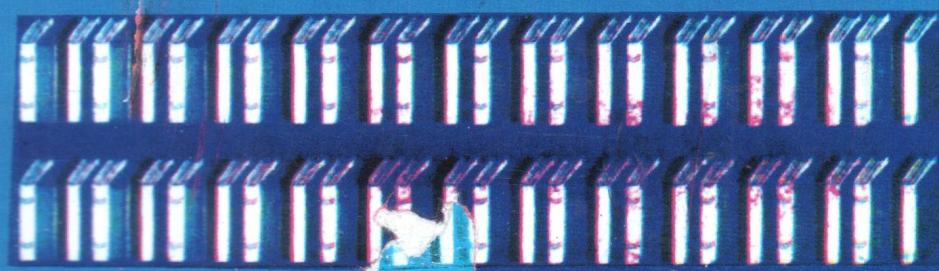
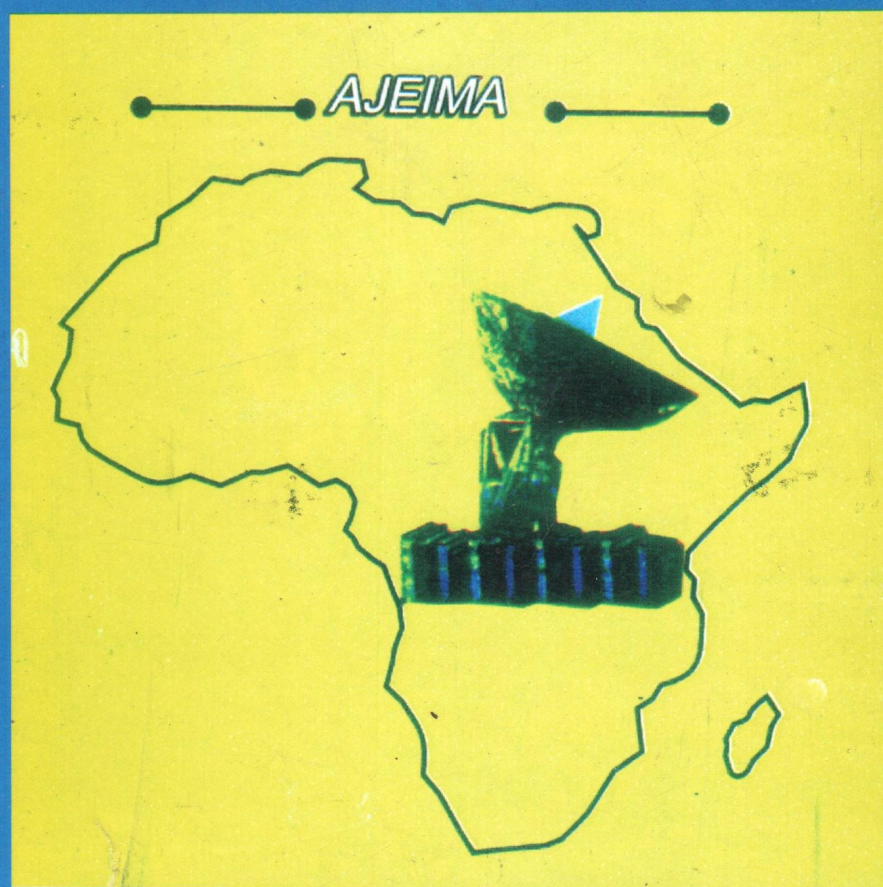


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## **Health and Reproduction, Counselling Psychology Logistics and Monitoring the Impact of Contraceptive Technology on Women in Lagos Municipality**

**Augustine. A. Agbaje Ph.D**

Department of Educational Foundations  
Guidance and Counselling  
University of Uyo, Uyo.  
Nigeria

**Ukeme, E. Eyo Ph.D**

Department of Physical and Health Education  
University of Uyo, Uyo  
Nigeria

*And*

**Temitope Agbaje – Afolabi Ph.D**

Department of Gynaecology  
College Hospital  
University of Ibadan  
Ibadan,  
Nigeria

### **Abstract**

*In developing countries of the world, reproductive ill health has been a great concern to many stakeholders as maternal mortality and morbidity are very high compared to developed world. Besides, reproductive health knowledge and access to quality of care of maternal health services in developing countries are poor with significant health consequences. Counselling psychology logistics are assured to have appropriate directives to reproductive health knowledge, beliefs and will power of women to access quality family services which are essential for improvement in reproductive health of women. The study aimed to assess reproductive health knowledge beliefs and influential factors of contraceptives use among women attending family planning clinics in their environments. The study was cross-sectional in nature involving 550 randomly selected respondents out of 3450 of the entire respondents among women attending family planning clinics in Lagos municipal city. The questionnaire was administered by the researchers and their assistants, analysis of co-variance (ANCOVA) was used to analyse the data. Only fifty-six percent of the respondents knew that pregnancy can occur while thirty-one percent believed that having sex once with a man would not result in pregnancy. Almost in all responses, over ninety respondents have knowledge of benefits of family planning. Consideration about personal health and the husbands' approval were eighty-four and seventy-four respectively and these were major determinants of respondents' use of contraceptives.*

**Key words: Health Reproduction, Counselling Psychology, Logistics, Contraceptive, Technology, Women**

## **Introduction**

Reproductive health occupies a central position in the identity of the health as well as the development of a given population. However, the events of reproductive health are usually found in women who due to their biological function invariably bear the greater burden of the shortcomings of reproductive health such as unsafe motherhood or unsafe abortion. In developing countries, there is need to improve maternal and child health care services as most death of women during pregnancy or delivery are preventable. In the Revised National Health Policy of Nigeria among the three identified current situation of the health status of the country is that the maternal mortality rate (about one mother's death in every one hundred deliveries) is one of the highest in the world. In the light of this, one of the key National Policy on Reproductive Health Objectives is to reduce maternal morbidity due to pregnancy and childbirth by 50%. One of the strategic thrusts is the promotion of a healthy reproductive health lifestyle by process of providing appropriate knowledge to bring about adequate behavioural change and improve participation in the use of reproductive health services (Alderfer, 2002).

Family planning helps everyone, specifically, it protects women from unwanted pregnancies thereby saving them from high risk pregnancies or unsafe abortion. Besides other benefits accruing from family planning methods include prevention from cancers, sexually transmitted infections and HIV/AIDS. Review of literature shows, that the advantages of proper family planning are enormous as high fertility rate has been linked with underdevelopment in the developing countries (Shuay'b, 2006).

## **Combined Oral Contraceptive Pill**

The combined oral contraceptive pill (COCP) often referred to as the birth-control pill or simply "the pill" is a birth-control method that includes a combination of an estrogen and a progestin, (oestrogen and progesterone respectively). When taken by month everyday, these pills inhibit female fertility. They were first approved for contraceptive use in the United States in 1960 and are very popular form of birth control. They are currently used by more than one hundred million women worldwide and by almost twelve million women in the United States. Usage varies widely by country, age, education and marital status: one quarter of women aged between 16 and forty-nine in Great Britain currently use the pill, combined pill, or progesterone only pill or "minipill" compared to only one percent of women in Japan, (Denga, 2011).

## **Studies of Progesterone and Progestins to Prevent Ovulation**

Pincus and McCormick enlisted Harvard Clinical Professor of gynecology, John Rock, Chief of gynecology at the Free Hospital for women and an expert in the treatment of infertility, to lead clinical research with women. Pincus and Rock discovered that they were using similar approaches to achieve opposite goals. In 1952 Rock and Pincus induced a three-month anovulatory "pseudo-pregnancy" state in eighty of their infertile patients with continuous gradually increasing oral doses of estrogen (diethylstilbestrol 5-30mg/day) and progesterone (50-300mg/day) and within the following four months in encouraging 15 percent became pregnant. In 1953 at

pincel's suggestion, Rock induced a three-month anovulatory "pseudo-pregnancy" state in twenty-seven of his infertility patients with an oral 300 mg/day progesterone only regimen for 20 days from cycle days 5-24 followed by pill-free days to produce withdrawal bleeding. This produced the same encouraging 15 percent pregnancy rate during the following four months without the troubling amenorrhea of the previous continuing estrogen and progesterone regimen. But 20 percent of the women experienced breakthrough bleeding and in the first-cycle ovulation suppressed in only 85 percent of the women indicating not even higher and more expensive oral doses of progesterone would be needed to initially consistently suppress ovulation, (Akande, 2009).

Pincus asked his contacts at pharmaceutical companies to send him chemical compounds with progesterone activity. Chang screened nearly 200 chemical compounds in animals and found the three most promising were Syntex's norethynodrel and Searle's norethynodrel and norethandrolone. Chemists Carl Djvassi, Luis Miramontes and George Rosenkvane at Syntex in Mexico City had synthesized the first orally highly active progestin, norethindrone in 1951. Rock in 1954 began the first studies of the ovulation-suppressing potential of 5-50 mg doses of the three oral progestins for three months (for 21 days per cycle days 5-25 followed by pill-free days to produce withdrawal bleeding) in fifty of his infertility patients in Brookline, Massachusetts. Pincus and Rock selected Searle's norethynodrel for the first contraceptive trials in women citing its total lack of androgenicity versus Syntex's norethindrone very light androgenicity in animal tests.

### Uses and Packing

Combined oral contraceptive pills should be taken at the same time each day. If one or more tablets are forgone for more than 12 hours, contraceptive protection will be reduced. Most brands of combined pills are packaged in one of two different packet sizes, with days marked off for a 28-day cycle. For the 21 pill packet, a pill is consumed daily for three weeks, followed by a week of no pills. For the 28 pill packet, 21 pills are taken followed by a week of placebo or sugar pills. A woman on the pill will have a withdrawal bleed sometime during the placebo week and is still protected from pregnancy during this week. There are also two newer combination birth control pills (Yaz 28 and Loestrin 24 Fe) that have 24 days of active hormone pills, followed by 4 days of placebo. (Shuayb, 2009)

### Placebo Pills

The placebo pills allow the user to take a pill every day, remaining in the daily habit even during the week without hormones. Placebo pills may contain an iron supplement; an iron supplement represents an increase during menstruation. Failure to take pills during the placebo week does not impact the effectiveness of the pill, provided that daily ingestion of active pill is resumed at the end of the week. The withdrawal bleeding that occurs during the break from active pills was thought to be comforting, as a physical confirmation of not being pregnant. The 28-day pill package also stimulates the average menstrual cycle, though the hormonal events during a pill cycle are significantly different from those of a normal ovulatory menstrual cycle. The withdrawal bleeding is also predictable; as a woman goes longer periods of time

taking only active pills, unexpected breakthrough bleeding becomes a more common side effect, (Agbaje, 2007).

### **Health Benefits**

The use of oral contraceptives including control pills for five years or more decreases the risk of ovarian cancer in later life by 50 percent. Combined oral contraceptive use reduces the risk of ovarian cancer by 40 percent and the risk of endometrial cancer by 50 percent compared to never users. The risk reduction increases with duration of use with an 80 percent reduction in risk for both ovarian and endometrial cancer with use for more than ten years. The risk reduction for both ovarian and endometrial cancer persists for at least twenty years.

Taking oral contraceptives also reduces the risk of colorectal cancer and improves conditions such as pelvic inflammatory diseases, dysmenorrhea, premenstrual syndrome and acne. Besides, birth control pills reduce symptoms of endometriosis and polycystic ovary syndrome and decrease the risk of anaemia (Agbaje, 2012).

It is generally accepted by medical authorities that the health risk of oral contraceptives is lower than those from pregnancy and birth and “the health benefits of any method of contraception are far greater than any risks from the method”. Some organizations have argued that comparing a contraceptive method to no method (pregnancy) is not relevant, instead the comparison of safety should be among available methods of contraception (Collins, 2002).

### **Knowledge and Misconceptions**

In many cultures, infertility is considered a shameful condition, something that is not freely discussed. Though not surprising, many men and women either do not know or still have misconception about the true causes of infertility. Silke Dyer is the Director of infertility services at Groote Schuur Hospital. Large public tertiary care hospital in Cape Town, South Africa. “I have begun asking almost all of my patients. “Now why do you think you are infertile? Many of them just shrug their shoulders”, he assumes that his patients do not know. Ayowojolu, a gynecologist from University Teaching Hospital, Ibadan, Nigeria, agrees that many patients do not understand what is causing their infertility, he concludes that “there is a lot of mystique surrounding infertility.” Because child bearing is viewed as a natural part of adult life, some have explained infertility as supernatural. It has been labeled a act of God, a punishment from unhappy ancestors or the result of witchcraft. In an urban slum area of Baghadash, nearly half of 120 men and women surveyed said evil spirits caused female infertility. Another common misconception, that some forms of contraception cause infertility, may be a powerful disincentive to contraceptive use. Group interviews with men and women in the North West of Lagos revealed that contraception was thought to spoil the womb” and that youngless educated women were particularly unlikely to use contraception as long as they felt susceptible to infertility. The respondents in the Ikorodu of Lagos State suggested that contraceptives can damage the uterus leading to infertility, (Isikan and Mink, 2009).

Even the family planning providers sometimes misunderstand the effects of contraceptives on fertility. In an FIII study in Nigeria, about 97 providers interviewed said they used age or parity requirements to ensure that only women of proven fertility

obtained contraceptives mainly because they believed that hormonal methods delay fertility after using any contraceptive method is low. Fertility usually returns or shortly after contraceptive discontinuation. In fact, by preventing unintended pregnancy and thus the potential for either postpartum or post abortion infections, all contraceptives can help to prevent infertility and improve the chances that women will become pregnant when they choose to do so. (Federal Ministry of Health National Health Policy, Abuja, 2005).

### **Factors Contributing to Infertility**

- Anatomical problems
- Endoallogical problems
- Genetic problems
- Immunological problems
- Increasing age
- Infections and parasitic diseases
  - Genital tuberculosis
  - Malaria
  - Schistosomiasis
- Malnutrition
- Potentially harmful substances
  - A flatoxins
  - Arseric
  - Pesticides
  - Tobacco, alcohol or caffeine
- Reproductive tract infections
  - Postabortion infections
  - Postpartum infections
  - Sexually transmitted infections

The results showed no known cause for up to 14 percent of the couples. But in all the areas of the world, the largest proportion of remaining diagnoses could be attributed to infections. In particular, women who reported a history of sexually transmitted infections had higher rates of infertility. Such STIS as chlamydial or gonorrhea in the lower genital tract can ascend into the upper genital tract, causing pelvic inflammatory disease (PID) that can produce inflammation, scarring and eventual blockage of the fallopian tubes. The World Health Organization (WHO) study also showed that in every area of the world, a history of post-partum or post-abortion complications was associated with blockage of both fallopian tubes. Besides, the percentage of abortion could introduce new infections that can lead to pelvic inflammatory disease or other problems that hinder conception. Many cases of infertility after delivery or abortion may, however, still be due to sexually transmitted infections. If a woman has gonorrhea or chlamydial infection during pregnancy, her estimated risks of pelvic inflammatory disease increase from 50 percent to 100 percent if she either gives birth or has an abortion. In these cases, instruments used during obstetric procedures could carry existing infections into the upper genital tract (Evers, 2007).

### **Environmental Impact**

A woman using combined oral contraceptive pills (COCP) excretes from her urine and faeces natural estrogens, estrone (E1) and estradiol (E2) and synthetic estrogen ethinylestradiol (EE2) into water treatment plants. These hormones can pass through water treatment plants into rivers. Other forms of contraception such as the contraceptive patch, use the same synthetic estrogen (EE2) that is found in combined oral contraceptive pills and can add to the hormonal concentration in the water when flushed down the toilet. This excretion is shown to play a role in causing endocrine disruption which affects the sexual development by treated sewage effluents. A study done in British rivers supported the hypothesis that the incidence and the severity of intersex wild fish populations were significantly correlated with the concentrations of the E1, E2 and EE2 in the rivers (Simcon, 2001).

A review of activated sludge plant performance found estrogen removal rates varied considerably but averaged 78 percent for estrone, 91 percent for estradiol and 76 percent for ethinylestradiol (estriol effluent concentrations are between these of estrone and estradiol, but is a much less potent endocrine disruptor to fish). Effluent concentrations of ethinylestradiol are lower than estradiols which are lower than estrone but ethinylestradiol is more potent than estradiol which is more potent than estrone in the induction of intersex fish and synthesis of vitellogenin in male fish.

Infertility is complex, it has multiple causes and consequences depending on the gender, sexual history, lifestyle society and cultural background of the people it affects. Partly due to its complexity and to difficulty preventing, diagnosing and treating it, infertility is a global health concern. More than 80 million people, that is, about 8 percent to 12 percent of all couples worldwide are or have been infertile. Although infertility is considered by some to be primarily a woman's problem, men often contribute to and are also affected by it. Infertility arises when either one or both members of a couple are sterile or have severely reduced fertility. Sterility of one partner will always render the couple infertile. But sub-fertility in one partner may or may not depending on the overall combined fertility to the couple. A couple is considered clinically infertile only when pregnancy has not occurred after at least 12 months of regular sexual activity without the use of contraceptives. Arowojolu, a gynecologist at the teaching hospital, University of Ibadan advised that clients should be discouraged from seeking infertility services until they have failed to conceive for an entire 24 months. Research has shown that many couples seeking infertility treatment are actually sub-fertile and may eventually become pregnant without any intervention (National Family Planning Commission, 2004).

### **Social and Cultural Impact**

The pill was approved by the FDA in the early 1960s, its use spread rapidly in the later part of that decade, generating an enormous social impact. Time magazine placed the pill on its cover in 1967, it was more effective than most previous reversible methods of birth control, giving women unprecedented control over their fertility. Its use was separated from intercourse, requiring no special preparations at the time of sexual activity that might interfere with spontaneity or sensation and the choice to take the pill was a private one. This combination of factors served to make the pill immensely popular within a few years of its introduction. People argued that

this new contraceptive technology was a key player in forming women's modern economic role in that it prolonged the age at which women first married allowing them to invest in education and other forms of human capital as well as generally become more career-oriented. Soon after the control pill was legalized there was a sharp increase in college attendance and graduation, rates for women. From an economic point of view, the birth control pill reduced the cost of staying in school. The ability to control fertility without sacrificing sexual relationships allowed women to make long term educational and career plans (Khaliwal, 2001).

Because the pill was so effective and soon so widespread it also heightened the debate about the moral and health consequences of pre-marital sex and promiscuity. For a couple using the pill, intercourse became purely an expression of love or a means of physical pleasure or both but it was no longer a means of their less widespread use failed to emphasise this distinction as clearly as the pill did. The spread of oral contraceptives uses thus led many religious figures and institutions to debate the proper role of sexuality and its relationship to procreation.

A backlash against oral contraceptives occurred in the early and middle 1970s when reports and speculations appeared that linked the use of the pill to breast cancer. Until then, many women in the feminist movement had hailed the pill as an "equalizer" that had given them the same sexual freedom as men had traditionally enjoyed. This new development, however, caused many of them to denounce oral contraceptives as a male invention designed to facilitate male sexual freedom with women at the cost of health risk to women.

At the same time society was beginning to take note of the impact of the pill on traditional gender roles. Women now did not have to choose between a relationship and a career, Singer Loretta Lynn commented on this in her 1974 album with a song titled "The Pill" which told the story of a married woman's use of the drug to liberate herself from her traditional roles as wife and mother.

## **The Psychological Logistics in Problem Solving**

### **1. Problem Definition**

Before you are ready to take any step to solve a problem, you first have to be sure that you are clear about what the problem really is. It can be easy to get distracted by solving a different problem that what is actually causing distress if it is easier than dealing with the real problem. This step involves thinking about the following questions:

- How is the current situation different from what I actually want it to be?
- What do I actually want or how do I actually want things to be?
- What is preventing me from achieving my goal or from things being the way I want them to be?

### **2. Problems Analysis**

Once you have defined the problem, you need to think about it from different perspectives to ensure that you understand all the dimensions of the problem.

- How is this problem affecting me, him, her etc?
- How is this problem affecting other people?
- Who else is experiencing this problem?



After you have completed this step, check to make sure that you define if the problem still fits. It is not unusual at this point that the problem you really want to solve is different than the one you initially identified.

### **3. Establish your Goals**

Once you have looked at the problem from different perspectives you can decide what you want to achieve and establish your goals. You need to answer the very specific question – “what is my immediate goal?”

- Improve my time management skills
- Complete assignments on time
- Improve my pattern

### **4. Generate Possible Solutions**

During this stage the goal is to generate as many possible solutions as you can. Do not worry about whether or not they are realistic, practical or effective. Frequently, a solution you might eliminate initially with work can be developed into a very effective solution.

It can be very helpful to ask yourself what you have done in the past when faced with similar problems and how other people you know have dealt with similar situation. Besides, you can also approach friends, family, a counselling psychologist, teacher, books or the internet, and so on, to obtain ideas for solutions. Be sure to write down all the possibilities you generate so that you can approach this task systematically (Agbaje, 2011).

### **5. Analyse the Solution**

During this stage, you will examine each alternative and write down both the advantages and disadvantages to each. Some considerations to keep in mind include:

- Is it relevant to my situation?
- Is it realistic?
- Is it manageable?
- What are the consequences – both good and bad?
- What is the likelihood that it is going to help me reach my goal?

### **6. Implementation**

The last step is to implement the solution you have chosen. This step involves identification of all the phases necessary to implement it, and also on-going monitoring of the effectiveness of the solution to make sure that it actually solved the problem. During this stage of the logistics, ask yourself the following questions:

- How effective is the solution?
- Did it achieve what I wanted?
- What consequences (good or bad) did it have in my situation?

If the solution was successful in helping to solve a problem, then you can feel satisfied with your efforts and what you have learned. If you feel dissatisfied in some way, you can either modify the solution to work better or you can scrap it and turn to other alternative solutions or begin a fresh.

Remember that counselling psychology logistics in problem solving involve searching for a solution to a problem that would lead to various possible solutions which then need to be evaluated. If the problem is solved you have found an effective solution but if the problem remains unsolved you have to start again (Francis, 2009).

The problem-solving logistics discussed above are most powerful when combined to activate both the rational and intrusive or creative parts of the brain and other areas of the body. The narrative would provide an example of how this logistics can be used at specific points in the problem-solving process to address important individual differences and viewpoints. While scientific process has provided a method used successfully in a wide variety of situations, researchers have described individual differences that can influence perspectives and goals related to problem-solving. These differences can be used to identify appropriate problem-solving logistics as spelt out in each step. The same process can be used in group situations to satisfy the unique perspectives of individual members. Decisions made in this manner are more likely to both personal strengths or weaknesses while groups are more likely to select solutions that would both solve the problem and be acceptable to individual group members, (country or countries, person or persons) (Alderfer, 2002). This logistics are of greater values if keenly adopted to any situations or circumstances, (Denga, 2001).

### **Statement of the Problem**

Reproductive health knowledge and access to quality of care and maternal health services in Africa are transparently poor with significant health consequences. Thus appropriate reproductive health knowledge, belief and will-power of women to access quality family services both preventive and curative are realistically essential for improvement in reproductive health of women.

Infertility in many cultures is considered a shameful condition, something that is not freely discussed. Many men and women either do not know or still have misconception about the true causes of infertility. Some researchers concluded that there is a lot of mystiques surrounding infertility because childbearing, for example, is viewed as a natural part of adult life, others have explained infertility as supernatural. It has been labeled as “an act of God”, a punishment from unhappy ancestors or the result of witchcraft. In an unborn shum area of Lagos nearly half of 100 men and women surveyed said evil spirits usually cause female infertility.

Another common misconception is that some forms of contraception cause infertility – may be a powerful disincentive to contraceptive use. Group interviews with men and women in North-West of Lagos revealed that contraception was thought to “spoil the womb and that young less educated women are particularly unlikely to use contraception as long as they felt susceptible to infertility.

Some of the adherents of sciences held the view that having sex once with a woman may not result in pregnancy while others concluded that pregnancy may occur. Majority sanctioned the consideration about personal health and husbands’ approval as serious determinants of respondents use of contraceptives. Some scientists argued that it would take almost a decade of epidemiological studies to conclusively establish an increased risk of rehaus thrombosis in oral contraceptive users and an increased risk of stroke and myocardial infarction in oral contraceptive users who smoke or have high blood pressure or other cardiovascular or cerebrovascular risk factors. Longevity time of research finding would truly be a big problem because may people would have died before the final conclusion is reached, since many victims of stroke and other allied diseases have no forward looking to anywhere.

Low levels of serotonin, a neurotransmitter in the brain have been linked to depression while high levels of estrogen, as in the first-generation combined oral contraception pills and progestin as in some progestin-only contraceptives have been shown to promote the lowering of brain serotonin levels by increasing the concentration of brain enzyme that reduces serotonin. This observation along with some small researches have inspired speculation that the pill cause depression. The researchers should strive promptly to balance combined oral contraceptives pills and progestin for effective active workability in all human being. Other side effects associated with low-dose of combined oral contraceptive pills are leucorrhoea, increased vaginal secretions, reductions in menstrual flow, mastalgia, breast tenderness, increase in breast size and decrease in acne. Side effects association with older high dose of combined oral contraceptive pills include nausea, vomiting, increases in blood pressure and melasma, facial skin discoloration (Agbaje, 2012, Shuay'h, 2006).

### **Research Hypotheses**

Based on the objectives of the study, the following hypotheses were formulated and tested at 0.05 alpha level.

- There is no significant relationship between “the hormones in the contraceptive pills” and “medical conditions such as polycystic ovary syndrome, endometriosis and anaemia related to menstruation and painful menstruation.
- There is no significant relationship between women knowledge and education of the role of family planning and the effects of health benefits in personal and community health and practices.
- There is no significant relationship between the determinants of reproductive health service and influential determinants of the use of reproductive health services.

### **Purpose of the Study**

Reproductive ill-health has been a great concern to all and sundry in developing countries, this research aimed to assess same and all its antecedents such as knowledge, will-power, beliefs and influential factors of contraceptive uses among women attending family clinics planning in the municipal areas of Lagos. To determine the impact of contraceptives cum reproduction health, the following are of greater importance:

- Educate the masses about the benefits of good health and the mystique of infertility.
- Necessity of personal health and the husbands' approval should be emphasized as major determinants of respondents' use of contraceptives to keep the home intact.
- Respondents should be knowledgeable about the family planning and that all contraceptives can assist to prevent infertility and improve the chances of becoming mothers.
- Reproductive health should occupy the central position in the identity of the health as well as the development of good health.

### **Design**

Descriptive survey was used for the study. This was appropriate because it is concerned with the assessment of attitudes, opinions, demographical information, conditions and procedures.

### **Population of the Study**

The population of the study consisted of five thousand, five hundred and fifty (5,550) married and reproductive age women. They report at the city's clinics every Tuesday and every Thursday at 10.00 am in the mornings on these two days for various medical check-up and medications since most of them are pregnant women. Apart from the fact that they are conscious of good health they would not want to take chances because in all things health is usually tagged as number one among others and everything is free of charge particularly for the pregnant women aged and children in Lagos.

### **Sample and Sampling Techniques**

A sample of five hundred and fifty (550) participants were involved in the study, they were selected from clients accessing reproductive health care services in the 9 clinics of Lagos municipal areas of Lagos state. The respondents were purely women of reproductive age, they made up of educated, semi-educated and stack illiterates who can express themselves in pidgin English and they similarly appreciate the relevance of counselling psychologists in the clinics and also within their environments.

### **Procedure**

Permission was sought for and obtained from the appropriate health officers in all the visited clinics. The women were addressed at the outpatient halls of the clinics. The focus of the speech was on reproduction of health and monitoring the impact of contraceptives". Sequel to this, interested women were asked their willingness to participate in the programme.

A kind of stratified random sampling technique was used to select participants for the study. The study was carried out over a period of six weeks in the municipality. The training came up once a week and each session lasted thirty-five minutes which fell in line with change of instructor's periods among the medical officers on the visiting day for women with different health problems.

### **Instrumentation**

The two instruments used were investigative inventories, perception of consolidation of counselling psychology in conceptualizing health reproduction (Agbaje, 2012) and counselling psychology logistics inventory (Isakan and Mink, 2009). The first inventory is like likert structure pattern with 21 items while the secondary inventory is a four-factor with a total of about 18 items. The need for good health production, the need for consolidation of counselling psychology logistics. The response format of the scale ranges from strongly agree to strongly disagree. The whole instrument has a test-retest reliability values ranging from 72 to 80. The internal

consistency for the total inventory has 86. As observed by the researchers a participant’s SRI profile configuration might suggest some specific approach to enhancing reproduction health. The rationale for adopting the scale for use in the study was real to the research situation. The instrument has five subscales which are:

1. Reproduction health
2. Counselling psychology logistics
3. Measurement of contraceptive users attitudes
4. Making plans and
5. Problem solving

Subscales have a total of 73 items with response ranging from “Not real” (1) to “very much real” (5). The instrument has a theoretical value which ranges from 44 – 80. Health reproduction subscale has a total 11 items with a coefficient alpha of .79; counselling psychology logistics has twenty-one (21) items with co-efficient alpha of .85, Management of contraceptive users’ attitudes has subscale of twenty-two (22) with coefficient alpha of .79; making plans also has ten (10) items with .85 and problem solving equally has ten (10) items with .64.

**Data Analysis**

Analysis of Co-variance (ANCOVA) was used to analyse the data. It was so used because of its capacity to take care of initial differences among the participants. Besides, it enables the researchers to make predictions with some degree of certainty, (Denga, 2011, Udoh and Eme Joseph, 2009).

**Results**

**Hypothesis 1**

There is no significant relationship between “the hormones in the contraceptive pills” and “medical conditions such as polyoystic ovary syndrome, endometriosis and anaemia related to menstruation and painful menstruation”.

**Table 1: Analysis of Covariance (ANCOVA) on the Counselling Psychology Logistics of the Production Health of the Experimental Participants and the Control Group**

Variable	Source	Sums of Squares	Df	Mean	F	P
Counselling	Row	742.94	2	371.47	1225.42	<0.05
Psychology	Column	18.71	2	9.35	30.86	<0.05
Logistics of production	Interactional	5.87	4	1.47	4.85	<0.05
Health	Within	1036.73	171	*393		

The analysis of covariance of participants post-test-scores on counselling psychology logistics of reproduction health shows that there is the main relationship of treatment (F(1,4140 2443.67 P < 0.05). Thus the null-hypothesis which posited that there is no significant relationship between the hormones in the contraceptive pills and medical conditions of the experimental participants and the control group was

rejected. The inference that could be drawn from the result is that significant relationship existed in the counselling psychology logistics of reproductive health of the treated participants and the control group. It is worrisome that only 56.9 percent knew when pregnancy occurs, 56.3 percent can link sexually transmitted infection early in life to future fertility problems. This result may be due to the fact that there is sexuality education in schools to sexual experimentation and engagement in risky sexual behaviours. Reproductive health knowledge is very important for women as woman's health and well-being, contraception as well as those of her family may depend on her being able to delay the birth of her first child or space the birth of her children, (Daniels M. Ryan, R. and Deli, P. 2001).

Table 2 presents the result of second hypothesis which postulated that there is no significant relationship women knowledge and education of the role of family planning and the effects of beliefs in personal and community health practices.

**Table 2: Analysis of Variance (ANCOVA) Showing the Counselling Psychology Logistics over the Women Knowledge of Education and Role of Family Planning Cum Personal and Community Health Beliefs and Practices**

Variable	Source	Sums of Squares	Df	Mean	F	P
Counselling	Row	566.11	1	566.11	2443.67	<0.05
Psychology	Column	15.81	2	7.91	33.95	<0.05
Logistics of production	Interactional	4.38	2	2.19	0.42	<0.05
Health	Within	531.00	114	.23		

The result in Table 2 shows that there was significant relationship of counselling psychology logistics over the women knowledge of education and the role of family planning cum personal and community health beliefs and practices of the participants ( $F(1,114) = 2443.67, P < 0.05$ ). Besides women knowledge of education had greater relationship over the family placing, personal and community beliefs and practices ( $F(2,114) = 33.95, P, 0.05$ ). women knowledge, awareness about the role of family planning in family life as well as access to safe and effective methods of family are essential to good health. The impact of belief in personal and community health practices is very strong. Belief may not be true scientifically and as such may make one to rightly, or wrongly access health care. The attitudes and views of women, the primary users of family planning methods should be considered important when introducing any new contraceptive method. Family planning ensures reduction in health risks of women and gives them more control over their reproductive lives. With these gains, women can take advantages of education, employment and civic responsibilities.

The result in Table 3 of the data analysis for hypothesis three which posited that there is no significant relationship between the determinants of reproductive health services and influential determinants of the use of reproductive health services.

**Table 3: Analysis of Covariance (ANCOVA) showing the Relationship of the Determinants of Reproductive Health Services and Influential Determinants of the use of Reproductive Health Services**

Variable	Source	Sums of Squares	Df	Mean	F	P
Counselling	Row	343.10	1	543.10	2060.93	<0.05
Psychology	Column	6.71	2	3.35	12.74	<0.05
Logistics of production	Interactional	4.28	2	2.14	8.13	<0.05
Health	Within	600.83	114	.26		

As shown above there was significant relationship in the counselling psychology logistics scores of the participants of determinants of reproductive health services and the influential determinants of the use of reproductive health services and the control group ( $F(2|114) = 2060.93, P < 0.05$ ). Determinants of reproductive health service use, rest on the individual, household, service and community levels. Therefore, when considering those influential determinants of the use of reproductive health services, the household and community in which an individual lives, as well as the characteristics of the health services available in the community must be taken into consideration. Respondents had a high level of knowledge of benefits of family planning but their general reproductive health knowledge was in the average. They considered safety of their health and approval of their husbands as strong determinants of their use of contraceptives.

### Discussion

The study tried to find out how far the counselling psychology logistics could be used in the reproduction health of the participants. Through keen observations and the research findings of the study it was discovered that significant relationships exist between the hormones in the contraceptive pills and the medical conditions such as polycystic ovary syndrome, endometriosis and anaemia related to menstruations and painful menstruation. The finding is not a surprise under the auspices that reproductive health knowledge education is very important for women as woman's health and well-being, contraception as well as those of her family may depend on her being able to delay the birth of her first child or space the birth of her child. The result also agreed with Agbaje (2012) who found out that the health orientation services absorb any constraints and enable the mothers to understand themselves, become aware of their various health rules and regulations as they were instructed at their various clinic centres. It also concerns that Denga (2011) who posited that education knowledge predicts the competence and personality development cum self-reliance in the reduction of health risks of women and gives them more control over their reproductive lives (Titus, 2002).

The null hypothesis which stated that there is no significant relationship between the determinants of reproductive health services and influential determinants of the use of reproductive health services was also rejected. The result attested to the effectiveness of the treatment programme. Isikan and Mink (2009), Agbaje (2007) and

Shuay'b (2006) concluded that counselling psychology logistics produce favourable results in terms of their therapeutic approaches mainly when individuals explore significant and useful information in relation to their proximal reproductive health. The finding is similar in agreement with National Family Planning Commission (2004) which asserted that reproduction health has a significant on reproduction health crystallization. All these researchers further explained that reproduction health has environmental, social and cultural impacts and family biological influence.

Shuay'b's (2009) study agreed with the fact that oral contraceptives equally reduce the risks of colorectal cancer in women and improve conditions such as pelvic inflammatory diseases, dymenorhea, premenstrual syndrome and acne. Agbaje (2011) in his research works posited that the health benefits of any method of contraception are far greater than any risks from the method and that the comparison of safety should be among available methods of contraception. He further identified that oral contraceptives are often prescribed as medication for mild and moderate acne, while "the pill" provides some protection against breast growth that are not cancer, entopic pregnancy, vaginal dryness and painful intercourse related to menopause. Daniels, M., Ryan, R. and Dcci, E. (2001) in their works found out that effectiveness of counselling psychology logistics is one possible explanation in improving the reproduction health which the women have to imbibe towards their good production health, other achievements and admired trends of livelihood.

### **Conclusion**

Based on the findings and analysis so far, it is pertinent to submit that health and reproduction, monitoring the impact of contraceptive technology on women in Nigeria reduces the risk of ovarian cancer and the risk of endometrial cancer compared to never users. It improves conditions such as pelvic inflammatory disease, dysnmemo wheal, premenstrual syndrome and acne. Additionally, birth control pills reduce symptoms of endometriosis and polycystic ovary syndrome and decrease the risk of anaemia.

Oral contraceptives come in a variety of formulations. The main division is between combined oral contraceptive pills containing both estrogen and progestins and progestin only pills. Combined oral contraceptive pills also come in varying types including varying doses of estrogen and whether the dose of estrogen or progestin changes. Oral contraceptives may influence congulation increasing the risk of deep venous thrombosis and pulmonary embolism, stroke and myocardial infection (heart attack). Combined oral contraceptives are generally accepted to be contraindicated in women with pre-existing cardiovascular disease in women who have a families' tendency to form blood dots.

### **Recommendation**

While many couples do not know the true causes of infertility, the consequences are often apparent, especially for women in the developing world. Grief and frustration, guilt, stigmatization and ridicule, abuse, marital instability, economic deprivation and social ostracism are just some of the consequences that have been reported in various parts of Asia and Africa. Many of these social pressures can be particularly intense in the parts of the developing world where voluntary childlessness



is rare and opportunities for women apart from motherhood are few. In hope of becoming pregnant, some women who consider themselves infertile may even engage in extra-marital relations, a behaviour that places them at risk of sexually transmitted infections (STIS) including HIV.

Clinicians should be aware that infertile couples also have their own expectations, three main themes emerged; hope to conceive; hope to receive information about it; when and how they could conceive; and uncertainty about what to expect. Some women also had unrealistic expectations. Nearly half of the 120 women in the quantitative study thought they would be pregnant by the end of their first visit. General observations indicate that “very often infertility services focus mostly on pregnancy rates but this research shows that there is going to conceive and not everyone would ultimately be able to access the kind of therapy they want, particularly in communities like ours, there is a separate aim and that is providing information, counselling and empathy.”

### References

- Agbaje, A. A. (2007). Social Perception Motivational Performance Level and Employment Prospects of the Challenged Youths in Cross River State. *West African Journal of Education*, 261 ISSN 0043-2799.
- Agbaje, A. A. (2011). Human Trafficking: A Barrier to Personality Realisation. *International Journal of Research in Education*, Vol.3, No.3.
- Agbaje, A. A. (2012). Self-Reliance Intervention and Poverty Eradication Course on Therapeutic Approaches in Counselling Psychology among Youths in Southern Nigeria. London. Oxford University Press.
- Akande, T. M. (2009). Awareness and Use of Family, Planning Methods among Married Women in Ibadan, Nigeria. Lagos Macmillan Publishers.
- Alderfer, C. (2002). Existence, Relatedness and Growth. New York: Free Press.
- Collins, J. A. (2002). Programme for Appropriate Technology in Health. New York: McGraw Hill Inc.
- Daniels, M. Ryan, R. and Deci. E. (2001). Self-Determination Theory and the Facilitation of Intrinsic Motivations, Social Development and Well-being. *American Psychologist*, 55(1): 68-78.
- Denga, I. D. (2011). The Counsellor in a Developing Nation. Calabar: Rapid Educational Publishers Ltd.
- Evers, T. S. (2007). Worldwide Patterns of Infertility: Is Africa Different? London. Oxford University Press.
- Federal Ministry of Health, National Health Policy. Abuja (2005).

- Francis, W. S. (2009). *Studies of Progesteron to Prevent Ovulation*. New York: McMillan Press.
- Isikan, P. and Mink, A. C. (2009). *Patterns and Growth in Personality*. New York: Holt, Rinehort and Winston.
- Khalirial, L. L. (2001). *Contraceptive Technology*: London. Oxford University Press.
- National Family Planning Commission of Nigeria (2004).
- Shuay'b, A. O. (2006). Counselling against Early Marriage of Girl Child. *Anambra State Journal of Education*, 59 (4): 44-59.
- Shuay'b, A. O. (2009). *Personality and Social Encounter*. New York. Beacon Press.
- Simeon, P. S. (2001). *Combined Oral Contraceptive Pill*. New York: Prentice Hall Inc.
- Snick, H. K. (2002). *Reproductive Health*. London: Harper and Row.
- Titus, M. S. (2002). *An Overview of the Global Policy Consensus on Women's Sexual and Reproductive Rights: The Nigerian Perspective*. Lagos: Lijohuson Publishers.