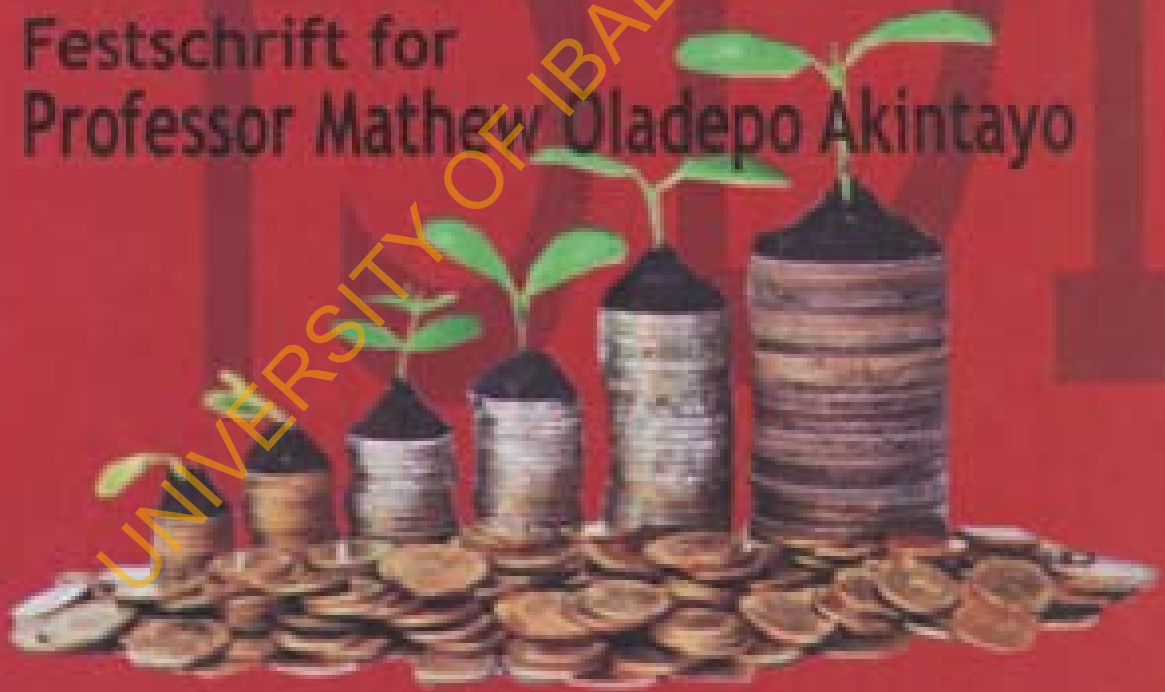
Human and Social Development Investments

Festschrift for Professor Mathew Oladepo Akintayo



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Contents

CHAPTER TWENTY-SIX

Testing Theory of Planned Behaviour in Predicting Married Women's Use of Modern Family Planning Methods at Ibadan North Local Government

A. A. Omokhabi

Introduction

Most studies on family planning do not focus on women's intention to use modern family planning using the Theory of Planned Behaviour (TPB) in Nigeria particularly among married women. This study therefore adopted all constructs of the Theory of Planned Behaviour for prediction of women's intention to use modern family planning methods. These constructs postulate that willingness to use modern family planning method is determined by the women's perceived threat (perceived susceptibility and perceived severity) towards unwanted pregnancy, their perceived benefit towards modern family planning method usage, their perceived barrier to use of the methods, their perceived self-efficacy, and subjective norms related to use of modern contraceptive methods (Bartholomew, Parcel, Kok and Gottlieb, 2011). The relevance of this theory is based on the fact that women's readiness to use modern family planning methods would be based on intention which would influence their behaviour. TBP does not only establish the intention behaviour relationship, it also explains how other factors such as attitudes, subjective norms and perceived behaviour control are mediated by intention.

Modern family planning use amongst married women of child bearing age was modelled using the Theory of Planned Behaviour (TPB). The participants were a convenience sample of 108 women of childbearing age from Bodija, Agbowo/University of Ibadan, Mokola in Ibadan North Local Government area. All were married currently using modern family planning method and participated on a voluntary basis. An adapted questionnaire by Ajzen (1991, 2002) was used to measure the four

dimensions of the Theory of Planned Behaviour model (attitude towards modern family planning , subjective norms, perceived control and use of modern family planning). Simple frequencies count and percentages were used to analyse respondents' background data and research questions raised for the study. The mean score of 3.00 was adopted as criterion point for determining those being used and their effectiveness. Attitudes, norms and perceived behavioural control were all found to significantly predict use of modern family planning methods with perceived behavioural control being the strongest predictor. This suggests that the Theory of Planned Behaviour may be a suitable theory upon which to understand the modern family planning usage by women of child bearing age who are currently married. The study recommended that sufficient and right information must be provided by stakeholders on modern family planning methods at all levels federal, state and local government for more uptake . Besides, government should create awareness programmes on the existing reproductive health programmes and policies especially on the benefits to the women of reproductive age. This should be done through campaigns on birth control, health talks and sensitisation of the masses on the importance of small family sizes, as this will reduce on the extreme poverty at the household and government level

Nigeria's Reproductive Health of Women of Child bearing Age and Modern Family Planning Usage in Nigeria

The use of Family Planning (FP) is a key factor in preventing unwanted pregnancies, reducing maternal and child mortality, and improving the lives of women and their families (Kavanaugh and Anderson, 2013). It is one of the key fundamentals of health services, whose benefits are wellbeing's of mothers, husbands, families, and their country in general (Mosha, Mgimwa and Msuya, 2017). The benefits of family planning usage go beyond the health sector. For instance, providing unrestricted access to contraceptives will help ensure a reduction in unwanted pregnancies and thereby contribute to increased female education, women's empowerment, poverty reduction, and even environmental sustainability (Sonfield, Hasstedt, Kavanaugh and Anderson, 2013). A recent study estimated that family planning use could avert more than two-fifths of maternal deaths (Ahmed, Li, Liu, and Tsui, 2012). Increased access to family planning services has been established as a cost-effective strategy for countries to reduce maternal and child mortality (Moreland and Talbird,

2006). Reduction in fertility is an essential factor that defines economic growth and good health (Ashraf, Weil and Wilde, 2013). There is a significant positive association between fertility reduction and fall in maternal, infant and child mortality (Soest and Saha, 2018). Unplanned pregnancies remain a major worry in developing nations with 120 million women giving birth while their actual need is to limit family size (United Nations Population Fund [UNFPA], 2019).

Family planning is one of the most cost-effective ways to prevent maternal, infant, and child mortality. It can reduce maternal mortality by reducing the number of unintended pregnancies, the number of abortions, and the proportion of births at high risk. (Lule, Hasan, and Yamashita-Allen, 2007). It has been estimated that meeting women's need for modern contraceptives would prevent about one-quarter to one-third of all maternal deaths, saving 140,000 to 150,000 lives per year (Singh, Darroch, Vlassof, and Nadeau, 2003). Family planning offers a host of additional health, social, and economic benefits; it can help slow the spread of HIV, promote gender equality, reduce poverty, accelerate socioeconomic development, and protect the environment. Among women of reproductive age in developing countries, 867 million (57%) are in need of contraception because they are sexually active but do not want a child in the next two years. Of these, about 222 million (26%) do not have access to modern methods of contraception, resulting in significant unmet need (Singh, and Darroch. 2012.) In 2006, unmet need for family planning was added to the fifth Millennium Development Goal as an indicator for tracking progress on improving maternal health. (Bernstein and Edouard, 2007).

In Nigeria, according to the population census of 2006, there were, at that time, 44,152,637 women of reproductive age. In Nigeria, for example, the results of the 2013 Demographic and Health Survey indicated that only 15.1 percent of married women were using any form of contraceptive method, while only 9.8 percent were using a modern method (National Population Commission NPC/ICF, 2014). These numbers have not changed meaningfully since 2003 (National Population Commission (NPC/ICF), 2009). Partly as a result of low contraceptive use, in 2013 fertility remained high in Nigeria at 5.5 children per women, on average. Underlying the low contraceptive use and high fertility rate in Nigeria, are fertility preferences that favor a large family size. Only 19 percent of currently married women desired no more children while 33 percent desired another child within the next two years (National Population Commission (NPC/ICF), 2014).

Furthermore, the mean ideal family size was 7.1 percent per women while unmet need stood at 16 percent among currently married women. The Nigerian Demographic and Health Survey (NDHS) (2013) reported that only 15.1 percent of married women of reproductive age were using any contraceptive method, 10 percent of currently married women reported using a modern method, and 5 percent use other methods of contraception. In addition, there is a significant unmet need for family planning in Nigeria; 16 percent of married women have an unmet need for family planning (NDHS, 2013). For these reasons, Nigeria amongst the African countries has made a commitment to enhance family planning program which is an important factor that determines the reduction of fertility rate. Amongst the family planning program is the use of modern contraception (WHO, 2013).

Modern Family Planning: Meaning and Types or Methods

Family planning is the ability of individuals and couples to space and attain their desired number of their children through contraceptive use, which is one of the most cost-effective public health interventions and is pivotal to reducing the country's fertility (Graff, 2014). Family planning methods can be divided into two categories: modern and traditional (Maria Paz, Maria Midea and Elma, 2017). Modern contraceptives include oral contraceptives, intrauterine devices (IUDs), female and male sterilisation, injections, condoms and the diaphragm (United Nations, Department of Economic and Social Affairs, Population Division; 2015) while the traditional ones include withdrawal, rhythm and cycle methods (Mosha, Mgimwa and Msuya 2017).

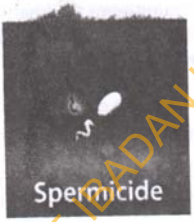
Contraceptive Patch

Contraceptive patch is a transdermal patch applied to the skin that releases synthetic estrogen and progestin hormones. The patch is worn each week for three consecutive weeks, generally on the lower abdomen or buttocks. The fourth week is patch-free. Moreover, it has been shown to be as effective as a combined oral contraceptive pill (Aliyu and Onwuchekwa, 2018).

Source: Planned Parenthood Federation of America inc 2020 Birth Control Methods and Types https://www.plannedparenthood.org/learn/birth-control/birth-control-patch

Spermicides

Spermicides is placed in the vagina before intercourse to create a chemical barrier. (Chandra-Mouli, McCarraher, Phillips, Williamson and Hainsworth, 2014). It may be used alone or in combination with a physical barrier.



Source: Planned Parenthood Federation of America inc 2020 Birth Control Methods and Types https://www.plannedparenthood.org/learn/birth-control/birth-control-patch

Contraceptive Sponge

The contraceptive sponge has a depression to hold it in place over the cervix. Foam/ sponge is placed into the vagina using an applicator. The sponge acts as a barrier which stops the sperm from reaching the egg and also acts as a spermicide (Nordqvist, 2009).

Source: Planned Parenthood Federation of America inc 2020 Birth Control Methods and Types https://www.plannedparenthood.org/learn/birth-control/birth-control-patch

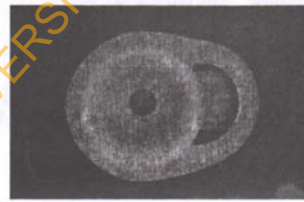
Cervical Cap

The cervical cap is a thimble-shaped latex rubber barrier device fitted over the cervix and blocks sperm from entering the uterus through the external orifice of the uterus, called the os (Chandra-Mouli, McCarraher, Phillips, Williamson and Hainsworth, 2014). The cap stays in place by suction

Source: Planned Parenthood Federation of America inc 2020 Birth Control Methods and Types https://www.plannedparenthood.org/learn/birth-control/birth-control-patch

The Lea Contraceptive

The Lea contraceptive is a soft pliable cup-shaped bowl with a loop inserted into the vagina before intercourse and it prevents sperm from entering the cervix. For effectiveness, it must be used with a spermicide and left in place for 8 hours (Nordqvist 2009).



Source: Wiley on line libarary 2020 Barrier Control Methods and Types https://www.plannedparenthood.org/learn/birth-control/birth-control-patch

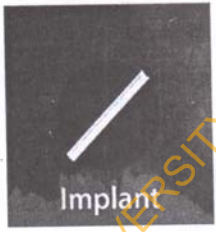
Emergency contraception (emergency postcoital contraception)

Emergency contraception (emergency postcoital contraception) are

contraceptive measures that, if taken after sex, may prevent pregnancy. They are referred to as emergency contraceptives or the morning-after pill. These drugs prevent ovulation or fertilisation and possible post fertilisation implantation of a blastocyst (embryo). As an emergency contraceptive pill, it is different from, medical abortion methods (Somba, Mbonile, Obure and Mahande, 2014).

Source: Planned Parenthood Federation of America inc 2020 Birth Control Methods and Types https://www.plannedparenthood.org/learn/birth-control/birth-control-patch

Implants



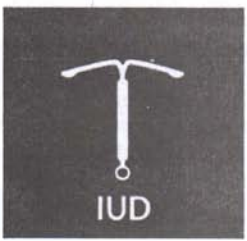
Contraceptive implants are small, thin, flexible plastic rods, each about the size of a matchstick, that are inserted under the skin of a woman's upper arm and release a progestin hormone into the body. The most common types of implant contraceptives are: Implanon (one rod containing 68 mg of progestin etonogestrel); Jadelle (two rods, each containing 75 mg of levonorgestrel); and Sino-implant (II) (two rods, each containing 75 mg of levonorgestrel) (Ramchandran and Upadhyay, 2007). Contraceptive implants are 99.95 percent effective and lasts up to 3 years.

Source: Planned Parenthood Federation of America inc 2020 Birth Control Methods and Types https://www.plannedparenthood.org/learn/birth-control/birth-control-patch

Intrauterine devices (IUD)

An intrauterine device (IUD), also known as intrauterine contraceptive device (IUCD or ICD) or coil, is a small, often T-shaped birth control device that is inserted into the uterus to prevent pregnancy. IUDs are one form of

long-acting reversible birth control (LARC) (Winner, Peipert, Zhao, Buckel, Madden, Allsworth, and Secura, 2012). Intrauterine device (IUD) is also known as a coil. It is a small, flexible T-shaped device that is placed in the uterus by a physician. It stays in place throughout the time pregnancy is not desired and is used as a primary contraception method but may be used as emergency contraception. An IUD can last for 5 to 10 years depending on the type. As an emergency contraception, it is intended for occasional use when primary contraception means fails (Somba, Mbonile, Obure and Mahande, 2014).

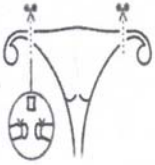


Hormonal Intrauterine Device (hormonal IUD) 99.8 percent effective, lasts to 5 years
Source: Planned Parenthood Federation of America inc 2020 Birth Control Methods and Types https://www.plannedparenthood.org/learn/birth-control/birth-control-patch

Copper intrauterine device (Cu-IUD) 99.2% effective Lasts to 10 years
Source: Planned Parenthood Federation of America inc 2020 Birth Control Methods and Types https://www.plannedparenthood.org/learn/birth-control/birth-control-patch

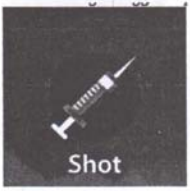
Tubal ligation

Tubal ligation is a permanent form of female sterilisation. The fallopian tubes are severed and sealed (pinched shut) to prevent fertilisation (Amory, Muller, Shimshoni, Isoherranen, Paik, Moreb, Amory, Evanoff, Goldstein and Griswold, 2011).



Female tubal ligation 99.5% effective/permanent
Source: Planned Parenthood Federation of America inc 2020 Birth Control Methods and Types https://www.plannedparenthood.org/learn/birth-control/birth-control-patch

Contraceptive Injection (The Shot)



The brand name is Depo-Provera. Depot medroxyprogesterone acetate (DMPA) is a progestin-only long-acting reversible hormonal contraceptive birth control drug injected every 3 months (Chandra-Mouli, McCarraher, Phillips, Williamson and Hainsworth, 2014). It stops the woman from releasing an egg and provides other contraceptive effects.

Contraception injection: Depot medroxy-progesterone acetate (DMPA) 94% effective Injection every 12 weeks
Source: Planned Parenthood Federation of America inc 2020 Birth Control Methods and Types https://www.plannedparenthood.org/learn/birth-control/birth-control-patch

Contraceptive Vaginal Ring (NuvaRing)

Contraceptive vaginal ring (NuvaRing) is the trade name for a combined hormonal contraceptive vaginal ring manufactured by Organon. It's a flexible plastic (ethylene-vinyl acetate copolymer) ring that releases a low dose of a progestin and an estrogen over 3 weeks. The NuvaRing is inserted into the vagina for a 3-week period, and then removed for one week, during which a menstrual period will be experienced (World Health Organisation, 2016.

Contraceptive vaginal ring 91% effective New ring used every 4 weeks
Source: Planned Parenthood Federation of America inc 2020 Birth Control Methods and Types https://www.plannedparenthood.org/learn/birth-control/birth-control-patch

Pill

The pill is a combined contraceptive pills having two hormones – an estrogen and progestin that stops the release of egg (ovulation), and also make the lining of the uterus thinner (World Health Organisation 2016) Combined oral contraceptive pill (the COC Pill) 91 percent effective Taken daily with 24-hour window while Progestogen-only contraceptive pill (POP) 91 percent effective Taken daily 3-hour window.

Source: Planned Parenthood Federation of America inc 2020 Birth Control Methods and Types https://www.plannedparenthood.org/learn/birth-control/birth-control-patch

Diaphragm

Diaphragm is a rubber dome-shaped device placed over the cervix and fits into place behind the woman's pubic bone with a firm flexible ring that presses it against the vaginal walls. The diaphragm is a very effective contraceptive device when combined with a spermicide(Somba, Mbonile, Obure and Mahande, 2014)

Diaphragm 88% effective
Source: Planned Parenthood Federation of America inc 2020 Birth Control Methods and Types https://www.plannedparenthood.org/learn/birth-control/birth-control-patch

Female Condom

Female condom is made up of polyurethane having a flexible ring at each end. One end is secured behind the pubic bone to hold the condom in place, while the other ring stays outside the vagina (United Nations, Department of Economic and Social Affairs, Population Division, 2015; Nordqvist 2019). Female condom is 79 percent effective.

Source: Planned Parenthood Federation of America inc 2020 Birth Control Methods and Types https://www.plannedparenthood.org/learn/birth-control/birth-control-patch

Adopting The Theory of Planned Behaviour as a Framework

Theory of Planned Behaviour (TPB) was propounded by Ajzen (1991) where he submitted that three determinants influence behaviour intention which is a proxy measure of the behaviour (decision using modern family planning), attitudes toward the behaviour which refer to the individual's (women's) positive and negative feeling of the behaviour and outcome of performing the behaviour, subjective norms, which relates to the individual's (women's) perception of the social environment surrounding the behaviour; and perceived control over the performance of the behaviour .The Theory of Planned Behaviour (TPB) is the most used framework in the category of behavioural models (Morgan and Bachrach, 2011). The main assumptions of the TPB are that intention is a strong predictor of behaviour and intention may be assessed by evaluating general attitudes, beliefs and preferences. An important feature of the TPB is that it is not discipline-specific, or as its authors call it, it is a content-free model of human behaviour (Ajzen, 2011). According to Klobas (2011), the main issue regarding the usefulness of the TPB concerns the cases in which it may be appropriately used, rather than if it is appropriate to use the TPB and her conclusion is that it should be applied to decisions regarding fertility about which the individual in the target population is likely to have reasoned. In this theory, behaviour is explained by behavioural intention, which is influenced by attitudes toward a specific behaviour, subjective norms (SNs), that is, perceived social pressure to perform the behaviour and perceived behavioural control (PBC). Specifically the strength of others' influence on individuals' behaviour (SN) is determined by individuals' perception of what others want them to do (normative beliefs) and their motivation to comply with others.

In demography, fertility is seen as the result of rationally taken decisions, based on the assessment of costs and benefits. This, however, does not imply that rational behaviour in the sense of economic rationality is required in order to work within the TPB framework (Ajzen, 2011; Klobas, 2011; Liefbroer, 2011; Philipov, 2011). As both Ajzen (2011) and Philipov (2011) point out, beliefs are subjectively held information, possibly even incomplete and/or biased, but the TPB is not concerned with the process

through which the individuals arrive at their beliefs, so whether this is a rational process or not does not affect the results obtained. What matters is how these beliefs shape the attitudes, norms and perception of behavioural control with which the TPB operates, thus also the intention to perform the behaviour. The greater control individuals have on their fertility, ranging from effective contraceptive methods to fertility treatments, combined with increasing social acceptance of choices regarding fertility, renders necessary the understanding of how decisions about childbearing are made (Klobas, 2011) and the impact these decisions have on fertility patterns. Under these circumstances, the occurrence of an unintended birth for example is more likely due to ineffective actual control than to rationality issues (Barber, 2011; Philipov, 2011).

Barber (2011) refers to three possible reasons why the initial intention to avoid pregnancy by using adequate protection may not be translated into behaviour. One of them is sexual arousal, which increases the risk of a woman to get carried away and put aside the initial intention. Also, it may be that one has a stronger desire to please their partner, to bond with them, or they are more inclined towards nurturing, which could imply an unconscious desire to become parent. Individual variation in these characteristics could be used to explain why the intentions of some women are more likely to translate into behaviour. The TPB gives best results with short term intentions, which are stable and allow for a more accurate estimation of their realisation. Also, unlike the long-term intentions, their realisation may be assessed easier and it brings valuable information about contemporary childbearing decision-making and its subsequent behaviour. For example, using data from a two-wave panel in four countries, Spéder and Kapitány (2009, 2012) analysed childbearing intentions and their subsequent realisation and were able to classify the respondents into three categories. The first category comprised people who intended to have a child at the moment of the first wave and they gave birth to one until the second interview (intentional parents). A second category was formed by the postponers, namely those who initially declared they intend to have a child in the two years following the first interview, failed to do so and declared the same intention at the second wave as well. The last category was that of abandoners, who intended to have a child at the time of the interview or during the subsequent two years, failed to translate their intention into behaviour and declared no such intention at the second interview. Philipov (2011) underlines that the concept of 'belief' is

fundamental for the TPB and that these are inevitably formed within given social influences and through continuous socialisation (Liefbroer, 2011). And since these beliefs are the ones determining the core elements of the TPB, the macro context is automatically accounted for. Moreover, control beliefs are strongly connected with actual control, which in turn is based on enablers and constraints (Klobas, 2011). Thus, changing contexts may either change intentions (and behaviour) through the attitudes, norms and perceptions of behavioural control, or determine the individual to attach them different weights (Liefbroer, 2011).

Methodology

The participants were a convenience sample of 130 women of childbearing age from 21 to 49 years from Bodija, Agbowo/University of Ibadan and Mokola in Ibadan North Local Government area. All were married and currently using modern family planning methods and participated on a voluntary basis. 130 copies were distributed, 119 copies were retrieved out of this 108 were completely filled and used for data analysis.

Instruments

In order to identify the key variables for the study, a questionnaire was devised based on the one recommended by Ajzen (1991, 2002) and adapted to the issues being addressed. The dimensions of the TPB model (attitude towards contraception, subjective norms, perceived control and use of contraception) were assessed using a series of statements Attitude towards contraception had items following stem: "I use modern family planning method ... and I use modern family planning method to let my body rest") were responses were formatted on a 4 point scale ranging from Good (G), Bad (B), Pleasant (P) and Unpleasant (UP) exhibiting a very high reliability index ($\alpha = 83$). Subjective norms focused on norms, through questions assessing how the participant perceived that her partner, friends relatives and religious leaders approve of them practising modern family planning were measured by a six-item scale with a very satisfactory reliability ($\alpha = 82$). Responses were formatted on a 4-point scale ranging from Strongly agree (SA), Agree (A), Strongly disagree (SD) and Disagreed (D). Two components emerged here. The first (four items) was related to approval by the woman's relatives, friends, parents and spouse while the second (two items) expressed the approval of religious and traditional

leaders. Perceived control was evaluated using a scale consisting of six items (α = 0.80). This scale had two components. The first component consisted of three items related to control with respect to others (for example, I can talk about modern family planning method with my friends and family'. The second component (consisted of three items) referred to control with respect to oneself ('I can stop taking/using modern family planning method whenever I want to' and the responses were formatted on a 4 point scale ranging from Very Easy (VE), Easy (E) ,Very Hard (VH) and Hard (H). Use of contraception was measured on a six-item scale exhibiting good reliability (α = 0.77). Two components emerged from this scale. The first component (three items) was related to the easy/ complicated aspect of the use of family planning (for example, 'Using a modern family planning method is easy for me'. The second component (three items) was related to the benefits of the practice, 'Using a modern family planning method helps me avoid unwanted pregnancies. Responses were formatted on a 4 point scale ranging from Strongly agree (SA), Agree (A), Strongly disagree (SD) and Disagreed (D).

Data Analysis

Simple frequencies count and percentages were used to analyse respondents' background data and research questions raised for the study. The mean score of 3.00 was adopted as criterion point for determining those being used and their effectiveness. What this implies is that, a mean score of 3.00 and above is an indication of an agreement with the options of the items while a mean score of below 3.00 indicates a disagreement to the options of the items.

Research Question 1 What is the attitude of married women of child bearing age towards the use of modern family planning methods?

Table 26.1 shows the attitude of married women of child bearing age towards modern family planning method use, age 40.7 percent agreed that they use modern family planning method for child spacing which is good, 9.3 percent chose bad, 35.2 percent chose that pleasant while 14.8 percent said unpleasant. 42.6 percent respondents indicated that they use modern family planning method for comfortable sexual relationship which is good, 15.7 percent said it is bad, 23.1 percent said it is pleasant while 18.5 percent were of the view it is unpleasant. 39.8 percent respondents indicated that they use modern family planning method for prevention of unwanted

Table 26.1: Attitude of Married Women to the Use of Modern Family Planning Methods

S/N	Items	G	B	P	UP	Mean	S.D
1	I use modern family planning methods for child spacing	44 40.7%	10 9.3%	38 35.2%	16 14.8%	3.61	.60
2	I use modern family planning methods for comfortable sexual relationship	46 42.6%	17 15.7%	25 23.1%	20 18.5%	3.57	.60
3	I use modern family planning methods for prevention of unwanted pregnancies	43 39.8%	18 16.7%	20 18.5%	27 25.0 %	3.39	.61
4	I use modern family planning methods for prevention of sexual transmitted infections	21 19.4%	22 20.4 %	37 34.3%	28 25.9%	3.39	.61
5	I use modern family planning methods to lets my body rest before another conception	53 49.1%	14 13.0%	30 27.8%	11 10.2%	3.38	.62

Weighted Mean = 3.00

pregnancies which is good, 16.7 percent said it is bad, 18.5 percent said it is pleasant while 25.0 percent were of the view it is unpleasant. 19.4 percent respondents indicated that they use modern family planning for prevention of sexual transmitted infections which is good, 20.4 percent said it is bad, 34.3 percent said it is pleasant while 25.9 percent were of the view it is unpleasant. On the use of modern family planning method to let women's body rest before another conception 49.1 percent said good, 13.0 percent said bad, 27.8 percent were of the view that it was pleasant while 10.2 percent said unpleasant. The findings had mean scores that ranged between 3.38 to 3.61, which are above the criterion mean of 3.00. The highest rated item on the table is item 1 with a mean of 3.61. On the other hand, the least rated item in the table is item 5 with a mean of 3.38. This implies that attitude of married women of child bearing age towards modern family planning method use is high. The high positive attitude towards modern family planning by the women of child bearing age in the three communities could be attributed to their knowledge of modern family planning and knowledge of the benefits of modern family planning

methods by them as well as where they are currently residing which is in urban communities .This finding is in line with the findings of Lincoln, Mohammadnezhad and Khan (2018) that an overwhelming majority of the participants (176 or 54.2%) had high level of attitudes towards family planning. This implies that women having a positive attitude towards family planning use is an important factor for promoting its usage .Using the theory of planned behaviour specifies the nature of relationships between beliefs and attitudes. *Attitude,* the first predictor, is a function of perceived desirability and likelihood of expected outcomes, and has been demonstrated to be a strong predictor of some of the behaviours (Fishbein, 2008; Smith-McLellan and Fishbein, 2008). According to TPB, women's evaluations of or attitudes toward modern family planning method use are determined by their accessible beliefs about the behaviour which is using the modern family planning methods. Where a belief is defined as the subjective probability that the behaviour that is modern family planning method use will produce a certain outcome which could be prevention of unwanted pregnancies, safe sexual relationship, prevention of sexual transmitted diseases amongst others.

Applying the Theory of Planned Behaviour this could be explained that behaviour which is modern family planning use by married women of child bearing age is explained by behavioural intention, which is influenced by their attitudes for example using modern family planning method is best for preventing unwanted pregnancies, helps to prevent sexual transmitted infections, child spacing and comfortable sexual relationship toward a specific behaviour(modern family planning method use). Attitudes toward the object of the behaviour and beliefs about the consequences of doing or not doing the behaviour also affect behaviour. In other words, if a married woman of child bearing age has a positive attitude toward using modern family planning method and believes that the consequences of use are important to her, she will be more likely to intend to use modern family planning method and then be effective in her actual modern family planning method use

Research Question 2

Do subjective norms affect married women of child bearing age use of modern family planning methods?

Table 26.2: Subjective Norms Affecting Married Women Use of Modern Family Planning methods

S/N	Items	SA	A	SD	D	Mean	S.D
1	My partner approves of me using modern family planning methods	44 40.7%	27 25.0%	20 18.5%	17 15.8%	3.91	.57
2	My parents approves of me using modern family planning methods	25 23.1%	29 26.9%	28 25.9%	26 24.1%	3.57	.56
3	My relatives (in-laws) approves of me using modern family planning methods	20 18.5%	22 20.4%	30 27.8%	34 31.5 %	3.39	.59
4	My friends approves of me using modern family planning methods	21 19.4%	39 36.1%	20 18.5%	28 25.9%	3.39	.60
5	My religious leaders supports women using modern family planning methods	24 22.2%	28 25.9%	27 25.0%	29 25.9%	3.38	.60
6	Leaders in my community approves of married women using modern family planning methods	27 25.0%	26 24.1%	29 26.9%	26 24.1%	3.21	.61

Weighted Mean = 3.00

From the table it shows that 65.7 percent respondents agreed that their partner approves of them using modern family planning while 34.3 percent disagreed, 50.0 percent respondents agreed that their parents approves of them using modern family planning while 50.0 percent respondents disagreed, 38.9 percent respondents agreed that their relatives (in-laws) approves of them using modern family planning while 61.1 percent respondents disagreed, 55.5 percent respondents agreed that friends approves of them using modern family planning while 44.5 percent respondents disagreed, 48.1 percent respondents agreed that religious leaders supports women using modern family planning while 51.9 percent respondents disagreed, 49.1 percent respondents agreed that leaders in my community approves of married women using modern family planning while 50.9 percent disagreed . Subjective norms strongly support family planning use as 65.7 percent of the women answered (M=3.91, SD=0.57)

Subjective norms refer to the belief that an important person or group of people will approve and support a particular behaviour. Subjective

norms are determined by the perceived social pressure from others for an individual to behave in a certain manner and their motivation to comply with those people's views. In other words, subjective norms relate to the women's perception of social pressure from others who are important to them for example, spouse, family, friends to behave (or not) in a certain manner which is using modern family planning methods and their motivation to comply with those people's views. This may imply that women tend to be willing to use the family planning methods only when approved or disapproval from the spouse, cultural and religious leaders in their community The second predictor of behavioural intention is perceived subjective norms, the perceptions of what others think one should do as well as perceptions of what others are doing (Fishbein, 2000). Specifically, the strength of others' influence on individuals' behaviour (SN) is determined by individuals' perception of what others want them to do (normative beliefs) and their motivation to comply with others.

According to Ajzen's Theory of Planned Behavior (TBP), intention/willingness to modern family planning method, is predicted by the function of referents (for example partner, religious and cultural leaders) approval towards the behaviour and the individual's motivation to comply with the referents suggestion Approval from partner has been identified from the study as a major determinant of modern family planning method use among married women of child bearing age. This is because women require certain form of approval from their husbands on whether or not to use family planning in a marital relationship. Most women try as much as possible to first seek permission from their husbands this is because our society is rooted in patriarchal values that put man in a decision making position than a woman, so it is always hard for woman to make any move without approval of the husband. Studies by Gizaw and Regassa (2011) and Malalu (2014) found out that women who have discussed with their partner/husband actually used some methods compared to those who did not. Husband's/partner's support for family planning influences a woman's modern contraceptive use (Williamson, Parkes, Wight, Petticrew and Hart, 2009; Ngoma and Kadantu, 2010). The findings above indicate that men's control over women's reproductive health and sexuality is likely a result of upstream factors related to the masculinity and gender role norms prevailing in most patriarchal societies. From the TPB this implies that women's beliefs about whether their husband, friends, relatives and religious leaders are of importance to them think could likely make them

engage in the modern family planning use.

Research Question 3

Do perceived control affect married women of child bearing age use of modern family planning method?

Table 26.3: Perceived Control on The Use of Modern Family Planning by Married Women

S/N	Items	VE	E	VH	H	Mean	S.D
1	I can talk about family planning methods with my friends	40 37.0%	38 35.2%	20 18.5%	10 9.3%	3.00	.59
2	I can talk about family planning methods with my family	39 36.1%	41 38.0%	17 15.7%	11 10.2%	3.01	.53
3	I can talk about family planning methods with relatives	30 27.8%	37 34.3%	16 14.8%	25 23.1 %	3.10	.54
4	I can stop taking/using FP methods whenever I want to'	31 28.7%	39 36.1%	20 18.5%	18 16.7%	3.67	.55
5	I can stop taking/ using FP methods at my own convenience	34 31.5%	37 34.3%	15 13.9%	22 20.4%	3.58	.59
6	I have confidence taking/ using FP methods whenever I want to	30 27.8%	43 39.8%	19 17.5%	26 24.1%	3.77	.61

Weighted Mean = 3.00

The table above shows responses on perceived control on the use of family planning 37.0 percent respondents agreed that they can talk about family planning with their friends which is very easy, 35.2 percent said easy, 18.5 percent agreed it was very hard to talk about family planning with their friends while 9.3 percent said hard. On talking about family planning with family 36.1 percent agreed that it was very easy, 38.0 percent said easy. 15.7 percent respondents said very hard while 10.2 percent said hard. On talking about family planning with relatives 27.81 percent agreed that it was very easy 34.3 percent said easy. 14.8 percent respondents said very hard while 23.1 percent said hard.

Perceived control in respect to women of child bearing age, 28.7 percent respondents agreed that they can stop taking/using FP whenever

they want to which is very easy, 36.1 percent said easy, 18.5 percent were of the view that it is very hard to stop taking or using family planning whenever they want to while 16.7 percent said hard. On stop taking/using FP at their convenience 31.5 percent respondents said it is very easy, 34.3 percent said easy while 13.9 percent said very hard and 20.4 percent chose hard respectively Confidence taking/using FP whenever they want to 27.8 percent said it's very easy, 39.8 percent said it is easy while 17.5 percent said very hard and 24.1 percent hard respectively. The findings had mean scores that ranged between 3.00 to 3.77, which are above the criterion mean of 3.00. The highest rated item in the table is item 6 with a mean of 3.77. On the other hand, the least rated item in the table is item 1 with a mean of 3.00.

The findings show that perceived control had direct effect on family planning use for the women of reproductive age In the urban areas of Ibadan North local government today, the lifestyle is becoming increasingly westernised. City-dwelling couple live more and more in nuclear family groups, far from parents and relatives, and are potentially more independent which may likely give women the confidence of taking decisions over issues relating to their reproductive health. Perceived behavioural control includes the perception of one's own abilities and sense of control over the situation and is defined as a combination of locus of control (belief about the amount of control that a person has over events and outcomes in his life) and self-efficacy (perceived ability to perform the task) (Ajzen, 2002). *Perceived Behavioral Control* (PBC) refers to an individual's confidence in his/her abilities to correctly perform the behavior in question (Ajzen, 1991; Bandura, 1986). Like attitude and perceived norms, PBC is considered the third proximal predictor of behavioral intention (Fishbein, 2008; Fishbein and Ajzen, 2010). This implies that women of child bearing age residing in urban communities perhaps have confidence in their abilities and sense of control over their use of family planning methods. Perceived behavioural control refers to the presence of the necessary resources and opportunities for modern family planning method use and is influenced by a number of factors, such as previous experiences related to the modern family planning, convenience perceptions, perceived monetary barriers which may in turn increase or decrease the perceived level of feasibility of family planning usage.

Research Question 4

What is extent of usage of modern family planning by married women of

child bearing age?

Table 26.4: Use of Modern Family Planning By Married Women of Child bearing Age

S/N	Items	SA	A	SD	D	Mean	S.D
1	Using a modern family planning method is easy	42 38.9%	35 32.4%	18 16.7%	13 12.0%	3.33	.63
2	Using a modern family planning method is cheap	29 27.0%	35 32.4%	27 25.0%	17 15.7%	3.29	.60
3	Using a modern family planning method affects my menstrual flow and body weight	20 18.5%	27 25.0%	23 21.3%	38 35.2 %	2.99	.59
4	Using a modern family planning methods helps to avoid unwanted pregnancies	36 33.3%	44 40.7%	15 13.9%	13 12.0%	3.25	.59
5	Using a modern family methods helps me to have small family	31 28.7%	39 36.1%	12 11.1%	26 24.1%	3.31	.62
6	Using a modern family methods helps me to get pregnant when I so desire and have safe sex	34 31.5%	47 43.5%	13 12.0%	14 12.9%	3.60	.60

Weighted Mean = 3.00

The study indicated the use of modern family methods by married women of reproductive age 38.9 percent respondents strongly agreed that using a modern family planning method is easy, 32.4 percent agreed, 16.7 percent respondents strongly disagreed while 12.0 percent respondents disagreed. On modern family planning method being cheap 20.7 percent respondents strongly agreed, 32.4 percent agreed while 25.0 percent strongly disagreed and 15.7 percent disagreed. On modern family planning method affecting their menstrual flow and body weight 18.5 percent respondents strongly agreed, 25.0 percent agreed while 21.3 percent strongly disagreed and 35.2 percent disagreed. On the benefits of using modern family planning 33.3 percent respondents strongly agreed that it

helps them to avoid unwanted pregnancies, 40.7 percent indicated yes while 13.9 percent were of contrary view by strongly disagreeing and 12.0 percent disagreed. On helping to have small family 28.7 percent strongly agreed, 36.1 percent agreed while 11.1 percent strongly disagreed and 24.1 percent disagreed. On helping them to get pregnant when they so desire and have safe sex 31.5 percent strongly agreed, 43.5 percent agreed while 12.0 percent strongly disagreed and 12.9 percent disagreed. The findings had mean scores that ranged between 3.09 to 3.60, which are above the criterion mean of 3.00. The highest rated item on the table is item 6 with a mean of 3.60. On the other hand, the least rated item on the table is item 3 with a mean of 2.99. The findings shows that married women use modern family planning methods for the following reasons: that family planning methods is easy to use, cheap, to avoid unwanted pregnancies, helps them to have small family and helps them to get pregnant when they so desire and have safe sex. Applying the Theory of Planned Behaviour implies that use of modern family planning method is based on the benefits married women of child bearing age derived from engaging in the usage of modern family planning methods and not the barriers. This could also be seen from various studies by Campbell and, Graham (2006) that child spacing, which is one of the benefit of utilising family planning services have been identified as a means of reducing maternal deaths In addition, utilisation of family planning helps to prevent women from participating in unsafe abortion practices (Godwin 2009). In the words of Ekpenyong, Nzute, Odejimi, and Abdullahi (2018) argued that this is because in Nigeria, like many other African countries, abortion is illegal and the United Nations Population Fund (UNFPA, 2009) reported that 74,000 women were estimated to die because of unsafe abortion. This report further explains that 50 million induced abortions were performed each year of which 20 million are performed in unsafe conditions or by untrained providers. Thus, the use of family planning services according to World population Department (1996) in Ekpenyong, Nzute, , Odejimi, and Abdullahi, (2018) reduces the number of unintended pregnancies, thereby promoting women reproductive health by decreasing the number of times a woman is exposed to the risk of pregnancy and child bearing in adverse conditions.

Conclusion and Recommendations

Family planning use amongst married women of child bearing age was modelled using the Theory of Planned Behaviour. The model was a good

fit to the data and significantly predicted modern family planning use. Attitudes, norms and perceived behavioural control were all found to significantly predict the use of modern family planning. This suggests that the Theory of Planned Behaviour may be a suitable theory upon which to understand the use of modern family planning methods. These constructs, considered together, determine the intention of the married women of child bearing age and ultimately predict the behaviour which is modern family planning method use. The more favourable attitudes and subjective norms combined with greater perceived behavioural control, the stronger modern family planning use among married women of child bearing age. In order to increase the uptake of modern family planning methods the following are recommended: Sufficient and right information to be provided by stakeholders (health practitioners) on modern family planning methods at all levels federal, state and local government for more uptake. Besides, Government should create knowledge awareness programs on the existing reproductive health programmes and policies especially on the benefits to women of reproductive age. This should be done through campaigns on birth control, health talks and sensitisation of the masses on the importance of small family sizes, as this will reduce on the extreme poverty at the household and government level. In addition, family planning programmes should be intensified to meet the needs of all categories of married women by increasing outreach to married women who are less likely to use modern family planning.

References

Ahmed, S., Li, Q., Liu, L., and Tsui, A. O. (2012). Maternal deaths averted by contraceptive use: an analysis of 172 countries. *The Lancet*, 380 (9837): 111-125.

Ajzen I. (2002). Perceived behavioral control, self-efficacy, locus of control, and the theory of planned behavior. *Journal of Applied Social Psychology*, 32: 665-683.

Ajzen I. (1991) The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50: 179-211.

Ajzen, I. (1991). The Theory of Planned Behavior. Organizational Behavior and Human Decision Processes 50, 179-211.

_____ (2005). Attitudes, personality, and behavior (2nd ed.). Milton-Keynes, UK: Open University Press.

_____ (2011). Reflections on Morgan and Bachrach's critique. *Vienna*

Yearbook of Population Research, 9, 63-69.

Ajzen, I., and Fishbein, M. (2005). The influence of attitude on behaviour. In D. Albarracín, B. T. Johnson and M. P. Zanna (Eds.), *The handbook of attitudes* (pp. 173-221). Mahwah, NJ: Lawrence Erlbaum.

Aliyu, B. and Onwuchekwa C. (2018). Birth Control Contraceptive drugs/ pills and methods in the last dexades Tropical. *Journal of Obstetrics Gynecology.* Vol 35-233-40 available on http://www.tjogonline.com/ article.asp?issn=0189-5117;year=2018

Amory, J. K., Muller, C. H., Shimshoni, J. A. , Isoherranen, N., Paik, J., Moreb, J. S., Amory, D.W., Evanoff, R., Goldstein, A.S. and Griswold, M.D. (2011). Suppression of spermatogenesis by bisdichloroacetyl-diamines is mediated by inhibition of testicular retinoic acid biosynthesis. *Journal of Androl*; 32: 111-9.

Ashraf, Q.H., Weilm D.N. and Wilde, J. (2013). The Effect of Fertility Reduction on Economic Growth. *Popul Dev Rev.* ,39(1) 9 7-130.

Barber, J. S. (2011). The Theory of Planned Behaviour: considering drives, proximity and dynamics. *Vienna Yearbook of Population Research*, 9, 31-35.

Bartholomew, L.K., Parcel, G.S., Kok, G. and Gottlieb, N. H. (2011). Planning health promotion programs: an intervention mapping approach. John Wiley & Sons; 2011, January 25.

Bernstein, S. and L. Edouard (2007). "Targeting Access to Reproductive Health: Giving Contraception More Prominence and Using Indicators to Monitor Progress. *Reproductive Health Matters* 15(29): 186-191.

Campbell, O.M., Graham, W.J. (2006). Lancet Maternal Survival Series steering group (2006) Strategies for reducing maternal mortality: getting on with what works. *The Lancet* 368: 1284-1299.

Chandra-Mouli, V., McCarraher, D.R., Phillips, S.J., Williamson, N.E., Hainsworth, G. (2014). Contraception for adolescents in low and middle income countries: Needs, barriers, and access Reproductive Health 2014; 11:1.

Ekpenyong, M. S., Nzute, A. I., Odejimi, O. and Abdullahi, A. D. (2018). Factors influencing utilisation of family planning services among female of reproductive age (15-45 years) in Bauchi local government area, Bauchi state. *Nursing Palliative Care*, Vol. 3(3)1-6.

Fishbein, M. and Ajzen, I. (2010). Predicting and changing behavior: The reasoned-action approach. New York, NY: Psychology Press.

Fishbein, M. (2000). The role of theory in HIV prevention. *AIDS CARE.* 12: 273-278.

_____ . (2008) reasoned-action approach to health promotion. Medical Decision Making; 28:834–844. PMC free article, PubMed.

Funk, S., Miller, M.M., Mishell, D.R. Jr, Archer, D.F., Poindexter, A, Schmidt, J, (2005). Safety and efficacy of implanon, a single-rod implantable contraceptive containing etonogestrel. *Contraception* 71: 319-26.

Gizaw, A. and Regassa, N. (2011). Family planning service utilization in Mojo town, Ethiopia: A population based study. *Journal of Geography and Regional Planning*, 4(6): 355-63.

Gizaw, A. and and Regassa, N. (2011). Family planning service utilization in Mojo town, Ethiopia: A population based study. *Journal of Geography and Regional Planning*, Vol. 4(6), pp. 355-363

Godwin, H. (2009). Nigeria: Family Planning basis for Safe Motherhood. *This Day newspaper* (7th, September 2009).

Kavanaugh , M . L. and Anderson, R. M. (2013). Contraception and Beyond: The Health Benefits of Services Provided at Family Planning Centers. New York: Guttmacher Institute.

Klobas, J. (2011). The Theory of Planned Behaviour as a model of reasoning about fertility decisions. *Vienna Yearbook of Population Research*, 9, 47-54.

Liefbroer, A. C. (2011). On the usefulness of the Theory of Planned Behaviour for fertility research. *Vienna Yearbook of Population Research* 9 55–62.

Lincoln, J., Mohammadnezhad, M. and Khan, S. (2018). Knowledge, Attitudes, and Practices of Family Planning Among Women of Reproductive Age in Suva, Fiji in 2017. *Journal of Women's Health Care*, 7:3DOI: 10.4172/2167-0420.1000431.

Lule, E., R. Hasan, and K. Yamashita-Allen. (2007). Global Trends in Fertility, Contraceptive Use and Unintended Pregnancies. *Health, Nutrition and Population Discussion* Paper. Washington, DC: World Bank. Retrieved from http://go.worldbank.org/BZSBNC53A0.

Malalu, P. K. (2014). Determinants of Use of Modern Family Planning Methods: A Case of Baringo North District, Kenya. *Science Journal of Public Health*, 2(5): 424-430.

Maria Paz, N. M., Maria Midea, M. K., Elma, P. L. (2017). Ten Years of Traditional Contraceptive Method Use in the Philippines: Continuity and Change [Internet]. USA: USAID and ICF; 2017 Jul [cited 2019 Mar 26] p. 36. Available from: https://dhsprogram.com/pubs/pdf/WP130/WP130.pdf

Moreland, S. and Talbird, S. (2006). Achieving the Millennium Development Goals: The Contribution of Fulfilling the Unmet Need for Family Planning. Washington, DC: Constella Futures, POLICY Project.

Morgan, P. S. and Bachrach, C. A. (2011). Demographic Debate – Is the

Theory of Planned Behaviour an appropriate model for human fertility? *Vienna Yearbook of Population Research*, 9, 11-18.

Mosha, P.E., Mgimwa, C.A., Msuya, S. M. (2017). Assessment of Knowledge and Perception Towards Modern Contraceptives Use Among Women of ReproductiveAge in Mtwivila, Tanzania. *Science Journal of Public Health*. Jul 13;5(4): 335.

National Population Commission (NPC) [Nigeria] and ICF International (2014). Nigeria Demographic and Health Survey 2013. Abuja, Nigeria, and Rockville, MD: NPC and ICF International.

National Population Commission (NPC) [Nigeria] and ICF Macro (2009). Nigeria Demographic and Health Survey 2008. Abuja, Nigeria: National Population Commission and ICF Macro.

NDHS. National Population Commision; Nigerian Demographic and Health Survey Reports (2013).

Ngoma, C. and Kadantu, M.C. (2010). Knowledge and use of modern family planning methods by rural women in Zambia. *Curationis*; 33(1): 17-22.

Nordqvist, C. (2019). What is contraception? What is birth control? Med News Today 2009. Somba MJ, Mbonile M, Obure J, Mahande MJ. 2014 Sexual behaviour, contraceptive knowledge and use among female undergraduates' students of Muhimbili and Dares Salaam Universities, Tanzania: A cross-sectional study. *BMC Womens Health* 2014; 14:94.

Philipov, D. (2011). Theories on fertility intentions: a demographer's perspective. *Vienna Yearbook of Population Research*, 9, 37-45.

Ramchandran, D., Upadhyay, U.D. (2007). Implants: The Next Generation. Population Reports. *Series K: Injectables and Implants*, 7: 1-19.

Singh, S., and J.E. Darroch. (2012). Adding It Up: Costs and Benefits of Contraceptive Services: Estimates for 2012. New York: Guttmacher Institute.

Singh, S., J.E. Darroch, M . Vlassof, and J. Nadeau. (2003). Adding It Up: The Benefits of Investing in Sexual and Reproductive Health Care. New York: Alan Guttmacher Institute. Retrieved from www.gut t macher.org/p ubs/addingitup.pdf

Smith-McLallen, A. and Fishbein, M. (2008). Predictors of intentions to perform six cancer-related behaviors: Roles for injunctive and descriptive norms. *Psychology, Health and Medicine.*;13(4): 389-401.

Soest, A. V., Saha, U. .R (2018). Relationships between infant mortality, birth spacing and fertility in Matlab, Bangladesh. *PLOS ONE*. Apr 27;13(4): e0195940.

Sonfield, A., Hasstedt, K., Kavanaugh, M.L. and Anderson, R. (2013). The

social and economic benefits of women's ability to determine whether and when to have children, New York: Guttmacher Institute.

Spéder, Z., and Kapitány, B. (2012). Realising Birth Intentions in European Comparison – Understanding the Postcommunist Fertility Transition. Retrieved from http://www.demografia.hu/letoltes/kiadvanyok/WorkingP/WP15

Spéder, Z. and Kapitány, B. (2009). How are Time-Dependent Childbearing Intentions Realized? Realization, Postponement, Abandonment, Bringing Forward. *European Journal of Population*, 25, 503-523.

UNFPA. Family planning [Internet]. [cited 2019 Jul 12]. Available from: https://www.unfpa.org/family-planning

United Nations, Department of Economic and Social Affairs, Population Division. Trends in Contraceptive Use Worldwide, 2015. [Internet]. New York, USA: United Nations, Department of Economic and Social Affairs, Population Division; 2015 [cited 2019 Mar 23] p. 70. Report No.: ST/ESA/SER.A/349. Available from: http://www.un.org/en/development/desa/population/publications/pdf/family/trendsContraceptiveUse2015Report.pdf

Williamson, L., Parkes, A., Wight, D., Petticrew, M. and Hart, G. (2009). Limits to modern contraceptive use among young women in developing countries: a systematic review of qualitative research. *Reproductive Health*; 6(1): 3.14.

Winner, B., Peipert, J.F., Zhao, Q., Buckel, C., Madden, T., Allsworth, J.E., Secura, G.M. (2012). Effectiveness of long-acting reversible contraception. *New England Journal of Medicine* 24;366(21): 1998-2007.

Winner, B., Peipert, J.F., Zhao, Q., Buckel, C., Madden, T., Allsworth, J.E., Secura, G.M. (2012). Effectiveness of Long-Acting Reversible Contraception". *New England Journal of Medicine*. 366 (21): 1998-2007. doi:10.1056/NEJMoa1110855. PMID 22621627.

World Health Organization (2016). Selected Practice Recommendations for Contraceptive Use. Sexual and Reproductive Health. *World Health Organization*.

World Health Organization. World Health Organization Fact Sheet. 2013.

World Population Department (1996) For economic and social information and Policy Analysis, Population Division. New York.