-coded string of beads representing the menstrual cycle, to monitor their cycle days and cycle lengths. The Standard Days Method is more than 95% effective with correct use. The TwoDay Method is based on the presence or absence of cervical secretions to identify fertile days. To use this method, women are taught to note everyday whether they have secretions. If they had secretions on the current day or the previous day, they consider themselves fertile. The TwoDay Method is 96% effective with correct use. Both methods fit well into midwifery practice.

PMID: 17081938

J Midwifery Womens Health. 2005 Jan-Feb;50(1):31-8.

New low- and high-tech calendar methods of family planning.

Fehring RJ.

Source

Marquette University College of Nursing, Milwaukee, WI 53201, USA.
Richard.fehring@marquette.edu

Abstract

Calendar-based methods are not usually considered effective or useful methods of family planning among health professionals. However, new "high-" and "low"-tech calendar methods have been developed, which are easy to teach, to use, and may be useful in helping couples avoid pregnancy. The low-tech models are based on a fixed-day calendar system. The high-tech models are based on monitoring urinary metabolites of female reproductive hormones. Both systems have high levels of satisfaction. This article describes these new models of family planning and the research on their effectiveness. The author proposes a new algorithm for determining the fertile phase of the menstrual cycle for either achieving or avoiding pregnancy.

PMID: 15637512

BMJ. 1993 Sep 18;307(6906):723-6.

"Natural family planning": effective birth control supported by the Catholic Church.

Ryder RE.

Source

Department of Endocrinology, Dudley Road Hospital, Birmingham.

Abstract

During 20-22 September Manchester is to host the 1993 follow up to last year's "earth summit" in Rio de Janeiro. At that summit the threat posed by world overpopulation received considerable attention. Catholicism was perceived as opposed to birth control and therefore as a particular threat. This was based on the notion that the only method of birth control approved by the church--natural family planning--is unreliable, unacceptable, and ineffective. In the 20 years

since E L Billings and colleagues first described the cervical mucus symptoms associated with ovulation natural family planning has incorporated these symptoms and advanced considerably. Ultrasonography shows that the symptoms identify ovulation precisely. According to the World Health Organisation, 93% of women everywhere can identify the symptoms, which distinguish adequately between the fertile and infertile phases of the menstrual cycle. Most pregnancies during trials of natural family planning occur after intercourse at times recognised by couples as fertile. Thus pregnancy rates have depended on the motivation of couples. Increasingly studies show that rates equivalent to those with other contraceptive methods are readily achieved in the developed and developing worlds. Indeed, a study of 19,843 poor women in India had a pregnancy rate approaching zero. Natural family planning is cheap, effective, without side effects, and may be particularly acceptable to the efficacious among people in areas of poverty.

Comment in

- Natural family planning. Effective only if used perfectly. [BMJ. 1993]
- Natural family planning. Abstinence unnatural in primates. [BMJ. 1993]
- Natural family planning. Review's enthusiasm based on flawed evidence. [BMJ. 1993]
- Natural family planning. Couples take chances. [BMJ. 1993]

PMID: 8401097

Adv Contracept. 1997 Jun-Sep;13(2-3):179-89.

Natural family planning with and without barrier method use in the fertile phase: efficacy in relation to sexual behavior: a German prospective long-term study.

Frank-Herrmann P, Freundl G, Gnoth C, Godehardt E, Kunert J, Baur S, Sottong U.

Source

NFP Study Group, University of Düsseldorf, Germany.

Abstract

A large prospective long-term study with users of natural family planning (NFP) methods has been conducted to analyze the relation between unintended pregnancy rates and sexual behavior with special reference to barrier method use in the fertile phase. Seven hundred and fifty eight NFP beginners, 19-45 years of age, 14870 cycles, 28 unintended pregnancies were studied. Of the couples, 54.2% use NFP only or predominantly and 45.9% use mixed methods (additional barrier method use in the fertile phase in 55.7% of the cycles). The overall pregnancy rate after 12 cycles of exposure is 2.2% according to the actuarial method. There is no significant

difference between NFP users and mixed methods users and also no significant effect of duration of use in the first 5 years of exposure. During "perfect use" the pregnancy rate at 12 months is 0.63%. When only protected intercourse takes place in the fertile phase the pregnancy rate is 0.45%. The symptothermal method of NFP is most unforgiving for imperfect use (unprotected intercourse in the fertile phase). However, it is extremely effective when either abstinence or protected intercourse is used in the fertile phase.

PMID: 9288336

J Midwifery Womens Health. 2001 Mar-Apr;46(2):68-73.

Nurse-midwives' knowledge and promotion of lactational amenorrhea and other natural family-planning methods for child spacing.

Fehring RJ, Hanson L, Stanford JB.

Source

Marquette University College of Nursing, Milwaukee, WI 53201-1881, USA.

Abstract

The purpose of this study was to describe and assess certified nurse-midwives' (CNMs) knowledge and promotion of two modalities for child spacing, natural family-planning (NFP) and the lactational amenorrhea method (LAM). One thousand two hundred CNMs were randomly selected from a national membership list and mailed a 24-item questionnaire on NFP and LAM. Of the 514 respondents (42.8% return rate), 450 (87.5%) were currently practicing as CNMs. Respondents had an average age of 46 years, with an average of 10 years of practice. CNMs ranked NFP as the ninth most used and the eighth most effective family-planning method in their practice, with an average perceived method-effectiveness of 88% and use-effectiveness of 70%. Although most respondents felt somewhat prepared during their education program to provide NFP, only 22% would offer NFP as a family-planning option for child spacing.

PMID: 11370692

Am J Obstet Gynecol. 2011 February; 204(2): 124.e1–124.e7.

Obstetrician-gynecologists’ views on contraception and natural family planning: a national survey.

Source

Pritzker School of Medicine, The University of Chicago, Chicago, IL 60637, Section of General Internal Medicine, The University of Chicago, Chicago, IL 60637, Section of Hospital Medicine, The University of Chicago, Chicago, IL 60637, The MacLean Center for Clinical Medical Ethics, The University of Chicago, Chicago, IL 60637.

Abstract

Objective

To characterize beliefs about contraception among obstetrician-gynecologists (Ob/Gyns).

Study design

National mailed survey of 1800 U.S. Ob/Gyns. Criterion variables were whether physicians have a moral or ethical objection to - and whether they would offer – six common contraceptive methods. Covariates included physician demographic and religious characteristics.

Results

1154 of 1760 eligible Ob/Gyns responded (66%). Some Ob/Gyns object to intrauterine devices (4.4% object, 3.6% would not offer), progesterone implants and/or injections (1.7% object, 2.1% would not offer), tubal ligations (1.5% object, 1.5% would not offer), oral contraceptive pills (1.3% object, 1.1% would not offer), condoms (1.3% object, 1.8% would not offer), and the diaphragm or cervical cap with spermicide (1.3% object, 3.3% would not offer). Religious physicians were more likely to object (OR 7.4) and to refuse to provide a contraceptive (OR 1.9).

Conclusion

Controversies about contraception are ongoing, but among Ob/Gyns objections and refusals to provide contraceptives are infrequent.

PMCID: PMC3052964

Arch Gynecol Obstet. 2002 Dec;267(2):67-71.

Opinion: natural family planning and the management of infertility.

Gnoth C, Frank-Herrmann P, Freundl G.

Source

German NFP Study Group at the University of Düsseldorf and Department for Reproductive Medicine, Kliniken der Stadt Düsseldorf gGmbH, Academic Teaching Hospital of the University of Düsseldorf, Düsseldorf, Germany. gnoth@uni-duesseldorf.de

Abstract

Reproductive behaviour in modern western society has changed dramatically in the last two decades. Parenthood is now well planned. If planned pregnancies do not occur as expected, early infertility care is often demanded with the risk of over-treatment. Live birth rates in untreated subfertile couples reach nearly 55% in 36 months. During this period, self-monitoring with natural family planning (NFP) methods may be all that is necessary, especially in couples with unexplained infertility.

PMID: 12439549

J Am Board Fam Med. 2008 Sep-Oct;21(5):375-84. doi: 10.3122/jabfm.2008.05.070239.

Outcomes from treatment of infertility with natural procreative technology in an Irish general practice.

Stanford JB, Parnell TA, Boyle PC.

Source

Department of Family and Preventive Medicine, University of Utah, 375 Chipeta Way, Salt Lake City, UT 84108, USA. joseph.stanford@utah.edu

Erratum in

- J Am Board Fam Med. 2008 Nov-Dec;21(6):583.

Abstract

OBJECTIVES:

We evaluated outcomes in couples treated for infertility with natural procreative technology (NaProTechnology [corrected] NPT), a systematic medical approach for optimizing physiologic conditions for conception in vivo, from an Irish general practice.

METHODS:

All couples receiving treatment from 2 NPT-trained family physicians between February 1998 and January 2002 were studied. The main outcome was live birth, and secondary outcomes

included conceptions and multiple births. Crude proportions and adjusted life-table proportions were calculated per 100 couples.

RESULTS:

A total of 1239 couples had an initial consult for NPT, of which 1072 had been trying for at least a year to conceive and initiated treatment. The average female age was 35.8 years, the mean duration of attempting to conceive was 5.6 years, 24% had a prior birth, and 33% had previously attempted treatment with assisted reproductive technology (ART). All couples were taught to identify the fertile days of the menstrual cycle with the Creighton Model FertilityCare System, and most received additional medical treatment, including clomiphene (75%). In life-table analysis, the cumulative proportion of first live births for those completing up to 24 months of NPT treatment was 52.8 per 100 couples. The crude proportion was 25.5. Younger couples and couples without previous ART attempts had higher rates of live birth. Among live births, there were 4.6% twin births.

CONCLUSION:

NPT provided by trained general practitioners had live birth rates comparable to cohort studies of more invasive treatments, including ART. Further studies are warranted to compare NPT directly to other treatments.

Comment in

- Re: outcomes from treatment of infertility with natural procreative technology in an Irish general practice. [J Am Board Fam Med. 2009]

PMID: 18772291

Contraception. 2004 Jan;69(1):15-21.

Periodic abstinence in developing countries: an assessment of failure rates and consequences.

Che Y, Cleland JG, Ali MM.

Source

Shanghai Institute of Planned Parenthood Research, 2140 Xie Tu Road, Shanghai 200032, China. Yan_che2002@hotmail.com

Abstract

It is estimated that 27 million couples, representing 2.6% of all couples in the reproductive span, use periodic abstinence (PA). Using data from 15 national surveys in low and middle-income countries, this article assesses characteristics of PA users, knowledge of the fertile period, accidental conceptions while using PA and the reproductive consequences of these conceptions. Current users of PA (predominantly the simple calendar variant) tend to be more educated and urban than users of other methods. The method is preferred by young single women and older married women. The proportion of users with correct knowledge of the timing of ovulation ranges from 8% to 91%, with a median value of 62%. The median 12-month gross failure rate was 24 per 100 episodes. Net of other predictors of failure, correct knowledge of the timing of ovulation was associated with a 12% decrease in failure probabilities. Couples who experienced PA failure were more likely than couples who experienced failure with another method to carry the pregnancy to term. Nevertheless, PA still contributes to one-sixth of all abortions (or miscarriages) following contraceptive failure.

PMID: 14720614

Obstet Gynecol. 1999 Nov;94(5 Pt 1):672-8.

Physicians' knowledge and practices regarding natural family planning.

Stanford JB, Thurman PB, Lemaire JC.

Source

Department of Family and Community Medicine, University of Missouri-Columbia, USA. jstanford@dfpm.utah.edu

Abstract

OBJECTIVE:

To assess physicians' knowledge and practices of modern methods of natural family planning.

METHODS:

A questionnaire was mailed to 840 physicians selected randomly from Missouri state licensing records for obstetrics-gynecology, family practice, general practice, and general internal medicine.

RESULTS:

The response rate was 65%. A total of 375 physicians (69% of respondents) saw women for reproductive issues. About half (46%) of physicians reported that they mentioned natural family planning to at least some women when discussing family planning issues. Observing vaginal

discharge of cervical mucus was discussed by 40% of physicians in the context of avoiding pregnancy and by 36% of physicians in the context of helping a couple achieve pregnancy. Twenty-two percent of physicians estimated the best possible effectiveness of natural family planning to avoid pregnancy to be greater than 90%, and 35% estimated the actual effectiveness to avoid pregnancy to be greater than 70%. (The threshold rates of 90% best possible effectiveness and 70% actual effectiveness were chosen to be somewhat less than those reported in medical literature.) Physicians who gave higher estimates of effectiveness of natural family planning and physicians who were aware of an instructor in their community were more likely to provide women with relevant information about natural family planning.

CONCLUSION:

Most physicians, especially those unaware of availability of instructors in their areas, underestimate the effectiveness of natural family planning and do not give information about modern methods to women.

PMID: 10546708

J Obstet Gynecol Neonatal Nurs. 2011 May-Jun;40(3):281-91. doi: 10.1111/j.1552-6909.2011.01237.x. Epub 2011 Apr 13.

Pilot evaluation of an internet-based natural family planning education and service program.

Fehring RJ, Schneider M, Raviele K.

Source

College of Nursing, Marquette University, Milwaukee, WI 53201-1881, USA.

Abstract

OBJECTIVE:

To evaluate the efficacy, knowledge of fertility, and acceptability of a web-based natural family planning (NFP) education and service program.

DESIGN:

A 6-month repeated measure longitudinal evaluation pilot study.

SETTING:

A university based online website.

PARTICIPANTS:

The website was piloted with 468 volunteer women seeking NFP services. Of these participants, 222 used the automatic online fertility charting system to avoid pregnancy. The 222 charting participants had a mean age of 29.9 years (SD=5.6), 2.2 children (SD=1.9), 37% were postpartum, and 47% had regular menstrual cycle lengths.

INTERVENTION:

Nurse-managed web-based NFP education and service program.

OUTCOMES:

Pregnancies were confirmed by an online self-assessed pregnancy evaluation form. A 10-item fertility quiz and 10-item acceptability survey was administered online.

RESULTS:

Among the 222 users avoiding pregnancy, at 6 months of use, there were two correct-use unintended pregnancies that provided a pregnancy rate of 2% and seven total unintended pregnancies providing a typical use pregnancy rate of 7%. Mean knowledge of fertility increased significantly from time of registration (8.96, SD=1.10) to 1 month of use (9.46, SD=.10), t=4.60, p<.001). Acceptability increased nonsignificantly from 1 month of use (45.6; SD=8.98) to 6 months of use (48.4; SD=8.77).

CONCLUSION:

The nurse-managed online NFP system seems to provide adequate knowledge of fertility and help participants meet pregnancy intentions. Acceptability of such a system of NFP is still in question.

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PMID: 21488954

Eur J Contracept Reprod Health Care. 1997 Jun;2(2):105-11.

Postpartum contraception: the lactational amenorrhea method.

Vekemans M.

Source

Université Libre de Bruxelles, Belgium.

Abstract

Breastfeeding still accounts for a significant proportion of all fertility reduction, the average birth interval being longer among populations that breastfeed. However, per se it is not reliable for individual fertility suppression. The lactational amenorrhea method (LAM) is a highly efficient tool for the individual woman to utilize physiology to space births. Suckling induces a reduction in gonadotropin releasing hormone, luteinizing hormone and follicle stimulating hormone release, resulting in amenorrhea, through an intracerebral opioid pathway: beta-endorphins inhibit gonadotropin releasing hormone and dopamine secretions, which, in turn stimulates prolactin secretion and milk production. Reduced suckling precipitates the return of ovulation. During lactation, menses before 6 months are mostly anovulatory, and fertility remains low. The lactational amenorrhea method is based on three simultaneous conditions: (1) the baby is under 6 months; (2) the mother is still amenorrheic; and (3) she practises exclusive or quasi-exclusive breastfeeding on demand, day and night. Experiments with LAM extended to 9-12 months are ongoing. We use a standardized algorithm to present LAM. The lactational amenorrhea method is a way both to space births and to support breastfeeding, which should be replaced by a contraceptive method in due course. A 'Breastfeeding-LAM-Family Planning' team is very helpful in maternity wards for promoting modern breastfeeding, LAM, and contraception, and for alleviating barriers and misconceptions. The lactational amenorrhea method is at least 98% effective, comparing favorably with other contraceptive methods. Acceptability and continuity are not very well known; as with other 'natural' methods the figures are probably low in a general population but high for motivated couples. The lactational amenorrhea method avoids double protection, and thus saves resources, is especially (but not exclusively) suitable for couples interested in natural family planning and is accepted by religious authorities. The lactational amenorrhea method gives time to decide upon a long-term method of contraception. Unwanted pregnancies, although infrequent, conceived while using LAM result in very short, high-risk birth intervals. Introduction of LAM in family planning programs demands training, attention to be given to working mothers, positive attitudes of health personnel, close links between postpartum and family planning teams, situation analysis, budgets, evaluations, follow-up activities, modifications of record keeping systems and computing programs, and of national family planning guidelines. In conclusion, LAM is an efficient family planning method which should be promoted. The lactational amenorrhea method should always include the shift to another method when its criteria are no longer implemented.

PMID: 9678098

Adv Contracept. 1997 Jun-Sep;13(2-3):229-37.

Pregnancy complications in natural family

planning users.

Mena P, Bitto A, Barbato M, Perez A, Gray RH, Simpson JL, Queenan JT, Kambic RT, Pardo F, Stevenson W, Tagliabue G, Jennings V, Li C.

Source

Hospital Clínico Universidad de Chile, Santiago, Chile.

Abstract

A multicenter cohort study was designed to assess pregnancy outcome among natural family planning (NFP) users, and provide the opportunity to address complications in NFP users by planning status and by timing of conception with respect to day of ovulation. There were 877 singleton births in this sample. Complications evaluated were abnormal vaginal bleeding, urinary tract infection, vaginal infection, hypertension of pregnancy, proteinuria, glycosuria, and anemia. There was no significant difference in the mean age, number of prenatal visits or birth weight among optimally and non-optimally timed pregnancies or for planned and unplanned pregnancies. There were higher incidences of "parity 2 or more" and current smokers in the non-optimally timed pregnancies and lower incidences of prior pregnancy loss and "currently employed" in the non-optimally timed pregnancies. There was little difference in pregnancy complications with respect to pregnancy timing, with the exception of a significant increased risk of vaginal bleeding late in pregnancy among non-optimally timed conceptions (11.5%) compared to optimally timed pregnancies (5.2%, RR = 2.2, 95% CI 1.3-3.7). More differences were observed in pregnancy complication rates by planning status. Unplanned pregnancies were associated with significantly more late pregnancy bleeding, vaginal infections, proteinuria, glycosuria and medication use than planned pregnancies. Unplanned pregnancies had lower incidences of maternal anemia. Complications of pregnancy were low in this NFP population, irrespective of planned versus unplanned status. Women with planned pregnancies had even fewer complications during pregnancy than women with unplanned conceptions, suggesting that women using NFP to plan their reproduction may be at particularly low risk.

PMID: 9288340

Adv Contracept. 1997 Jun-Sep;13(2-3):201-14.

Pregnancy outcome in natural family planning users: cohort and case-control studies evaluating safety.

Simpson JL, Gray RH, Perez A, Mena P, Barbato M, Castilla EE, Kambic RT, Pardo F, Tagliabue G, Stephenson WS, Bitto A, Li C, Jennings VH, Spieler JM, Queenan JT.

Source

Baylor College of Medicine, Houston, TX, USA.

Abstract

Conceptions involving aging gametes are of relevance to natural family planning (NFP) because women using NFP to avoid pregnancy abstain from intercourse during the fertile time of the cycle. To help verify the safety of pregnancies occurring among NFP practitioners, our group has, since 1986, conducted a large cohort study involving six experienced NFP centers. Timing of conception was determined from NFP charts, in which women recorded days on which intercourse occurred. The number of days from the most probable conception intercourse to probable day of ovulation was first determined, and used as an estimate of the time gametes remained in the genital tract before fertilization. Several studies have already been completed, cohort as well as case-control in nature.

PMID: 9288338

Adv Contracept. 1993 Dec;9(4):269-83.

Prospective European multi-center study of natural family planning (1989-1992): interim results. The European Natural Family Planning Study Groups.

[No authors listed]

Abstract

Since 1989 an international multicenter prospective study to evaluate the effectiveness and acceptability of natural family planning (NFP) methods in Europe has been conducted by the NFP Research Center at the University of Düsseldorf in collaboration with the European Zone of the International Federation for Family Life Promotion (IFFLP). Fourteen NFP-organizations from nine European countries participate in the study. Cycle data from women in the fertile age group are transferred to a special standard computer sheet by the respective organizations and forwarded at three-monthly intervals to the study center for analyses. To date, 10,045 cycles from 900 women aged between 19 and 54 years have been analyzed. This paper presents the pregnancy rate for the women aged between 19 and 45 years of age, who contributed 9284 cycles. In the analyses the cycles were subdivided into two categories consequent to sexual practices during the fertile phase: group I (NFP only--4277 cycles) use only NFP to avoid a pregnancy; group II (FA/mix--5007 cycles) where barrier methods or coitus interruptus during the fertile phase, at least in some cycles, were used to avoid a pregnancy. The women used

different clinical indicators such as basal body temperature (BBT), cervical mucus, calculations, cyclical cervical changes or combinations of these to determine the beginning and the end of the fertile phase necessitating a further division into four subgroups, A, B, C, D, and different efficiency rates for each of these groups. In group A (symptothermal method, double check) 15 unintended pregnancies (UIP) occurred in 7404 cycles, giving a pregnancy rate of 2.4 Pearl Index (PI); in group B (muco-thermal method) there were 12 UIP in 1352 cycles with a pregnancy rate of 10.6 (PI); in group C (mucus to detect the beginning and mucus and BBT to determine the end of the fertile phase) there was one UIP in 434 cycles, and in group D (mucus method only) there was one IUP in 70 cycles. The numbers in group C and D are too small to calculate a pregnancy rate (PI). No pregnancy was observed in women over 40 years of age. Our conclusion from these preliminary results is that in the continent of Europe, the symptothermal method when used with periodic abstinence (NFP only = group I) and fertility awareness with the use of barriers during the fertile phase (FA/mix = group II) are effective methods of family planning.(ABSTRACT TRUNCATED AT 400 WORDS)

PMID: 8147240

Fertil Steril. 2005 Sep;84(3):805-7.

Protocol for determining fertility while breastfeeding and not in cycles.

Fehring RJ, Barron ML, Schneider M.

Source

Marquette University College of Nursing, Institute for Natural Family Planning, Milwaukee, Wisconsin 53201-1881, USA. Richard.fehring@marquette.edu

Abstract

A protocol was developed and evaluated for nonovulating breastfeeding women to determine potential fertility with an electronic hormonal fertility monitor. The amount of required abstinence (i.e., days of potential fertility) through the first menstrual cycle indicated by the fertility monitor was significantly lower (17% of the total days) compared with the amount of abstinence (50% of the total days) indicated by the self-observation of cervical mucus.

PMID: 16169432

Afr J Reprod Health. 2012 Dec;16(4):140-8.

Provision of family planning services in Tanzania: a comparative analysis of public

and private facilities.

Kakoko DC, Ketting E, Kamazima SR, Ruben R.

Source

Department of Behavioural Sciences, School of Public Health and Social Sciences, Muhimbili University of Health and Allied Sciences, Tanzania. knkuru@yahoo.com

Abstract

Adherence to the policy guidelines and standards is necessary for family planning services. We compared public and private facilities in terms of provision of family planning services. We analyzed data from health facility questionnaire of the 2006 Tanzania Service Provision Assessment survey, based on 529 health facilities. Majority of public facilities (95.4%) offered family planning services, whereas more than half of private facilities (52.1%) did not offer those. Public facilities were more likely to offer modern contraceptives as compared to private facilities. However, private facilities were more likely to offer counseling on natural methods of family planning [AOR = 2.12 (1.15-3.92), P < or = 0.001]. Public facilities were more likely to report having guidelines or protocols for family planning services and various kinds of visual aids for family planning and STIs when compared to private facilities. This comparative analysis entails the need to enforce the standards of family planning services in Tanzania.

PMID: 23444551

J Fam Plann Reprod Health Care. 2006 Oct;32(4):231-3.

Quality of delivery of the Standard Days Method as compared with contraceptive pills in Rwanda.

León FR, Blair C, Huapaya A, Lundgren R, Mukabatsinda M, Muramutsa F, Jennings V.

Source

Georgetown University, Institute for Reproductive Health, Washington, DC, USA. frleon@amauta.rcp.net.pe

Abstract

BACKGROUND AND METHODOLOGY:

Replicating a Peruvian study, this research introduced the Standard Days Method (SDM) into

Rwanda Ministry of Health clinics and evaluated client counselling on the new method against that given for contraceptive pills. Providers received technical reinforcement concerning established methods in addition to SDM training. To evaluate their quality of care, simulated clients implemented a service test in visits to 20 clinics.

RESULTS:

As in Peru, providers exchanged significantly more relevant information with clients who chose SDM than with those who chose pills. Also, a minority of providers posed barriers to SDM access by refusing to give SDM tools to the client until she brought her partner for consultation.

CONCLUSIONS:

The findings of this study confirm that SDM counselling is generally satisfactory, although SDM training needs adjustment, and that the rigour of providers' pill counselling remains below capacity.

PMID: 17032510

BMJ 2012;345:e5566

Letter: Contraceptive services - Shortcomings of natural family planning methods.

Douwe A Verkuyl, obstetrician

Source

Refaja Hospital, Stadskanaal, Netherlands

Abstract

Contraception should be evaluated on an intention to use basis—that is, compare women provided with IUDs with those given pills, condoms, or instructions for FABMs. If only Evans could do such a study and prove his claims for FABMs. The Vatican would sponsor it.

Reference: http://www.bmj.com/content/345/bmj.e5566

Adv Contracept. 1997 Jun-Sep;13(2-3):167-71.

Simplifying NFP: preliminary report of a

pilot study of the 'collar' method in Brazil.

Faundes A, Lamprecht V, Osis MJ, Lopes BC.

Source

Centro de Pesquisas e Controle das Doenças Materno-Infantis de Campinas CEMICAMP, Brazil.

Abstract

Natural methods of fertility regulation are acceptable in most cultures. Many couples worldwide do not wish to use contraceptives or do not have access to them but wish to limit their family size or lengthen the time between births. Barriers to expanding use of natural family planning (NFP) methods include a lack of providers who can teach NFP and a lack of time to teach and follow couples during the initial months of NFP use. If simple yet effective methods of NFP are available, then NFP could be introduced to a wider audience. Recently, calendar rules have been revised that use a set interval to identify fertile days. These new rules provide better coverage of fertile days and require less abstinence than the rules traditionally used with the calendar method. One of these new rules is being field tested in a pilot study in Brazil. Couples are asked to abstain from day 9-19 (inclusive) of the menstrual cycle, using a beaded necklace (the 'collar') as a mnemonic device. Focus groups with the teacher-monitors and in-depth interviews with female and male users were carried out to evaluate the acceptability of the 'collar' method. A preliminary analysis of these focus groups and interviews from the first site is presented.

PMID: 9288334

Eur J Contracept Reprod Health Care. 2010 Apr;15(2):113-23. doi: 10.3109/13625180903545302.

State-of-the-art of non-hormonal methods of contraception: IV. Natural family planning.

Freundl G, Sivin I, Batár I.

Source

Sektion Natürliche Fertilität, Universities of Düsseldorf and Heidelberg, Germany. freundlg@uni-duesseldorf.de

Abstract

Despite the popularity of 'modern' contraceptives, natural family planning (NFP), including fertility awareness-based (FAB) methods and withdrawal, are practised in most countries.

Worldwide FAB methods and withdrawal are used, respectively, by about 3.6% and 2.9% of all couples of reproductive age. This article describes the underpinnings of the different NFP methods, their rationales, histories, rules for use, efficacy and in broad categories their prevalence. Pregnancy rates of FAB methods with perfect use have ranged between 0.3 and 5.0 per 100 users per year, but typical use rates rises into the teens or higher. Withdrawal requires the male partner to be aware of his impending climax and to pull out of the vagina before ejaculation. Perfect use and typical pregnancy rates for withdrawal are estimated to be 4 and 27 per 100 per year, respectively. Many couples find NFP in accord with their own beliefs, satisfactory in its effectiveness and useful in planning a desired pregnancy. Many prize their self-control in practising NFP or withdrawal. In our research we used Medline, Popline and the Cochrane Library search engines in English, local institutional libraries, our own files in our native languages, the literature references contained therein, and source recommendations from colleagues.

PMID: 20141492

Contraception. 2006 Oct;74(4):313-7. Epub 2006 Aug 2.

Survey of attitudes regarding natural family planning in an urban Hispanic population.

Leonard CJ, Chavira W, Coonrod DV, Hart KW, Bay RC.

Source

Department of Obstetrics, Gynecology and Women's Health, Phoenix, AZ 85008, USA.

Abstract

METHODS:

We performed a cross-sectional survey of 357 reproductive-aged women, mostly Hispanic (81.8%), presenting for ambulatory and hospital reproductive care in Phoenix, AZ, about their interest in natural family planning (NFP). Participants completed questionnaires, and responses were analyzed to determine predictors of interest in NFP.

RESULTS:

Sixty-one percent stated that they were likely or very likely to use NFP to avoid pregnancy, and 50% would use NFP to achieve pregnancy. Of factors studied, Hispanic ethnicity, lower level of acculturation, less education and recent use of condoms or withdrawal were independently associated with interest in using NFP to avoid pregnancy. Younger age and desire for future pregnancy were independently predictive of potential NFP use to achieve pregnancy.

CONCLUSION:

This study suggests that Hispanic women find NFP to be an appealing family planning alternative.

PMID: 16982232

Int Q Community Health Educ. 2006-2007;27(2):99-120. doi: 10.2190/IQ.27.2.b.

Taiwan's population and family planning efforts: an historical perspective.

Cernada G, Sun TH, Chang MC, Tsai JF.

Source

University of Massachusetts, Amherst, MA, USA. gcernada@schoolph.umass.edu

Abstract

The unprecedented decline of Taiwan's natural population increase rate from 3% in 1963 to 1.9% in 1973, attributed primarily to an increasing use of contraception, brought universal attention to one of the first and most successful national family planning programs, at a time when successes were few. Taiwan met its goal of decreasing its natural increase rate despite its young population, increasing numbers of women of childbearing ages, a strong preference for sons and a per capita income at the outset in 1963 of less than U.S.$200. Recognition of this achievement brought thousands of professionals, particularly from developing countries, to study the program firsthand: more than 3,000 during 1970--73 alone. This was matched by an avalanche of publications about the program that appeared around the world, written by practitioners, academics and others. This article tells the story of this success.

PMID: 18364300

Adv Contracept. 1997 Jun-Sep;13(2-3):283-93.

The behavior of Italian family physicians regarding the health problems of women and, in particular, family planning (both contraception and NFP).

Girotto S, Del Zotti F, Baruchello M, Gottardi G, Valente M, Battaggia A, Rosa B, Fedrizzi P, Campanella M, Zumerle M, Bressan F.

Source

National Health Service, Italy.

Abstract

The hospital-centered trend that has dominated medical culture and the management of health care during this entire century has, in the last few years, undergone a reversal in Italy. Conditions in other countries suggest that similar changes have or will become increasingly common. The family physician today manages many of the functions previously handled by hospitals and specialists. In the field of reproductive health, family physicians are responsible not only for diagnosis and treatment, but also for prevention and education. The present study considers this new context with the objective of investigating the knowledge and behavior of Italian family physicians in the field of women's health, with particular regard to family planning (including natural family planning), through (1) a qualitative study (focus groups) of a small group of family physicians and (2) a questionnaire sent to 500 family physicians throughout Italy. The results of the focus group are summarized in the form of obstacles that the family physician finds in providing family planning services and proposals for change. The results indicate that because of their holistic approach, the family physician is an appropriate provider of family planning services although continued use of specialists' services, changes in logistics of the family physicians' practice, increased gender sensitivity, and additional training and information are necessary. The results of the questionnaire (121 responses, 24.2%) indicate that the Italian family physician currently lacks certain important information about family planning and would require logistical support to provide these services but is interested in acquiring information and is an appropriate family planning provider. An additional challenge for encouraging family practitioners to provide natural methods is that they favor a "medical" approach rather than a "behavioral" one in their treatment preferences for several other conditions.

PMID: 9288347

Adv Contracept. 1997 Jun-Sep;13(2-3):295-302.

The benefits and barriers associated with a national natural family planning service: the New Zealand experience.

France M.

Source

New Zealand Association of Natural Family Planning, Auckland, New Zealand.

Abstract

This paper provides a case study of a model for expanding natural family planning (NFP) from a small local program to the national level through the creation of a national association and the development of a public-private partnership. The experience of the New Zealand Association of Natural Family Planning (NZANFP) is analyzed in terms of both the benefits and barriers of using this model. Recommendations are given to guide others in developing a similar model.

PMID: 9288348

J Public Health Med. 1996 Jun;18(2):189-96.

The cost-effectiveness of family planning service provision.

Hughes D, McGuire A.

Source

City University, London.

Abstract

BACKGROUND:

Family planning services are amongst the most highly utilized services in the National Health Service. There have, however, been few empirical studies of the cost-effectiveness of these services.

METHODS:

Two measures of output were used to calculate the cost-effectiveness of family planning services. The first measure is based on the number of pregnancies averted. The second measure uses the couple year of protection as the measure of output. Accordingly, two cost-effectiveness ratios are calculated: cost per pregnancy averted and cost per couple year of protection.

RESULTS:

The direct cost per pregnancy averted is between 48 pounds and 167 pounds for reversible and 18 pounds and 21 pounds for non-reversible methods. The cost per couple year of protection is between 49 pounds and 184 pounds for reversible and 17 pounds and 21 pounds for non-reversible methods. For both approaches, if averted NHS costs associated with family planning services are included these translate into resource savings to the NHS resulting from the provision of these services.

CONCLUSION:

From the perspective adopted in this study, family planning services are highly cost-effective. According to calculations made in this paper, these services provide a high rate of return to the NHS and, when the resource consequences of unplanned pregnancies in the health sector as a whole are considered, result in resource savings.

PMID: 8816317

Eur J Popul. 1997 Jun;13(2):147-67.

The decline of fertility in Malta: the role of family planning.

Milne RG, Wright RE.

Source

Department of Political Economy, University of Glasgow, Glasgow, Scotland, G12 8RT; Department of Economics, University of Stirling, Stirling, Scotland FK9 4LA and Human Resources Research Programme, Centre for Economic Policy Research, 25-28 Old Burlington Street, London, England W1X 1LB

Abstract

This paper examines the role that family planning played in the decline of fertility in Malta. In 1993 the authors carried out a survey of family planning, similar to one carried out by one the authors in 1971. The analysis of these two surveys suggests that the practice of family planning has not increased significantly in this period. However, there has been a sharp change in the type of method used. More specifically, there has been a shift away from traditional methods (such as *coitus interruptus*) to more efficient methods (such as the contraceptive pill). There are now a range of affordable methods of contraception available in Malta. Regression techniques are used to model the choice of contraceptive method. The main aim of the empirical analysis is to establish what characteristics are associated with the use of efficient methods of contraception.

PMID: 12158979

Hum Reprod. 2007 May;22(5):1310-9. Epub 2007 Feb 20.

The effectiveness of a fertility awareness based method to avoid pregnancy in relation to a couple's sexual behaviour during the

fertile time: a prospective longitudinal study.

Frank-Herrmann P, Heil J, Gnoth C, Toledo E, Baur S, Pyper C, Jenetzky E, Strowitzki T, Freundl G.

Source

Department of Gynaecological Endocrinology and Fertility Disorders, University of Heidelberg, Vossstrasse 9, 69115 Heidelberg, Germany. petra.frank-herrmann@med.uni-heidelberg.de

Abstract

BACKGROUND:

The efficacy of fertility awareness based (FAB) methods of family planning is critically reviewed. The objective was to investigate the efficacy and the acceptability of the symptothermal method (STM), an FAB method that uses two indicators of fertility, temperature and cervical secretions observation. This paper will recommend a more suitable approach to measure the efficacy.

METHODS:

Since 1985, an ongoing prospective observational longitudinal cohort study has been conducted in Germany. Women are asked to submit their menstrual cycle charts that record daily basal body temperature, cervical secretion observations and sexual behaviour. A cohort of 900 women contributed 17,638 cycles that met the inclusion criteria for the effectiveness study. The overall rates of unintended pregnancies and dropout rates have been estimated with survival curves according to the Kaplan-Meier method. In order to estimate the true method effectiveness, the pregnancy rates have been calculated in relation to sexual behaviour using the 'perfect/imperfect-use' model of Trussell and Grummer-Strawn.

RESULTS:

After 13 cycles, 1.8 per 100 women of the cohort experienced an unintended pregnancy; 9.2 per 100 women dropped out because of dissatisfaction with the method; the pregnancy rate was 0.6 per 100 women and per 13 cycles when there was no unprotected intercourse in the fertile time.

CONCLUSIONS:

The STM is a highly effective family planning method, provided the appropriate guidelines are consistently adhered to.

PMID: 17314078

Adv Contracept. 1997 Dec;13(4):395-404.

The frequency and spectrum of congenital anomalies in natural family planning users in South America: no increase in a case-control study. NFP-ECLAMC Group. Natural Family Planning. Latin-American Collaborative Study of Congenital Malformations.

Castilla EE, Lopez-Camelo JS, da Graça Dutra M, Queenan JT, Simpson JL.

Source

ECLAMC at Instituto Oswaldo Cruz, Rio de Janeiro, Brazil.

Abstract

Users of natural family planning (NFP) practice periodic abstinence, leading many to reason that such couples should show increased anomalies in offspring as a result of fertilization involving aging gametes. In an effort to complement our NFP cohort study, we currently conducted a case-control study in the same region (South America) in which the largest number of cases have been recruited for our cohort NFP study. During 1992-94, 5324 case-control pairs of mothers were interviewed during the immediate postpartum period in 18 maternity hospitals participating in the Latin-American Collaborative Study of Congenital Malformations: ECLAMC (Spanish acronym for Latin-American Collaborative Study of Congenital Malformations). Natural family planning (NFP) usage was recorded in 6% of mothers in the ECLAMC sample studied (n = 10,648). Overall, no significant differences in frequency of NFP usage were observed between malformed cases (349/5324 = 6.6%) and normal controls (303/5324 = 5.7%) (chi 2 = 3.3; df = 1; p > 0.05). No significant differences in sex ratios were observed between children of NFP user and non-user mothers. Of special interest is the lack of association between NFP and Down syndrome, the sentinel phenotype for the hypothesis of delayed fertilization (aging gametes).

PMID: 9404549

J Obstet Gynecol Neonatal Nurs. 2004 Jan-Feb;33(1):34-43.

The future of professional education in

natural family planning.

Fehring RJ.

Source

College of Nursing and Institute for Natural Family Planning, Marquette University, Milwaukee, WI 53201-1881, USA. richard.fehring@marquette.edu

Abstract

Nurses and other health care professionals often have little knowledge of methods of natural family planning (NFP) and do not readily prescribe natural methods for their patients. One reason for this is that little or no information on NFP is provided in nursing or medical schools. The holistic, informational, and integrative nature of NFP fits well with professional nursing practice. A university online distance education NFP teacher training program, which offers academic credit and includes theory, practice, and the latest developments in fertility monitoring, has been developed for health care professionals. Professional NFP services in the United States need to meet worldwide standards and include documenting and assessing pregnancy outcomes, tailoring NFP services to the client or couple, and simplifying them for ease of use in a standard health care practice.

PMID: 14971551

Gynecol Endocrinol. 2000 Apr;14(2):81-9.

The importance of user compliance on the effectiveness of natural family planning programs.

Tommaselli GA, Guida M, Palomba S, Pellicano M, Nappi C.

Source

Department of Gynecology, Obstetrics and Pathophysiology of Human Reproduction, School of Medicine, University Federico II of Naples, Italy.

Abstract

Nowadays, there is an increasing interest in natural family planning methods. The biological basis for the application of natural family planning methods is the recognition of ovulation and, more extensively, of the fertile period. Several studies in the past decade have shown the efficacy of these methods and that the main cause of failure was either a conscious departure from the

rules of the method or erroneous application of the method. Another problem affecting natural family planning that has been highlighted is the relatively high discontinuation rate. These features are probably due to low compliance in applying the natural family planning rules, which may be too demanding for a number of couples. In this review, there are comments on the application of natural family planning methods, the discontinuation rates and the failure of the method due to mistakes in the studies carried out in the past 15 years. Steps that can be taken to limit mistakes and discontinuity are also addressed.

PMID: 10836194

Can Fam Physician. 1984 May;30:1107-9.

The ovulation method of family planning.

Muzzerall L.

Abstract

With the Billings Ovulation Method of natural family planning, women chart the symptoms of changes of their cervical mucus to determine when they are ovulating. The Ovulation Method is simple to learn, and some studies have shown it to be 98.5% effective. It can be used throughout a woman's child-bearing years. Unlike other methods of natural family planning, a woman need not have regular menstrual cycles to use the Ovulation Method. Usually, volunteer married couples trained in the method teach it; however, the physician's support can greatly increase the competence of these instructors.

PMID: 21278993

Eur J Contracept Reprod Health Care. 2012 Aug;17(4):254-9. doi: 10.3109/13625187.2012.677077. Epub 2012 Jun 10.

The role of the Standard Days Method in modern family planning services in developing countries.

Lundgren RI, Karra MV, Yam EA.

Source

Institute for Reproductive Health, Georgetown University, Washington, DC 20008, USA. lundgrer@georgetown.edu

Abstract

Background: The mere availability of family planning (FP) services is not sufficient to improve reproductive health; services must also be of adequate quality. The introduction of new contraceptive methods is a means of improving quality of care. The Standard Days Method (SDM) is a new fertility-awareness-based contraceptive method that has been successfully added to reproductive health care services around the world.

CONTENT:

Framed by the Bruce-Jain quality-of-care paradigm, this paper describes how the introduction of SDM in developing country settings can improve the six elements of quality while contributing to the intrinsic variety of available methods. SDM meets the needs of women and couples who opt not to use other modern methods. SDM providers are sensitised to the potential of fertility-awareness-based contraception as an appropriate choice for these clients. SDM requires the involvement of both partners and thus offers a natural entry point for providers to further explore partner communication, intimate partner violence, condoms, and HIV/STIs.

CONCLUSION:

SDM introduction broadens the range of FP methods available to couples in developing countries. SDM counselling presents an opportunity for FP providers to discuss important interpersonal and reproductive health issues with potential users.

PMID: 22681177

Eur J Contracept Reprod Health Care. 2010 Oct;15(5):379-80; author reply 381-2. doi: 10.3109/13625187.2010.505990.

The symptothermal (double check) method: an efficient natural method of family planning.

Soler F, Barranco-Castillo E.

Comment on

- Efficacy of contraceptive methods: A review of the literature. [Eur J Contracept Reprod Health Care. 2010]

PMID: 20863261

Contraception. 1999 Aug;60(2):65-70.

The TwoDay Algorithm: a new algorithm to

identify the fertile time of the menstrual cycle.

Sinai I, Jennings V, Arévalo M.

Source

Institute for Reproductive Health, Georgetown University, Washington, DC 20007, USA. sinaii@gunet.georgetown.edu

Abstract

Women who monitor their fertility signs and recognize when they are fertile can use this knowledge to conceive or to avoid pregnancy. Studies have shown that there is a rather small fertile window of several days during each menstrual cycle. Established methods of identifying the fertile window, such as the Ovulation and the Symptothermal methods of Natural Family Planning, can be very effective in helping couples avoid pregnancy. A new algorithm for identifying the fertile window has been developed, based on monitoring and recording of cervical secretions. The TwoDay Algorithm appears to be simpler to teach, learn, and use than current natural methods. A large existing data set from a World Health Organization study of the Ovulation Method, along with Natural Family Planning charts from women using the Ovulation Method and the Symptothermal Method, were used to determine the potential effectiveness of the TwoDay Algorithm in identifying the fertile window. Results suggest that the algorithm can be an effective alternative for low literacy populations or for programs that find current Natural Family Planning methods too time consuming or otherwise not feasible to incorporate into their services. Further studies are needed to determine the efficacy of the TwoDay Algorithm in avoiding pregnancy and to assess its acceptability to users and providers.

PMID: 10592852

J Midwifery Womens Health. 2010 Jan-Feb;55(1):e1-7. doi: 10.1016/j.jmwh.2009.02.015.

The use of lactational amenorrhea as a method of family planning in eastern Turkey and influential factors.

Türk R, Terzioğlu F, Eroğlu K.

Abstract

Although the lactational amenorrhea method (LAM) is commonly used for contraception, it frequently fails and pregnancy ensues. This descriptive study was conducted to determine the

status of the use of breastfeeding as a method of family planning and the influential factors that may have contributed to the success or failure of LAM. The research sample was comprised of 188 women with 6-month-old infants in eastern Turkey. A semistructured interview form was used for data collection in face-to-face meetings with the women during visits in their homes. In this study, 34% of the women used LAM to prevent pregnancy after childbirth. However, it was observed that only 17.2% of women using LAM fulfilled the LAM criteria with success, and 82.8% did not fulfill one or more of the LAM criteria. The pregnancy rate of women using this method was 32.8%. Two of the three basic criteria necessary for LAM to be effective were not met by the women: having menses (43.8%) and starting supplemental feeding (70.3%). Prenatal and postnatal counseling services need to be integrated and include information and education about the criteria that are necessary for LAM to be used effectively. These services should be given to women who choose to use LAM for contraception.

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PMID: 20129221

Obstet Gynecol. 2002 Dec;100(6):1333-41.

Timing intercourse to achieve pregnancy: current evidence.

Stanford JB, White GL, Hatasaka H.

Source

Health Research Center, Department of Family and Preventive Medicine, University of Utah, Salt Lake City 84108, USA. jstanford@dfpm.utah.edu

Abstract

Physicians who counsel women for preconception concerns are in an excellent position to give advice to couples regarding the optimal timing of intercourse to achieve pregnancy. The currently available evidence suggests that methods that prospectively identify the window of fertility are likely to be more effective for optimally timing intercourse than calendar calculations or basal body temperature. There are several promising methods with good scientific bases to identify the fertile window prospectively. These include fertility charting of vaginal discharge and a commercially available fertility monitor. These methods identify the occurrence of ovulation clinically and also identify a longer window of fertility than urinary luteinizing hormone kits. Prospectively identifying the full window of fertility may lead to higher rates of conception. Proper information given early in the course of trying to achieve pregnancy is likely to reduce time to conception for many couples, and also to reduce unnecessary intervention and cost.

PMID: 12468181
Am J Obstet Gynecol. 1995 May;172(5):1567-72.

Timing of conception and the risk of spontaneous abortion among pregnancies occurring during the use of natural family planning.

Gray RH, Simpson JL, Kambic RT, Queenan JT, Mena P, Perez A, Barbato M.

Source

Department of Population Dynamics, School of Hygiene and Public Health, Johns Hopkins University, Baltimore, MD 21205, USA.

Abstract

OBJECTIVE:

Our purpose was to ascertain the effects of timing of conception on the risk of spontaneous abortion.

STUDY DESIGN:

To assess these effects, women who conceived while using natural family planning were identified in five centers worldwide between 1987 and 1993. Timing of conception was determined from 868 natural family planning charts that recorded day of intercourse and indices of ovulation (cervical mucus peak obtained according to the ovulation method and/or basal body temperature). Conceptions on days - 1 or 0 with respect to the natural family planning estimated day of ovulation were considered to be "optimally timed," and all other conceptions were considered as "non-optimally timed." The rate of spontaneous abortions per 100 pregnancies was examined in relation to timing of conception, ages, reproductive history, and other covariates with bivariate and multivariate statistical methods.

RESULTS:

There were 88 spontaneous abortions among 868 pregnancies (10.1%). The spontaneous abortion rate was similar for 361 optimally timed conceptions (9.1%) and 507 non-optimally timed conceptions (10.9%). However, among 171 women who had experienced a spontaneous abortion in a prior pregnancy, the rate of spontaneous abortion in the index pregnancy was significantly higher with non-optimally timed conceptions (22.6%) as compared with optimally timed conceptions (7.3%). This association was not observed among 697 women with no history

of pregnancy loss. The adjusted relative risk of spontaneous abortion among women with non-optimally timed conceptions and a history of pregnancy loss was 2.35 (95% confidence intervals 1.42 to 3.89). The excess risk of spontaneous abortion was observed with both preovulatory and postovulatory conceptions.

CONCLUSIONS:

Overall, there is no excess risk of spontaneous abortion among the pregnancies conceived during natural family planning use. However, among women with a history of pregnancy loss, there is an increased risk of spontaneous abortion associated with preovulatory or postovulatory delayed conceptions.

PMID: 7755073

Obstet Gynecol. 2002 Dec;100(6):1333-41.

Timing intercourse to achieve pregnancy: current evidence.

Stanford JB, White GL, Hatasaka H.

Source

Health Research Center, Department of Family and Preventive Medicine, University of Utah, Salt Lake City 84108, USA. jstanford@dfpm.utah.edu

Abstract

Physicians who counsel women for preconception concerns are in an excellent position to give advice to couples regarding the optimal timing of intercourse to achieve pregnancy. The currently available evidence suggests that methods that prospectively identify the window of fertility are likely to be more effective for optimally timing intercourse than calendar calculations or basal body temperature. There are several promising methods with good scientific bases to identify the fertile window prospectively. These include fertility charting of vaginal discharge and a commercially available fertility monitor. These methods identify the occurrence of ovulation clinically and also identify a longer window of fertility than urinary luteinizing hormone kits. Prospectively identifying the full window of fertility may lead to higher rates of conception. Proper information given early in the course of trying to achieve pregnancy is likely to reduce time to conception for many couples, and also to reduce unnecessary intervention and cost.

PMID: 12468181

Adv Contracept. 1994 Jun;10(2):111-9.

Trial of a new method of natural family planning in Liberia.

Kambic RT, Lanctot CA, Wesley R.

Source

Department of Population Dynamics, Johns Hopkins University School of Hygiene and Public Health, Baltimore, MD 21205.

Abstract

This paper describes the evaluation of a new method of natural family planning (NFP) in Liberia. The Modified Mucus Method (MMM) was developed to address the need for a simple method of charting for poor and illiterate women. The acceptance, use, and cost-effectiveness of the MMM were compared with standard NFP methods, the sympto-thermal and ovulation method (ST/OM), used in the same population. The personal discontinuation rate of MMM users was 27.3 per 100 women per year compared with 3.2 among ST/OM users. Unplanned pregnancy rates were low for both MMM and ST/OM, 6.6 and 1.5 respectively. The cost per couple year protection (CYP) for MMM was $55.80 and for ST/OM $56.10. There were differences in characteristics between MMM and ST/OM clients. The MMM clients were more likely to have attended school and to have used a family planning method previously, and were less likely to be housewives. We conclude that the MMM in Liberia was provided to an inappropriate sample of women, educated and middle-class rather than poor and illiterate. The MMM users were dissatisfied and discontinued at the rate of 44 per 100 women entering per year. This is an unfair evaluation of the MMM because of the unsuitable study population. It is our opinion that the MMM needs more study to become part of the inventory of birth spacing methods.

PMID: 7942258

Contraception. 2011 Aug;84(2):144-9. doi: 10.1016/j.contraception.2010.11.011. Epub 2011 Jan 7.

TwoDay Method: a quick-start approach.

Jennings V, Sinai I, Sacieta L, Lundgren R.

Source

Institute for Reproductive Health, Georgetown University, Washington, DC 20008, USA.

Abstract

BACKGROUND:

Requiring that women wait until the onset of menses to initiate a family planning method is a medical barrier that can result in unintended pregnancies. In the efficacy study of the TwoDay Method, a new fertility awareness-based method of family planning, women were taught the method in the first seven days of their cycles. This study tested a quick-start approach (providing the method at any time in the cycle) to TwoDay Method delivery.

STUDY DESIGN:

In Peru, 167 women were counseled in TwoDay Method use (regardless of cycle day) and followed for up to 7 months. They were interviewed periodically to assess their use of and satisfaction with the method. Simulated clients gauged providers' ability to correctly counsel in method use at different times of the cycle.

RESULTS:

No significant differences were observed in correct use, continuation rates, and acceptability of the method among women who were counseled at different points in the cycle; quality of counseling was not undermined by the quick-start approach.

CONCLUSIONS:

There is no need to limit delivery of the TwoDay Method to the first seven days of the menstrual cycle.

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PMID: 21757055

J Obstet Gynecol Neonatal Nurs. 1994 May;23(4):303-9.

Use effectiveness of the Creighton model ovulation method of natural family planning.

Fehring RJ, Lawrence D, Philpot C.

Source

Marquette University College of Nursing, Milwaukee, WI 53233.

Abstract

OBJECTIVE:

To determine the use effectiveness of the Creighton model ovulation method in avoiding and achieving pregnancy.

DESIGN:

Prospective, descriptive.

SETTING:

A natural family planning clinic at a university nursing center.

PARTICIPANTS:

Records and charts from 242 couples who were taught the Creighton model. The sample represented 1,793 months of use of the model.

MAIN OUTCOME MEASURE:

Creighton model demographic forms and logbook.

RESULTS:

At 12 months of use, the Creighton model was 98.8% method effective and 98.0% use effective in avoiding pregnancy. It was 24.4% use effective in achieving pregnancy. The continuation rate for the sample at 12 months of use was 78.0%.

CONCLUSION:

The Creighton model is an effective method of family planning when used to avoid or achieve pregnancy. However, its effectiveness depends on its being taught by qualified teachers. The effectiveness rate of the Creighton model is based on the assumption that if couples knowingly use the female partner's days of fertility for genital intercourse, they are using the method to achieve pregnancy.

Comment in

- Natural family planning. [J Obstet Gynecol Neonatal Nurs. 1994]

PMID: 8057183

J Nurse Midwifery. 1995 May-Jun;40(3):269-76.

Using an ovarian monitor as an adjunct to natural family planning.

Cavero C.

Source

Clinical Research Facility, University of California, San Diego, La Jolla 92093-0620, USA.

Abstract

The need to identify a reliable ovulation predictor has received attention by the scientific community in recent years. For couples practicing natural family planning, a more precise identification of the fertile phase would be a welcome adjunct to their method. A home ovarian monitor invented by Professor J. B. Brown of Melbourne, Australia, enables couples to measure the principal urinary metabolite of ovarian estrogen and progesterone. The charted results reveal the hormonal pattern of the menstrual cycle and thus identify the beginning, peak, and end of the fertile period. A study involving 21 couples was conducted with the purpose of assessing overall acceptability, including ease of use, motivation, and client satisfaction. At the completion of the study, 12 couples indicated a high degree of motivation and satisfaction with the monitor. None reported difficulty with the test procedure. Increased confidence in natural family planning was cited as the most positive evaluation and the time required to perform the test, as the most negative.

PMID: 7798132

Contraception. 2000 Apr;61(4):253-7.

Using complete breastfeeding and lactational amenorrhoea as birth spacing methods.

Tommaselli GA, Guida M, Palomba S, Barbato M, Nappi C.

Source

Department of Obstetrics and Gynecology, Faculty of Medicine and Surgery, University of Naples, Federico II, Italy. gtommaselli@yahoo.it

Abstract

The aim of this study was to evaluate the effectiveness of lactational amenorrhoea and to determine the relationship between extended breastfeeding and the return of fertility. Breastfeeding pattern, basal body temperature, cervical mucus, salivary ferning, vaginal blood discharge, frequency of sexual intercourse, and the presence of ovulation in the first cycle after the resumption of menses with ultrasonography were evaluated in 40 women. All subjects completed the study with only one case of incomplete breastfeeding. No pregnancies were observed. The mean number of feeding sessions and mean interval between sessions decreased significantly ($p < 0.01$) during the first six months postpartum (7.5 +/- 1.3 after 60 days

postpartum vs. 5.7 +/- 2.1 after 180 days, and 3.6 +/- 0.8 vs. 5.1 +/- 0.9, respectively). Eight women (20%) menstruated before weaning, but none had an adequate thermal shift, while 32 (80%) had their first vaginal bleeding after weaning with 12 (37.5%) registering an adequate thermal shift. Both basal body temperature and salivary ferning proved to be suggestive of ovarian activity, while mucus characteristics were not reliable in identifying fertile periods. Our study showed that breastfeeding associated with lactational amenorrhoea proved to be a good method of postpartum fertility control. Since the importance of supplementation is still debated, it is recommended that a "complete" breastfeeding program be used.

PMID: 10899480

J Obstet Gynecol Neonatal Nurs. 1997 Nov-Dec;26(6):643-8.

What nurses should know about natural family planning.

Trent AJ, Clark K.

Source

Couple to Couple League International, Inc., Kansas City, MO, USA.

Abstract

Two common natural family planning (NFP) methods are the ovulation method based on characteristics of cervical mucus and the symptothermal method based on changes in cervical mucus, basal body temperature, and the cervix. Both methods are effective when used correctly. Nurses should understand the principles of NFP and introduce these methods in discussions of family planning options. Interested clients should be referred to a certified NFP instructor for education and supervision.

PMID: 9395972

Fertil Steril. 1998 Sep;70(3):448-60.

The World Health Organization Multinational Study of Breast-feeding and Lactational Amenorrhea. I. Description of infant feeding patterns and of the return of menses. World Health Organization Task

Force on Methods for the Natural Regulation of Fertility.

[No authors listed]

Abstract

OBJECTIVE:

To detect differences between populations in both infant feeding practices and the duration of lactational amenorrhea, if they exist.

DESIGN:

Prospective, nonexperimental, longitudinal follow-up study.

SETTING:

Five developing and two developed countries.

PATIENT(S):

Four thousand one hundred eighteen breast-feeding mothers and their infants.

INTERVENTION(S):

Breast-feeding women collected ongoing information about infant feeding and family planning practices, plus the return of menses. Fortnightly follow-up occurred in the women's homes.

MAIN OUTCOME MEASURE(S):

Breast-feeding frequency by day (and by night); 24-hour breast-feeding duration, percent of all infant feedings that were milk/milk-based (and solid/semisolid foods); time until the end of full breast-feeding; time until regular supplementation; and time until the end of lactational amenorrhea.

RESULT(S):

Differences between the centers in the duration of amenorrhea were substantial, ranging from a median of 4 months in New Delhi (India) to 9 months in Chengdu (China). Women in developed countries (but also women in Chengdu) were more likely to delay supplementation (for up to 5 months), whereas women in Santiago (Chile), Guatemala City (Guatemala), and Sagamu (Nigeria) started supplements much earlier, sometimes as early as 1 week after birth.

CONCLUSION(S):

Both breast-feeding behavior and the duration of lactational amenorrhea vary markedly across settings, indicating that breast-feeding promotion and family planning advice should be site- and culture-specific.

PMID: 9757873

Fertil Steril. 1998 Sep;70(3):461-71.

The World Health Organization Multinational Study of Breast-feeding and Lactational Amenorrhea. II. Factors associated with the length of amenorrhea. World Health Organization Task Force on Methods for the Natural Regulation of Fertility.

[No authors listed]

Abstract

OBJECTIVE:

To determine the relation between infant feeding practices (and other factors) and the duration of postpartum amenorrhea, and to establish whether there are real differences in the duration of postpartum amenorrhea for similar breast-feeding practices in different populations.

DESIGN:

Prospective, nonexperimental, longitudinal follow-up study.

SETTING:

Five developing and two developed countries.

PATIENT(S):

Four thousand one hundred eighteen breast-feeding mothers and their infants.

INTERVENTION(S):

Breast-feeding women collected ongoing information about infant feeding and family planning practices, plus the return of menses. Fortnightly follow-up occurred in the women's homes.

MAIN OUTCOME MEASURE(S):

A multivariate analysis explored the association between the risk of menses return and 16 infant feeding variables and 11 other characteristics.

RESULT(S):

Ten factors (in addition to center effects) were significantly related to the duration of amenorrhea. Seven of these were infant feeding characteristics and the remaining three were high parity, low body mass index, and a higher frequency of infant illness.

CONCLUSION(S):

The breast-feeding stimulus is strongly linked to the duration of postpartum amenorrhea. Cross-cultural effects also are extremely important and may have caused the variations in feeding, the variation in amenorrhea, or both.

PMID: 9757874

Fertil Steril. 1999 Sep;72(3):431-40.

The World Health Organization multinational study of breast-feeding and lactational amenorrhea. III. Pregnancy during breast-feeding. World Health Organization Task Force on Methods for the Natural Regulation of Fertility.

[No authors listed]

Abstract

OBJECTIVE:

To determine the risk of pregnancy during lactational amenorrhea relative to infant feeding

status.

DESIGN:

Prospective longitudinal study.

SETTING:

Five developing and two developed countries.

PATIENT(S):

Four thousand one hundred eighteen breast-feeding mother-infant pairs.

INTERVENTION(S):

Infant feeding practices, menstrual status, and pregnancy were measured.

MAIN OUTCOME MEASURE(S):

Life-table rates of pregnancy.

RESULT(S):

In the first 6 months after childbirth, cumulative pregnancy rates during amenorrhea, depending on how the end of amenorrhea was defined, ranged from 0.9% (95% confidence interval [CI] = 0%-2%) to 1.2% (95% CI = 0%-2.4%) during full breast-feeding, and from 0.7% (95% CI = 0.1%-1.3%) to 0.8% (95% CI = 0.2%-1.4%) up to the end of partial breast-feeding. At 12 months, the rates ranged from 6.6% (95% CI = 1.9%-11.2%) to 7.4% (95% CI = 2.5%-12.3%) during full breast-feeding, and from 3.7% (95% CI = 1.9%-5.5%) to 5.2% (95% CI = 3.1%-7.4%) up to the end of partial breast-feeding.

CONCLUSION(S):

These results support the Bellagio Consensus on the use of lactational amenorrhea for family planning, and confirm that the lactational amenorrhea method is a viable approach to postpartum contraception.

PMID: 10519613

Fertil Steril. 1999 Sep;72(3):441-7.

The World Health Organization multinational study of breast-feeding and

lactational amenorrhea. IV. Postpartum bleeding and lochia in breast-feeding women. World Health Organization Task Force on Methods for the Natural Regulation of Fertility.

[No authors listed]

Abstract

OBJECTIVE:

To describe and compare the duration of lochia in seven groups of women; to investigate the occurrence of a possible "end-of-puerperium" bleeding episode; and to determine the frequency of bleeding episodes before postpartum day 56, which applies to the practice of the lactational amenorrhea method of contraception.

DESIGN:

Prospective longitudinal study with fortnightly follow-up, beginning within 7 days of delivery.

SETTING:

Five developing and two developed countries.

PATIENT(S):

Four thousand one hundred eighteen breast-feeding women.

INTERVENTION(S):

Postpartum lochia and all days of bleeding per vaginam were recorded.

MAIN OUTCOME MEASURE(S):

Duration of lochia, frequency of an end-of-puerperium bleeding episode, and frequency of postlochia bleeding episodes within 56 days of delivery.

RESULT(S):

The median duration of lochia was 27 days; it varied significantly among the centers (range, 22-

34 days). In 11% of the women, lochia lasted >40 days. An end-of-puerperium bleeding episode around the 40th day postpartum was reported by 20.3% of the women. Bleeding within 56 days of delivery (separated from lochia by at least 14 days) occurred in 11.3% of the women and usually was followed by a confirmatory bleeding episode 21-70 days later.

CONCLUSION(S):

The duration of lochia varied significantly among the study populations, and long durations were not unusual. The significance of the end-of-puerperium bleeding episode is unknown. Most users of the lactational amenorrhea method will not experience a postlochia bleeding episode before postpartum day 56.

PMID: 10519614

BMC Womens Health. 2007 Jun 27;7:10.

Women's attitudes towards mechanisms of action of family planning methods: survey in primary health centres in Pamplona, Spain.

de Irala J, Lopez del Burgo C, Lopez de Fez CM, Arredondo J, Mikolajczyk RT, Stanford JB.

Source

Department of Preventive Medicine and Public Health, School of Medicine, University of Navarra, Irunlarrea 1, 31008 Pamplona, Spain. jdeirala@unav.es

Abstract

BACKGROUND:

Informed consent in family planning includes knowledge of mechanism of action. Some methods of family planning occasionally work after fertilization. Knowing about postfertilization effects may be important to some women before choosing a certain family planning method. The objective of this survey is to explore women's attitudes towards postfertilization effects of family planning methods, and beliefs and characteristics possibly associated with those attitudes.

METHODS:

Cross-sectional survey in a sample of 755 potentially fertile women, aged 18-49, from Primary Care Health Centres in Pamplona, Spain. Participants were given a 30-item, self-administered, anonymous questionnaire about family planning methods and medical and surgical abortion. Logistic regression was used to identify variables associated with women's attitudes towards

postfertilization effects.

RESULTS:

The response rate was 80%. The majority of women were married, held an academic degree and had no children. Forty percent of women would not consider using a method that may work after fertilization but before implantation and 57% would not consider using one that may work after implantation. While 35.3% of the sample would stop using a method if they learned that it sometimes works after fertilization, this percentage increased to 56.3% when referring to a method that sometimes works after implantation. Women who believe that human life begins at fertilization and those who consider it is important to distinguish between natural and induced embryo loss were less likely to consider the use of a method with postfertilization effects.

CONCLUSION:

Information about potential postfertilization effects of family planning methods may influence women's acceptance and choice of a particular family planning method. Additional studies in other populations are necessary to evaluate whether these beliefs are important to those populations.

PMID: 17596261

J Fam Pract. 1998 Jan;46(1):65-71.

Women's interest in natural family planning.

Stanford JB, Lemaire JC, Thurman PB.

Source

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Abstract

BACKGROUND:

In the United States, approximately 4% of women of reproductive age use natural family planning (NFP) to avoid pregnancy. It is unclear whether this low number is related to a lack of available information, women's lack of interest, or other factors. Our study examined women's interest in using NFP either to become pregnant or to avoid it.

METHODS:

A questionnaire was mailed to 1500 women, aged 18 to 50, who were randomly selected from driver's license renewal records in Missouri for the year beginning July 1991 and ending June

1992.

RESULTS:

Of the 747 returned questionnaires, 484 were from women who were still potentially fertile. Of these women, 22.5% indicated that they would be likely or very likely to use NFP in the future to avoid pregnancy, and 37.4% indicated that they would be likely or very likely to use NFP in the future to become pregnant. Only 2.8% were currently using a method of NFP. Past use of any method of NFP (including the outdated calendar rhythm method) to avoid pregnancy was associated with interest in future use of modern methods of NFP to avoid pregnancy. Past use of NFP to become pregnant and the possible desire for future pregnancy were associated with interest in future use of NFP to conceive.

CONCLUSIONS:

Many women who are not currently using NFP indicated that they are interested in doing so in the future, either to avoid pregnancy or to conceive. Interest in future use of NFP is associated with, but not limited to, those who have previously used NFP.

PMID: 9451372

Contraception. 1999 May;59(5):277-86.

Women's satisfaction with birth control: a population survey of physical and psychological effects of oral contraceptives, intrauterine devices, condoms, natural family planning, and sterilization among 1466 women.

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Source

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Abstract

User satisfaction and the physical and psychological effects of five commonly used contraceptive methods were investigated in a population survey among 1466 West German women. The focus was on effects attributed by current and past users to these methods, rather than objectively

assessed effects, to shed further light on personal experiences that are highly relevant to the user but often remain unknown to prescribers and unreported in the medical literature. Within the overall sample, 1303 women were surveyed concerning their current or past use of oral contraceptives (OC), 996 regarding condoms, 342 with respect to intrauterine devices (IUD), 428 in regard to natural family planning (NFP), and 139 in relation to sterilization (respondents completed questions about each method used). It emerged that satisfaction was greatest with sterilization (92% of users), followed by OC (68% of ever users), IUD (59%), NFP (43%), and condoms (30%). Almost one in three NFP users had experienced an unwanted pregnancy during use of this method, as compared with one in 20 OC and condom users. The majority of users reported no mood changes during use of the methods studied. The percentages reporting negative mood changes (various items were scored) were up to 16% among OC users, 23% among condom users, and 30% among NFP users. The latter observations suggested that subjective side effects of a contraceptive agent on mood generally reflected, at least in part, the user's sense of confidence in the method concerned (notably, with regard to efficacy and safety). Oral contraceptives, IUD, and sterilization had a broadly positive impact on sex life, whereas that of condoms was often negative. Whereas OC users often reported less heavy and painful menstruation (in up to 56% of cases), IUD were associated with heavier, prolonged, and more painful menstruation (in up to 65% of cases), as also was sterilization, although to a lesser extent (in up to 32% of cases). Overall, the study findings indicated that OC and sterilization had less negative impact on physical and psychological functioning than the other methods studied, in contrast to what the general public often believes.

PMID: 10494480