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Artificial and Natural Forms of Birth Control: A Comprehensive Analysis

Raymond McVeigh
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Abstract

In the current nation dialogue, birth control is a hot button topic. As it becomes increasingly important for couples to plan the number and timing of their children, it is often considered among couples what forms of birth control may be best for them. Surprisingly, one type of controlling birth that is often not considered is what is known as Natural Family Planning. Primary and secondary sources are presented to provide an objective analysis of artificial and natural forms of controlling birth. Three forms of Natural Family Planning are presented in addition to most common forms of artificial birth control. Aspects compared include mechanism of action, method-effectiveness, use-effectiveness, any potential side effects, and cost. Overall, it is found that Natural Family Planning may very well provide the best way for many couples to control birth, yet it has virtually no mainstream support from health care providers or other organizations the promote the use of birth control. The reasons for this apparent prejudice are considered. Additionally, the potential and indirect benefits of using Natural Family Planning are analyzed and presented.
**Introduction**

Family planning has been praised as one of the greatest public health accomplishments in the last one hundred years. Worldwide awareness of family planning has swelled to over three-fifths of couples who have been exposed to the concept (Tsui). In the United States, birth control is widely accepted and often assumed to be in use by sexually active couples. With strong advocates within government agencies and private organizations such as Planned Parenthood, as well as support from the vast majority of obstetrician/gynecologist offices, the acceptance of contraception has continued to increase over the last several decades. This is especially true among adolescences and young adults.

Recently, there has been heightened controversy surrounding the topic of birth control in American politics. With the new Affordable Care Act, it has been mandated that all health insurance providers will cover the costs of oral contraception. This mandate has caused problems with several religious organizations that provide health insurance that also hold religious beliefs against contraception. The most notable and vocal organization has been the Catholic Church, which runs over 12% of community hospitals in the United States and serves over 88 million patients annually (USCCB 2013).

With the rise in awareness and usage of birth control, as well as the amount of profit earned by the manufacturing of contraceptives, it would be only logical to predict that there would be great developments and improvements to the methods of birth control being utilized. However, there have been astonishingly few changes or advancements in the methods of controlling birth being sold and promoted to the American public. The types of birth control most commonly promoted tend to fall under two categories: barrier methods or hormonal methods. While the location of the barrier or the mode of delivery of the hormones has changed
slightly, virtually all methods of birth control currently being promoted have remained fundamentally the same for decades. This is evidenced by studies that seek to assess the public’s knowledge of birth control that have been conducted decades apart. The studies still provide the same options for types of birth control used as were offered in the early 1980’s (Freeman 1980, Cavazos-Regh 2010).

The lack of diversity and real options for birth control has created a need for real alternatives and better understanding. A survey done of American teenagers in 2010 found that a relatively large number of sexually active teenagers used no method of birth control, or were unsure of a method (Cavazos-Regh 2010). Over 12 percent of Caucasians, over 14 percent of African-Americans, and over 20% of Hispanics used no method or were unsure. This clearly is not due to a lack of availability of contraception. This may indicate a need for more options and education.

There is also a fear that sexually active teenagers and adults may not actually be making completely informed decisions about their birth control. With the growing acceptability of birth control, it is simply assumed and expected by many that sexually active women will be on ‘the pill’ and that men will use condoms. While it is undeniable that hormonal birth control pills can have both positive and negative side effects, which will be discussed later, the fact that women are expected and sometimes pressured into taking these pills is questionable. The lack of diversity of birth control methods makes the presentation of hormonal birth control pills to women simply seem like ‘The’ form of birth control everyone must accept. More options and more education would certainly allow men and women to make more informed decisions on what forms of birth control they choose.
Though it may be nearly impossible to tell from the current social landscape, alternative ways of controlling birth do exist. These alternatives are fundamentally different from the two methods of barriers and hormone consumption because they seek to neither create barriers nor inject hormones. These alternative methods are often referred to as Natural Family Planning methods. Natural forms of birth control are largely unknown to the general public (Wiegratz 2011, Cavazos-Regh 2010). Among the small portion of couples who are educated on natural methods of birth control there exist three popular methods. These are referred to as the Creighton Model, the Billings Ovulation Method, and the Symptothermal Method. All of these methods are similar in the sense that they seek to identify the times of fertility and infertility of a woman, and can thus control birth by abstaining from intercourse during the times of fertility.

It is important to note that the three natural methods discussed are not versions of the method once known as the Rhythm Method. The Rhythm Method is similar in the sense that it seeks to identify days of infertility, which is likely the cause of confusion between the Rhythm Method and the other natural methods being discussed. However, the way the Rhythm Method attempts to identify these days is very different. This method was used in the early and mid 20th century, but is essentially no longer in use today. The Rhythm Method uses a woman’s previous menstrual cycles to predict the days of fertility, whereas methods like the Creighton Model use current signs and symptoms of a woman’s body to determine the days of fertility. The exact process by which the Creighton Model, the Billings Ovulation Method, and the Symptothermal Method identify the days of fertility and infertility will be discussed in depth; but it is very important to first note that they are fundamentally different from the Rhythm Method and are often wrongly discredited due to their false association with it.
The prospect of using natural methods of controlling birth rather than commonly accepted artificial methods can be an interesting one. In order for men and women to make truly informed and educated decisions regarding birth control, an honest comparison of these methods is needed. Men and women should take into account the theoretical effectiveness, the actual effectiveness, possible negative effects, and possible positive effects of all methods of birth control. Natural Methods of birth control may have been dismissed decades ago for good reason, or they might just be the better alternative people have been looking for.
Literature Review and Research

The mode of action should be the first aspect analyzed by any person seeking a better understanding of various forms of birth control. The standard birth control pill works, usually, by consistently delivering a combination of estrogen and progestin (Wiegratz 2011). Some pills use only progestin, but the mode of action is still the same. The idea behind this is to manipulate a woman’s menstrual cycle, which is regulated by fluctuations in hormone levels. These hormones suppress the release of gonadotrophin, which leads to an arrest of follicular maturation. The preovulatory luteinizing hormone surge does not occur so ovulation does not occur. If ovulation does not occur it is impossible to conceive. By maintaining high estrogen and progestin levels, the body’s natural changes in hormone levels do not occur. This is not unlike what happens during pregnancy. Additional ways the pill can help prevent pregnancy is by making cervical mucus thicker, so that sperm have a harder time reaching the ovum; causing the endometrial lining of the uterus to be thinner, so an embryo cannot implant; and changing the orientation of the fallopian tubes slightly, so that sperm have a harder time reaching the ovum (Wilks 1998, Freeman, 2009).

There is some variation among birth control pills, but the concept behind each is fundamentally the same: manipulate the body’s hormone levels to arrest the menstrual cycle. However, there is additional variation in the mode of action of Plan B, or emergency contraception, pills. For Plan B type drugs, rather than giving a consistent amount of estrogen and/or progestin daily, a relatively large amount of progestin hormone is delivered. Plan B delivers 1.5mg of levonorgestrel, a progesterone hormone, to the body all in one dose (Jaday 2012). This dosage is extremely high when compared to the 20 to 50-microgram dose in the daily pills discussed previously – up to 75 times higher. However, the goal is still to prevent
ovulation. By providing a one-time super-high dose of levonorgestrel, follicular maturation will be completely seized for a short period of time.

The Plan B type drugs also affect the endometrial lining, which can prevent implantation if an ovum has already been released and conception has occurred. In this case, the human embryo that has been created will die due to taking the Plan B drug (Hitti 2007). Many would consider this an early stage abortion, but it will not appear on warning labels because recently there has been a change in the definition of pregnancy that says it only begins once implantation is complete. Thus, the producers of Plan B type drugs can circulate in the media and on packaging that their products do not cause early abortions because, by the relatively new definition, pregnancy hasn’t started yet. This is actually quite disturbing, since the majority of obstetricians and gynecologists agree pregnancy begins at fertilization, yet the definition of pregnancy given by the American College of Obstetrics and Gynecology is the one stating it does not begin until implantation (Glen 2011). This suspicious incongruence of definitions may lead some to believe the definition was changed intentionally for marketing purposes.

Daily hormone pills and Plan B type pills constitute one of the two types of birth control promoted in the mainstream. The second type consists of various forms of barrier methods. The goal of barrier method birth control is to block sperm from reaching the ovum so that fertilization does not take place. The mode of action is straightforward compared to oral contraceptives. Condoms are most commonly known, but this category also includes cervical caps and intrauterine devices (IUDs). The difference between each of these barriers is the location. Besides condoms, barriers such as the cap and IUD must be inserted by a healthcare professional.
Natural Family Planning (NFP) methods are more complicated and intricate. NFP is based upon the knowledge that there is a fertile phase and an infertile phase of the menstrual cycle. Additionally, it is built upon the understanding that there are certain biomarkers that are precise enough to determine, on a day-to-day basis, which days are fertile and which days are infertile. This second piece of information is the significant difference between NFP and the Rhythm Method mentioned earlier. The Rhythm Method had nothing to do with identifying current biomarkers, so it was much less effective. As a result, the Rhythm Method is virtually extinct. The variations in different models of NFP have to do with which biomarkers are used to identify days of fertility and infertility. Once the specific days of fertility are identified, a woman knows she needs to abstain from sexual intercourse in order to avoid pregnancy. Conversely, a woman may engage in sexual intercourse during the days of infertility without any barriers without conceiving a child.

One such model of NFP is called the Creighton Model. The Creighton Model uses observations of the characteristics of vaginal bleeding, external mucus discharge, and presence of vulvar dryness as the biomarkers to identify the phases of the menstrual cycle. There exist distinctions in the characteristics of cervical secretions during days of fertility because the body naturally secretes mucus that will make it easier for sperm to reach an egg when it is present. A Creighton Model Practitioner explains:

Each time a woman uses the toilet, she wipes the vulva and vestibule and makes a three-part observation (perceived sensation through wiping, observing the tissue for the presence or absence of mucus, and finger testing for stretchability and color if mucus is present). External observations correlate with biophysical
changes that occur in the endocervical mucus as ovulation approaches. (Barron 2001)

These observations are recorded on a tracking chart. Depending on the observations, a woman decides the meaning of the observations in relation to her cycle and uses color-coded stickers to denote the decision in the tracking chart. Being able to correctly observe and analyze these biomarkers and accurately track the symptoms and their interpretations takes training and education. Users of the Creighton Model, as well as the other forms of NFP, must take the time to learn the process by meeting with a practitioner of their chosen method several times. Typically, this involves one-hour meetings approximately every month for the first several months to a year.

The Billings Ovulation Method and the Symptothermal Method are similar to the Creighton Model. The difference between the Billings Ovulation Method and the Creighton Model is merely what time of day the observations of the cervical mucus are made. The Symptothermal Method is different because of the biomarkers it uses to identify the days of fertility and infertility. In addition to reading the signs denoted by cervical secretions, the Symptothermal Method double-checks these fertility signs by analyzing the changes of a woman’s body temperature. A woman’s body temperature rises after ovulation due to higher amounts of progestin (CCL 2005, Derzko 1986). The day of ovulation can be identified via temperature recordings by consistently recording a woman’s body temperature at the same time every day; usually in the morning. The higher amounts of progestin last for approximately three days, so the body temperature will remain approximately 0.2 degrees Celsius higher for these three days. Researchers explain, “The following guidelines are given to each couple to identify the last fertile day… The evening of their higher temperature reading, all three higher than the
previous six readings, the last one 0.2 degrees Celsius higher than the previous six” (Frank-Herrmann 2007). The Symptothermal Method uses all the biomarkers of the Creighton Model and the Billings Ovulation Method, plus measures the body temperature.

Once a general understanding of how all these methods of birth control function, most couples are primarily concerned with the methods’ comparative effectiveness. For reference, it is important to first look at the pregnancy rate associated with oral contraceptives and barrier methods, such as condoms. One study, led by Doctor Brooke Winner, was a cohort study conducted from 2007 to 2011 with over 7000 participants. The researchers provided the participants with whatever form of birth control they desired and then compared the rate of failure of the different methods requested. The researchers found, “The failure rate for the pills, patch, or ring was 4.55 per 100 participant-years” (Winner 2012). Among these three forms of hormone delivery, the pill was least successful 4.8% failure rate after the first year. Additionally, the researchers noted in their discussion, “The National Survey of Family Growth estimates that 9% of women using oral contraceptive pills will have an unintended pregnancy within the first year”. The variance in failure rate in Winner’s study and the National survey may be due to the combination of pill, patch, or ring in Winner’s study.

This is consistent with other academic sources. According to the Association of Reproductive Health Professionals, 9% of women using oral contraception will experience an unintended pregnancy after one year, as will 18% of those using only condoms. The Guttmacher Institute, an accepted authority on reproductive healthcare research, reports similar numbers. The Guttmacher Institute reports that the typical failure rate of the pill is 9% and that the typical failure rate of just condoms is 15% (Guttmacher 2013). Thus, couples can accurately assume hormonal contraception of all kinds has approximately 6-9% failure rate and that condoms have
approximately 15-18% failure rate when assessing Natural Family Planning methods of controlling birth.

In discussions of Natural Family Planning, as scarce as they are in professional journals, it is often questioned whether the so-called biomarkers are really capable of identifying fertile days in a woman’s menstrual cycle. Studies have repeatedly shown that the cervical mucus signs are accurate and easily identifiable to the vast majority of women (Derzko 1986, Fehring 1993, Frank-Herrmann 2007). As early as the 1980’s this was well established by the World Health Organization:

> It could be argued that the women studied, as users of natural family planning, were not representative of the general population. The cross-cultural World Health Organization study did, however, show that over 90% of women, from all socioeconomic backgrounds, easily recognized the changing patterns of cervical mucus…. Our results raise the possibility that by identifying the day of most abundant fertile type mucus women can accurately pinpoint the day of ovulation with almost the same precision as luteinizing hormone measurement. (Depares 1986)

Thus, it is safe to claim that the biomarkers used by NFP are scientifically accurate and successful at identifying the day of ovulation. To accurately assess NFP methods’ effectiveness at avoiding pregnancy compared to barrier and hormonal methods these statistics must be specifically researched. Luckily, there is a plethora of such studies.

Studies on the effectiveness of NFP methods have had positive results for decades, despite the lack of attention they have been given. As early as the 1980’s, studies have been showing that NFP can have greater success at avoiding pregnancy than the artificial methods
discussed previously. In 1989, Dr. Kwang-Ho Meng led a study of 200 women using the Billings Ovulation Method. The researchers found, “Unplanned pregnancies gave a cumulative twelve month life table rate of 7 (±2.5 S.E.) per 100 women-years, after the first years of use. Two of the unplanned pregnancies were method related, 11 were teching-related and one was associated with non-adherence to abstinence during the fertile days” (Meng 1989). Since the researchers noted that at least one of the unintended pregnancies in this study was a result of willful non-compliance with the method, the estimated 7% failure rate includes user-error. Yet, the failure rate found in this study is lower than any forms of birth control analyzed thus far.

Dr. Meng’s study does not stand alone in its positive findings of Natural Family Planning use-effectiveness. During the same time, Dr. Richard Fehring conducted an even larger and longer study analyzing the use-effectiveness of the Creighton Model. His study enrolled 323 couples from the Marquette University Nursing Center natural family planning program from October 1984 to May 1992. All of the couples were taught the Creighton Model as any independent couple seeking the method would be taught. The researchers concluded in their report:

The method and use-effectiveness rates for avoiding pregnancy in the current study are similar to those obtained in three previous studies that examinded the effectiveness of the Creighton model (Doud, 1985; Hilgers et al., 1980; Howard 1990)… Use effectiveness rates at the 12th ordinal month were 94.8 in Hilgers et al. (1980) study, 96.2 in Doud study, 97.4 in Howard study, and 98.0 in the current study. (Fehring 1993)

The findings for the Creighton model have been consistent and remarkably successful. More recent studies have had similar findings. A 2007 study that enrolled 900 women found, “For the
whole cohort, we calculated an unintended pregnancy rate of 1.79 (+/- 0.52 standard error) per 100 women after 13 months of use; all unintended pregnancies due to method and user failure were included” (Frank-Herrmann 2007). Additionally, the Guttmacher Institute, a research organization associated with Planned Parenthood, reports that the Billings Ovulation Method and Creighton Model have a 3% failure rate and that the Symptothermal Method has a 0.4% failure rate (Guttmacher 2013), when used perfectly.

Out of the seven separate sources presented on the effectiveness of Natural Family Planning methods, the highest failure rate reported is 7%, which is reported in the least recent study. The highest estimate of 7% failure is still 2% lower than the failure rate of hormonal contraception reported previously. Even the most critical analysis of the NFP methods must admit that these methods are at least equally effective as the most successful artificial methods of birth control. A fair and unbiased comparison of natural and artificial methods is likely to conclude that Natural Family Planning methods are more successful at avoiding pregnancy than hormonal and barrier methods.

For those couples seeking to find the best form of birth control for them, it will also be important to analyze potential negative and positive side effects of birth control methods. For artificial birth control, hormonal contraception has the most associations with negative side effects. Hormonal birth control has been found to increase a woman’s chance of breast cancer and cervical cancer (Urban 2012, Yanhua 2012). This is likely due to the excessive amounts of estrogen in this type of birth control, which is classified by the World Health Organization as a class 1 carcinogen (WHO 2005). Other possible minor side effects include nausea, weight gain, sore or swollen breast, decrease libido, vaginal bleeding, and mood changes. Rarer and more serious side effects include abdominal pain, chest pain, headaches, blurred vision, and swelling.
of the legs and thighs (Johnson 2012, Wiebe 2012). Ironically, some studies have also found that
the use of oral contraception can lead to a decreased use of condoms (Waise 2012). However,
some positive side effects of hormonal contraception include shorter and fewer periods, clearer
skin, and decreased risk of endometrial and ovarian cancer (Johnson 2012, Urban 2012, WHO

For barrier methods, the side effects vary depending on what barrier is being used.

Condoms have relatively few side effects. The most problematic effect arises when either partner
has a latex allergy, since most condoms are made of latex (Hatcher 2007, Sefcik 2011). The
problems here are obvious, but some non-latex condoms can be found. Additionally, many men
simply dislike using condoms due to decreased sensation (Perinno 2005, Sefcik 2011). A minor
negative effect of condoms, though worth mentioning, is that by blocking semen from reaching
the uterus they inadvertently block antidepressant chemicals found in semen from being
absorbed (Castlemen 2011, Bering 2010). The most positive effect of condoms is their ability to
protect against sexually transmitted diseases (Carey 1992, Sefcik 2011). Condoms cost $0.50 to
$1.00 each (TeensHealth 2013).

Barrier methods that involve surgical insertion, such as IUDs, have different side effects.
The risks of using Intrauterine Devices include increase menstrual bleeding and cramp,
perforation of the uterus, and miscarriages or preterm birth if it fails at preventing pregnancy
(Staff 2011). Other inserted barriers have similar negative side effects (Johnson 2012b). Barrier
methods that require surgical insertion have virtually no positive side effects. IUDs cost $500 to
$1,000 per year (PPFA 2013).

Unlike all of the artificial forms of controlling birth discussed, Natural Family Planning
methods have virtually zero negative side effects but actually result in multiple positive effects.
The lack of negative side effects is due to the lack of tampering with the body. Rather than manipulate the body to prevent conception, women learn to work with their body to achieve the same end. There is simply no conceivable mechanism for how negative results could occur. The positive effects mostly result from the increased awareness women who use the models gain of their own bodies. It has been well documented that NFP can be used not only to avoid pregnancy, but to achieve pregnancy, as well (Barron 2001, Derzko 1986). As a result, NFP methods have been used to treat infertility and repeated miscarriages (Tham 2012). Additionally, couples who are in monogamous relationships who use NFP often report actually having more sex than couples who do not use NFP and have a dramatically lower divorce rate of only 0.2% (Kopp 2010). The typical cost for the classes required to learn NFP is about $135. After the method is learned, the only financial cost for practicing NFP is the cost of paper for charting.
Discussion

The conversation on birth control methods certainly has numerous variables and is sometimes filled with controversy. When all aspects are considered in a fair and honest way, it appears a much stronger case for Natural Family Planning methods can be made than is usually offered by those who promote birth control. While virtually every sexually active young man and young woman is aware of oral contraception and barriers, such as condoms, very few are even aware of NFP as an option. Given the strong evidence presented for why NFP is as good as, if not better than, the common artificial forms of birth control, the reasons for the lack of awareness and utilization of these natural methods are numerous.

First, as noted earlier, there may be a serious confusion between modern Natural Family Planning and the extremely out-dated Rhythm Method. The Rhythm Method has some similarities to current methods, such as the Billings Ovulation Method and Creighton Model. These similarities include referencing previous menstrual cycles and the fact that both methods have been approved by the Catholic Church, and thus have been used by similar demographics of women. Despite these newer models being much more scientific and having much better results, the Rhythm Method almost certainly will be brought up in any conversation on the topic of natural ways of preventing pregnancy with a person who is critical of such methods. Many studies that have reflected poorly on NFP have wrongly grouped it in with Rhythm Method statistics (Boven 2005, Rakhi 2011, Wanyenze 2011). This false association with the Rhythm Method seems lodged in the minds of the promoters of artificial contraception and may contribute to the lack of awareness and utilization of NFP.

Secondly, NFP has likely failed to gain real traction, in part, due to a severe case of sampling bias in studies that have concluded these methods are largely ineffective at preventing
pregnancy. This sampling biased occurs in two ways. First, as previously noted, NFP can be used to achieve pregnancy just as well as it can be used to avoid pregnancy. Thus, if a simple survey is conducted on couples that use NFP, and it is asked how many children they have conceived while using NFP, this is clearly a methodological error. These couples may have been attempting to conceive children through NFP, not prevent it. Furthermore, unlike other forms of birth control, NFP is not an ‘either/or’ form of family planning. In addition to preventing and achieving pregnancy, NFP allows for a middle ground of “openness” to children. By choosing to engage in sexual activity on days of uncertain fertility, usually when approaching definite fertile days, some couples choose to open the door to pregnancy without fully “intending” to conceive. For example, a religious couple may choose to leave it up to “God’s Will” on whether they conceive a child.

The second way many studies commit sampling bias is by over-sampling couples that are not actually very committed to avoiding pregnancy. Since NFP methods rely on abstaining during days of fertility, the success of the methods is dependent on the strength of will to avoid pregnancy. Due to the promoting and acceptance of NFP by the Catholic Church, a large majority of women who use NFP are married and lack a strong desire to avoid having more children (Ryder 1993, Fehring 1993, Standford 2000, Frank-Herrmann 2007). This creates an association between couples who currently use NFP and being open to having many children. As a result of these sampling errors in some studies, sources such as Planned Parenthood often circulate numbers such as 24 out of 100 women using NFP will conceive each year (PPFA 2013). There is clearly a vast difference between such numbers and the data provided in the sources above. A disparity of this size may be evidence of one or more systemic errors in the way data is collected or presented, such as the ones hypothesized here. In order to properly
determine the effectiveness of NFP, studies need to factor couples’ openness to having more children and the number of current children. When this is done, the use-effectiveness of NFP is remarkably high, as shown in the studies referenced in this report.

Third, NFP may not have gained much ground due to the fact that the negative side effects of the artificial forms of birth control discussed here, which NFP methods completely lack, are largely down-played by healthcare providers. This may be due to a form of circular reasoning that assumes NFP is not a legitimate alternative for avoiding pregnancy. When one assumes that NFP is not a legitimate option, artificial birth control becomes the only option and so the negative side effects are just “normal”. When the negative side effects become just “normal”, there is no real reason to look for more natural options and so NFP is dismissed without any real evaluation. Thus, the circularity of the self-fulfilling reasoning used to dismiss NFP continues.

One cannot help but notice that the forms of birth control largely promoted by health care providers happens to be the forms that can produce the greatest profit. The production of various forms of artificial contraceptives is a lucrative business. For example, the condom manufacturing industry had over $370 million in profits in the year 2012 (IBSworld 2013). Meanwhile, couples that use NFP, once it is learned, have no need to buy any birth control-related products. This may be a coincidence, but it could be providing a reason for the market to suppress the promotion of NFP methods while actively promoting the forms of birth control most young adults are now inundated with.

One of the most common reasons cited for why society should invest in birth control is to help the poor. It is largely argued that poor women and families ought to be given free artificial birth control to help them have fewer children, and thus give them a better chance to rise out of
poverty. While this is a chief reason for promoting certain forms of birth control, such as the pill and condoms, Natural Family Planning could better champion this cause. While NFP may have a higher start-up cost in the time and money needed to initially teach the method, it would be an overall much cheaper way to help the poor prevent having children. Not only would this method be cheaper for the charities helping the poor, it would also make the poor less dependent on continually being given the supplies needed to prevent pregnancy. Additionally, the education involved in learning NFP would empower these women with better knowledge of their own bodies. Using Natural Family Planning education to assist the poor seems like an infinitely more beneficial answer to poverty than making the poor dependent on continual donations of estrogen and condoms.
Conclusion

When comparing various forms of birth control, there are several important factors to consider. These factors include mechanism of action, method-effectiveness, use-effectiveness, negative and positive side effects, and cost. While the topic can be intimidating and complicated, Natural Family Planning seems to be the best option for controlling birth. This is based upon its extremely high use-effectiveness at preventing pregnancy, its completely safe and natural mechanism of action, the completely lack of negative side effects and its extremely low cost.

This conclusion may seem ironic because of the complete lack of attention or credibility given to Natural Family Planning by most health care providers, researchers, and other organizations to promote the use of birth control. However, this prejudice against Natural Family Planning can be accounted for with many different variables. These variables include severe sampling errors on the part of some researchers, false associations of NFP with outdate and ineffective methods, a lack of profit to be made off of promoting NFP, and a flat out assumption by some that NFP is not a legitimate form of controlling birth. Perhaps if the American public is able to overcome these unfounded prejudices against Natural Family Planning it will be able to accurately see it as a wonderful and empowering option of controlling birth. Natural Family Planning has the potential to not only be the alternative to birth control many couples are seeking, but also the greatly benefit the poor. With increased education and seeking of truth on these matters, the American public can unveil the hidden treasure that is Natural Family Planning.
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