Uzma Moin

ID UM22207HPU30432

Course Name: Final Thesis for MPH

Family Planning: Reproductive Health Knowledge, Belief and Determinants of Contraceptive Use among Women Attending Family Planning Clinics in Niamey, Niger.

TABLE OF CONTENTS

Acknowledgement:

I would like to express great thanks to my tutor, Edward Lambert, who has been involved in helping and guiding me in making the architecture of my thesis in every step. His generous guidance was helpful to solve the problems. I should say without his advice nothing could have been accomplished. Also, I would like to thank my friend, Odette Eiger, who commented critically on my initial efforts of revising the thesis. I have also accepted the advice of Dr. Adama Ouedraogo (maternal and child health specialist at UNICEF, Niger) in updating the thesis. I would also like to thank Dr. Pierre Ngondara, who helped me to translate my questionnaire in French (Niger is a Francophonic country) for respondents. I would also like to acknowledge the considerable help from Mrs. Jeanette and Mr. Khalilou who helped me in data collection from respondents at different family planning clinics in Niamey, Niger. I want to thank Dr. Abdul Rashid Fatima (responsible for evaluation at family planning clinic Niamey. I want to appreciate Dr. Bi Francois, my colleague, for his encouragement. I wish to thank all individuals for their participation in my thesis.

And last but not least, the support and encouragement I received from my husband, Dr. Imran H. Siddiqui and my beloved children (Taha and Yamna) despite the inevitable sacrifice of the time that we could have spent together.

Final Thesis Assignment

Family Planning: Reproductive Health Knowledge, Belief and Determinants of Contraceptive Use among Women Attending Family Planning Clinics in Niamey, Niger.

Photography by Catherine-Lune Grayson/IRIN
IRIN Africa (Niger),
April 8th, 2013

Photography by Catherine-Lune Grayson/IRIN
IRIN Africa (Niger),
April 8th, 2013

Chapter 1: Introduction

"If you can look in to the seeds of time, and say which grain will grow and will not."

-Shakespeare.

Context:

Studies have found association between the concepts of reproductive health, ideology of family planning and factors related to birth control practice among women attending fertility clinics in Niamey, Niger, West Africa.

Purpose of Study:

The study aimed to analyze and observed the extent of awareness of reproductive health concepts, ideology and benefits of family planning practices, faith and confidence, also factors that affect to bring hurdles in family planning practice among women in Niamey, Niger.

The family planning or birth control is a major step that involves the physical, psychosocial and economic issues among the population.

As Kofi Annan, U.S.-Secretary General World Population Day, 2005 declared,
"Equality goes hand-in hand with investment in education, economic opportunity, and reproductive health and taken together, these are powerful force for lifting millions out of poverty."

The concept of reproductive health concerns a vital position in the assessment of health status as well as the development and progress of a given population. However, the incidents of reproductive health status are generally found in women who due to their biological and physical events invariably bear the greater load of the inadequacy of reproductive health status and behavior such as insecure motherhood or high risk abortion. In developing countries especially in Niger, there is an obligation of need to ameliorate maternal and child health care services as the majority of women died during pregnancy or childbirth will be preventable.

In the national health policy of Niger, the three identified current situation of the current health condition of the nation is that the maternal mortality rate according to WHO (World Health Organization), one in every twenty-three Nigerien women pass away during pregnancy and delivery or child birth (compared to one in forty-two for African regions). In the light of this shocking health statistics is to decrease maternal morbidity due to conception and child birth by 50%. One of the strategic trusts is to raise the concept of healthy reproductive life style by administering the efforts in the manipulation and advancement of reproductive health services in Niger.

Background Information:

In progressing countries especially in Niger (Africa), population fertile period sickness have been a great distress to many medical personnel's as maternal mortality and morbidity are extremely high as compared to the other developed countries of the world. Also, the concept of reproductive health and its approach to improve quality of care and maternal health services in Niger are poor and weak with substantial risky health consequences. Proper concepts about reproductive health, the ideology and determination of factors of birth control that the women can approach quality of family planning services (preventive and curative) are crucial and it's a big task for the improvement of reproductive health in women.

By mid-2010, Niger had an approximate population of 15.9 million and a TFR (Total Fertility Rate) of 7.l4 birth for every woman (WHO, World Health Report, 2004. Annexes by Country, Geneva WHO, 2004). The critical need and alarm to slow brisk population growth rate should be under consideration in projection of the country's population found on the information at which it attain its required target to lower the level fertility.

The Population Reference Bureau assesses that if the nation's Total Fertility Rate dropped to 3.8 by 2050 (a median projection, which might be not certain), the population will extent 58.2 million, like formulating to bringing up to the second most populous country in West Africa. The United Nations (UN) projections for Niger are related to a population of between 47 million (Total Fertility Rate, 3.2) and 5.90 million (Total Fertility Rate, 4.2) by 2050, approaching 98.5 million by the end of 2100. However, according to a study of family planning and birth control trends in 13 west African nations (including Niger) between 1991 and 2004, contraceptive prevalence in these regions increased by only 0.6% per year over that time, strongly advisably suggesting that those UN projections are excessively hopeful for child spacing and birth control. Since from the beginning of 2002, contraceptives or birth control pills have been supplied free in all over in Niger, distribution has been outsourced and a few radio, TV programs transmissions promoting family planning and birth control has been initiated to enhance the step; however contraceptives prevalence is still low in Niger.

In 2009, 11% of married Nigerien women aged 15-49(reproductive age) were practicing contraception and birth control pills and less than half (5%) have confidence on a modern method of contraception, or in other words over all oral contraceptives pills or IUD. In general the most frequent reasons given for non-use or diminish practice were due to a desire for more children, sterility or infertility and menopause. Because of this low contraceptive prevalence, the nation's population persists to increase rapidly and grows faster, thus skewing the age structure of the population. About 49% of the population is aged 15 or younger and only 3% is ager 65 or older are practicing contraception. For the contraceptive or birth control prevalence to attain 55% (the level requires to reach a TFR of 3.8) by 2050, the number of people would need to enhance

more than ten times to reach the required level for that population. 91% of Niger's population is deprived and they give up the use of contraception without taking a medical advice. Only 0.2% of women have five children or more in Niger.

Nigerien people and their cultural dynamics, and psychosocial behavior mainly represent male dominated society and many women do not have the liberty and opportunity to manage child-bearing and practice family planning or birth control. The nation has not ratified the Maputo protocol outlawing early marriage, the average age of marriage in Niger is 15.5 years for a girl, and the average age of a woman is at first birth is 17.9 years in Niger.

Niger is one of those countries in the world that with diminutive overall unmet need for birth spacing, not because of access and facility (not all part of Niger) to contraceptive methods, however because of a strong religious ideology and faith and also male dominated culture and polygamy (male having more than one wife) in which the desired family size is excelled than an average family size required for the population.

In the year of 2006, married women and men reported wishing an average of 8.8 and 12.6 children per family respectively. Over one quarter of women, older than 40 years give birth of 10 or more children for the family. Only one in hundred women desires to give birth of only two children throughout her reproductive life. In 2005, World Bank document for Niger,

"If the current state of affairs, the national human resource training system for the health sector is incapable of meeting such expended needs. The public health training system is already experiencing huge difficulties."

In the light of United Nations Environment Program,

"The Sahel is almost inevitably heading towards an environmental disaster."

Available family planning involvement in Niger is at three levels.

1. At Community Level, through community health staff (village health workers), these people helps to facilitate the promotion of program.
2. At Clinic Level, for the provision of primary health care services
3. A connected referral hospitals to enhance family planning services in Niger.

These involvements were well admitted and appreciated with excellent uptake expert family planning and birth control services. It was almost forbidden to speak about family planning and birth control in this Muslim dominated population who have high quality on traditional and religious beliefs on their way of life. They have the concept that a large family size is a sign of

prosperity, wealth and richness, and thus it was strange for a woman to ask for family planning practice with some medical personnel.

The main factors which are the leading cause in Niger were to be dependable on the poor uptake for the promotion of family planning and birth control were strong religious beliefs and faith also resistance from husbands-the leader of the family to adopt family planning and birth control practice. The rest of the factors regarding family planning were competing among wives (polygamy in Niger) wishing to have more number of children than their rivals, and limited understanding of family planning and birth control practicing methods. Even the medical staff assumed that it is hard to bring the change in their mind or to clarify the concept of family planning and birth control to practice and that is why they could not modify the people's thinking about family planning. Therefore, to make family planning an appealing and charming service in Niger is mandatory overcome these hurdles to bring the good changes.

Scope of Study:

The concept of reproductive health occupies a major vital position in the characteristics of the health status of an individual as well as the progress of a population. However, the incidents of reproductive health concepts are often found in women who due to their biological, psychosocial, and physical task almost always involve to clarify the ideology behind reproductive health concepts such as unprotected maternity or child birth or unprotected, life threatening abortion. In developing countries especially in Niger, it is first line step to take to ameliorate maternal and child health care services because the majority of morbidity and mortality of women during pregnancy or childbirth are due to lack of good health care services.

With the help of different studies one can raise a healthy reproductive health lifestyle and bring so many good things and ideas by providing the population about comprehensive knowledge of family planning and birth control to bring them proper behavioral change and develop active participation in the use and promotion of reproductive health services in Niger.

Niger has one of the most terrible maternal and child mortality rates in the world. According to the World Health Organization (WHO), one in every 23 Nigerien women pass away while prenatal, natal and childbirth (compared to one in 42 for the other Africa regions). In the light of such a shocking statistics, it is recommendable that the urgent requirement to decrease rapid population growth in Niger, and family planning and birth control can help to overcome this situation. Family planning aids every person (women, children, men, families, nations, Earth) especially; it secures female from unwanted pregnancies and their complications and thereby protecting them from high risk pregnancies or unsecure abortions or miscarriages. If all women could ignore high risk pregnancies by understanding the concept of family planning and birth control, helps to decrease the number of maternal deaths during pregnancy and child

birth. Also, other benefits arising from the practice of family planning methods include preventions from cancers, sexually transmitted infections and HIV/AIDS. The advantages of appropriate family planning and birth control are many as high fertility rate has been connected with under development in developing nations.

The extract of this study therefore is to find out and emphasize the importance of concepts of reproductive health, the ideology and benefits of family planning practice and also the factors that create the hurdle in practicing family planning and birth control practice among Nigeriens women.

Chapter 2: Definition of the Investigations

Statement of Issue:

Family Planning: Reproductive Health Knowledge, Belief and Determinants of Contraceptive Use among Women attending Family Planning Clinics in Niamey, Niger.

Description of Issue:

This study is to analyze and observe the practicing family planning and birth control as well as the demographic trends in Niger. The range and extent of reproductive health in woman encompasses tools and guide that linked to population growth plan, HIV/AIDS tendency to propagate, adolescent requirements and other related topics. Family planning and birth control and reproductive health are integral mechanism that associated with each other of a wide, integrated health framework that linked to maternal and child health, the prevention and treatment of HIV/AIDS, and sexually transmitted diseases and other health aspects. Family planning and birth control is effective and proven interference that allows and helps women and men to work out their right to make firmed decisions about the number of family members(family size), spacing, and timing of pregnancy and child bearing.

Reproductive and sexual change regarding the concepts and ideas that takes place throughout much of the developing countries the Cald Wells hypothesized that,

"Sub-Saharan Africa's fertility declines would, in large part, follows a different course because of its unique economics, social and religious-cultural environment."

Currently, the total fertility rate (TFR) in Sub-Saharan Africa is 5.1 births per woman, and in Niger 7-8 birth per woman. Likewise only about fifteen percent of married women ages 15-49 in Sub-Saharan Africa are using modern contraception and birth control methods. Many researchers recommend factors that makes the problems to practice family planning and birth control in Niger are husband approval (Niger has a male dominated culture), religious influence, family planning recommendations by medical practitioner, need parent in-law approval, friend, cultural factor, etc.

The most distressing, shocking and alarming HIV epidemic in Niger, makes public system more fragile. There is lack of health care resources, including personal, away from family planning and birth control practice.

Providing a multiple variety of contraceptive and birth control methods to women who want to delay or end child bearing and contradict misinformation about contraception use, constitute a logical and key point which can help in fertility reduction. Although the demand and value for family planning and birth control in Niger is low and services are also poor and only

42% on that requirement is meet the requirement of the population. The lack of health facilities and services also the extremes lacking of health staff and members at all levels of medical services that limit the range of contraceptive use and options that can be afforded. Therefore, occasionally, more birth in Niger will likely be prevented by traditional methods then by modern methods of contraception. Amenorrhea due to lactation is one such traditional method more popular and acceptable in Niger; thus it is essential to avoid any promotion of artificial feeding.

Admittance to family planning and birth control practice includes the ability to obtain and capture precise, comprehensive and culturally accepted information. Many needy illiterate women believe and they have the concept in their mind that contraception is more life-threatening than childbirth; although the risk of mortality during childbirth and pregnancy is actually much more elevated because of this false belief. Reaching women with comprehensive information, however, offers a challenge in Niger due to the high level of illiteracy rate. The use of radio and TV to publicize and deliver correct information about family planning and birth control and correct misinformation about contraception requirements should be promoted.

65% of women in the capital (Niamey) television viewer but only 2% of rural women watch television; however, the radio is reachable 35% of rural women. If there is a limitation of resources and information to approach the contraceptive adoption is limited, unintended and high risk pregnancies will be common, and majority of the women will seek the way to terminate them through abortion. However, provoked abortion is illegal in Niger if it is not on therapeutic ground. There have been no surveys and information about risky abortion practice here.

Many of the young girls became sexually active immediately after menarche in Niger. This vital factor influencing the countries elevated Total Fertility Rate. The average age of a girl at the time of marriage is younger than 14-15 years in some areas of Niger the high ratio of young women to old women in the population enables wealthy old men to engage in polygamy marriages with teenage women.

In Niger 74% of women are illiterate and they never go to school and about 60% of girls are married before the age of 15. The contraceptive prevalence rate is only 5%. The new population challenge in Mazur said that,

“Increasing the age of child bearing by 5 years in a country such as Niger would reduce future population growth by 15-20%.”

A debatable and demanding current situation of Niger and of its projected demographic trends changes makes a focused on family planning program a critically important step to overcome the burden of many disasters of the country, although it is a big challenge but it can be

achievable. Considerable challenges come across in the way of making family planning and birth control commonly available and approachable to all places, including rate of quality, mild to long acting contraceptives efficacy, cultural and hurdles in collecting the data and appropriate information, and deficiency of coordination and communication in acquirement process. Currently there is a primary requirement in Niger regarding family planning and birth control practice; the political and religious leaders should engage in the movement and promotion of increasing the use of family planning and spacing of children that can ensure healthier offspring and beneficial for the family and for population.

"……investment is sexual and reproductive health is an integral part of achieving the millennium development goals (MDGs) and must be integrated in the national development strategies to reduce poverty and promote human development."
~Jeffery Sachs, director of the UN millennium project and special advisor to UN Secretary, Kofi Annan on the MDGs.

Research Questions:
Demographic Characteristics of Respondent in Niamey, Niger: N=500

Characteristics	**NO**	**%**

- Age: …years

- Marital status
  - Single ☐
  - Married ☐
  - Separated ☐
  - Divorced ☐
  - Widow ☐

- Religion
  - Christianity ☐
  - Islam ☐
  - Traditional ☐
  - Others ☐

- Education
  - No proper education ☐
  - Elementary education ☐
  - Secondary education ☐

Higher education ☐

- Ethnic Group
  - Hausa ☐
  - Zarma ☐
  - Tuareg ☐
  - Sorai ☐
  - Peulh ☐
  - Songhai ☐
  - Beri Beri ☐
  - Others ☐

Table 2

Information about the concept of Reproductive Health of Women those who Attended Family Planning Clinics in Niamey, Niger N=500

Item	True (Knowledgeable)	False (Not Knowledgeable)
1. Pregnancy can occur when one has sex between 12th-16th days of menstrual cycle.		
2. Infertility/childlessness later in life maybe due to sexually transmitted infections acquired early in life.		
3. Men and women infected with sexually transmitted infections always develop symptoms when the infections first occur.		
4. HIV infections can be passed from a mother to her unborn child.		

Table 3

To Know about ideology and basics of Reproductive Health among those Women who Attended Family Planning Clinics in Niamey, Niger N=500

Item	True	False
1. Pregnancy can only occur when one has sex only by lying down.		
2. Having sex once with a man will not always lead to pregnancy.		
3. Washing one's vagina immediately after sex prevents pregnancy.		
4. If a swollen part is detected in the breast it shows that the woman has much breast milk.		
5. Breast milk is not harmless for the baby shortly after birth.		
6. Having sex with a young adult man will make one feel younger.		

Table 4

Information about the Benefits of Family Planning (Child Spacing) of those Woman who Attended Family Planning Clinics in Niamey, Niger N=500

Item	Yes	No
1. Family planning permits couple to prepare for child bearing.		
2. Contraception will help parents to give sensible education to their children.		
3. Family planning helps to standard of living for family.		
4. Family planning aids mother to recover before her next baby.		
5. Family planning helps women to make her beauty last.		
6. Family planning makes couple to be responsible.		
7. Family planning protects		

the health of your children.		

Table 5

Information about the Determinants of Contraceptives or birth control practice among those Women who Attended Family Planning Clinics in Niamey, Niger N=500

Items	Agree	Disagree	Not Sure
1. Husband authorization.			
2. Religion support.			
3. Recommended by health practitioner			
4. Parent-in-law approval.			
5. Friend approval.			
6. Advertisement/mass media.			
7. Safe for my health.			
8. Cultural influence.			

Importance of Study:

Current situation in Niger present a significant demand which is necessary to reconsider the value and importance of family planning and birth control practice and to re-examine and re-evaluate the services which will helpful in updating program methods.

Family planning and birth control can decrease maternal mortality by lowering the number of unwanted high risk pregnancies, the number of risky miscarriages and the percentage of births at high risks as well.

It has been approximated that meeting women's contraceptive requirements with the use of modern contraceptives would minimize up to one-quarter to one-third of all maternal deaths, saving 140,000-150,000 lives of women annually. It would also help to inhibit related percentage of the injuries during child birth and pregnancy, infections, and long-term disabilities that consequence from pregnancy or child birth, and risky abortion over 15 million women per year.

Family planning and birth control presents a host and primary factor of a robust woman health, social and economic advantages, it will be beneficial in reducing infant mortality, reduce the propagation of HIV/AIDS, raise gender equality among the population, helpful to reduce poverty, increase socioeconomic and psychological development of a individual and save the environment from harm and danger. In general, the current situations, family planning and birth control promote the necessity to assemble and exhibit arguments and issues related to family planning and birth control that appeal to improve health of a population and their developmental priorities.

The Millennium Development Goals (MDGs), key messages related to family planning and birth control include the following,

MDG 1: Family planning alleviates poverty and accelerates socioeconomic development.
MDG 2: Family planning can help ensure that all children go to school.
MDG 3: Family planning promotes gender equality.
MDG 4: Family planning can reduce infant mortality.
MDG 5: Family planning can reduce maternal mortality.
MDG 6: Family planning can slow the spread of HIV/AIDS.
MDG 7: Family planning can help to protect environment.

Niger should take considerable step towards achieving family planning and birth control practice which is sort out that the basic need that is beneficial for the population. If the Niger accept the third Millennium Development Goal (MDG) of elevating gender equality and empowering women, according to WHO (Word Health Organization),

"Although women's ability to control their fertility is by itself not sufficient to gaining their fall empowerment and gender equality, it is the first and most important step."

The study on family planning and birth control will aid for reducing fast population growth by knowing the factors and reasons behind the hurdles that comes in the way of adopting family planning services in Niger. One is to accentuate socioeconomic progress and environmental aspects, which many consider, will open the way towards lower fertility. The other study is to give much greater importance to fertility regulation which is also beneficial for the population.

The studies accentuate family planning and birth control is to demonstrate the importance of exploring in population health promotion, helpful in decreasing poverty and ameliorating the health status of women and also for population by improving the standards of living, but it asserts that these studies alone will not reduce rapid growth rate of the population. This study balances a dynamic, helpful in making strategies and importance on fertility regulation of a woman which is important but not adequate for socioeconomic development of the nation.

Studies highlighting fertility regulation can be subdivided into two groups.

1. One converges on meeting the unmet need for family planning and birth control and emphasis the access to contraception and secure high risk abortions and pregnancies even in ignorant and impoverished population.

2. Other studies alone will be helpful most likely to reduce family size by giving good spacing among children in many populations. Niger and other parts of the Sahel have the additional issues of early marriage and polygamy, which is assume could be the leading cause in Niger.

About the family planning and birth control practice in Niger the opinion of some different services are as,

In June 2011, the United Nations Population Funds issued a report on the state of the world midwifery shows that the 2010 maternal mortality rate per 100,000 births for Niger is 820.

"This is a humanitarian emergency. We have no future without birth control."
Said the president of local NGO involved in family planning.

The Nigerien Organization for the Development of Human Potential (ONDPH) says for Niger,

"The government cannot cope. The population is poor, the health system is weak, and there is no land for farming. We are already unable to feed and educate our population."

For the population, National surveys are the best resource of collection of different data that should be desired to do the good research on contraceptive consumption. If there are several surveys, the past development may provide as a guide for projections and promotion for family planning and birth control practice. On the other hand, the national goal for use of contraception can be achieve to see the extent of the fertility decline for a given population.

It is wise and important to observe and examine the prevalence effectiveness of contraception and continuation rate of each program, as the fertility effect depends on each of these should be taken under consideration.

In many nations, the injectable and the oral contraceptive pill are the top and popular choices and can enhance the utilization; this promotion was considered in the Niger family planning and birth control programs. Traditional ways of contraception are also necessary including intentional post partum abstinence and due to exclusive breast feeding, however over time they may reduce as current strategy of such methods of contraception replace them in that case the concluded result is less increase in the net contraceptive use then in modern method of contraception practice.

In any community or in any population always a small percentage about 2-3% of women never gives birth of a child or any conception during their fertility age period even though they

have been in bond martially for several years. In certain communities where diseases are prevalent especially sexually transmitted infections and other pelvic inflammatory diseases the proportion of women who never conceive or give birth of a child can be elevated. The incidence of HIV/AIDS has reduced the fertility of women.

Breast feeding, the traditional method of contraception is known to muffle ovulation and helpful in reducing the incidence if conception, especially if it is really exclusively, with little supplementary food, and breast feeding is markedly common in Sub-Saharan Africa especially in Niger. In Niger it is related with purposeful post partum abstinence. A few demographic trends and health surveys were conducted in Niger as they show the current situation about the family planning and birth control practice and task about their preferred method choices in the future which is really helpful in promoting and in making policies for family planning and birth control, but that data when investigated for Niger and also for other communities in which contraceptive prevalence has increased to higher level.

Many researchers did different studies about the family planning and birth control for Niger concluded that it is clear in Niger-and undoubtedly is true in other African nations that the family planning practice and services is weak and fragile.

Ultimately for that sake, political leaders' development specialists and other professionals are keenly concerned and struggle was done to involve them in that serious issue of population growth which is a factor that obstructs effort to increase living standards ameliorates the quality of life and efficiency of a population. Fortunately, that high fertility and high population projection rates in Niger (and other communities of Africa) are strictly bound social and economic development even with a continuous commitment to accomplishing fertility declines to achieve the target for the required nation. It is likely that the fertility transition in Niger and several other African nations will take may be to continue with their future generation.

With the support of different studies and analysis, for any community, recognizing fertility preference and the determinants of family planning and birth control objectives and use is necessary and such data helps to guide methods and make good strategies that will be effective in decreasing the number of unintended and/or unwanted high risk births. The consequential following fertility deterioration and decline in Niger is still high mortality and morbidity due to pregnancy and child birth and also endangers support population projection and economic prosperity even in the most distant and fragile settlements.

Poverty in Niger is clearly connected to maternal mortality, morbidity and service uptake; the health community needs to progress methods and improve facility that target poorer, needy women. Skilled care and techniques are essential to decreasing both maternal and neonatal

mortality and morbidity by encouraging services based childbirth where available is an essential key step for increasing uptake of skill care.

Donor programs which based on funding from different resources in Niger for family planning and birth control are also an important source to finance and technical resource output, however strong coordination with staff and services is also required to achieve the target.

Several studies were conducted to facilitate the improvement of environment by risen government resources, increased media coverage and increased population support for family planning and birth control. It also important to ameliorates service system by raising the availability of facilities that meeting quality the program levels. It also gives community impact by improvement in number of leaders (both traditional and religious leaders) openly talking about the support of family planning and birth control and also helpful to improved community participation due to their involvement in the program of family planning and birth control.

Individual involvement for family planning and birth control should be achieved and motivated by the confidence to approach services and encourage them with facts (both technical/benefits and theological), motivate them to speak with their spouses, peers and convinced people to approach to available services of family planning and birth control. They are encouraged through several mass media programs like transmission on radio, TV.

Conclusively, access to concept of reproductive health and family planning and birth control services in Niger is not stable, weak and dependent on aid because of lack of resources in the country. Fertility rate continues high and contraceptive practice is still decreased the way approaching a two-thirds reduction in maternal mortality and morbidity.

Theoretical Framework:

Concepts of Reproductive Health and Family Planning and Birth Control:

Reproductive health can be defined as,

"Reproductive health is a state of complete physical, mental and social well-being, and not merely the absence of disease or infirmity, in all matters related to the reproductive system and to its functions and processes."

The core concept of reproductive health is to fulfill human needs and their development including physical, social and mental wellbeing throughout their whole life time. Comprehensive reproductive health care services requires a wide range of services including family planning and birth control counseling, about detailed information, sex education, communication and services; comprehensive education and services for prenatal care, secure childbirth and conception, post-natal care, infant and women's health care; prevention and

treatment of infertility; prevention and treatment of infections that is sexually transmitted diseases, including HIV/AIDS; breast cancer and cancers of the reproductive system, and other reproductive health related aspects and circumstances; and need to take steps such dangerous and risky traditional practices, such as female genital mutilation or female circumcision.

Reproductive health and family planning or birth control programs concern a vital place for a population development and also in the population program and planning. These programs are not limited for a single community it involve globally for the benefit of universe and also generally considered in an effective public health policy. But reproductive health and family planning programs are still controversial. In part because they involve in birth control, a major topic of concern that stirs strong views, they have drawn many criticism from different perspective including religious, political, ideological and scientific aspect.

Menarche and Adolescent:

Menarche is the age of the first menstruation in a girl. Puberty is the period of general body growth and development of secondary sexual characters and sex organs in young adult. Puberty characters the change from childhood to adolescence, with in girls the development of breasts and pubic hair and with the onset of menstruation. Simultaneously there is a period of rapid growth. The age at which the changes take place is varies, but it is unusual for there to be no signs of sexual development at the age of 14 years or above.

The key for the changes to begin is an increasing frequency and amplitude of gonadotrophin- hormone release. The ovaries are then accelerated to release estrogen which acts on the breast tissue to promote their growth. This often begins near the age of 9 and takes about 5 years to be complete. Pubic hair is stimulated by the release of androgens hormones from the ovaries and the adrenal glands.

The age of menarche in girls seems to be declining, particularly in African-American girls because of the factors such as general health; nutrition (weight) and exercise all take part in the age of onset.

Hypothalamic–Pituitary Axis:

During fetal life, Gonadotrophin Releasing Hormone activity from the hypothalamus (which is present from 720 weeks) is restrained by the steroid production from the fetal placenta. The ovaries therefore have least estrogen production.

During infancy there is a rise in Gonadotrophin Releasing Hormone activity in boys and in girls. This leads to an increase in production of testosterone hormone in boys and estradiol hormone in girls. At this early age, the feedback mechanism to the pituitary gland is undeveloped. As this feedback mechanism matures over a few months in childhood, the FSH and LH levels reduce. In girls, this leads to the decreased levels of FSH and LH at 14 yrs old young girl. At 16 yrs of age in girls there is a rise in the amplitude and rate of Gonadotrophin Releasing

Hormone production from the hypothalamus. This is then correlated with the onset of diurnal rhythms of FSH, LH and steroids.

Puberty advances with an increase in nocturnal amplitude of LH and a gradual modification to the adult pattern of 90 min pulses. FSH variability shows no diurnal difference at any stage, with only a slight raise in amplitude but not frequency as puberty advances.

Stages of Puberty:

In girls, puberty can be described in five stages following the classification by Marshall and Tanner.

- Sexual characteristics appear in 95% of girls between 8-13 yrs.

- Breast development happens between 10 and 12.5 yrs (average age breast stage II = 11.2 yrs).

- Pubic hair usually occurs at the age of 11.

-At the age of 12 yrs, adolescent growth spurts.

- Menarche: 12–15 yrs, average age 13 yrs.

Precocious Puberty:

Precocious onset of puberty is defined as;

This is the early onset of puberty. It may happen as early as 2 or 3 years of life or before the average age; <8yrs old in females. Its incidence is 71 per 5000–10 000 individuals.

Delayed Puberty:

Delayed onset of puberty is defined as,

Occurring older than the average age, puberty may be postponed up to the age of 17 to 18 years. A detailed, comprehensive history should be taken and also asking about general health. In girls, the age at which breast and pubic hair development started and if the girl had a growth issue or still appears to be growing. Any chronic illness may lead to lawful postponement in puberty.

The Ovary:

During the reproductive life, the ovary is a very dramatically changing organ. The inner, stromal, section is formed of connective tissue flooded with small capillaries and adrenergic nerves. The cortex contains a huge number of oocyte-containing follicles varying from 7,300,000 at menarche to 1500 at menopause. There is a stable state of change in the various stages of development of the follicles from primordial follicle, with increasing numbers of layers of granulosa cells, the antral stage enclosing follicular fluid, to a fully fledged, pre-ovulatory follicle. A corpus luteum in the luteal phase of the cycle is completed by the presence of corpora

albicans (remnants of degenerate corpora lutea). Although much of this changing of stages of follicular development is dependent on the stage of the (gonadotrophin-dependent) ovarian cycle, there is a constant, non-FSH-dependent, progression in development of primordial to potentially mature follicles being available at the start of the ovarian cycle.

Follicular Development (ovarian cycle):

One follicle a month (i.e. 7400 in a reproductive life) will be selected to ovulate, the rest 99.9% of those that started life in the ovary. The earliest stage of follicular selection begins 10 weeks before the cycle for which it is planned. This is a steady non-FSHdependent stage that is from primordial to several surviving, potentially mature follicles, which are available. Sensitivity to FSH then activates to select the follicle for further development, cell differentiation and multiplication. As estrogen and inhibin are produced by developing follicles, FSH concentrations are reduced, making it less available. The follicle most sensitive to FSH becomes dominant and the rest fades into Artesia, starved of FSH. The dominant follicle is the main producer of estradiol that stimulated by FSH. The dominant follicle also develops LH receptors in the late follicular phase in preparation for the LH surge and approaching ovulation.

Ovaries and the Menstrual Cycle:

Normally, ovulation happens once a month in the fertile age range between menarche and menopause, although an ovulation normally occurs at the extremes of reproductive life. A cycle is said to be as normal if the duration is 24–35 days. The time between menstruation and ovulation is termed the follicular phase and between ovulation and the next menstruation, the luteal phase. Ovulation itself is the release of a mature, fertilizable oocyte from the mature follicle, the peak of an integrated, coordinated interplay of hormones, the main sources are:

- Anterior hypothalamus.

- Gonadotrophin-releasing hormone

- Anterior pituitary.

- Follicle-stimulating hormone (FSH).

- Luteinizing hormone (LH).

- Ovaries.

- 17-B estradiol.

- Progesterone.

Ovulation is achieved through the coordination of the timing of release and quantity of the various hormones involved, which varies throughout the cycle as a result of feedback mechanisms.

Lactation Physiology:

The breast (mammary glands) is modified exocrine glands that undergo dramatic anatomic and physiologic changes during pregnancy and lactation. Their function is to provide nourishment for the newborn and to transfer antibodies from mother to infant. During first half of pregnancy proliferation of alveolar epithelial cells, formation of new ducts and development of lobular architecture takes place. Later in pregnancy, proliferation declines, and the epithelium differentiates for secretary activity.

Lactation depends on a sensitive balance of several hormones. An intact hypothalamic-pituitary approach is necessary to the initiation and maintenance of lactation. Prolactin is a vital hormone for milk production.

Menopause:

The term menopause is simply cessation of menstruation. The symptoms of menopause are used to describe the climacteric.

The average age at which the menopause occurs is 45-50 years. Women can expect to spend about one-third of their lives in a menopausal state.

- Menopause can be defined retrospectively 1yr after last menstrual period; average age 51.

- Climacteric can be explain as, the 'climb' to the menopause; average age 45–47 (lasting 4yrs on average—up to 10yrs).

- Early menopause is <45yrs.

- Premature ovarian failure is <40yrs.

Symptoms of Menopause:

The major symptoms of the menopause include:

- Hot flushes (70%)
- Night sweats (70%)
- Loss of libido
- Insomnia
- Urethral syndrome (urinary problems)
- Anxiety/irritability
- Vaginal atrophy
- Memory loss

- Poor concentration
- Mood changes
- Hot flushes

Infertility:

Infertility, may be defined as,

Infertility is the failure to conceive following at least 1yr of regular unprotected sexual intercourse.

In the general community, the prevalence is 16% after 1yr but 8% after 2yrs. This is to be known as primary infertility if the woman had never had conception and birth of a child. Whereas the second infertility is the spouses have had previous child/children and have failed to conceive following at least 1yr of regular unprotected sexual intercourse. The prevalence of infertility varies with age.

Fertility and Awareness of Fertility:

Sex Education:

When a person seeking an advice on sex, contraception, pregnancy or child birth and parenthood younger generation are permitted to:

- Manageable

- Confidential

- Accommodating

– Neutral support and advice that recognizes the variety of their cultural, belief and background. Their own ideas should be discussed to, respecting their own attitude and judgment. Valid choices contain what have been termed ‘saving sex’ (i.e. for another person, or another time) as well as having ‘safer sex’.

A considerable percentage of early post pubertal menstrual cycles are not fertile. Hence adolescents who have risky sex shortly after puberty usually leading to a false sense of wellbeing later on, when their fertility is much advanced. Generally, also their pill-taking is not regular. Teenagers should therefore be suggested more commonly than frequently even if their first idea had been to ask for ‘the Pill’. Injectable and implants are often preferable to copper IUDs because they are more prepared to initiate (i.e. no vaginal procedure) and may supply some prevention against pelvic infection—although IUDs are only relatively contraindicated. Yet for several young women the most primary method of contraception currently remains rather a modern, low-estrogen COC or the new progestogen-only pill (POP).

With all these strategies there should be suitable condom advice. Patients under 16 years old, lawfully, should first be made to necessitate a parent making the decision to prescribe a 'medical' method of contraception. It can be an excellent practice to prescribe, the COC in the absence of such parental assistance.

Sexually Transmitted Infections:

The most frequent conditions are now Chlamydia (>10% of sexually active young have acquired Chlamydia infections), non-specific urethritis and viral infections, but approximately all sexually transmitted infections (STIs) are common.

In the women at 'higher risk' of infection (particularly with Chlamydia infection) are those:

- Below 25 years of age

- A partner change in within 3 months

- History of multiple partners within a year

Sexual history should be asked as part of the Initial consultation for every contraceptives methods, not only the intra-uterine ones:

- 'When did you have last sex?' followed at once by

- 'When was the last time you had sex with someone else?'

The sexually active of all ages of women must be advised about minimizing their risk of STIs, including the human immunodeficiency virus (HIV/AIDS). It is necessary to promote the condom as an addition to the chosen contraceptive, whenever infection risk occurs.

Where screening of STI has been identified; screening should be best done through a Genitourinary Clinic. If a patient avoids, then give the patient a written advice to give to specific medical adviser for sexually transmitted disease that they have been in contact with and suggesting that they attend a Genitourinary Urinary Clinic.

Contraception or Birth Control:

Contraception means prevention of conception without abstinence from coitus.

Indications of Contraception:

The indications of contraception can be categorized into two groups.

1- At the Community Level:

Indication for contraception on a community base arises when the specific population or a community or a nation is to be viewed for child spacing and birth control.

2- Individual:

a- Personal:
   1- To control family size
   2- Early and delayed marriages

b- Medical Aspects:
   1- Due to systemic illness
   2- Recurrent gynecological and obstetrical issues
   3- Prenatal cross placenta diseases

Characteristics of the Ideal Contraceptive:

The characteristics of ideal contraception that affect successful use of contraception by population should have following features.

- It should be highly effective

- It should be easy to take

- It should be secure, free from side-effects

- It should be reversible, ideally by itself

- It should be maintenance free

- It should be highly protective against sexually transmitted infections including HIV

- Including other non-contraceptive advantages, irregularity of menstrual cycle or dysfunctional uterine bleeding

- It should not be expensive

- Acceptable to every culture, religion and political view.

- It should be understandable to the woman, who needs to know it has worked!

Emergency Oral Contraceptive Pills:

Emergency oral contraceptive pills should be taken within 72 h after unsecure intercourse to decrease the risk of pregnancy by approximately 75%.

Amenorrhea of Lactation Method:

Amenorrhea of Lactation Method is an effective but temporary method of contraception which helps to prevent pregnancy by inhibition of the luteinizing hormones from anterior pituitary. Breast feeding therefore provide a contraceptive effect, but it is not totally reliable as up to 10% of women can conceive during this period.

Criteria for Contraception:

1. Any condition in which there is no contraindication for the use of the contraceptive method.

2. Any condition in which the advantages of the contraceptive method generally are more important than the risks.

3. Any situation in which the risks are usually offset the benefits, so an alternative method is usually required, that respecting the patient's liberty, if the woman accepts the risks and rejects or she should not use relevant alternatives, given the risks of pregnancy the method can be used with caution.

4. Any situation which show an unacceptable health risk.

Clinical assessment is required, always in consultation with the contraceptive users.

Awareness of Fertility:

There should be sex education for young adult to deliver them appropriate sex guidance. Under normal circumstances,

- An average young adult fertile man's ejaculate contains 7300–400 million sperms.

- An acidic vaginal environment can destroy sperms in a matter of hours; however, in estrogen-primed cervical mucus and upper genital tract fluid, average sperm life span is 73 days.

- An average fertilized egg survived after ovulation is 717h, with a range up to a maximum of 24h.

- Adding the lifetime of the sperm to that of the egg gives a 'fertile window' of 7–8 days, whose duration is constant.

- Maximum dependability will require several days of abstinence, especially the initial few days of the menstrual cycle. For utmost efficacy with any of the contraceptive methods, unprotected sexual intercourse should preferably, following excellent evidence of ovulation, be confined to the days after the ovum will not be fertilized.

The Indicators of Ovulation:

1- A rise in body temperature which has been sustained for 72h at least 0.2°C above the preceding 6 days' values.

2- Observations of the mucus as detected at the vulva. This becomes increasingly fluid, glossy, transparent, slippery and stretchy, like raw egg white, under the influence of follicular estrogen. 3-The peak mucus day can be recognized before the abrupt change to a thick and tacky type (under the influence of progesterone).

4-The postovulatory infertile phase is defined as beginning the 4th day after the peak mucus day, provided this is also after the third of the early morning rectal temperature.

5-Relying for the onset of the postovulatory infertile phase and using that alone for unprotected intercourse can give very acceptable failure rates of 1–3 per 100 women-years.

The proliferative (infertile) phase is much more difficult to identify with accuracy. The markers are:

1- The first indication of any mucus at all, detected by either sensation or appearance.

2- Calendar calculation, in which first week after and first week before menstruations are secure and this is also called the "safe period" and in this period pregnancies are likely to occur.

3-Calendar methods can be recommended to those who can accept pregnancy, since calculations and mucus observations do NOT reliably predict ovulation far enough ahead to eliminate (over many months or years) the capricious survival of that last-surviving sperm which could cause conception.

4-The postpartum period and in the climacteric years, temperature and mucus approximations are not trustable and/or give many 'false indications', since some cycles are anovulatory and still there is sufficient estrogen to produce slippery mucus.

Benefits of Contraception:

1- It should completely free from any physical or biological side-effects.

2- It should be acceptable by all, especially in the light of certain religious and cultural aspects.

3- The methods should be under the couple's personal control.

4- The methods readily lend themselves, if the spouse's scruples permit, to the additional use of a fake method such as a barrier at the potentially fertile periods.

5- There should be proper teaching before commence contraception; follow-up should be done to evaluate the status of health of the couple.

6- Understanding of the methods can also aid married couples who wish to conceive.

Disadvantages of Contraception:

1-In appropriate use of contraception gives very high failure rates (25 per 100 woman years) and also gives rise of irregularity of menstrual cycle. This is due to the in adequate use of contraception.

2- Conflicts and frustrations are the major problem that established in consumer's thoughts that the method to be helpful to their marriage/relationship rather than stressing it.

3- A potential risk is fetal abnormalities due to conceptions tending to result from fertilization involving due to ageing couple gametes. The consensus after many studies is that this hazard, if real, is negligible.

Post Partum Contraceptive Use:

- The Combined Oral Contraception (COC) should be ignored in lactation as it may inhibit this and also change the quality of milk. Otherwise the COC is a suitable choice post partum.

- The Progesterone Oral Pill (POP) is advisable, it is often started like the COC for 21 days, though WHOSPR suggest after (6 weeks) for ALL hormonal methods. This does not interrupt significantly with lactation and, although small amount may enter in the milk, the quantity has been calculated as equivalent to a baby getting just one pill over 2 years.

- Spermicidal or contraceptive sponges, are not generally effective enough for recommendation to young woman, are strong enough as adjunctive methods while the exclusive breast feeding are recommended.

- Condoms (including the female condom) are beneficial for first postpartum intercourse and until other methods of contraception are adopted. Caps and diaphragms may be refitted at 5–6 weeks, and this is all the time important after a full-term pregnancy, even after Caesarean section.

- The injectable, DMPA (depot medroxy progesterone acetate), aside from slightly higher milk levels (which seem to be harmless to the infant), may be a preferable progestogen-only method for women who might be short-term breast feeders and unreliable POP takers, but wish high efficacy right through weaning and thereafter. It does not give any side effect during lactation because the quality and may even improve the quantity of the breast milk.

- Another method is implant. WHOSPR recommends method should begin at 6 weeks after postpartum for nursing mother in breast feeders, as for DMPA (and POPs).

- The IUD or IUS are easily inserted at 4–6 weeks after normal delivery or 6–8 weeks after a Caesarean section, but the uterus is still soft and great care should be taken during placing the IUD. Earlier insertion is more likely to lead to expulsion.

- Sterilization procedures performed after delivery carry extra operative, failure rate, and emotional distress and psychological stress (including greater risk of regret). Surgery for either partner is frequently, and preferably, delayed for a few months.

Female Condoms:

Marketed variety of female condom comprising a polyurethane sac with an outer rim at the introit us and a loose inner ring, whose retaining action is alike to that of the rim of the diaphragm. It thus forms a well-lubricated (with silicone) secondary vagina.

- Effectiveness: failure rate 5% among 'perfect' users after one year.

- Duration of use: used near or at the time of intercourse, whereas the diaphragm or cap should be left in place for at least 6h after intercourse. It is suitable for both short-term and long-term use.

Reuse of the female condom is not justifiable. Women can use barrier contraceptives throughout their reproductive years.

Advantages of Female Condom:

- It gives protection against all sexually transmitted infections including HIV and HPV.

- It is easily available in almost all the pharmacies with comprehensive information for use.

- It is not easily broken or damaged by any chemical or anything which comes into contact with it.

- It can be easily used if someone has a history of allergy with rubber.

- The penetrative phase of intercourse can perceive better to a man than when a male condom is used.

- Uniquely among condoms, it can be put in place before the man has an erection.

Disadvantages of Female Condom:

Couples should take precaution during:

- The definite possibility that the penis may become mal-positioned between the Femidom sac and the vaginal wall.

- Its obviousness particularly during foreplay

Caps and Diaphragms:

It gives the barrier in the vagina for sperm either in the upper vagina (diaphragms) or at the cervix level.

- Effectiveness: failure rate 5 per 100 'perfect' users, increasing to 16 per 100 consumers (who may not be able to use appropriately) after one year.

Advantages of Caps and Diaphragms:

- Once a couple starts practicing, many couples express astonishment by the simple use of these vaginal barriers. They are best reserved for couples in a stable relationship where sexual activity takes on a relatively regular pattern, and conception would not be seen as a disaster.

- All may be introduced well ahead of coitus, and so used without ruining it.

- There is hardly diminution in sexual sensitivity, as the clitoris and introit us are not affected and cervical pressure is still sustained.

Disadvantages of Caps and Diaphragms:

- It is does not give complete protection against the sexually transmitted infections such as HIV/AIDS.

- Some of the couples that are sensitive spermicidal effect.

-It is difficult to learn and practice.

Fitting and Follow-Up of Caps and Diaphragms:

- The method of practice is difficult l, both in the process of fitting the diaphragm and cervical caps, and in guiding a woman how to use it appropriately, for further information by an appropriate leaflet.

- The position of diaphragms should be followed initially after 1–2 weeks of trial and re-examined routinely postpartum or whenever there is gain or loss in weight.

- If either partner returns complaining that they can feel a diaphragm during coitus, the position of caps or diaphragm must be immediately examined. It could be too big or too little; or the retro-pubic ledge may be not enough to prevent the slipping down the anterior vagina; or, most seriously with respect to efficacy, the item may be being regularly placed in the anterior fornix of vagina. Recurrent urinary infections may be linked due to pressure from a diaphragm's anterior rim, and hence often improves with a vault or cervical cap.

Chemical Methods (Spermicidal):

In these methods a chemical is inserted into the vagina. Spermicidal method used alone—whether in the form of creams, jellies, and foams—simply it is not very reliable method. However, good efficacy of this method has been reported in women whose fertility is already decreased spermicidal products may be acceptable choices in the following cases:

- If a woman >50yrs of age if still having bleeds after stopping the Combined Oral Contraception and for 1 year after the menopause (i.e. the duration for which contraception is still recommended) whether or not they use Hormone Replacement Therapy.

- If a woman aged >45 if they have irregular vaginal bleeding.

- During lactation, along with amenorrhea of lactation, spermicidal use is an additional support to the woman to prevent conception.

- As an addition to other contraception, e.g. spermicidal method may be beneficial as a plus point for the couples who choose to continue using coitus interrupt us/withdrawal as their main method.

- For those who want to postpone the conception for the couple of time to give good spacing between the children.

Disadvantages of Spermicidal Method:

- The currently available spermicidal method, in which the chemicals, is truly absorbed from the vagina, but there is no evidence of systemic involvement, congenital malformations or spontaneous abortions after the use of these chemicals. These chemicals kill the spermatozoa before their ascent into the cervix.

- Infrequently, sensitivity to spermicidal effects like allergy is reported.

- Clinical trials have confirmed an increased risk of HIV transmission with use of spermicidal products.

High risk of HIV infection is therefore, for the chemicals whether used alone or with combination of other methods. However, if the vagina is traumatized during the act it is believed

that vagina is able to recover between applications when spermicidal chemical is used in the manner, and at the kind of average coital frequency, of appropriately counseled diaphragm or cap users. So it remains good practice to continue to recommend spermicidal chemical for normal contraceptive use, whether alone or with diaphragms or cervical caps; but not with condoms.

The Combined Oral Contraceptive (COC):

Mechanism of Action of Combined Oral Contraception:

- It prevents ovulation by inhibition of ovulation and by bringing local changes due to the exogenous hormones therefore the local changes in the cervical mucus, and endometrial changes, and the motility of fallopian tubes.

This method is highly effective in 'perfect' use; but it removes the normal menstrual cycle and replaces it with a cycle which is user-produced and based only on the endometrial changes due to the exogenous hormone.

Benefits of Combined Oral Contraceptives:

- It is effective.

- It is convenient to take.

- It is reversible.

Non-contraceptive benefits of COCs, like in case of dysmenorrheal and dysfunctional intrauterine bleeding may provide good support to treat these clinical consequences.

- Reduction of most menstrual cycle disorders: reduced heavy bleeding, therefore decreased incidence of anemia, and help to treat dysmenorrheal problem; regular bleeding, the timing of which can be controlled: fewer symptoms of premenstrual syndrome; diminished ovulation pain.

- Decreased incidence of cancers of ovary, endometrial cancer, and now very probably also colorectal cancer.

- Some functional ovarian cysts are prevented because of abnormal ovulation.

- Reduce the risk of ectopic pregnancy.

- Decrease the incidence of pelvic inflammatory disease (PID).

- Decrease the incidence of benign breast disease.

- Helpful for symptomatic fibroids treatment.

- Probable reduction in thyroid disease, whether over-or underactive.

- Probable decreasing the risk of rheumatoid arthritis.

- Reduced incidence of sebaceous disorders (with estrogen-dominant COCs).

- Reduced incidence of duodenal ulcers (not well established).

- Reduced incidence in Trichomonas vaginalis infections.

- Decrease incidence of toxic shock syndrome.

- Continuous use helpful in suppression of endometriosis.

- No toxicity occurs if overdose is taken.

Side Effects of Combined Oral Contraceptives:

1- Common side effect: nausea, weight gain, fullness or enlargement of breast, headache, and libido is mostly increased and changes in menstrual cycle. Vaginal discharge due to cervical erosions, psychological upsets, and anxiety.
2- Metabolic side effects
    a. Cortisol Metabolism: symptoms are weight gain and fluid retention, headache, hypertension, neuropsychiatric disturbances carbohydrate.
    b. Carbohydrate Metabolism: leads to impairment of glucose in tolerance.
    c. Lipid Metabolism: increased triglyceride level and small increase in serum cholesterol level.
3- Other side effect
    a. Give rise to cancer: breast, cervical, liver.
    b. Increases incidence of venous thrombo-embolism (VTE).
    c. Arterial diseases: acute myocardial infarction (AMI), hemorrhagic stroke (HS) and ischemic stroke (IS).

Risk of Cancer and COCs:

Breast Cancer and COCs:

COCs users can be support that:

- When women are taking COCs reduces the risk of breast cancers even after discontinuation will prevent from cancers over the next few years.

- Over 10yrs after stopping, there is no detectable increase in breast cancer risk for previous COC users.

- The cancers diagnosed in women who utilize or have used COCs before are clinically less advanced than those who have never practiced COCs, and are less likely to have spread beyond the breast.

- These hazards are not related with the time period of use, the dose or type of hormone in the COC, and there is no equivalent with other hazards for breast cancer (e.g. family history).

- If 1000 women use the COCs pill till the age of 35, by age 45 this statistic shows there will be, in total, 11 cases of breast cancer. Necessarily however, only one of these cases is extra (pill-related); the others would have increased in a control group of whom never practiced.

Clinical Inferences:

Women with benign breast disease (BBD) or with the family history of a blood related breast cancer below the age of 40.

- The women who have a strong background risk of breast cancer than the other women of the population should be screened through mammography for breast cancer.

- If the woman with BBD had a breast biopsy, the histopathology should be collected to look for epithelial dysplasia (premalignant).

- If a woman diagnosed as carcinoma of the breast, COCs should be stopped immediately, and women with a history of breast cancer should normally avoid COCs.

Cervical Cancer and COCs:

COC behaves as a cofactor for the human papilloma virus (HPV) types 16 and 18, the primary carcinogen in cervical cancer, speeding transition through the stages of cervical intraepithelial neoplasia (CIN). In this respect it is alike to, but certainly weaker than, cigarette smoking.

Clinical Inferences:

- Women must be screened according to the necessity through Pap smear to rule out cervical cancer.

- It is mandatory to do the follow up for all COCs users for any abnormality, or after definitive treatment of CIN and routine annually.

Liver Cancers:

-COC raises the relative risk of benign adenoma. However, the incidence is very low (1–3 per 1 million women annually) that the COC-attributable risks are minimal.

- Case–control studies also support the view that the incidence of primary liver carcinoma is rare and are minimally less rare in COC users than it is in controls.

All Gestational Trophoblastic Disease: Clinical inference:

Women are counseled not to conceive

- For 6 months after HCG levels return to normal, and

- For at least 12 months not to conceive from conclusion of any chemotherapy (risk of recurrent disease and malformation of fetus due to the chemotherapy).

So conclusively what contraception should be practiced?

- If HCG levels are >5000IU/L, ovulation is very unlikely so barrier methods should be advisable, and these are first choice.

- The progesterone-only pills methods are recommended, while HCG is raised and emergency contraception (EC) may also be considered.

- Combined oral contraceptive methods can be practiced as soon as HCG concentrations are normal.

- Intrauterine devices are not recommended, until a normal menstrual cycle is recognized.

- If active cancer is diagnosed, and chemotherapy is in progress, avoid IUDs except with special approval from the regional centre: a progesterone-only pill would often be best.

In summary, after the all-clear with respect to HCG monitoring has been given by the regional centre, any hormonal or intra-uterine method is usable.

Endometrial and Carcinomas of the Ovary:

- Both are definitely less frequent in Combined Oral Contraceptive users.

A defensive e effect can be observed in ex-users for up to 15yrs, indeed for carcinoma of the ovary if lasts over 30 years. In both cases the risk is about halved among women who use COCs for 15 years. Inhibition of ovulation in COC users and of normal mitotic activity in the endometrial layer is the accepted explanations of these activities

Clinical Inferences:

It would be practical for a woman known to be prejudiced to either of these cancers to choose to use the COC basically for this secured effect.

Colorectal Cancer:

There is very suggestive information from many studies that the oral contraceptive pills also defends against this cancer.

Women who are apparently cured by local surgery for cancer of the ovary, cervix, and for malignant melanoma may all use COCs. The 'bottom line' when counseling COC takers is as follows: Populations using the pill may develop different benign or malignant neoplasm from control populations, but it does not appear from computer modeling studies that the overall risk of cancer is increased.

Cardiovascular Disease:

The spontaneous incidence of VTE in healthy non-pregnant young women (not taking any oral contraceptive) is about 5 cases per 100 000 women per year. The incidence in users of second generation oral contraceptive Pills is about 15 per 100,000 women per year of use. The incidence in users of third generation oral contraceptive Pills is about 25 cases per 100 000 women per year of use: this high incidence has not been satisfactorily explained by bias or confounding. The level of all of these risks of VTE increases with age and is likely to be increased in women with other known risk factors for VTE such as obesity. Women must be fully informed of these very small risks … Provided they are; the type of oral contraceptive Pill is for the woman together with her doctor or other family planning professionals jointly to decide in the light of her individual medical history.

Eligibility Criteria for Combiner Oral Contraceptives:

Absolute Contraindications to COCs:

1. Past or present history of circulatory disease

2. History of any liver disease

3. History of serious condition affected by sex steroids or related to previous COC use

4. Pregnancy

5. Undiagnosed irregular intra uterine bleeding

6. Estrogen-dependent neoplasm

7. Miscellaneous causes

8. Woman's anxiety about COC safety

Relative Contraindications to COCs:

- Risk factors for arterial or venous disease

- Diabetes mellitus, hypertensive disease and migraine

- Risk of altitude illness.

- Sex steroid-dependent cancer, Primary example is breast cancer.

- Malignant melanoma any time post diagnosis for the pill.

- If a young (<40yrs of age), first-degree relative has breast cancer

- During the monitoring of abnormal pap smears

- During and after definitive treatment for CIN

-estrogen in a woman needing contraception

- Most chronic congenital or acquired systemic diseases

- Sickle cell disease

- Inflammatory bowel syndrome

- Gallstones

- Very severe depression

- Diseases that require long-term treatment with enzyme-inducing drugs

-Diabetes mellitus (DM)

-Hypertension

Progestogen-Only Pill (POP):

Mechanism of Action and Maintenance of Effectiveness of POP:

-Ovulation is prevented in 50–60% of cycles.

- Progesterone interference with cervical glair changes. This 'barrier' effect is readily lost, so that each tablet daily must be taken within 3h of the same regular time.

Effectiveness of POP:

- Failure rate of 3.1 per 100 woman in each year between the ages 25 and 29, but this improved to 1.0 at 35–39 years of age and was as low as 0.3 for women >40 years of age.

Effect of Body Mass or on weight:

Studies are suggestive, but not conclusive, that the failure rate of old-type POPs may be higher with increasing weight.

Lactation and the POP use:

Because of amenorrhea of lactation, even without the POP there is only 72% conception risk.

- Amenorrhea, since the lochia ceased;

- Exclusive breast feeding—the baby's nutrition effectively all from its mother;

- Baby not attain up to the age of 6 months old.

Risks and Disadvantages of POP:

Being estrogen-free, these are exceptionally safe products. There are negligible changes to most metabolic variables. There is no proven causative link:

- With any cancer or neoplasm.

- With venous or (less certainly) arterial disease,

Side-Effects of POP:

Main side effect of POP is dysfunctional uterine bleeding.

Advantages and Indications of POP:

- Lactation, where the combination even with ordinary POPs is extra effective, indeed as good as the COC would be in non-breast feeders.

- Side-effects with, or recognized contraindications to, the combined oral contraceptive pills, in particular where estrogen related. As estrogen-free products do not appear to affect blood-clotting mechanisms significantly, POPs may be used by women with a definite past history of VTE and a whole range of disorders predisposing to arterial or venous diseases.

- Sickle cell disease, severe structural heart disease, pulmonary hypertension

- Smokers >35 years of age.

- Hypertension, whether COC related or not, controlled on treatment.

- Migraine

- Diabetes mellitus (DM)

- Obesity

- At the woman's choice.

Contraindications of POP:

Absolute Contraindications for POP use:

These are far fewer than for the COC.

- Any serious adverse effect of COCs not certainly related solely to the estrogen

- Breast cancer

- Undiagnosed genital tract bleeding.

- Actual or possible pregnancy.

- Hypersensitivity to any component.

Relative Contraindications for POP:

- Past severe arterial diseases.

- Sex steroid-dependent cancer, including breast cancer, when in complete remission

- Recent trophoblastic disease until HCG is undetectable in blood as well as

- Enzyme inducers

- Previous treatment for ectopic pregnancy

- The risk of ectopic pregnancy is actually reduced among POP users

- Past VTE or severe risk factors for VTE

- Risk factors for arterial disease; more than one risk factor can be present, in contrast to COCs.

- Current liver disorder—even if there is persistent biochemical change.

- Most other chronic severe systemic

- Family history of breast cancer

Injectable Contraception:

The most commonly only injectable currently long-term use is depomedroxyprogesterone acetate (DMPA), and it has been given additional approval as a first-line contraceptive. WHO data indicates that DMPA users have reduced risk of cancer with no, overall increased risk of cancers of the breast, ovary or cervix, and a 5-fold reduction in the risk of carcinoma of the endometrium, (relative risk 0.2).

Administration:

There are actually two injectable agents available:

- DMPA 150mg every 12 weeks.

- Norethisterone enanthate 200mg every 8 weeks. Both are generally given by deep intra muscular (I.M.) injection within the first 5 days of the menstrual cycle. Injections may also be given beyond day 5 with 7 days added precautions if it is near certain that a conception risk has not been taken. The injection sites usually in the right upper quadrant of either buttock should not be massaged.

Mechanism of Action and Effectiveness of injectable contraception:

- DMPA is one of the most effective among reversible methods.

- Failure rate of 0.3% to 3% in the first year of use.

- It functions primarily to avoid ovulation, with effects on the cervical mucus similar to the COC.

Timing of the First Injection administration:

- In menstruating women, the first injection should ideally be given on day 1 but can be up to day 5 of the cycle; if given later than day 5 (including much later if abstinence believably claimed to that day), advise 7 days extra precautions.

- If a woman is on a COC or POP up to the day of injection, the injection can normally be given at any time, with no added precautions.

- Postpartum (when the woman is not breastfeeding) or after a second-trimester abortion, the first injection should normally be at about day 21 and, if later, with added precautions for 7 days.

- During lactation, if chosen, DMPA is best given at 6 weeks. Lactation is not inhibited and the dose to the infant is small and believed to be entirely harmless.

- After miscarriage or a first-trimester abortion, injection on the day (or after expulsion of fetus if a medical procedure). If the injection is given beyond the 7th day advise 7 days' extra precautions.

Indications for injectable contraception:

The main indications are

- The woman's desire for a highly effective method that is independent of intercourse and unaffected by enzyme inducers, and

- When other options are contraindicated or disliked.

- A past history of ectopic pregnancy or, like all other progesterone-only methods, of thrombosis, e.g. for effective contraception while waiting for major or leg surgery.

If it causes amenorrhea, DMPA is positively beneficial in:

- Endometriosis;

- Past symptomatic functional cysts;

- Other menstrual disorders.

Injectable Advantages:

DMPA has,

- Obvious contraceptive benefits (effective, 'forgettable'), but the data imply that it also shares

- Most of the non-contraceptive benefits of the COC described above, including protection against pelvic infection and endometrial cancer, while having

- Even greater safety, with respect to mortality and serious morbidity, than the COC.

Injectable Disadvantages:

Metabolic changes are minimal, aside from some evidence of reduction in HDL cholesterol.

The main problems are

- Irregular, sometimes prolonged bleeding.

- Amenorrhea and potential hypo-estrogen level.

- Impossibility of reversal of the effect of a dose (for at least 3 months, sometimes longer). It is unfair not to mention this fact in advance.

- Delayed return of fertility

- Weight gain (the latter can be marked in some cases).

- Some concern re reduced bone density—which is probably exaggerated.

Menstrual abnormalities related to injectable use:

These are an obstacle to any large increase in the method's popularity.

In the management of frequent or prolonged bleeding

- First, always exclude a non-DMPA-related cause

- It has a better prognosis than with implants, being usually an early problem then generally followed by amenorrhea after 3–6 months.

- If it does not resolve, the next injection may be given early (but not less than 4 weeks since the last dose). However:

- Clinical experience suggests that giving additional estrogen is more successful, though not proven in trials. The rationale is to provide estrogen cyclically to produce some 'pharmacological curettages', i.e. withdrawal bleeds due to endometrial shedding that is bleeding in an unacceptable way—in the hope that a 'better' endometrium will be developed post-treatment. The plan should be explained to the woman, who should also understand that it is not guaranteed to work.

-Amenorrhea occurs in most long-term users and is usually very acceptable, after appropriate counseling.

-Bone density

-After >20 years of research but no RCTs nor adequate comparative studies, there remains uncertainty: not about the low follicular-phase estradiols that are indeed found in many DMPA users but about their implications for bone health.

Injectable Contraindications:

Absolute Contraindications for DMPA:

- Past severe arterial diseases, or current very high risk thereof (because of the above evidence about low estrogen levels coupled with reports of lowered HDL cholesterol).

- Severe risk factor(s) for osteoporosis, including chronic corticosteroid treatment (>5mg per day).

- Any serious adverse effect of COCs not certainly related solely to the estrogen (e.g. liver adenoma or cancer)

- Breast cancer

- Undiagnosed genital tract bleeding.

- Actual or possible pregnancy.

- Hypersensitivity to any component.

Relative Contraindications for DMPA:

- Short-term steroid treatment, recovered anorexia nervosa with normal menstrual cycling

- Active liver disease with abnormal liver function tests—

- DMPA is usable in all non-acute porphyrias

- Sex steroid-dependent cancer, including breast cancer, in complete remission

- Unacceptability of menstrual irregularities, especially cultural/religious taboos whether associated with bleeding or amenorrhea.

- Obesity

- Past severe endogenous depression.

- Planning a pregnancy in the near future

Injectable Counseling and Supervision:

Four practical points must always be made to prospective users:

- The effects, whether wanted (contraceptive) or unwanted, are not reversible for the duration of the injection: this fact is unique among current contraceptives.

- After the last dose, conception is commonly delayed with a median delay of 9 months, which is of course only 6 months after cessation of the method, but in some individuals it could be well over 1yr.

- Weight gain is probable due to increased appetite, so it is useful (and can really work) to advise a pre-emptive plan to start taking extra exercise as well as watching diet.

- Irregular, sometimes prolonged bleeding may be a problem, but the outlook is good as usually followed after a few months by amenorrhea which (it should be explained) is not a problem.

Follow-Up of injectable contraceptive users:

Apart from ensuring the injections take place at the correct intervals, follow-up is primarily advisory and supportive.

- Prolonged or too frequent bleeding is managed.

- BP is normally checked initially but there is absolutely no need for it to be taken before each dose, as studies fail to show any hypertensive effect. An annual check is reasonable as well-woman care.

Contraceptive Implants:

Implants contain progesterone in a slow-release carrier, made either of dimethylsiloxane as Norplant a single rod. They are excellent examples of long-acting reversible contraceptives (LARCs) with the ideal 'forgettable' default state yet rapid reversibility.

Mechanism of Action, Administration and Effectiveness:

- Norplant works primarily by ovulation inhibition, supplemented mainly by the usual sperm-blocking mucus effect of progesterone.

Clinical administration:

- It is inserted sub-dermal over the biceps medially in the upper arm, under local anesthesia, from a dedicated sterile preloaded applicator by a simple injection/withdrawal technique—aided by the blunt bevel of its cleverly shaped wide-bore needle.

- It is inserted anterior to the groove between the triceps and biceps, well away from the neurovascular bundle.

- Though this implant is much easier than Norplant to insert or remove, specific (model arm plus live) training is essential and cannot be obtained from any book.

Effect on Body Mass:

Serum levels tend to be lower in heavier women, but given the high margin of efficacy subsequently, failures have not been attributed to BMI.

- This finding should not detract in the slightest from offering Norplant to overweight women for whom the COC has a high VTE risk.

Contraceptive Implants Indications:

It inhibits ovulation so, special indications include past ectopic pregnancy and as a possibility for menstrual disorders, though the outcome is not reliably beneficial (because of irregular bleeding).

Contraceptive Implants Advantages:

- It provides efficacy and convenience: if the bleeding pattern suits, it is a 'forgettable' contraceptive.

- Long action with one treatment (3yrs); high continuation rates.

- Absence of the initial peak dose given orally to the liver.

- Blood levels are low and steady, rather than fluctuating (as with the

POP) or initially too high (as with injectable); this with previous bullet minimizes metabolic changes.

- Estrogen-free, therefore definitely usable if history of VTE.

- Median systolic and diastolic BP was unchanged in trials for up to 4yrs.

- The implant is rapidly reversible

Contraceptive Implants Disadvantages and Contraindications:

It inhibits ovulation and it is immediately reversible.

Local adverse effects occur, namely:

- Infection of the implant site.

- Expulsion.

- Migration and difficult removal

- scarring.

Absolute Contraindications of Implants:

- Any serious adverse effect of COCs not certainly related solely to the estrogen (e.g. liver adenoma or cancer

- Recent breast cancer not yet clearly in remission

- Acute porphyria with history of actual attack precipitated by hormones

- Known or suspected pregnancy.

- Undiagnosed genital tract bleeding.

- Hypersensitivity to any component.

- Severe hepatic disease

Relative Contraindications of Implant:

- Sex steroid-dependent cancer, including breast cancer

- Enzyme inducers

- Past symptomatic functional ovarian cysts

- Past VTE or severe risk factors for VTE

- Risk factors for arterial disease; more than one risk factor can be present.

- Current liver disorder (now) with normal biochemistry.

- Most other chronic severe systemic diseases.

- Unacceptability of irregular menstrual bleeding

Timing of Implant Insertion:

- In the woman's natural cycle, day 1–5 is usual timing; if any later than day 5 (assuming no sexual exposure up to that day) recommend additional contraception for 7 days.

- If a woman is on COC or POP DMPA, the implant can normally be inserted any time, with no added precautions.

Minor Side-Effects:

Reported in frequency order these were:

- Acne (but this might also improve!) - 'dizziness'

- Mood changes

- Libido decrease

- Headache

- Abdominal pain

- Breast pain

- Hair loss

-Weight gain

In the above RCT, the mean body weight increase over 2yrs was 2.6% with Implant and 2.9% with Norplant, while, in a parallel study, similar users of an IUD showed weight increases of 2.4% in the same time scale.

Weight seems to be less of a problem than with DMPA, though some individuals do find their weight gain unacceptable.

Bone Mineral Density:

Since Implant suppresses ovulation and does not supply any estrogen, allowing adequate follicular phase estrogen levels (i.e. usually not as low as the levels in DMPA users).

In a non-randomized comparative study, no bone density changes or differences were detected in either 44 Implant users or 29 users of copper IUDs over 2 years, which is reassuring.

Intra-Uterine Contraception:

Intra-uterine contraceptives are currently of two types:

- Copper intra-uterine devices (IUDs), in which the copper ion (the actual contraceptive) is released from a band or wire on a plastic carrier;

- Levonorgestrel-releasing intra-uterine system which releases that progesterone.

Intra-Uterine Contraception Copper Devices:

Advantages of Copper IUDs:

- Safe: mortality 1:500 000.

- Effective:

- Immediately

- No link with coitus.

- No tablets to remember.

- Continuation rates high and duration of use can exceed 10yrs.

- Reversible and there is evidence that this is true even when IUDs have been removed for one of the recognized complications.

Mechanism of Action of intrauterine device:

Studies indicates that mechanism of action of IUDs by

- Primarily by preventing fertilization, the copper ion being toxic to sperm.

- can also act to block implantation.

However, when IUDs are in situ long term, this seems to be a rarely needed s or back-up mechanism.

Choice of Devices and Effectiveness:

The 'gold standard' among IUDs for a grand multi-Para woman without menstrual problems is any banded copper IUD.

Important Influence of Age on Effectiveness:

Copper IUDs are much more effective in the older woman, largely because of declining fertility. Over the age of 30 there is also a reduction in rates of expulsion and of PID, the latter of which is not believed to be the result of the older uterus resisting infection but because the older woman is generally less exposed to risk of infection (whether through her own lifestyle or that of her only partner).

Advantages of IUDs:

The main advantage lies in the infrequency of re-insertions. Research in the past 50yrs has clearly shown that

- Most IUD complications can be insertion related and also

- reduce in frequency with duration of use.

- It usually passes through the cervical canal surprisingly easily, in all parities.

- For long-term use

Main Problems and Disadvantages of Copper IUDs:

1. Intra-uterine pregnancy, hence its risk including miscarriage.

2. Extra-uterine pregnancy, prevented less well than intra-uterine, though absolute risk actually reduced in population terms.

3. Expulsion, hence the risks of pregnancy/miscarriage.

4. Perforation

- Risks to bowel/bladder

- Risks of pregnancy

5. Pelvic infection

6. Displacement

7. Pain.

8. Bleeding

Pelvic inflammatory disease (PID) and IUDs:

- The greatest risk is in the first 20 days, most probably caused by pre-existing carriage of STIs.

- Risk thereafter, as with pre insertion, relates to the background STI risk. Therefore, the evidence-based policy should be that:

- Elective IUD insertions and reinsertions should always occur through a cervix that has been established to be pathogen-free, so hopefully eliminating the post insertion infections.

Clinical Implications for IUD Insertion Arrangements:

- Prospective IUD users should as always be verbally screened, meaning a good sexual history. They need to know that they will, at least, need to use condoms too if the method is judged.

- Recent exposure history or evidence of a purulent discharge from the cervix indicates referral for more detailed investigation at a Genitourinary Medicine clinic.

- If Chlamydia is detected, the woman should be referred to a clinic:

- investigated for linked pathogens,

- Necessary treatment and contact tracing arranged, and the IUD insertion postponed.

- In addition to the routine 6-week follow-up visit, a first post insertion visit might be appropriate at 1–2 weeks, designed to identify any women with post insertion infection (during the crucial 20 days.

Female Sterilization:

- The psychological sequelae Considerable regret has been reported in 2% at 6 months and by 4% at 18 months, and postoperative psychiatric disturbance and dissatisfaction was largely associated with preoperative psychiatric disturbance. Higher rates of regret are reported when the sterilization is done at times that are not, except in rare special cases, now recommended: at termination of pregnancy or Caesarean section, or immediately postpartum.

- Menstrual irregularity due to Sterilization, However, if the method of contraception prior to the sterilization was COC, then the lighter regular withdrawal bleeds of the COC are replaced by normal menstruation. Therefore, counseling MUST include specific questioning about whether heavy bleeding or pain are or were problems during the woman's natural cycles, even if this relates to many years previously.

- Ovarian cancer it appears in several studies that tubal sterilization may reduce the risk of ovarian cancer. This possible beneficial side-effect is difficult to explain, but may be a real effect.

Likelihood of Regret Following Sterilization:

A study in 1980 of women undergoing reversal of sterilization found

- 87% were under the age of 30. Marriages or intended long-term relationships started under age
- 63% had been sterilized after delivery; and

- No less than 75% had been unhappy in their relationship.

It is of importance that any disharmony or pressurizing by the partner be identified. Easily missed, they are at least potentially more easily picked up by the referring clinician in primary care, as compared with the hospital gynecologist or surgeon.

Chapter 3: Review of Literature

Other Research Done:

Several researchers have been interested to find out **the concept of reproductive health and the ideology and basic of family planning practice perspectives and factor that make the hurdle in practice of family planning and birth control other influential which make the women reluctant to adopt contraceptive methods.**

In 2011 research was done and data was collected to know about the family planning and birth control practices, at Africa- Sub-Saharan, Nigeria by Millennium Promise Millennium villages' project. The report was delivered by Dr. Clement Woje.

The program started in 2007, and they implement different health interventions in a group of different villages that consists and a total population of 22,000 natives, in a project called Millennium Promise Villages Project. The goal of this study is to achieve the MDGs for the different communities of Nigeria by 2015. They used different intervention and low cost investments for that project. They started working by following their strategies to promote the program at three different levels:

1- At community level: With the help of different community health workers or health visitors.
2- At clinical level: by providing good health services and facilitate to meet basic health requirements.
3- By making link with referral hospitals.

These strategies were well appreciated which will give a great assistance to increase and promote good Family planning or birth control counseling and better service. With this study they observed that it was almost a taboo to talk or discuss about Family planning or birth control practice in this Muslim dominated community who have strong belief on their traditional and religious concepts. In Nigeria, the community of different villages was belief that, the large family size is the symbol of wealth, happiness and prosperity for their family. It was hard for a woman to demand or discuss about the family planning or birth control practice. The two most important factors were sort out through this study that are responsible for the poor uptake of family planning and birth control practice were strong religious influences and male dominated society(husbands – the leader of the family). Other factors were concluding that the competition among wives (polygamy system) to have more children than their rivals, and inadequate knowledge education about family planning and birth control practice. Most of the researchers and the health staff believed they could not change the people's perception on family planning and birth control issues. Therefore, family planning and birth control program promotion has prime importance that can be helpful to overcome this critical situation.

In the year of 2009, the Total Fertility Rate in that group of people was 7.1, will show that with more than ¼ of young adult woman giving birth every year in Nigeria.

Other Methodology:

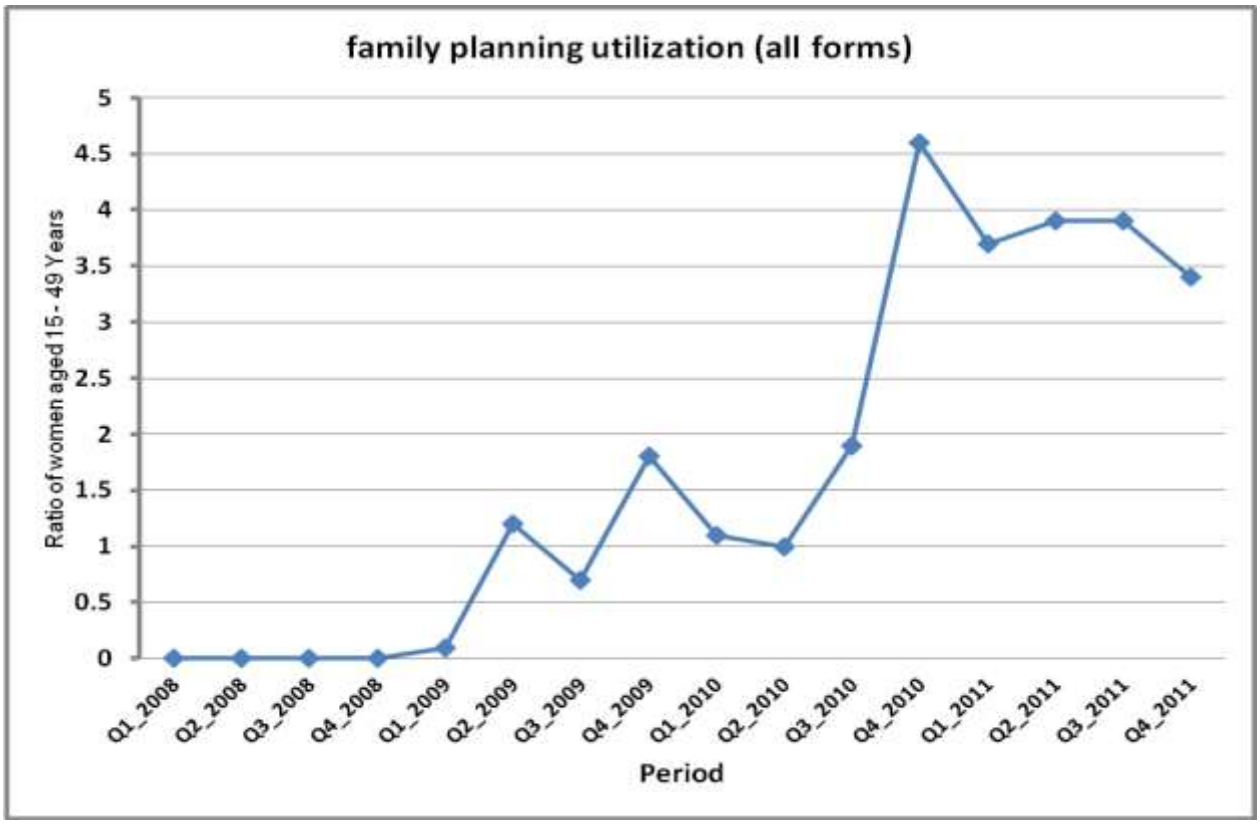
To begin this research the researchers decided to developed a multiple strategy to conduct the analysis to reach the final results. These are: by local advocacy; behavior change communication among the people; critical thinking and capacity building; and good supply.

They implement good strategies and planning well program about family planning and birth control issues at both community and clinical levels. At the clinical aspect they give the prime importance of family planning and birth control discussions. Women should be allowed to talk openly about this issue along with other clinical activities. However, during group counseling at Antenatal clinics, women should be sensitized about the potential future use of family planning and birth control.
At the population level advocacy was done during health service outreaches, at public meetings, in mosques and churches and at several other places and at meetings with community and religious leaders (focus group discussions). They invited well known Muslim clerics to promote and facilitate focus group discussions with Imams and heads of house. They also promote the services of family planning and birth control discussion into other zones of the project via: education, through agriculture, water and sanitation.

Other Findings and Conclusions:

The following table shows the progress in uptake of family planning methods between 2009 and 2011.

Method	**2009**				**2010**				**2011**			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Pill	2	0	0	13	1	0	41	50	19	13	16	40
Injectable	3	74	45	98	64	64	77	163	37	40	83	89
Insert able	0	0	0	0	0	0	0	66	312	188	83	77
IUCD	0	0	0	0	0	0	0	0	0	0	0	0
Total	5	74	45	111	65	64	118	279	368	241	182	206



This was the sticking moment when they used it to implement open discussion on family planning (child spacing) and birth control. They motivate people to openly discuss about the methods and benefits of family planning and birth control on mother, child, and family and for society as well. Comments and ideas were exchanged from different religious and traditional leaders, including leader of the house for their perceptions on family planning and birth control or child spacing. This was followed up with similar discussions in different many places like in Mosques, Churches, and cooperative groups over many months. The response was astonishing as women started coming to the clinics to request for family planning methods and in many instances men start bringing their wives to the clinics for the services. Over time, they built a large pool of satisfied clients who took on the roles of child spacing and birth control that advocates within the community and to neighboring communities.

Strengths and Weaknesses of the study:

1. Practicing family planning and birth control can be adopted and accepted by the couples through good community and their involvement in the system.
2. There is a need for behavior change communication through participation of community in correcting the false trust on their strong cultural and religious beliefs about the family planning and birth control are crucial.

3. For the success of a program there should be good communication and collaboration of the population is essential.
4. The collaboration with other agencies or organizations will be very helpful tool to improve staff efficacy and to raise their potential.

Another Research done:

Another study was done in Nigeria, Africa. Report published in International Family Planning Perspectives, Volume 25, Number 2, on June 1999 by Clifford Obby Odimegwu.

Studies have **found a good association between attitudes of a community toward family planning and birth control practice in Nigeria,** but the relationship between these two factors has not been analyzed.

Methods adopted for the study:

A randomly selected 927 respondents, married men and women who lived in urban and rural areas of Nigeria were questioned that they responded multiple attitudinal questions regarding family planning and birth control practice. A factor analysis was done to assess the respondent's behavior, their beliefs toward family planning and birth control practices.

METHODOLOGY:

Sample Selection:

The source of information about family planning and birth control practice, the concept about the practice were observed in Nigeria, the basic data obtained from a national survey which was conducted between the year of 1992 and 1993. A total of 1,540 responded (men and women) were selected for completion of data, by using a multistage sampling technique. Respondents were native of the state capital and a rural community in each of three states—Enugu and Nike in Enugu State, Kano State and Lagos City in Lagos State.

The data from 1991 census reported total 3.2 million of population, 5.6 million and 5.7 million in Enugu, Kano and Lagos states, respectively. Kano State is selected because it is a predominantly Muslim community. Kano is a moderately sized farming community of approximately 2,000 people lives in this region of Nigeria.

Enugu State is in the eastern part of the country. The indigenous population is predominantly Ibo. Christianity is the dominant religion in this state.

Lagos is located on the southwestern part of Nigeria. The indigenous of Lagos population is mainly Yoruba, but Ibos, Hausas, and other ethnic groups from the eastern and northern parts of the country. Christianity and Islam are the dominant religions in this region. The three urban centers were selected to conduct the research. The researchers selected two blocks, within which 180 people were randomly selected; the first 90 were the principle data sample and the second 90

as keep as backup for the analysis. The rural areas were not categorized, because there was no any significant distinction among the household so random sampling was done. In each of the three villages, 150 respondents (men and women) were interviewed for collection of data. Within each urban and rural area, the couple and all young adolescents were asking for collection of data. When there was more than one wife (polygamy), a lottery was drawn to determine which one would participate for the study.

At the end, 1,540 questionnaires (753 men and 787 women) were filled. The analysis in that report is limited to the 927 married respondents, because those who were unmarried or single or those who may not have be sexually active by that time and therefore may not have needed to practice contraception or birth control practice.

Other findings and Conclusions:

Respondents' concept and their belief about family planning and child birth control correlated with contraceptive and birth control practice. Those who appreciate and admit the importance of family planning and birth control practice were twice as likely as respondents who were not in favor of to be using contraceptives methods. Furthermore, respondents who communicated with their family members about family planning and birth control were three times more likely than those who did not want to practice family planning and birth control. Women who were in support of the questions that was asking about the girls' education and discouraging early marriage were three times more likely than women who was not favor of this aspect to be practicing contraception.

Factors found to be associated with contraceptive use should be beneficial and must be utilized by the Nigerian government in its family planning and birth control awareness programs. Changes in attitudes and behavior toward contraception among Nigerians women will be helpful and may increase the practice of contraception.

RESULTS:

Background Characteristics:

According to the data result about one-half of respondents were in between age of 20-34 years, and one-fifth was 45-49 years (Table 1). 40% or more of the male respondents were aged 45-49 years; and most of the female respondents were young.43% of male reported having a primary school education and 32% up to secondary school education. 37% of the women reported having a primary school education and only 22% up to secondary school education. More than one-third of the male respondents were belongs to farming profession, and they remain third were involved in professional or administrative jobs; almost four in 10 of the female respondents were engaged in artisanal jobs such as weaving and sewing, and another one-third of women worked clerical or sales positions. More than two-thirds of respondents were either Ibos or Hausas, while one-quarter were Yoruba. Almost half of respondent were Muslim, one-quarter respondent were Christian and the remainder belonged to other religious groups.

Table 1. Distribution of married respondents survey, by selected social and demographic characteristics, according to gender, Nigeria, 1992-1993			
Characteristic	Total (N=927)	Men (N=375)	Women(N=552)
Age			
15-19	3.6	0.5	5.7
20-24	12.8	1.6	19.9
25-29	19.6	9.4	25.7
30-34	19.0	15.8	21.0
35-39	14.0	15.8	12.9
40-44	12.5	14.5	9.8
45-49	18.5	42.4	5.1
Education			
None	26.6	15.5	33.2
Primary	40.9	43.1	37.4
Secondary	24.0	31.7	22.3
Tertiary	8.5	9.7	7.1
Occupation			
Professional/			
administrative	23.0	34.4	11.4

Sales/clerical	27.8	23.5	30.6
Farming	24.8	37.6	19.8
Artisan	24.4	4.5	38.2
Ethnic group			
Hausa/Fulani	34.1	39.3	30.3
Ibo	35.7	37.8	34.4
Yoruba	24.4	18.5	28.5
Other	5.8	4.4	6.8
Place of residence			
Urban	65.3	69.5	62.4
Rural	34.7	30.5	37.6
Religion			
Islam	47.1	47.6	46.8
Christianity	26.3	26.2	26.3
Other	26.6	26.2	26.9
Total	100.0	100.0	100.0
.			

CONCEPT OF CONTRACEPTIVE KNOWLEDGE, ATTITUDES OR BEHAVIOR CHANGE AND THEIR USE:

76% of respondents reported knowing about the concept of family planning and birth control methods, only 28% were reported practicing modern method of contraception , and (47%) reported ever having used one using contraceptives (Table 2). (42%) of male than female (50%) had ever used contraceptives methods, and the ratio of practicing contraception in women were more likely than men to have ever used a traditional method or a modern method of family planning or birth control.

Table 2. Survey of married respondents who know or who have used a method of family planning or birth control, by gender

Knowledge and use	Total (N=927)	Men (N=375)	Women (N=552)
Knowledge			
Any method	76.1	79.9	73.6
Traditional method	48.5	54.7	44.4
Modern method	69.6	66.5	70.3
Ever use			
Any method	46.8	41.6	50.4
Traditional method	34.0	31.2	35.9
Modern method	34.4	30.9	36.8
Current use			
Any method	27.9	26.7	28.8
Traditional method	14.6	15.5	13.9
Modern method	18.9	16.3	20.7

All respondents were generally in favor of family planning and birth control practice, although overall women were more likely than men to accept with the positive response for each statement (Table 3). When asked whether practicing contraception allows parents to prepare for children, 63% of men were in support of this statement then 78% of women. While 72% of female respondents accept that contraceptive use will help them to improve their standard of living, and only 40% of the male respondents were agree. Less than three-quarters of men, but more than four-fifths of women, accept that the family planning practice helps a woman to regain her strength between pregnancies and that it protects the health of mothers.

Table 3. Survey of married respondents who agreed with selected attitudinal statements about family planning and birth control practice, by gender

Attitudinal statement	Total (N=927)	Men (N=375)	Women (N=552)
Family well-being and family planning			
Family planning can help a couple to become responsible parents.	66.6	32.8	67.2
Practicing family planning allows couples to prepare for children.	71.7	62.7	77.9
Children will have better opportunities for education if their parents practice family planning.	69.6	62.3	74.3
Family planning will help improve one's standard of living.	67.1	39.7	72.1
Health benefits of family planning			
Family planning helps a mother to regain strength before her next baby.	78.1	70.4	83.3
Child spacing protects the health of mothers.	78.3	66.9	86.4
Child spacing helps protect the health of children.	78.3	66.8	86.0
A woman who has too many children looks tired and	66.5	61.0	70.2

worn out.			
A woman's beauty lasts longer if she practices family planning.	69.2	63.5	73.1
Women who use family planning look younger.	61.6	34.9	66.1
Female education and early marriage			
You should let your daughter finish school before she marries.	82.2	76.6	86.0
If a man really loves a girl, he will wait for her to finish school.	72.5	65.1	77.7
Early marriage and childbearing can damage a girl's health.	63.3	57.0	67.3
Marital relations			
Spouses who care for each other will practice family planning.	64.1	54.1	71.0
A husband who loves his wife will allow her to practice family planning.	57.4	45.3	65.5
The practice of family planning will bring a couple closer together.	56.3	48.0	62.0
With family planning, a couple can love one another with peace of mind.	61.9	32.8	68.1
A couple that practices family planning has a happy family.	62.8	30.4	71.2
Having a large family strains a couple's relationship.	49.0	40.0	55.1
Family planning leads to broken women.	17.9	17.1	18.5

Family planning practice will cause a loss of confidence between a husband and a wife.	27.1	25.2	28.3
Wives who practice family planning will be abandoned by their husband.	17.4	18.1	16.8
A couple that practices family planning will have conflict in their marriage.	21.8	25.2	19.4
It is embarrassing for me to talk to my spouse about family planning.	24.5	25.0	24.1
Societal values			
Practicing family planning will create a better society.	68.4	57.3	75.9
Men's role in family planning			
Men should share the responsibility for family planning.	65.4	33.5	73.5

77% of male members and 86% women respondents were in favor of that their daughters must be complete her school education before the parents decide about her marriage. 57% of men and 67% of women population in support of that the early marriage of their daughter may be the factor which is responsible to affect her health. The information about the perception to adapt family planning and birth control practice and their marital status were sort out that the male partners were less interested than the females. Although about one-fifth of respondents were in the favor of that a couple should be practicing family planning and birth control will lead to create the conflict in their marital relations, only 25% of the male agreed with this statement. 55% of Female respondents were in support of that the large family size is also responsible to create a strain between their relation with their spouses and only 40% of men agree with that statement.

Women they do not have the liberty and had no concept about that to discuss to practice family planning and birth control and most of the male were too far to agree with the statement that men should take part in the responsibility for practicing family planning and birth control. On the other hand three-quarters of women respondents document an excellent support form male partners playing an active role in practicing family planning and birth control, but unfortunately only one-third of the male respondents did.

Strengths and Weaknesses of the study:

This information clearly demonstrates that the perceptions of the population about practicing family planning and birth control affect whether they will practice it or not. Those respondents who were in favor of practicing family planning and birth control it provides them several health benefits, same as those who were perceive that family planning and birth control practice will help them to improve their life style and their standard of living. Furthermore, this analysis also suggests that there is a link between attitudes or behavior toward family planning and birth control and contraceptive use.

The study also reflects the idea that social and cultural support has a strong influence on practicing contraceptive use. Individuals who have an inspiration with the respondents had a positive effect on their contraceptive practice and behavior. Therefore, it is mandatory to know that those factors which can bring a social change among the population and helpful to increase the promotion of contraception. Their endorsement of family planning and birth control practice may be helpful to increase contraceptive use among their family and also other community members. Family member's communication is an important tool to promote contraceptive use and it should be considered in family planning and birth control service delivery. Finally, the association between ethnicity and family planning and birth control practice indicates that it is important to consider the social and cultural aspects of family planning and birth control service delivery.

In the light of these information we should sat that the Nigerians' must increased family planning and birth control practice by bringing the changed in their concepts of family planning and birth control practicing. It should be achieved through the involvement by the government's information, education and communication programs and by the country's economic adversity. Thus, family planning and birth control awareness programs must be launched and which should continue to have an impact on to bring Nigerians' contraceptive behavior change. The importance of most focusing these programs, especially in rural areas, where there is an actual need.

Chapter 4: Dynamics of the Anticipated Solution

Goals and Objectives of Research Methodology:

The main goal of research methodology is to produce the situation that will be effective and beneficial to reach up to desired level which is required by providing the necessary movement and good appropriate advice to take national and local initiatives in all zones of reproductive health and family planning and birth control aspects. Research methodology occupies a key position to assess the status of the health of the population and also the determinant which affect the health of population by…

1. The first step is by the promotion of providing healthy reproductive lifestyle by the promotion of the practice of adopting family planning and birth control and their services.

2. To Support health and wellbeing of the given community, especially in the aspect of maternal and child health care services by reducing maternal morbidity and mortality due to pregnancy and during child birth by…
    - Increase approach and facility to provide qualitative and reasonable maternal and child health care services as maximum as possible.
    - Decrease prevalence of anemia do to pregnancy or any other reproductive illness among women of reproductive age group.
    - Decrease prevalence of other dietary deficiencies of essential nutrient among the population.
    - Increase the facility to secure and screen transfusion of blood.
    - Increase the facility to the reproductive health guidance and delivery of comprehensive information about reproductive health, family planning and birth control practice and services.
    - Generate good health training centers for all health care team members and staff.

In the light of USAID health policy states that,
"Family planning assistance provides critically important health benefits for mother and young children."

3. To reduce the incidence of complications during child birth and neonatal morbidity and mortality by,

    - Reduce incidence of pre mature, low birth weight, and pre-term deliveries.
    - Increase the orientation about exclusive breastfeeding up to six months of age of baby.
    - Reduce prevalence of neonatal diseases due to parent ignorance.

- Give orientation to the mother about vaccination program for their children.
- Provide appropriate services to pregnant women regarding prenatal care, tetanus vaccination and sensitization about family planning and birth control practice after giving birth. And also appropriate treatment of neonates born to HIV positive mothers and counseling about the infant feeding in order to minimize the risks.

4. To reduce the unwanted pregnancies and risky abortion and risky behavior in all women of reproductive age by,

- Raise the family planning and birth control practice among the women.
- Reduce unwanted and risky pregnancy, among young adult women.
- Increase approach and facility to provide qualitative and reasonable maternal and child health care services as maximum as possible
- Increase the facility to the reproductive health guidance and delivery of comprehensive information about reproductive health, family planning and birth control practice and services

5. To minimize the incidence and prevalence of sexually transmitted infections or diseases including the transmission of HIV infections by,

- Provide good access and facility by increasing number of staff members who can able to deliver accurate and comprehensive reproductive health information and services to the population.
- Reduce the prevalence and incidence of sexually transmitted diseases and infections, including HIV/AIDS.
- Increase the facility proportion to screen all of the pregnant women of the population for syphilis, Toxoplasmosis and other STIs.
- Establish different centers that provide confidential testing for HIV/AIDS, and counseling
- It should be mandatory to properly screen all blood and blood products for HIV/AIDS and hepatitis prior to transfusion.
- Give sex education to the population to minimize the transmission of HIV/AIDS by HIV patients, through transfusion or by using unsterilized instruments by providing adequate education and provision of condoms.

6. To increase involvement of male member of the family in all reproductive health issues by,

- By involving men during the promotion of reproductive health programs and providing services related to family planning and birth control.
- Encourage husband support for the practicing of family planning and birth control and also other reproductive health services by women.

.

7. Make a target to reach up to that level which will be helpful in lowering the population growth rates-----that are companionable with the accomplishment of social and economic goals for the given population.

8. To encourage the researchers to conduct research on reproductive health and family planning and birth control issues by,

- Providing good recommendations or possible deliver some important information on reproductive health and family planning and birth control issues.
- To develop the skill training for members and all staff at every steps of research on reproductive health and family planning and birth control data.
- Promote the implementation of all information from research which will be helpful in planning and conducting reproductive health and family planning and birth control programs and beneficial in policy changes in reproductive health and family planning and birth control program.

9. To promote gender equality and freedom to all to adopt reproductive health, family planning and birth control practice services by,

- Organizing the system to promote gender sensitiveness in all the health facility to enhance gender responsive programs and policies.
- Conduct different policy oriented study on reproductive health and family planning and birth control practice throughout the whole life of a woman including menopause.

10. To lower the Incidence and prevalence of different cancers related to reproduction and other non-communicable diseases in the community by,

- Promote different screening strategies and programs for early detection and treatment of cervical, breast cancer.
- Establish useful referral sectors for the management of cancer.
- Strengthen information and data that base especially on reproductive health cancers through cancer registries.
- Reinforce the accessible system for all population to deal with all reproductive health cancers.
- Encourage screening programs for non-communicable diseases for a given community that leads to reproductive ill health e.g. diabetes, sickle cell diseases and hypertension.
- Reduce the mortality and morbidity of the women due to reproductive health cancers.

11. To reduce the prevalence and incidence of infertility/ childlessness by providing the adequate services to treat infertility cause in a couples by,

- Provide competent training for all health care staff and members or providers for counseling and treatment at adequate infertility clinic

Finally we can say that the goal and objective of this study is plan to observed and inferred the extent and depth of awareness of reproductive health concepts, ideology and benefits of family planning and birth control practices, their faith and confidence on contraception, also factors that affect bring hurdles in family planning and child birth control practice among the population of Niamey, Niger.

Research Hypothesis:

The study hypothesis is that**,**

"In Niamey, Niger women have Satisfactory knowledge about reproductive health and family planning but the family planning and birth control practice is weak and prevalence of fertility rate are still high due to the male dominated society (many women do not have the liberty to manage or to talk about family planning and birth control practice), religious factor and cultural influence is also take part and the population have the true faith the large family size is the symbol of prosperity and success for their family that's why the desired family size is higher than the actual family size."

Chapter 5: Research Methods

Strategies and techniques:

Simple techniques were adopted to collect information by randomly selected respondent from a large number of patients waiting in a waiting lounge in the department where they were waiting for their turn to go for consultation. In total, 500 respondents were selected randomly for data collection and also for assessing reproductive health and family planning and birth control services in different clinics exist in Niamey, Niger.

The study is descriptive cross-sectional exploratory, which involve 500 randomly selected respondents between the reproductive age (15-49 years) among those women who were present at the time of data collection in the clinic in Niamey, Niger. Data was collected at different (private and public hospitals both) that providing family planning and birth control services in the capital. The study questionnaire consisted of multiple statements related to the demographic characteristics of respondents, women reproductive health concepts, their belief about it and also the factors that involve in family planning and birth control practice. Some questionnaire were self-administered and some were interview administered (for those who couldn't read and write) questionnaire. The data and the information were analyzed by using SPSS package of source of data.

ADVANCED DATA HANDLING IN SPSS:

STEPS:

- Sorting cases
- Merging
- Aggregating cases
- Splitting files
- Selecting cases
- Recoding
- Computing new variables

Data Sources:

The data and the information were collected from different private and public health centers that providing family planning and birth control services in the capital of Niger.

Data Collection:

Pre-tested closed-ended questionnaire were given to the randomly selected 500 respondents either by self-administered or interviewed-administered for those who unable to read and write. Data was collected with the help of medical and Para- medical staff at each center.

Data Analysis:

SPSS package of source of data were apply to evaluate data analysis and the results was obtained and mentioned in tables in the form of percentage.

Table 1

Demographic Characteristics of Respondents those who Attended Family Planning and birth control Clinics in Niamey, Niger

N=500

CHARACTERISTICS	TOTAL NUMBER	%
Age (Years)		
15-21	197	39.4
22-26	65	13
27-31	55	11
32-36	74	14.8
37-40	46	9.2
41-45	38	7.6
46-49	24	4.8

CHARACTERISTICS	TOTAL NUMBER	%
Marital Status		
Single	36	7.2
Married	430	86

Separated	0	0
Divorced	25	5
Widow	9	1.8

CHARACTERISTICS	**TOTAL NUMBER**	**%**
Religion		
Islam	405	81
Christianity	76	15.2
Others	3	0.6

CHARACTERISTICS	**TOTAL NUMBER**	**%**
Education		
No formal education	86	17.2
Primary education	60	12
Secondary education	220	44
Tertiary education	139	27.8

CHARACTERISTICS	**TOTAL NUMBER**	**%**
Ethnic Groups		
Hausa	163	32.6
Zarma	143	28

Tuareg	34	6.8
Peulh	50	10
Sonrai	17	3.4
Songhai	6	1.2
Beri Beri	7	1.4
Others	83	16.6

Table 2

Information about the concept of Reproductive Health of Women those who Attended Family Planning Clinics in Niamey, Niger N=500

Item	True (Knowledgeable)	False (Not Knowledgeable)
1. Pregnancy or conception can be possible if one has sex between 12^{th}-16^{th} days of menstrual cycle	435 (87%)	59 (11.8%)
2. Infertility/childlessness later in life maybe due to sexually transmitted infections acquired early in life.	438 (87.6%)	48 (9.6%)
3. Men and women infected with sexually transmitted infections always develop sign and symptoms when the infections first occur.	360 (72%)	133 (26.6%)
4. HIV infections can be passed from a mother to her unborn child.	417 (83.4%)	83 (16.6%)

Table 3

To Know about ideology and basics of Reproductive Health among those Women who Attended Family Planning Clinics in Niamey, Niger N=500

Item	True	False
1. Pregnancy can only occur when one has sex only on lying down.	108 (21.6%)	392 (78.4%)
2. Having sex once with a man will not always lead to pregnancy.	149 (29.8%)	351 (70.2%)
3. Washing one's vagina immediately after sex prevents pregnancy.	122 (24.4%)	369 (73.8%)
4. If a swollen part is detected in the breast it shows that the woman has much breast milk.	368 (73.6%)	123 (24.6%)
5. Breast milk is not safe for the baby shortly after birth.	343 (68.8%)	145 (29%)
6. Having sex with a young man will make one feel younger.	218 (43.6%)	253 (50.6%)

Table 4

Information about the Benefits of Family Planning (Child Spacing) of those Woman who Attended Family Planning Clinics in Niamey, Niger N=500

Item	Yes	No

1. Family planning allows couple to prepare for child bearing.	455 (91%)	38 (7.6%)
2. Family planning will help parents to give sound education to their children.	419 (83.8%)	70 (14%)
3. Family planning helps to standard of living for family.	441 (88.2%)	48 (9.6%)
4. Family planning helps mother to regain her strength before her next baby.	456 (91.2%)	34 (6.8%)
5. Family planning helps women to make her beauty last.	418 (83.6%)	71 (14.2%)
6. Family planning makes couple to be responsible.	434 (86.8%)	55 (11%)
7. Family planning protects the health of your children.	449 (89.8%)	40 (8%)

Table 5

Information about the Determinants of Contraceptives or birth control practice among those Women who Attended Family Planning Clinics in Niamey, Niger N=500

Items	Agree	Disagree	Not Sure
1. Husband approval.	435 (87%)	54 (10.8%)	11 (2.2%)

2. Religion support.	309 (61.8%)	182 (36.4%)	9 (1.8%)
3. Recommended by health provider.	344 (68.8%)	143 (28.6%)	13 (2.6%)
4. Parent-in-law approval.	74 (14.8%)	422 (84.4%)	4 (0.8%)
5. Friend approval.	84 (16.8%)	416 (83.2%)	0 (0%)
6. Advertisement.	395 (79%)	92 (18.4%)	13 (2.6%)
7. Safe for my health.	446 (89.2%)	44 (8.8%)	10 (2%)
8. Cultural influence.	248 (49.6%)	241 (48.2%)	11 (2.2%)

Verification of the Study:

The verification of the study is based on the final analysis results and hypothesis of the research, to prove that, the control trials (additional data) for another 25 respondents were collected to verify the result to reach the final conclusion.

Table 2

Information about the concept of Reproductive Health of Women those who Attended Family Planning Clinics in Niamey, Niger N=25

Item	True (Knowledgeable)	False (Not Knowledgeable)
1. Pregnancy or conception can be possible when one	24	01

has sex between 12^{th}-16^{th} days of menstrual cycle.	(96%)	(4%)
2. Infertility/childlessness later in life maybe due to sexually transmitted infections acquired early in life.	25 (100%)	00 (0%)
3. Men and women infected with sexually transmitted infections always develop sign and symptoms when the infections first occur.	16 (64%)	09 (36%)
4. HIV infections can be passed from a mother to her unborn child.	17 (68%)	8 (32%)

Table 3

To Know about ideology and basics of Reproductive Health among those Women who Attended Family Planning Clinics in Niamey, Niger N=25

Item	True	False
1. Pregnancy can only occur when one has sex only by lying down.	06 (24%)	19 (76%)
2. Having sex once with a man will not result to pregnancy.	04 (16%)	21 (84%)
3. Washing one's vagina immediately after sex prevents pregnancy.	01 (4%)	18 (72%)
4. If a swollen part is detected in the breast it shows that the woman has much breast milk.	17 (68%)	07 (28%)

5. Breast milk is not safe for the baby shortly after birth.	22 (88%)	03 (12%)
6. Having sex with a young man will make one feel younger.	08 (32%)	11 (44%)

Table 4

Information of Benefits of Family Planning (Child Spacing) of those Woman who Attended Family Planning Clinics in Niamey, Niger N=25

Item	Yes	No
1. Family planning allows couple to prepare for child bearing.	21 (84%)	04 (16%)
2. Family planning will help parents to give sound education to their children.	17 (68%)	08 (32%)
3. Family planning helps to standard of living for family.	16 (64%)	09 (36%)
4. Family planning helps mother to regain her strength before her next baby.	20 (80%)	05 (20%)
5. Family planning helps women to make her beauty last.	16 (64%)	09 (36%)
6. Family planning makes couple to be responsible.	14 (56%)	11 (44%)

7. Family planning protects the health of your children.	14 (56%)	11 (44%)

Table 5

Information about the Determinants of Contraceptives or birth control practice among those Women who Attended Family Planning Clinics in Niamey, Niger N=25

Items	Agree	Disagree	Not Sure
1. Husband approval.	20 (80%)	05 (20%)	00 (0%)
2. Religion support.	15 (60%)	10 (40%)	00 (0%)
3. Recommended by health provider.	15 (60%)	10 (40%)	00 (0%)
4. Parent-in-law approval.	03 (12%)	22 (88%)	00 (0%)
5. Friend approval.	05 (20%)	20 (80%)	00 (0%)
6. Advertisement.	11 (44%)	12 (48%)	02 (8%)
7. Safe for my health.	18 (72%)	7 (8.8%)	00 (0%)
8. Cultural influence.	12 (48%)	13 (52%)	00 (0%)

To reach up to the final result if we compare with the result (for verification), 16% of the respondents believed that having sex once with a young man will not give pregnancy. 96% of the

women respondents aware that the pregnancy or conception can be happen when someone has sex between 12-16 day on menstrual cycle and the other results are also closed to the actual research results. Approximately, in all the statements which are related to family planning and birth control, 60-80% of women respondents have good concept of family planning and birth control practicing. 72% of female respondents were aware about the impact of benefit of family planning and birth control practice on their personal health. Conclusively to know about the factors that creates the hurdle to adopt family planning and birth control practice by their spouses. The 80% of female respondents thinks that they need husband's approval before practicing family planning and birth control methods. 60% of female respondents in favor of religious influence and 48% under the influence of their traditions and these values are very close to the actual respondents result.

So, on the basis of these results outcome, finally I can say that my hypothesis is correct,

"In Niamey, Niger women have Satisfactory knowledge about reproductive health and family planning but the family planning and birth control practice is weak and prevalence of fertility rate are still high due to the male dominated society (many women do not have the liberty to manage or to talk about family planning and birth control practice), religious factor and cultural influence is also take part and the population have the true faith the large family size is the symbol of prosperity and success for their family that's why the desired family size is higher than the actual family size."

Ethical Consideration:

First of all I introduced myself to the head of the department and I explain briefly about my study and explain because of that reason I need assistance regarding information about my topic. I took permission from the appropriate heath officers and staff those who were present at the time of collection of data from respondents. They were helped me in briefing about the purpose of my study and they explain them that all the respondents have a right to participate openly, or to withdraw from the study.

Results of the Study:

39.4% of female respondents who has attended the clinic for the purpose to seek the advice on family planning and birth control practice were between the ages of 15-21 years. 86% of respondents were married women. (81%) that indicates that majority were Muslims. Only, 44% of female responded reached up to the secondary school education level. While 27.8% earned tertiary level of education. 17.2% of the respondent was illiterate and only 12% received education up to primary school level. Most of the respondents were Hausa (32.6%) and Zarma (28.6%). 29.8% have the concept that having sex once with a young man will not result in pregnancy or conception. 87% of women respondent knew about the ovulation that the

conception or pregnancy can occur when one has sex between the time period of 12-16 day of her menstrual cycle. 80-90% of female respondents they know the importance of family planning and birth control practice. 89% of female respondents were aware about the impact of benefit of family planning and birth control practice on their personal health. 87% of women respondents thinks that they need husband's approval before practicing family planning and birth control methods.61.8% of female respondents in favor of religious influence(false belief about family planning and birth control practice). About (49.6%) suffered because of the strong cultural influence and their traditional values in which the desired family size is higher than the actual family size. These are the major determinants of the female respondents which make the family planning and birth control practices weak and low and leads to increase the fertility rate of the population. This does not only involve a single issue like poverty, there are many more factors behind it which involve not only the single community but also the nation, country, and earth.

Chapter 6: Analysis of Result

Interpretation of Results:

Demographic Characteristics of Respondents:

On the basis of these results of the study 39.4% were between the ages of 15-21 years, which is the highest percentage among the women who came to seek assistance to practice family planning and birth control methods. 14.8% of women respondents were between the ages of 32-36 years. And only 13% of respondents who came for consultation are in between the age of 22-26 years. Majority of the women respondents (86%) were married. A part from those 405 (81%) of respondents were Muslims, although 76 (15.2%) were belongs to Christianity. Many (220=44%) of the respondents were educated up to the secondary education, while (139=27.8%) earned up to the tertiary education and remain(60=12%) reach up to the primary education but unfortunately 86=17.2% of women had no any back ground that they never enter school for education. Among the 500 respondents 163=32.6% belong to the ethnic group of Hausa, Zarma 143=28.6%, Peulh 50=10%, Tuareg 34=6.8%, Sonrai 17=3.4%, Songhai 6=1.2%, Beri Beri 7=1.4%, and others 83=16.6% respectively.

In the light of this conclusion we can say that most of the women respondents were married and the majority was in between the ages of 15-21 years old. So we can say that, there is tradition of early marriages in this Nigerien culture before adolescence. That is why that possibly could be the one of the potential cause to raise the fertility growth for this nation. Most of the respondents women belong to the Muslim religion, the Nigerien women they really wants to practice it but, it is hard for them to continue for long term because of the religious taboos. And that factor is also the one of major factor which makes the family planning and birth control practice weak for the population. The average literacy rate is low among Nigerien women.

Table 2 shows the extent as mentioned earlier the Information about the concept of Reproductive Health of Women those who Attended Family Planning Clinics in Niamey, Niger. Regarding each statement majority of women respondents have a good idea that when pregnancy can occur and they also know about the ovulation (435=87%). 87.6% they know that the sexually transmitted infections in young life or in adolescence may give rise to infertility problems in future. While 72% of the respondents have a clear concept that the symptoms may not be necessarily always occur with sexually transmitted infections. The awareness is may be due to the introduction of sex education at school level and as well as the mass media is also taking part in the promotion of this kind of programs and information for all the population. Many ONGs are working hard to raise literacy rate among this population. However, 83.4% of women respondents have the knowledge about the cross placental transmission of HIV from infected mother to her unborn fetus. Reproductive health knowledge its concepts regarding its benefits is very important for women as a woman's health and well-being is depend on her good health by

giving good space between her children and for her family and this can be possible by practicing family planning and birth control methods.

Women should have the knowledge, education and right to know and practice about what is beneficial for them. Awareness and guidance about the role of family planning and birth control practice is important tool as well as approach to practice safe and effective method of family planning and birth control is essential for her health. The impact of belief in personal and community health practice is very strong tool. Belief may not be true scientifically and as such may make one to rightly or wrongly access health care.

In Table 3**,** as mentioned about ideology and basics of Reproductive Health among those Women who Attended Family Planning Clinics in Niamey, Niger. Only 21.6% of respondents in favor of that the pregnancy or conception can only happen when someone has sex on lying down (i.e. the traditional method of coitus). 29.8% agreed that having sex once with a young man possible to give pregnancy or conception. 24.4% of female respondents think that washing vagina immediately after intercourse prevents pregnancy or conception. Also 73.6% assume that the swollen part of the breast was considered by as sign excessive much breast milk, while 68.6% assume that the breast milk (mother milk) is not safe for new born immediately after birth. 43.6% believed that having sexual intercourse with a young man will make them feel younger. These concepts and perception are wrong scientifically and have an impact on mother and child health.

When introducing any contraceptive methods to a woman it is mandatory to explain the all necessary details about the family planning and birth control and also assess the view and motivation of the client that she favors which one is also best for her health before start practicing.

In Table 4, Information of Benefits of Family Planning (Child Spacing) of those Woman who Attended Family Planning Clinics in Niamey, Niger as detailed mentioned earlier in the table, majority of the respondents 91% accepted that family planning and birth control practice allows them to prepare for child bearing, 83.8% admitted that it facilitates couple to give better education to their children, 88.2% agree that its helps to improve their life style and standards of living, 91.2% in favor of that family planning and birth control practice helps mother to build her health before her next conception , 83.6% observed that family planning and birth control practice helps a female to make her beauty for long period of time , 86.8% favors that it makes the couple more responsible while 89.8% assume that the health of the children are secured when women plan to practice family planning and birth control.

A woman's health and well-being and those families are associated with her first delivery or how she gives spaces the birth among her children. Most of the Women are often aware of benefits of family planning and birth control practice. Women's decision about to practice , not adopted or discontinuation of family planning and birth control methods can be effected by their false perceptions about contraceptive risks and benefits, concerned about how side effects or contraindications relationship with partner or other family members.

Family planning helps in decreasing the health risk of women and gives them more protection and security to give support to their reproductive lives. With the support of these benefits women can take additional advantages of education, employment and other responsibilities.

In Table regarding the Information about the Determinants of Contraceptives or birth control practice among those Women who Attended Family Planning Clinics in Niamey, Niger 89.2% of the respondents opined about the impact of contraceptives use on their health and well being as the most important determinant of use of contraceptives, followed by87% of respondents needs their husband approval and lowest determinants was sort out is (14.8%) parent-in-law approval.

In this study, women opined that their health and well being are very important for their family. It is also significant to observe and give importance that a large number of respondents have a perception that their husband's approval is mandatory before they take step to practice family planning and birth control practice and this is a strong determinants of their contraceptive use which create a big hurdle to adopt family planning methods

Strengths and Weaknesses:

Family planning and birth control practice and reproductive health study, is a big and important step towards maternal and child health care are concerned and have considerable and assessable impact on the health and well being of women and their families. Good study about family planning and birth control and reproductive health helps to understand and implement the interplay of the different variables that provide opportunities and access to improve facilities and utilization of family planning and birth control and maternal and child health care services for the population.

Inconsistency exists in different parts of the country regarding the health delivery services, or at the level of education promotion, marked difference among rural urban zones, and their socio-cultural or traditional norms. As verified by the interaction of contraceptive prevalence rate (CPR) and demographic trends inconsistency it is clear that the support male or husband involvement in practicing of family planning and birth control services originating from

husbands resistance. The results of the analysis suggests that for programming family planning and birth control and reproductive health issues particularly in Niger struggle must object on the dominant factors in Niamey, Niger to focus on this issue.

It is an obligation to improve family planning and birth control assets that requires filling up the gaps which interfere in the knowledge and concept to initiate the program or project. There should be strong support to track ways to assimilate family planning and birth control services with other health sectors, including HIV/AIDS screening, prevention and care, maternal and child health care services and for high risk abortion services. Furthermore, in the light of these data results we can say that, there is a clear cut association between behavior of the community toward family planning and contraceptive use. Also with the help of this study obstacle in the way of family planning and birth control can be broken through encouragement.

The views and behavior of the community due to their strong bonding to their cultural and false religious concepts regarding the practicing of family planning and birth control, takes time and a lot of struggle to achieve the goal. The health personal and several researchers believe that they can bring change by changing their concepts and ideas though study that helps to maintain the collaboration with other services and this tool is very useful for population. A corporation with other organization is very helpful to improve staff competence and services are very essential. Activities to allow women by implementing a health-oriented educational program-and increase the number of female community workers and staff to support to accelerate contraceptive practice.

Questions about Alternative Approach:

We can do different studies by asking different information like as described below,

- Conduct the survey for married couples, to know or by asking who is practicing method of family planning, ask by gender
- We can also ask by elaborating the method they practice, like
    a. Practicing any method of contraception
    b. traditional method practice
    c. modern method practice
- we can also raise the issue of the importance of female education for the family and issue of early marriages for girls by asking questions below
    a. Should you let your daughter to finish her education before she marries?
    b. If a boy really loves a girl, will he wait for her to finish education?
    c. Is the early marriage and early child birth will affect a girl's health?
- Regarding marital relation we can pose the question as below,

a. Spouses who care for each other will practice family planning and birth control?
b. A husband who loves her wife will allow or permit her to practice family planning and birth control?
c. A practice of family planning or birth control will bring a couple closer to each other?
d. With family planning and birth control, couple can love one another with peace of mind?

- Societal and cultural values, practicing of family planning and birth control will build a community.
- Man's role in family planning and birth control practice

  -Should men share the responsibility of family planning and birth control practice?

Conclusion:

General Discussion:

The clear and transparent concept of Reproductive health is important and has a vital place for women in related to her health and well-being. Family planning and birth control practice is also helpful not only for her as well as her family concerned. The family will depend on her decision to delay the birth of her first child or give good space the birth of her other children to limit the size of the family.

Comprehensive women's knowledge or education to know about what affects her health and well being, and also awareness about the role of family planning and birth control for her health as well as the providence of services or facility to safe and effective methods of family planning is essential and key step to good health.

To conduct a good study, it is important to know the belief, view and attitude of the given community and is a very strong tool. Belief of the population may not be true or authentic scientifically and that factor may make one to rightly or wrongly approach to assess the health status and care for the given population.

The attitudes, behavior and views of women, the primary user of family planning and birth control practice should be taken as important when implementing any new method of contraception.

A woman's health and well-being is not only limited around her it involves the benefits for her whole family. It involves her parity child space and her family size. Most of the times, women are often aware of benefits, advantages and importance of family planning and birth

control. Women's, who is the primary user decision about use, not practice or discontinuation of family planning and birth control methods can be affected by their perceptions or wrong belief of contraceptive risks or disadvantages and benefits, concerns about how untoward effects may contribute their daily lives and assessment of how particular methods may affect relationships with her partner or other members of the family.

Family planning and birth control helps in decreasing health risks of women, and gives them strength and support over their reproductive health. With these achievements, women can take advantages and benefit to complete their education, can perform good jobs and other vital responsibilities.

The reproductive health and family planning and birth control practice and services in Niger are not strong. Total fertility rate is still high due to the factors as we already discussed earlier and contraceptive use is low, that why to reach the goal to meet the requirement of the country is a challenge for researchers.

The success of the Program depends on the following factors:

- To facilitate environment issues, it is important to increase government resources.
    a. Program promotion should take assistance of mass media coverage.
    b. Increased the resources to get public support for family planning and birth control.
- Conduct the compressive health survey and increase systems efficacy by increasing the percentage of services that meet quality of requirement.
- Increase the number of Community leaders (both traditional and religious leaders) who can easily and openly speak out in favor of family planning and birth control practice by their active participation in the program.
- Communities should earn the trust to approachable services.
- Motivate the population with facts, truth and with confidence (both technical/benefits and theological), encouraged them to discuss with their spouses, friends and persuaded.
- Community should be motivated through multiple mass media programs (on radio, TV, drama serials, etc.).

Recommendations for Future Research:

In the light of the results of the study, all women respondents had a high level of clear and transparent concept about the importance and advantages of family planning and birth control practice but the general knowledge and concept about reproductive health was on the average scale. The women are aware that their health and well being must be the priority for their families. But, under cultural and religious influences respondent they think that husband authorization is very compulsory before start practicing family planning and birth control. I

Therefore, I recommend that there must be some programs or projects which must emphsizes on improving and making the concept clear without any conflict and confusion .Along with this there should be back support by the male (husband support) to their wives to take initiative to adopt family planning and birth control practice not just for their own sake, basically its involve the benefit for all family, community and even country and earth.

References (Bibliography):

Oxford Handbook of Reproductive Medicine and Family Planning, Guillebaud, John Roy, McVeigh. Oxford University Press. 2008.

Reaching the Poor with Health, Nutrition, and Population Services: What Works, What Doesn't, and Why, Gwatkin, Davidson R., Wagstaff, Adam, Yazbeck, Abdo. The World Bank. 2005.

Family Planning: A Medical Dictionary, Bibliography, and Annotated Research Guide to Internet References, Parker, James N., Parker, Philip M. ICON Health Publications. 2003.

Analyzing Family Planning Needs in Nigeria: Lessons for Repositioning Family Planning in Sub-Saharan Africa, Tom Goliber, Rachel Sanders, and John Ross of the USAID | Health Policy Initiative. 2009.

Accessing Health Care and Family Planning in Nigeria, Kabir M. Abdullahi. The Woodrow Wilson International Center for Scholars, Washington DC, 2012.

Another lesson unlearned: access to family planning in Niger, V. Gidi, The Lancet, 2010.

Behavioral Counseling to Prevent Sexually Transmitted Infections, Jennifer Lin, MD, Evelyn Whitlock, MD, MPH, Elizabeth O'Connor, PhD, and Vance Bauer, MA, Agency for Healthcare Research and Quality (US), 2008.

Breaking barriers to access to Family planning in Northern Nigeria, Dr. Clement Woje, hci-info@urc-chs.com, 2011.

Demographic and Health Surveys Toolkit, http://www.measuredhs.com, 2013.

Development of Health Policy and Systems Research in Nigeria: Lessons for Developing Countries' Evidence-Based Health Policy Making Process and Practice, Chigozie J. Uneke, PhD, Abel E. Ezeoha, PhD, Chinwendu D. Ndukwe, MBBS, Patrick G. Oyibo, MBBS, and Friday Onwe, MSc, Long woods Publishing, 2010.

Reducing unmet need for family planning: Evidence based strategies and approaches, Adrienne Kols, Jennifer Kidwell Drake and Beth Balderston, Akin Bankole, Yves Bergevin, Stan Bernstein, Patricia Coffey, Lynn Collins, Liliana Frierio, Howard Friedman, Lorelei Goodyear, Jane Hutchings, Mona Kaidbey, Jim Litch, Margaret Neuse, Nuriye Ortayli, GildaSedgh, Steven Sinding, Audrey Sullivan, and Scott Wittet, www.path.org/reproductive-health, 2008.

Niger: Too Little, Too Late, Malcolm Potts, Virginia Gidi, Martha Campbell and Sarah Zureick, Guttmacher Institute, 2011.

Family Planning Strategy Overview, Melinda Gates. Bill and Melinda Gates Foundation, 2013.

Family Planning Attitudes and Use in Nigeria: A Factor Analysis, Clifford Obby Odimegwu. International Family Planning Perspectives, Guttmacher Institute, 1999

Family planning moves up the agenda in Niger and worldwide**,** info@soschildren.org, 2012.

Family planning: the unfinished agenda, John Cleland, Stan Bernstein, Alex Ezeh, Anibal Faundes, Anna Glasier, Jolene Innis, The Lancet Sexual and Reproductive Health Series, 2006.

NIGER: Small steps towards a sustainable future, Catherine-Lune Grayson/IRIN, 2012.

Family planning in sub-Saharan Africa: progress or stagnation? John G Cleland, Robert P Ndugwa & Eliya M Zulu, Bulletin of the World Health Organization, 2011.