

The Influence of Contraception on Abortion among Women of Reproductive Age in the United States

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ABSTRACT: A common notion is that contraception is necessary for women (and couples) to avoid unwanted pregnancies and abortions. The thesis of this paper is that contraception actually leads to more (not less) abortions. On the other hand, the use of natural family planning (NFP) and the acceptance of fertility lend themselves to an openness to life. The specific purpose of the paper is to describe the influence of contraceptive use and of NFP on the likelihood of having an abortion among women of reproductive age. The rate of those who at one time or another used any method of contraception coincides with the likelihood of ever having an abortion to a high degree. By contrast, those who at any time used NFP do not have any significant likelihood of ever having an abortion. From the data studied, it appears that contraception contributes to the likelihood of having an abortion and NFP prevents that likelihood. Promotion of the use of NFP among married couples and chastity among adolescents are ways of contributing to the culture of life.

FAMILY PLANNING HEALTHCARE PROFESSIONALS and population researchers have for many years been promoting the use of contraception as a means of decreasing unwanted pregnancies and, in turn, abortions. The statistic commonly cited in this effort is that approximately half of all

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abortions in the United States are among women who are not currently using contraception.¹ The thinking is that if we can get more reproductive age women to use contraception – especially contraceptive methods that do not involve too many behaviors and can be used and forgotten (i.e., sterilization and the intrauterine contraceptive device) – the more likely it is that there will be fewer unplanned pregnancies and abortions. The use and promotion of emergency contraception has also been seen (and continues to be seen) as a means to decrease unwanted pregnancy and abortions.² Emergency contraception is promoted as a backup contraceptive (e.g., when a condom slips off) or after an occasional act of “unprotected” intercourse.

The proposition that more contraception, easily available contraception, and that emergency contraception as a back-up contraceptive will lead to less abortion seems to make sense at first look. I propose, however, that a deeper understanding of human sexuality actually renders this proposition false and that real life evidence supports my proposal. For example, population researchers have found that while the use of contraceptive methods increased significantly in Spain from 49.1% of the participants in 1997 to 79.9% in 2007 among women of reproductive age, the rate of voluntary interruption of pregnancy (abortion) also rose from 5.52 per 1000 women in 1997 to 11.49 per 1000 women in 2007 (i.e., from 49,578 in 1987 to 112,138 in 2007).³ The Spanish population researchers speculated that the increased availability and use of contraception resulted in more abortions because Spanish adolescents are initiating sexual intercourse at a younger age than in the past, that there is an inconsistent use of contraception (in particular the pill and the condom), and that the increased number of immigrants into Spain have a lower education

¹ R. B. Gold, *Abortion and Women's Health: A Turning Point for America?* (New York NY: The Alan Guttmacher Institute, 1990), pp. 1-74; H. W. Ory, J. D. Forrest, and R. Lincoln, *Making Choices: Evaluating the Health Risks and Benefits of Birth Control Methods* (New York NY: The Alan Guttmacher Institute, 1983), pp. 1-72; K. Cleland, J.F. Peipert, C. Westhoff, S. Spear, and J. Trussell, “Family Planning as a Cost-Saving Preventive Health Service,” *The New England Journal of Medicine* 364 (2011): e37.

² J. Trussell, F. Stewart, F. Guest, and R.A. Hatcher, “Emergency Contraceptive Pills: A Simple Proposal to Reduce Unintended Pregnancies,” *Family Planning Perspective* 24 (1992): 269-73.

³ J. L. Dueñas, I. Lete, and R. Bermejo, et al., “Trends in the Use of Contraceptive Methods and Voluntary Interruption of Pregnancy in the Spanish Population during 1997-2007,” *Contraception* 83 (2011): 82-87.

level and become pregnant more often. The Spanish population researchers suggested (without good evidence) that increased use of emergency contraception might help reduce the rate of abortions in Spain.

Other researchers have reviewed the parallel rise in the use of contraception and abortion rates in thirteen countries around the world.⁴ They found that in seven countries, i.e., Kazakhstan, Kyrgyzstan, Uzbekistan, Bulgaria, Turkey, Tunisia, and Switzerland, abortion rates decreased as the prevalence of modern forms of contraception rose. However, in six other countries, i.e., Cuba, Denmark, the Netherlands, the United States, Singapore, and the Republic of Korea, the levels of contraception availability and prevalence of use also resulted in an increased rate of abortions. The researchers explained that the reason that abortion increased in these countries was that the amount of fertility increased and overwhelmed the contraceptive system. Increased fertility is a result of younger population, earlier initiation of intercourse by adolescents, and the immigration of reproductive age women.

The use of emergency contraception seems to have been a big failure in the reduction of the abortion rates in this country and others. For example, in a study conducted in Scotland, demographic researchers determined that a massive media promotion of emergency contraception and making it readily available to sexually active women showed no decrease in abortion rates compared to counties that did not promote it.⁵ Similar studies in China and in the United States also found no decrease in abortion rates with the introduction of emergency contraception.⁶ A trio of researchers from Family Health International, the Office of Population Research at Princeton University, and the Department of Family and Reproductive Health at the Johns Hopkins Bloomberg School of Public Health systematically investigated the published literature to determine if increased access to emergency contraception pills influenced the use of the pills and unintended pregnancy rates.⁷ An extensive

⁴ C. Marston & J. Cleland, "Relationships between Contraception and Abortion: A Review of the Evidence," *International Family Planning Perspectives* 29 (2003): 1-12.

⁵ A. Glasier, K. Fairhurst, and S. Wyke, et al., "Advanced Provision of Emergency Contraception Does Not Reduce Abortion Rates," *Contraception* 69 (2004): 361-66.

⁶ X. Hu, L. Cheng, X. Jua, and A. Glasier, "Advanced Provision of Emergency Contraception to Postnatal Women in China Makes No Difference in Abortion Rates: A Randomized Controlled Trial," *Contraception* 72 (2005): 111-16.

⁷ J. Trussell, E.B. Schwartz, K. Guthrie, and E. Raymond, "No Such Thing as an

search of four literature data sets showed that there were 23 articles (published between 1998 and 2006) that met their selection criteria. Of these, ten were randomized control trials, four were cohort studies, and the others were population based studies. The results from the studies convincingly showed that greater access to emergency contraception increased the use of emergency contraception pills. There was, however, no evidence that increased access led to decreased unintended pregnancy or abortion rates. They concluded that further research is needed to explain the best ways to use emergency contraception to produce a public health benefit.

Although it seems logical that the greater availability of contraception and more use of contraception would lower unintended pregnancies and the abortion rate, this might not be true. Several ethicists and philosophers have provided reasons why contraceptive availability and use might actually increase the abortion rates. For example, Janet Smith has noted that most abortions occur in the case of unwanted pregnancy by sexual activity outside of marriage and facilitated by contraception.⁸ Cohabiting couples who wish to be sexually active and childless often use contraception, but then also use abortion when an unintended pregnancy occurs. Richard Doerflinger from the U.S. Conference of Catholic Bishops speculated that the reason that contraception is linked to abortion is because abortion is viewed as a needed back-up to failed contraception.⁹

Saint John Paul II called contraception and abortion fruits of the same tree.¹⁰ My interpretation of his claim is that contraception is a rejection of fertility and a separation of it from human sexuality while abortion is a rejection of the unborn child. Contraception looks upon fertility as an enemy to be avoided. If “sexually responsible” women/couples get pregnant with

Easy (or EC) Fix,” *Contraception* 78 (2008): 351-54; C.B. Polis, E.G. Raymond, and J. Trussell, “Facing the Facts on Advance Provision of Emergency Contraception,” *Contraception* 82 (2010): 579-80.

⁸ J. Smith, *The Connection Between Contraception and Abortion*, downloaded from One More Soul Web site, June 3, 2011, at: <http://onemoresoul.com/contraception/risks-consequences/the-connection-between-contraception-and-abortion.html>.

⁹ R.M. Doerflinger, *The Prevention Deception: How Not to Reduce Abortions* (Washington, D.C.: Secretariat for Pro-Life Activities, U.S. Conference of Catholic Bishops, 2007).

¹⁰ Pope John Paul II, *Evangelium vitae* (The Gospel of Life) in *Origins* 24/42 (6 April 1995): 694-95.

contraception, then it was not their fault and as a result they do not feel responsible for the child. On the other hand, use of natural family planning (NFP) involves acceptance and appreciation of one's fertility and the mutual and responsible cooperation of the husband and wife in living with their fertility. As such, couples who believe in NFP and use it will not readily resort to abortion when an unintended pregnancy occurs.

One way of determining if there is a connection between contraception and abortion – i.e., whether contraception facilitates or prevents abortion – is to analyze evidence of contraception and NFP use among sexually active women of reproductive age and then to ascertain the likelihood of them having an abortion. The purpose of this study is to determine the influence of having ever used any of the common forms of contraception – i.e., the pill, sterilization (male and female), the male condom, withdrawal, Depo Provera/hormonal injections, emergency contraception – on the likelihood of having an abortion among women between the ages of 18 and 44 in the United States. A second purpose is to determine the influence of NFP on the likelihood of ever having an abortion among U.S. women of reproductive age. The more specific research questions to be answered are these:

Question #1: What is the likelihood of ever having abortion among sexually active U.S. women who ever used common forms of family planning?

Question #2: What is the likelihood of ever having abortion among sexually active U.S. women who ever used NFP?

Question #3: What is the likelihood of ever having an abortion in the past year among sexually active U.S. women who ever used common forms of family planning?

Question #4: What is the likelihood of ever having abortion in the past year among sexually active U.S. women who ever used NFP?

Methodology

The National Survey of Family Growth (NSFG) has been conducted by the National Center for Health Statistics (NCHS) and the Center for Disease Control and Prevention (CDC) approximately every five to seven years since 1973.¹¹ The NSFG includes factors that help explain trends in contraception

¹¹ W.D. Mosher and J. Jones, "Use of Contraception in the United States: 1982-

use, infertility, sexual activity, and pregnancy outcomes. Researchers at the NCHS provide the data for legislatures and policy makers to plan health services and health education programs. The NSFG is also available to researchers who may use the data set to determine trends in family health, contraceptive use, infertility, and sexual health choices.

The NSFG is conducted by demographic researchers at the University of Michigan using a nationally representative, randomly selected sample of women (and, since 2002, men) aged 15-44 in the U.S. Interviews are conducted in person and take approximately eighty minutes to complete. Sensitive questions (such as the use of abortion) are asked through a self-paced computer-assisted interview program. The response rates of these surveys range from 75% to 80%. In 2010, data sets were released from Cycle 7 of the NSFG, which was conducted from January 2006 through June 2010. There are 7,356 women participants in the 2006-2008 Cycle 7 of the NSFG and 3,577 variables in the data set.

The variables analyzed from this data set for this study were: (1) the “current use” of the hormonal contraceptive pill, vasectomy, female sterilization, male condom, intrauterine device (IUD), withdrawal, and NFP; (2) the “ever use” of the pill, vasectomy, female sterilization, male condom, withdrawal, IUD, and NFP; (3) if the respondent ever had an abortion; and (4) whether the respondent had an abortion in the past twelve months. NFP included the use of temperature or cervical mucus monitoring. Use of the IUD was only in the past twelve months.

Descriptive statistics were used to determine the demographic makeup of the sample, including age, marital status, race, and religion. Chi square and relative risk odds ratios (OR) were calculated, i.e., the likelihood at any time to have an abortion by ever using any method of contraception, with a 95% confidence interval (CI). Statistical significance was set at the 0.05 probability level, and in order to control for increased error rates with multiple testing the Bonferonni average of .006 was determined. Statistical analysis was performed by the use of the Statistical Package for Social Sciences (SPSS version 17).

2008,” *Vital and Health Statistics Series 23*, no. 29 (2010): 1-771; W.D. Mosher, “Use of Contraception and Use of Family Planning Services in the United States: 1982-2002,” *Advanced Data* 10 (2004): 1-36; L.J. Piccinino and W.D. Mosher, “Trends in Contraceptive Sse in the United States: 1982-1995,” *Family Planning Perspectives* 30 (1998): 4-10, 46.

Only those women who indicated that they were heterosexually active were included in the data analysis.

The NSFG Cycle 7 data set is available through the NCHS and is downloadable through the Internet into SPSS files. The data set does not contain any identifying variables and is intended for public use. Some very sensitive variables, such as whether the respondent had an abortion or not, are handled through a computer-assisted interview and not in-person. Use of this data set was reviewed by the Office of Research Compliance at Marquette University and received exempt status.

Results

Demographics. Of the 7,356 women participants in the Cycle 7 NSFG data set, 6,329 indicated that they were sexually active. The mean age of these women was 30.17 (range 15-45), 39% of whom were married, 13% cohabitating, and 36% never married. The majority (67%) were of the Caucasian race, 22% were listed as Black, and 11% other races. The majority (46.4%) listed their religion as Protestant, 26% were Catholic, 8.7% other religion, and 18.9% no religion.

Current and Ever Use of Family Planning Methods. The frequency (and percentage) of current and ever use of family planning methods among the sexually active participants in the NSFG Cycle 7 Data Set is presented in Table 1. The most frequent current method of family planning (when you combine the female and male partners) among sexually active women in the U.S. is sterilization, followed by the hormonal birth control pill, and the male condom. The most frequent methods of family planning that these women “ever used” were the male condom, the pill, and withdrawal. Current use of NFP by U.S. women is only 0.2% and ever use is 3.8%. The percentage of abortions in the past year was only 1.3% but ever use of abortion was 15.3%.

Likelihood of Abortion with Ever Use of Family Planning Methods. Table 2 shows the likelihood odds ratios (OR) of ever having an abortion based on ever use of a method of contraception and NFP. Likelihood ORs based on the percentage above or below 1.00 compared to a group that has never used that particular method of contraception. The chance of ever having an abortion is 209% more likely among those women who indicated use of the condom with their male sexual partner as compared to those women who never used

condoms with a male sexual partner. The only method of family planning that had a lower likelihood of having an abortion is surgical sterilization, i.e., a 17% lower likelihood compared to those women who never had a surgical sterilization. There was no greater likelihood of having an abortion among those women who ever used natural family planning methods compared to those who never used NFP.

Likelihood of Abortion in Past Twelve Months with Ever Use of Family Planning Methods. Table 3 provides the likelihood odds ratios (OR) of having an abortion in the past twelve months based on ever use of methods of contraception and NFP. The highest likelihood of having an abortion in the past twelve months is 1,660% among women who have been surgically sterilized (compared to those who never were sterilized), followed by the male condom with a 577% likelihood (compared with those women whose partners never used the male condom, and emergency contraception with a 225% likelihood of having an abortion in the past twelve months (compared with those who never used emergency contraception). All methods of contraception had some level of likelihood of having an abortion in the past year except for the use of the IUD, which did not meet the level of significance. The ever use of NFP did not have any greater likelihood of an abortion in the past twelve months compared with those women who indicated that they never used NFP.

Auxiliary Information: Current Use of the Pill and Condom and Abortion Rate. The rate of abortion among those currently using the birth control pill was 1.9% and among those currently using the male condom 2.7%. These percentages are almost double compared to the percentage (0.9%) of those who were sexually active and not currently using a method of family planning.

Discussion

The number one “current” method of family planning among sexually active U.S. women between the ages of 15-44 years is sterilization (male and female) followed by the pill and condom. These figures reflect an inability to accept and live with one’s fertility among sexually active women and couples of reproductive age in the U.S. According to the data from Cycle 7 of the NSFG, the “ever use” of methods of contraception (outside of surgical female sterilization) coincides with a significant likelihood of ever having an abortion (for example, a high of 209% with ever use of the male condom and a low of

85% with use of the birth control pill) compared with “never use” of these contraceptive methods. In a like manner, ever use of contraceptive methods also imparts a likelihood of having an abortion in the past twelve months. There is an extremely high likelihood of abortion with female sterilization and the use of the male condom. As a contrast, the ever use of NFP among U.S. women does not have any increased likelihood of ever having an abortion nor of having an abortion in the past year.

The current abortion rates among U.S. women of reproductive age is about 19 per 1,000 women and about one third of all U.S. women have had an abortion.¹² The rate in Cycle 7 of the NSFG is about 13 per 1,000 women, which indicates an under-reporting of abortion. Even with under reporting of abortion, however, the consistency of abortion being a likelihood of ever use of contraception is remarkable. The U.S. Center for Disease Control and Prevention (CDC) reported that induced abortions usually result from unintended pregnancies, which often occur despite the use of contraception (CDC).¹³ Even the Allen Guttmacher Institute (AGI), considered to be the most accurate in regards to abortion rates among U.S. women, indicated that 54% of women having abortions used a contraceptive method during the month they became pregnant.¹⁴ Among those women, 76% of the hormonal birth control pill users and 49% of male condom users reported using the methods inconsistently, while only 13% of pill users and 14% of condom users reported correct use. Only 8% of women having abortions have never used a method of

¹² R.K. Jones, L.B. Finer, and S. Singh, “Characteristics of U.S. Abortion Patients,” *Allen Guttmacher Institute* (2008); Stanley K. Henshaw and Kathryn Kost, “Trends in the Characteristics of Women Obtaining Abortions, 1974 to 2004,” *Guttmacher Institute* (August 2008), on line at http://www.guttmacher.org/pubs/2008/09/18/Report_Trends_Women_Obtaining_Abortions.pdf; W.R. Johnston, “Historical Abortion Statistics: United States,” *Johnston's Archive* (4 June 2008) online at: <http://www.johnstonsarchive.net/policy/abortion/ab-unitedstates.html>; “An Overview of Abortion in the United States,” *Alan Guttmacher Institute* (Jan. 2008), on line at <http://www.guttmacher.org/media/presskits/2005/06/28/abortionoverview.html>; Stanley K. Henshaw, “Unintended Pregnancy in the United States,” *Family Planning Perspectives* 30/1 (1998): 24-29, 46.

¹³ L.M. Koonin and J.C. Smith, “Legal Induced Abortion: From Data to Action,” *Public Health Surveillance for Women, Infants and Children* (Center for Disease Control, 1994).

¹⁴ R. K. Jones, L.B. Finer, and S. Singh, “Characteristics of U.S. Abortion Patients.”

birth control and 9 in 10 women at risk of unintended pregnancy are using a contraceptive method (AGI).¹⁵

The AGI also reported that 46% of women who have abortions had not used a contraceptive method during the month they became pregnant. Of these women, 33% perceived themselves to be at low risk for pregnancy, 32% had concerns about contraceptive methods, 26% had unexpected sex, and 1% had been forced to have sex.¹⁶ Furthermore, only 8% of U.S. women who have had an abortion have never used a method of birth control. The continuation rate of hormonal contraception is about 67%.¹⁷ There are many physical problems that explain why women do not like taking hormonal contraception, including bone loss, unusual uterine bleeding, weight gain, and other more risky problems, such as thrombo-embolism. Non-use of contraception is greatest among those who are young, poor, black, Hispanic, or less educated.¹⁸ About one half of unintended pregnancies occur among the 11% of women who are at risk for unintended pregnancy but are not using contraceptives. Most of these women have practiced contraception in the past.¹⁹

As mentioned earlier, Doerflinger indicated that one of the reasons that contraception contributes to abortion rates is that abortion is often looked upon as a backup to failed contraception.²⁰ This seems to be the case in the studies that show that emergency contraception does not reduce abortions and unintended pregnancies. Although emergency contraception is often intended as a back-up to the back-up of “traditional” contraception, it has been found ineffective to do so. One would also expect higher abortion rates among less effective methods of contraception, like condoms and withdrawal. This is supported by the evidence that shows the greatest likelihood for having an

¹⁵ R.K. Jones, J.E. Darroch, and S.K. Henshaw, “Contraceptive Use among U.S. Women Having Abortions in 2000-2001,” *Perspectives on Sexual and Reproductive Health* 34 (2002): 294-303.

¹⁶ Ibid.

¹⁷ Ibid.

¹⁸ J. Trussell, “Contraceptive Failure in the United States,” *Contraception* 83 (2011): 397-404.

¹⁹ L.B. Finer and S.K. Henshaw, “Disparities in Rates of Unintended Pregnancy in the United States, 1994 and 2001,” *Perspectives on Sexual and Reproductive Health* 38 (2006): 90-96; W.D. Mosher, “Use of Contraception and Use of Family Planning Services in the United States: 1982-2002,” *Advanced Data* 10 (2004): 1-36.

²⁰ R. Doerflinger, *The Prevention Deception*, p. 1.

abortion is among those women who ever reported using condoms, emergency contraception, and withdrawal. In fact, this is recognized by contraceptive providers and policy makers who promote the use of what is called “forgettable” contraceptive methods, i.e., sterilization, the IUD, and the injectable Depo Provera.²¹ These methods are more effective because they do not involve behaviors like taking the pill on a daily basis or inserting a diaphragm. The intent is that not only is the person forgetting the contraceptive method but also forgetting about dealing with or living with fertility.

The reason that there was such a high likelihood of abortion in the past twelve months with female sterilization seems to be contrary to the expectation of high rates of abortion among less effective methods of contraception. What is most likely happening is that failed contraception leads to abortion, and then abortion leads to making fertility “final” through sterilization. That is why the data shows no increased likelihood of ever having an abortion compared to the great likelihood of having an abortion in the past twelve months with female sterilization.

Smith suggested that another reason why contraception might lead to more abortions is that it facilitates couples living together without being married.²² People in unstable committed relationships would tend to seek abortion when the contraception fails. Furthermore, most women who have an abortion are single and not married. I did not find a relationship between cohabitation and abortion in the analysis of the current NSFG data set. But in the study that analyzed the abortion and contraceptive rates in Spain, some of the characteristics associated with greater likelihood of having an abortion included being twenty-five or older, cohabiting, having high income, having experienced first intercourse before turning eighteen, the number of births, and having used no contraceptive method at first sex.²³ The availability of elective abortion appears to decrease the level of responsibility felt by those engaging in sexual activity.

Those who use contraception for family planning purposes usually view fertility as something to be controlled. Contraceptive methods do so by

²¹ J. Trussell, “Contraceptive Failure in the United States.”

²² J. Smith, *The Connection Between Contraception and Abortion*.

²³ J.L. Dueñas, I. Lete, R. Bermejo et al. “Trends in the Use of Contraceptive Methods and Voluntary Interruption of Pregnancy in the Spanish Population during 1997-2007.”

suppressing fertility with chemicals, blocking with devices, or, more likely, destroying with surgery. Fertility is essentially treated as an enemy that is not a wanted part of self or of a relationship (unless trying to achieve a pregnancy) when the woman is sexually active. The wish is to detach fertility from human sexuality. This is a non-integrative dualistic notion. Most women do not wish to use any method of contraception and, in particular, contraceptive methods that interfere with the sexual act – that could be why sterilization is so popular after having one to two children and the family size is complete. Family planning researchers discovered this notion by interviewing sexually active teens and asking why they did not use condoms or emergency contraception. The sexually active teens indicated feeling that it was not natural and that the condom separated them from a true sexual embrace.²⁴

The values inherent in the “contraceptive mentality,” which is very different from responsible parenthood and learning to live with fertility in which the full truth of the conjugal act is manifested, are such that they in fact strengthen the temptation to use abortion as a back-up when an unwanted pregnancy is conceived. Blessed John Paul II mentioned that contraceptive use implies a self-centered concept of freedom, which regards procreation as an obstacle to personal fulfillment.²⁵ The life that could result from a sexual encounter (especially outside of a strong marriage) thus becomes an enemy to be avoided at all costs, and abortion becomes the only possible decisive response to failed contraception. In *Evangelium vitae* he explains that procreation then becomes the “enemy” to be avoided in sexual activity: if it is welcomed, this is only because it expresses a desire, or indeed the intention, to have a child “at all costs,” and not because it signifies the complete acceptance of the other and therefore openness to the richness of life which the child represents.²⁶

With NFP, on the other hand, fertility is accepted. Though the use of NFP is difficult at times, fertility remains part of the relationship, and the conjugal act is respected and remains whole. Despite the fact that couples can view NFP as just another method of family planning and thus still be selfish in using it, there is less likelihood of doing so since on a day-to-day basis couples need to

²⁴ L.H. Keogh, “Understandings of the ‘Natural’ Body: Comparison of the Views of Users and Providers of Emergency Contraception,” *Sexual Health* 2 (2005): 109-15.

²⁵ John Paul II, *Evangelium vitae* (1994) §13, §91, §96.

²⁶ *Ibid.*

struggle with, understand, and live with their fertility. There is a realization of their fertility and an understanding of the possibility of new life. Although an unintended pregnancy with use of NFP can be a disappointment and, for some, a real hardship, the temptation to resort to abortion is lessened by a sense of responsibility to life and the maintenance of the integrity of the marital relationship.

Limitations of the Study

One limitation of the NSFG data set that has been reported in the literature is the potential under-reporting of abortion.²⁷ It could be that the lower use of abortion among Christians, Catholics, and those using NFP (who are mostly Catholic) would be an embarrassment that discourages admitting the use of abortion, which is a grave matter in the Catholic faith in particular and among Christians generally. There is also some question as to whether the population sampling technique truly represents the U.S. population, especially among the Hispanic population. According to the U.S. Census, about 68% of Hispanics in the U.S. consider themselves Catholic, while the NSFG only indicates 57%.²⁸ There are relatively few couples who list NFP as their method of family planning. This limits the statistical power and the ability to make definite comments on NFP and the relation to abortion practices. Finally, this study did not analyze the wantedness and intendedness of the pregnancies that ended in abortion.

Implications

According to Blessed John Paul II in *Evangelium vitae*, the trivialization of sexuality in society and the separation of sex from fertility are among the principal factors that have led to contempt for new life.²⁹ Only a true love is

²⁷ R. Jagannathan, "Relying on Surveys to Understand Abortion Behavior: Some Cautionary Evidence," *American Journal of Public Health* 91 (2001): 1825-31; L.B. Smith, N.E. Adler, and J.M. Tschann, "Underreporting of Sensitive Behaviors: The Case of Young Women's Willingness to Report Abortion," *Health Psychology* 18 (1999): 37-43.

²⁸ J.A. McDonald, K. Suellentrop, L.J. Paulozzi, and B. Morrow, "Reproductive Health of the Rapidly Growing Hispanic Population: Data from the Pregnancy Risk Assessment Monitoring System," *Maternal & Child Health Journal* 12 (2008): 342-56.

²⁹ Pope John Paul II, *Evangelium vitae* (1994), §13, §91, §96.

able to protect life. He felt that it is a duty to offer adolescents and young adults, an authentic education in sexuality and in love – education that involves training in chastity. He also mentioned that it is precisely this respect that makes legitimate, at the service of responsible procreation, the use of natural methods of regulating fertility, i.e., NFP. He urged that centers for natural methods of regulating fertility should be promoted as a valuable help to responsible parenthood, in which all individuals, and in the first place the child, are recognized and respected in their own right, and where every decision is guided by sincere gift of self. He felt that all married and engaged couples should learn NFP. With these approaches I would also include defending the idea that marriage should be only between a man and a woman as well as promoting marriage and those means that help to build strong marriages.

In order to help build a culture of life among health professionals, health care providers (physicians and professional nurses) should become familiar with natural methods of family planning and should offer them as viable options for their patients. Perhaps health professionals could learn several methods of NFP or refer their patients to institutions that teach those methods. A study of knowledge and use of NFP by nurse midwives found that 92% of the sample felt they were minimally prepared to teach NFP.³⁰ Natural family planning should be included in the curriculum of both medical schools and nurse midwives in order for the care providers to be able to offer a natural and effective option.³¹ Health professionals (especially those in primary care and pediatrics) could be involved with developing, providing, and researching chastity-based programs of human sexuality. A recent randomized comparison study of a chastity-based program in comparison to a contraceptive-promotion sexual health program among African-American teens showed that the chastity based program was more effective in decreasing sexual activity and unwanted pregnancy.³²

³⁰ R. Fehring, "The Future of Professional Education in Natural Family Planning," *Journal of Obstetric Gynecological and Neonatal Nursing* 33 (2002): 34-43.

³¹ R. Fehring, L. Hanson, and J. Stanford, "Nurse-midwives' Knowledge and Promotion of Lactational Amenorrhea and Other Natural Family Planning Methods for Child-spacing," *Journal of Nurse-Midwifery and Women's Health* 46 (2001): 68-73; R. Fehring, "Physician and Nurses' Knowledge and Use of Natural Family Planning," *The Linacre Quarterly* 62 (1995): 22-28.

³² J.B. Jemmott, L.S. Lammott, and G.T. Fong. "Efficacy of a Theory-based Abstinence-only Intervention over 24 months," *Archives of Pediatric and Adolescent*

Recommendations for Future Research

Recommendations for future research include comparing the findings from Cycle 6 (2002) and Cycle 7 (2006) of the NSFG data sets. Comparing the results would allow analysis of trends in contraception and the relationship with abortion. Another recommendation is to look at Cycle 7 as was done in this study, but to break down the analysis with special sub-populations of interest and especially different ethnicities (e.g., Hispanics) and races such as Caucasian, African-American, and other races. Another point of interest is to look at those women who were not contracepting and never had intercourse and to see their rates of abortion. For example, is the practice of chastity related to abortion and to reduced abortion rates? Finally, the influence of faith (i.e., religion) on family planning patterns and abortion (as expressed in the importance of religion and the frequency of church attendance) would be of interest. These religious variables are available in the NSFG data sets and have been studied in the past by this author.³³

Conclusion

I have been a professional nurse involved with health care for almost forty years. In that time I have heard over and over again the same notion that more contraception and more available contraception are needed in order to decrease unwanted pregnancy and abortion. It seems that it is only through contraception that women can have control of their lives and their careers. Furthermore, the consensus among health professionals is that there is a great need to provide unmarried sexually active adolescents with the pill, the condom, and more recently the Depo injection as well as emergency contraception, and when women are done with their fertility and no longer wish more children, with sterilization.³⁴ Yet these approaches are not solving the problem of unwanted

Medicine 164 (2010): 152-59.

³³ R. Fehring and J.M. Ohlendorf, "The Relationship between Religiosity and Contraceptive Use among Roman Catholic Women in the United States," *The Linacre Quarterly* 74 (2007): 135-44.

³⁴ R.E. Lawrence, K.A. Rasinski, J.D. Yoon, and F.A. Curlin, "Obstetrician-Gynecologists' Views on Contraception and Natural Family Planning: A National Survey," *American Journal of Obstetrics and Gynecology* 203 (2010): e-published ahead of print; R.E. Lawrence, K.A. Rasinski, J.D. Yoon, and F.A. Curlin, "Factors Influencing Physicians' Advice about Female Sterilization in USA: A National

pregnancy and abortion. This will only happen when a true understanding of human sexuality, marriage, and the conjugal act can be effectively communicated and lived. The only way to decrease abortion is through chastity-based human sexuality programs for teens and their parents, marriage preparation that includes the use of NFP, through understanding that women's roles and careers are not contingent on eliminating their human fertility, and through promoting and defending the notion that marriage should only be between a man and a woman. The pro-life movement needs to embrace these methods. Not seeing the link between contraception and abortion is blinding the pro-life movement and eliminates strategies for effective change in our culture to become a culture of accepting life.

Survey," *Human Reproduction* 26 (2011): 106-11; M. Guiahi, M. McNulty, G. Garbe, S. Edwards, and K. Kenton, "Changing Depot Medroxyprogesterone Acetate Access at a Faith-Based Institution," *Contraception* 83 (2011): 367-72.

Table 1: Frequency (and Percentage) of Current and Ever Use of Common Family Planning Methods and Abortion among the Sexually Active Women (N = 6 3 2 9) in the NSFG Cycle 7 Data Set

Method	<u>Current Use</u>		<u>Ever Use</u>		
	Frequency/(Percentage)	Frequency/(Percentage)	Frequency/(Percentage)	Frequency/(Percentage)	
Pill (OC)	1138	18.0%	5029	79.5%	
Sterilization (Female)	1061	16.8%	788	14.5%	
Condom (Male)	768	12.1%	5850	92.4%	
Sterilization (Male)		328	5.2%	695	11.0%
IUD	240	3.8%	236	4.2%	
Withdrawal	229	3.6%	3710	58.6%	
Depo-Provera	212	3.3%	1601	25.3%	
NFP	11	0.2%	242	3.8%	
Emergency Contraception		6	0.1%	704	11.1%
Abortion Last 12 Months		83	1.3%		
Ever Abortion			972	15.3%*	

* There is an under-reporting of abortions in the NSFG data set. The 15.3% is based on 6,329 women as the numerator. There were, however, 1,900 participants who did not respond to the question of ever having an abortion.

Table 2: Odds Ratio (OR) of Ever Having an Abortion by Family Planning Methods among Sexually Active U.S. Women in Cycle 7 of the NSFG.

Method	Odds Ratio	95% CI	Significance
Condom (Male)	3.089	2.10 – 4.54	< .001
Withdrawal	2.047	1.79 – 2.34	< .001
EC	1.860	1.62 – 2.14	< .001
Pill (OC)	1.852	1.54 – 2.22	< .001
Vasectomy	1.472	1.26 – 1.72	< .001
IUD	1.720	1.39 – 2.13	< .001
Depo-Provera	1.668	1.48 – 1.88	< .001
Surgically Sterile	0.832	0.721 - 0.960	< .013
NFP	0.996	0.74 – 1.35	0.979

* IUD used in the past 12 months.

Table 3: Odds Ratio (OR) of Having an Abortion in the Past 12 Months by Family Planning Methods among Sexually Active U.S. Women in Cycle 7 of the NSFG

Method	Odds Ratio	95% CI	Significance
Surgically Sterile	17.594	2.45 - 126.24	< .001
Condom (Male)	6.770	0.945 - 48.52	< .026
EC	3.254	2.06 - 5.39	< .001
Withdrawal	3.244	1.86 - 5.66	< .001
Pill (OC)	2.125	1.07 - 4.23	< .028
IUD*	2.098	0.977 - 4.51	< .097
Vasectomy	1.010	1.00 - 1.02	< .028
Depo-Provera	1.727	1.11 - 2.68	< .014
NFP	0.931	0.30 - 2.93	0.902

* IUD used in the past 12 months.