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Assessing the Determinants and Clues-to-Actions Influencing the Uptake of Modern Contraceptives Among Women of Reproductive Age 15-49 years in Federal Capital Territory, Abuja, Nigeria

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ABSTRACT

The contraceptive prevalence rate for any family planning method among currently married women in Federal Capital Territory (FCT) is 23.9%; use of any modern method (20.3%) among currently married women, use of any traditional method (3.6%), not currently using any method (76.1%), and total fertility rate is 4.3 per woman (NDHS 2018). The study aimed at assessing the determinants and clues-to-action influencing the uptake of contraceptives among women of childbearing age (15-49) years. A cross-sectional household survey was conducted from February 20-March 15, 2019 in FCT, Abuja. A multi-stage sampling method was used to recruit 360 women, out of which 348 were successfully interviewed by trained interviewers yielding a response rate of 96.7%. SPSS version 20.0 was used for analysis. Findings revealed that 94.4% of women were aware of family planning services, 24.4% reported of ever used any family planning methods, 20.6% used any modern method, and 3.8% using any traditional method. Major reasons for discontinuation of modern contraceptives indicated were: became pregnant while using contraceptives (33.8%), desire to become pregnant (31.8%), delay in conception (30.9%), health concerns (24.3%), fear of having disable babies (22.1%) and side effects (13.8%). Applying Health Beliefs model the clues-to-action for uptake of contraceptives were: quality-of-care, women's satisfaction of products, beliefs/attitude, side effects and health concerns. Review demand creation strategies to include community health - and religious leaders as change agents, invest more in education. pharmaceutical companies to review products side effects, aggressive marketing, harmonization of stakeholders' effort to reduce duplication, and entrench central database.

Keywords: Family Planning, Health Belief, Modern Contraception, Satisfaction, Utilization

INTRODUCTION

Family planning is one of the best ways of enhancing gender equality, women empowerment, reduction of poverty, prevention of abortions and maternal/child mortality. Acceptance of family planning services among the women of childbearing age (15-49) can reduce financial stress and poverty in the family. According to World Health Organization (2020), among the 1.9 billion women of reproductive age group (15-49 years) worldwide in 2019, 1.1 billion have a need for family planning; of these, 842 million are using contraceptive methods, and 270 million have an unmet need for contraception. The proportion of the need for family planning satisfied by modern methods, Sustainable Development Goals (SDG) indicator 3.7.1, was 75.7% globally in 2019, yet less than half of the need for family planning was met in Middle and Western Africa.

In sub-Sahara Africa, research findings revealed also low uptake of family planning services in Africa either due to the cultural and religious beliefs and/or interest and willingness to have more children as result of their occupation which is majorly agricultural based. Failure to accept new ideas and changes such as family planning has resulted into unwanted pregnancies, illegal abortions, pre-mature deaths, delayed some girls' education, high maternal and child mortality in the continent. Studies listed some factors that impinged on the uptake of contraceptives to include: perceived side effects, health concerns, stock-out of commodities, attitude of health care providers, distance to health facility/point of service, bad experience on the part of acceptors and users, religious and cultural beliefs.

In Nigeria, Government at all levels (Federal, state and Local Government Areas), non-governmental organizations, civil society organizations (CSOs) and faith-based organizations have been promoting and implementing family planning services with view to improving the uptake of contraceptives in the country since 1990s. Nigeria Demographic and Health Survey (NDHS) 2013 puts the uptake of any family planning methods in Nigeria by currently married women as 15 percent, in which 10% was using modern method and 5% using a traditional method. The knowledge about family planning services among men was 95% and women (92.2%); while **17**% of married women use a method of family planning, with 12% using modern method and 5% using a traditional method in Nigeria as at 2018. Finding indicates only 2 percent increase between 2013 and 2018 in the uptake of modern contraceptive methods (NDHS 2018). About 36% of currently married women have a demand for family planning and 47% of the potential demand is being met.

The Federal Capital Territory (FCT) of Nigeria has a similar trend with the national figures even though majority of the inhabitants are civil servants, hence, FCT is the focus of this study.

The Federal Capital Territory, Abuja is the administrative capital and seat of Federal Government of Nigeria. It is located in the North Central geopolitical zone of Nigeria. FCT lies between Latitude 8°25' and 9°25' north of the equator and Longitude 6°45' and 7°45' east of Greenwich Meridian and covers an area of 8,000 square kilometers. It has six administrative areas, namely, Abuja Municipal Area Council (AMAC), Abaji, Bwari, Gwagwalada, Kuje, and Kwali. FCT is majorly dominated by civil servants, with an estimated population of 6,000,000 as at 2016 with total fertility rate of 4.7 children per woman and contraceptive prevalence rate (CPR) of 36%.

The uptake of family planning services for over ten years had been very low and worrisome considering the tireless efforts that had been put up by the government, international non-governmental organizations, national NGOs, civil society organizations and faith-based organizations. FCT uptake of family planning among married women in 2013 was 25.6%, with women using any modern method (20.6%), using any traditional method (4.6%). and 74.8% not using any method. Recent NDHS 2018 puts currently married women using any method of family planning as 23.9%, any modern method (20.3%), any traditional method (3.6%), and not using any method (76.1%). A slight drop of almost 2% was observed between NDHS 2013 and 2018. Family planning plays a huge part in preventing maternal mortality and is projected that it can help reduce maternal deaths by 32% (Cleland et al. 2006). Family planning (FP) approval has tendency to improve the maternal, newborns, child health and children's education which invariably, enhances better socio-economic endowment and improved standard of living.

The total fertility rate (TFR) of Nigeria as at 2013 and 2018 were 7.2 and 5.3 births per woman, while Federal Capital Territory TFR were 4.5 and 4.3.

Total fertility is being defined as the average number of live births a woman would have if she were subject to the current age-specific fertility rates throughout her reproductive years (15-49) years.

According to NDHS 2018, knowledge of contraceptive method in Federal Capital Federal (FCT) is 92.7%, and utilization was 23,6% against 25.6% in2013. However, this high knowledge did not translate to increase uptake of contraceptives. How can the drop in utilization be explained? Could it be that the women have erroneous beliefs and attitude toward use of contraceptives that led to the drop or the family planning implementation that was faulty and/or the data from the field that has problem? This begs for evidence-based evaluation answer.

According to the elders' saying, "people's beliefs drive their actions. How a person lives and how s/he treats issue or people is very important, but not more important than what s/he believes, because the way and manner s/he lives, and interacts reflect what s/he believes".

In attempt to explore the determinants, and be able to provide evidence-based answer to above questions, conceptual framework which will show relationship among factors was considered.

Conceptual Framework

Conceptual framework is a diagram of a set of relationships among factors that are believed to impact or lead to a target condition. The study implored combination of Health Belief model (HBM) and diffusion theory to examine the knowledge, perceptions, challenges, clues to-action and utilization of modern contraceptives. The HBM suggests that a person's belief in a personal threat of a particular thing such as illness or disease together with a person's belief in the effectiveness of the recommended health behavior or action may predict the likelihood that the person will adopt the behavior. The HBM looked at two scenarios: a) the desire to avoid unwanted pregnancy, too frequent child birth, lack of spacing, or get children at appropriate time and avoid anything that will cause negative repercussions such as lack of family plaining uptake; and b) the belief that a specific health action will prevent evil occurrence and leads to safe motherhood, women economic empowerment and better life.

Based on the model, individual decision course of action will always be a function of individual's perceptions of the benefits and barriers or discomfort related to the health behavior. Nevertheless, HBM has some limitations that influence a person inability to predict his/her attitudes, beliefs, habitual behavior or other individual determinants that dictate a person's acceptance of a health behavior, hence, diffusion theory was combined to assess the low uptake of the contraceptive methods among women. Attitude of people play greater role on how people behaved and acted while diffusion theory serves as a trigger to attitude, behavior to favorably dispose better health action. **2**

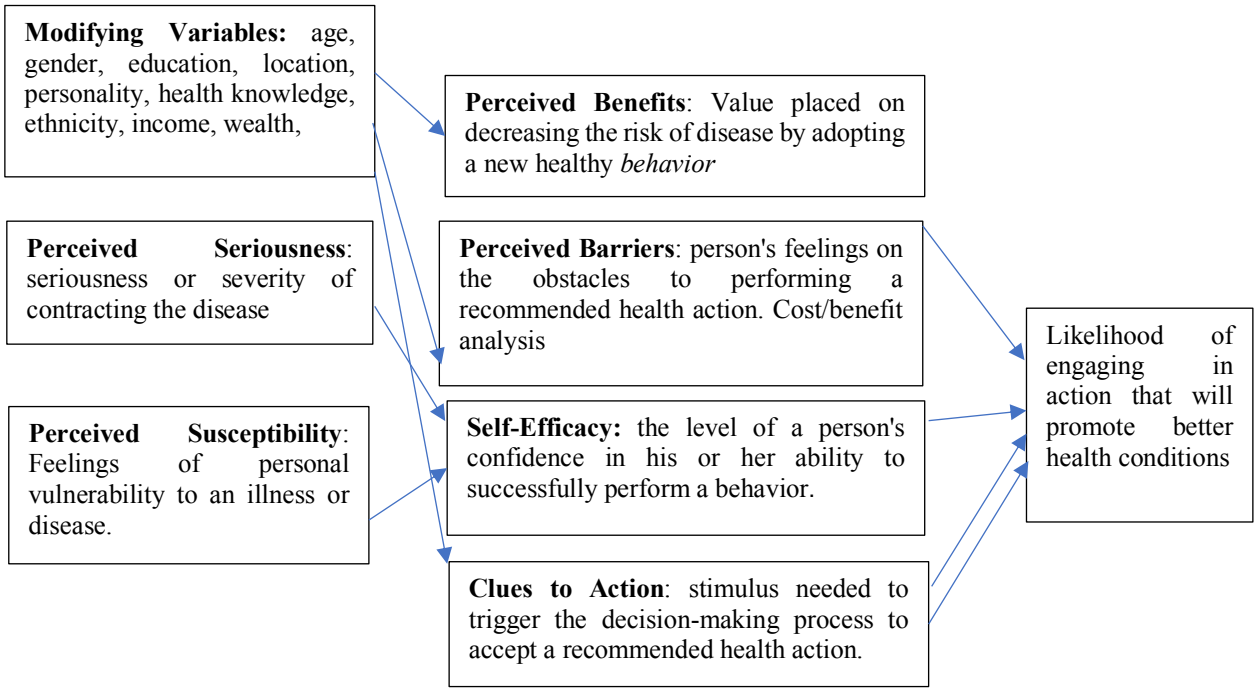


Figure (i): Adaptation of Health Belief Model for assessing uptake of family planning services

The HBM asserted that predictor of human behavior is the person's abilities to carry out certain behavior provided an individual has the requisite abilities, skills and courage to forge ahead even in the face of environmental factors interphase.

It has been observed that perceived beliefs and self-efficacy of individuals influenced the behavior at every point in time. Attitude reveals favorable and unfavorable manner or mode of behavior that is displayed in the presence of social pressures mounted by either campaigns, friends, relations, parents or peers. Self-efficacy stressed the need of being able to carry out certain behavior due to their convincing belief. Apart from self-efficacy, research findings revealed that beliefs, education, perceived norms, attitudes, location, exposure and socio-economic variables also influence the decision of either to accept or disregard the use of contraceptive methods.

The diffusion theory in other hand, explains how over time an idea, or product gains momentum, and diffuses through a specific population or social system. It based it on the adoption of idea, behavior or new product or innovative conceived by people and made known through media vehicles or channels.

Diffusion is the process of spreading a given idea or practice over time, via specifiable channels, through a social structure such as neighborhoods; Katz et al, (1963).

Katz et al work on the diffusion of innovations and claimed that for a new idea or innovation to diffuse, there must be awareness stage, interest stage, evaluation stage, trial and adoption. In the same vein, Bittner (1984) recognizes that the media can lead someone into getting aware of the existence of an item. Hence, family planning advocates suggest that through sensitization, education, access to - and affordable contraceptive methods could impact the uptake, invariably, impact the curbing of population explosion, and improve the well-being of the family.

According to research findings among women, it was observed that some demand side factors have influence on non -acceptance of contraceptives and these include: side effects (such weight gain or loss, heavy monthly flow, loss of appetite, dizziness, and possible delay in conception after removal), spousal disapproval, mother-in-law disapproval among other reasons.

In Tanzania, the predominant demand side factors to non-use of contraceptives as rated by the women were fears of side effects and health concerns of specific methods (44.3%), spousal disapproval (12.1%), women opposition (11.5%) and in-frequent sex (17.8%) as recorded by Sedgh and Hussain (2014). Lack of affordability, stock-out of commodities, long distance, lack of youth friendly centers, and attitude of care providers were mentioned as part of supply side factors that led to low uptake of family planning services.

Findings also showed that some married women using contraceptives are dropping and discontinuing of the methods due to certain limitations. It was presumed that couples can only realize their reproductive objectives when there is consistent and correctly use of appropriate identified contraceptive methods of their choice.

Another area of concern is the messages content. Some schools of thoughts claimed that demand component that would draw traffic was never properly planned for or invested in; while another school of thought is of the view that demand component are properly handled, but only the context, society and cultures/religion teachings serve as impediment.

A researcher claimed that it is important to design programs that are culturally appropriate, that encourage community participation and that also have political support (Mwaikambo et al 2011). According to the author, well-crafted messages will enhance policies, programs, and services that will be responsive to varying demographics.

Education is another determinant that positively influence uptake of modern contraceptive methods. In the review of literatures, Sonia Sultan (2018) observed that education regarding family planning is essential and lack of resources influenced the low uptake. She was of the opinion that FP determinants such as education, poverty, and accessibility to resources can be used to empower women and men in underdeveloped nations. Am J. Prev Med (2015) systematic review revealed that educational interventions can help increase knowledge of available contraceptive methods, enabling individuals to make informed decisions and use contraception more effectively. Although, the review did not state the aspect of educational interventions that are most effective.

People's attitude towards family planning (FP) is important as they could promote acceptability of contraceptives, especially in areas with high fertility and low uptake of FP methods. According to Odumegwu, (1999) asserted that those who perceived contraceptives to be of benefit to their well-being are more likely to use contraceptive methods.

Religion was found to have influenced the uptake of contraceptive methods as shown in the study conducted in Cameroon and Senegal on women's fertility decision (Browne 2012). It was observed that Christian denominations viewed family planning uptake in different ways. According to the findings, the Catholic Church's stands against the use of contraceptives, hence, affects members' attitudes and consequently their use of contraceptive methods. They reiterated that the principal purpose of a sexual relation within marriage is procreation and anything contrary is disobedient to God (Schenker 2000; Schenker and Rabenou 1993). While among the Protestant Christian, no form of contraception is forbidden within a marriage that already has children hence, the decision on the family size, use and method of contraception are left to the couple (LoPresti 2005).

Radhika Sundrarajan et al 2019 claimed that Christian and Islamic religion and gender dynamics strongly influence the uptake of family planning. The authors said regardless of gender or religion, their study participants claimed that they will live by their religion traditions.

Another research finding indicates that respondents lives and behaviors were greatly influenced by religious beliefs, hence, positively impacted the decision-making of family planning services (Sunday A. Adedini, Stella Babalola, Charity Ibeawuchi, Olukunle Omotoso, Akinsewa Akiode and Mojisola Odeku, 2018).

In Islamic religion, fundamental Muslims maintain that all form of contraception violates God's law and intentions (Poston 2005). In sub-Saharan Africa, researchers found out that religious, ethnic beliefs and values are barriers to fertility decline in the region (Bertrand et al. 1979; Caldwell and Caldwell 1987). Although, facts and figures may be pointing to low uptake of contraceptives in FCT, nevertheless, there is a possibility that the actual uptake may be better than what evidence suggests. On this premise, the survey assessed the determinants and clues-to-action influencing uptake of modern contraceptives in order to gain deeper insights to the likelihood of engaging in positive behavior that promotes acceptance, access- and utilization of modern contraceptive methods among women in Federal Capital Territory, using application of health beliefs model and diffusion theory.

SURVEY METHODOLOGY

This study location was Federal Capital Territory (FCT), Abuja and a cross-sectional population household-based survey was undertaken. Multi-stage clustered sampling design was adopted to select pre-determined samples of Area Councils, enumeration areas (EAs) and households per EAs. The sample size was drawn from six Council Areas (CAs) that made up FCT, Abuja (Abaji, Abuja Municipal Area Council (AMAC), Bwari, Gwagwalada, Kuje, and Kwali). Each of the six Area Councils of FCT was given equal probability of being selected into the sample survey to ensure representativeness of women residing in it. The systematic probability sampling method was used in the selection of three Area Councils resulted in the chosen of Abaji, Abuja Municipal (AMAC), and Gwagwalada Area Councils respectively. Three hundred and sixty (360) potential

women of reproductive age were recruited across the selected Area Councils. Visitors to the household previous night before the survey were not included.

A sample survey size was calculated with a view to making the size from each Area Council adequate for FCT-level analysis and interpretation of results. Assumptions was based on the determination of a difference of 15% for all demand and supply indicators, a 5% margin of error, power of the test was put at 80%, and design effect of size 1.5 yielded a minimum of 320 for the sample survey, however, a 10% non-response rate increased the sample size to 352. Therefore, 117 women of reproductive age were randomly selected per Area Council (district). Notwithstanding, 15 enumeration areas (E. As) per Area Council were drawn from the master frame of each council and eligible 8 households (HHs) per EA were randomly selected after the completed listing of the household (HH) per cluster. Overall, 360 women of reproductive were visited and out of which 348 respondents were successfully interviewed during 3-weeks data collection representing a response rate of 96.7%. The SPSS version 20.0 was used for the analysis. The survey was conducted between February 20 –March 15, 2019. Analysis was done at FCT-level to allow comparison of results with existing relevant data with National Demographic and Health Survey (NDHS 2018).

Questionnaire and Field Management

A well-structured questionnaire adapted from Nigeria Demographic and Health Survey 2018, with additional inputs from other sources was administered to provide insight into impact of family planning service uptake among women aged 15-49 in the selected households from the three Area Councils of FCT. The questionnaire has five sections: socio-demographic variables; awareness and sources of information; attitude and use of family planning; clues-to-action, successes and challenges experienced in accessing family planning services and suggestions for possible increase in utilization. Pretest of the questionnaire was carried out to further test the suitability, sequencing, skipping pattern, sensitivity and cultural suitability of the questions. During the training of research assistants, importance of evidence-based decision making, planning and accountability, the art of conducting interview, ethics of human subject research, consent, anonymity and confidentiality, respect of the respondent's opinion and data quality assurance were emphasized. Role play and mock trials were conducted to assess the suitability of each research assistants. Computer assisted personal interview (CAPI) was used for the interview to save time, energy, room for probing, ease of quick review of the responses, retrieval, data collation, and analysis which enhanced the data quality assurance. Art of listing of buildings, households, household members in a community was explained and practical conducted during training. English, pidgin, and local languages were used to administer the questionnaire in the selected localities. A short debriefing with the interviewers every morning before going for fieldwork was conducted. Two-level quality control was adopted –supervisors and investigators. The supervisors were saddled with the responsibilities of assigning the research assistants to their clusters, carried out accompaniment, spot-checked and 50% back-checked; while the second stage of quality control was the responsibility of the investigators who checked all the completed questionnaires and randomly picked 20% of completed questionnaire for back-checks.

Limitation

Inadequate fund, and cost of computer assisted personal interviews resulted to only the selection of three Area Councils instead of the six Area Council that would have been surveyed.

DATA MANAGEMENT AND ANALYSIS

The completed survey questionnaires and the open ended sections were coded, inputted, and edited before the data analysis was carried out. CS Pro software was used to design the questionnaire before the uploaded into tablets for data collection. Data cleaning and running of frequency distribution was conducted to ascertain the data were thoroughly cleaned to checkmate any missing variables or any outlier in the data set. Data analysis was done using SPSS version 20.0. The response rate was 96.7% attributable to active involvement of chiefs, village heads, research assistants and the investigators. A statistical significant level of 0.05 was adopted. Socio-demographic variables were analyzed using descriptive statistics; while inferential analysis was conducted using explanatory variables (age, education, marital status, knowledge of FP, exposure), and dependent variables (approval of FP, utilization, and satisfaction). Binary logistics regression was carried out to ascertain the level of relationship; while multi-variate logistic regression analysis with p-value of 0.05 with 95% confidence interval was conducted to have insight about the variables that have influence on the uptake of modern contraceptive methods.

Demographic Variables

About 43% of women interviewed were within the age cohort of 30-39 years, followed by 20-29 years with 38%, 40-49 years had 12% and 15-19 years had 7%. Almost three-quarter (72 percent) of the surveyed women are currently married, and single 28%. About 52% of the women live in rural area while 48% reside in urban area. In terms of education, 8% of women have no education, primary education (15%), 47% have secondary education and 31% have tertiary education. Occupation of the women show that 42% are currently engaged in paid employed job, 25% self-employed business, 25% farming and 8% housewife (See table 1) below.

Table (i): Demographic data of the surveyed women

Variables	Frequency	Percent
Age		
15-19 years	24	7.1
20-24 years	130	38.2
30-39 years	147	43.2
40-49 years	39	11.5
Total	**340**	**100.0**
Education		
No education	26	7.6
Primary	53	15.6
Secondary	169	49.7
Tertiary	92	27.1
Total	**340**	**100.0**
Marital Status		
Single	95	27.9
Married	245	72.1
Total	**340**	**100.0**

Place of Residence		
Urban	162	48
Rural	178	52
Total	**340**	**100.0**
Occupation of the women		
Paid employed jobs	142	42
Self-employed business	86	25
Farming	86	25
House wife	26	8
Total	**340**	**100**

General Sources of Information

The survey findings revealed that the women have access to various means of communication. The general sources of information by women include: radio (30%), television (25%), Newspaper (11%), Programs (15%), Flyers/ leaflets (8%), and friends/peers (11%).

Sources of Family Planning Information

Almost one-quarter (24%) of women obtained family planning information through radio, television attracted 22%, Public Hospital/Clinic (16%), private clinic (12%), NGO/Government workers (9%), friends/peers (7%), flyers/leaflets (3%) and religious (2%).

Knowledge of Method

The knowledge about family planning methods was assessed by asking the respondents to mention all the methods of family planning they are aware of. Finding showed that a slight above nine-in-ten (94%) of the women were aware of any form of family planning methods. Sixty-nine percent of currently married women were aware of any family method; unmarried women that have knowledge of any family planning method (25%). The surveyed women (93%) have knowledge of modern contraceptive methods and were able to mention at least one modern contraceptive. 67% of married women were aware of any modern methods, and 26% of unmarried women have the knowledge of modern contraceptives. Almost one-in-ten (7%) of the women were not aware of any modern method. The knowledge of contraceptive methods among the women of childbearing age indicates Pills (89%), IUD (38%), Condom (94%), Injections (74%), LAM (40%), Implants (9%), Rhythm (86%), withdrawal (89%), and other methods (18%).

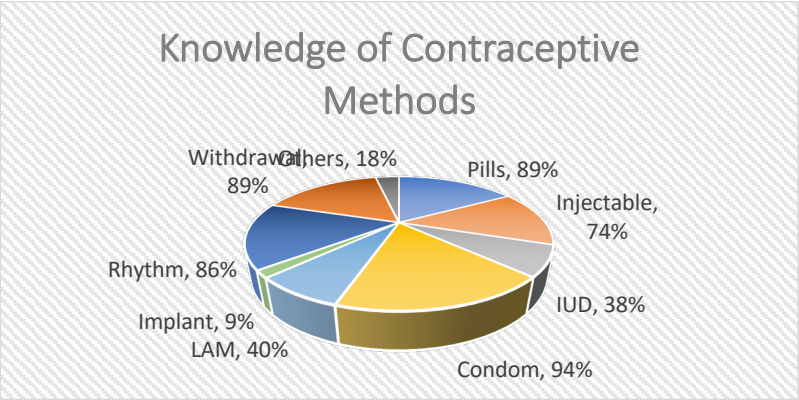


Figure (ii): Percentage distribution of knowledge of contraceptive methods

Sexual Initiation

The median age at first sexual intercourse among women of reproductive age 15-49 was 17 years.

Age at first Marriage

Marriage as well as sexual activity enable the family planning promoters and stakeholders to ascertain the degree of exposure to the risk of pregnancy among women of reproductive age. Age median at first marriage among the surveyed women of childbearing age was 20 years.

Perceived Attitude and Beliefs

The researchers assessed the attitudes, beliefs and approval of the women concerning decision making, perceptions and convictions about the uptake of family planning services. The Likert Scale measurement was used: strongly agree -1, agree – 2, neither agree nor disagree – 3, disagree – 4 and strongly disagree – 5. The balanced score was computed and the following results and decision were reached. The table below revealed the attitude, beliefs and perceptions of the women as rated during the survey.

Table (ii): Attitude, beliefs and approval as rated by the surveyed women

Rated Attributes (Attitudes and Beliefs)	Balanced Score (%)	Decision
Husbands and wives should jointly take decision on family planning	77.0	Agree
Husband should be the one to decide use of FP by the wife	82.4	Disagree
Men should not allow their wives to use family planning method	72.9	Disagree
A woman should seek permission from the husband before using FP	75.3	Agree
A woman who uses family planning is promiscuous	85.9	Disagree
Our culture does not support family planning services	52.5	Disagree
Family planning services are not affordable	33.4	Disagree
God decide the number of children a couple should have	43.9	Disagree
Religious leaders are representative of - and knowledgeable in things of God so we should seek their advice on decision-making on the use of family planning by couple	78.1	Agree
A woman who practices FP is disobedient to God directives	62.7	Disagree
A woman should continue to give birth to children until she has at least a male child	84.6	Agree
A woman should continue to give birth to children until she has at least a female child	74.0	Agree
Use of family planning can lead to a woman having disable babies	15.5	Agree
Only married women should be allowed to use family planning	7.0	Agree
Only single ladies should use family planning method to avoid embarrassments of having a child without marriage	76.3	Disagree
All women of childbearing age should be allowed to use family planning method once they are sexually active	92.3	Agree

Over every three-in-four (77%) women gave approval that husband and wife should jointly discuss and take decision on issues pertaining to uptake of family planning services as a family. Majority of the women (82%) disagreed that husband alone should be the one to decide on the use of family planning by the wife; while 73% of women did not agree with the assertion that men should not allow their wives to use family planning methods. Influence of male child

preference is still predominant among the women in FCT. About 85% of women agree that a woman should continue to give birth to children until she has at least a male child, while 74% of women approved of having at least a female child in the family. The belief that a female child will be able to assist mother in home chores and care more for them in old age than male child was observed.

Effect of religious leaders on the women was observed to be very strong in the attitude and belief statements. Over three-quarter (78%) of the women believe that religious leaders are representative of God, who knows the mind of God, and more knowledgeable in holy books than them, hence, all related issues to procreation be referred to them for their candid advice by the couples. Notwithstanding, about 44% of the women did not agree to the statement that God decide the number of children a couple should have. About 7% and 16% of the women agree that only married women and/or only unmarried women should use family planning methods. Nevertheless, 92% of the women agree that all sexually active women of childbearing age are free to use family planning methods of their choice.

Perceived Reasons for Utilization of Family Planning

When the respondents were asked the general reasons for the use of family planning, the following responses were given. Spacing children by couple (12.1%), 8.2% for limiting the number of children, 7.6% for preventing pregnancy and 6.5% mentioned prevention of disease. Among young adolescents (15-19) years, 2.1% mentioned family planning is use for spacing children by couple, limiting the number of children (1.5%), prevention of pregnancy (1.8%) and prevention of diseases (1.5%).

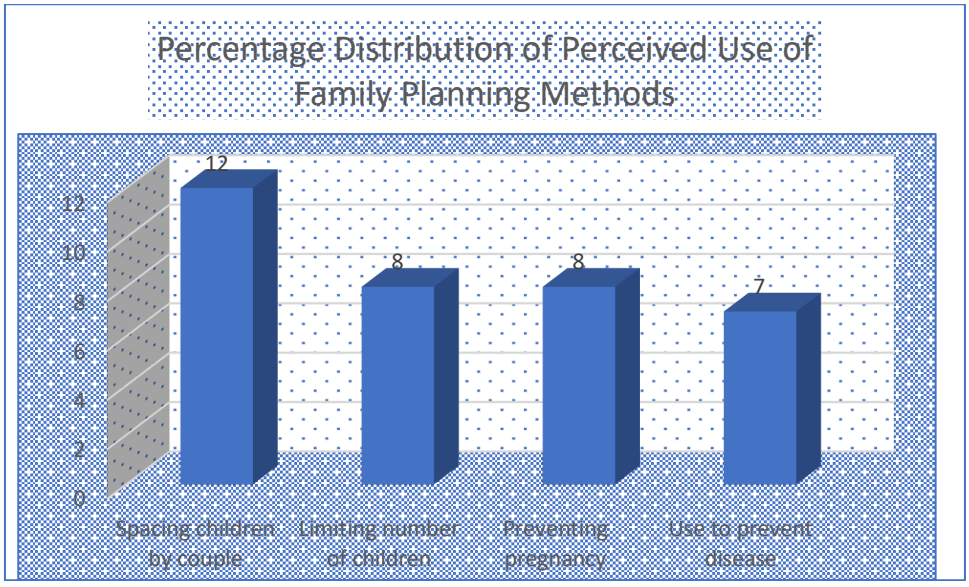


Figure (iii): Percentage distribution of perceived use of family planning methods

Percentage Distribution of Utilization of Family Planning by Demographic Variables

Table (iii): Percentage distribution of women demographic variables by uptake of family planning

Age	Not Using Any Family Planning (%)	Using Family Planning Method (%)	Total
15 - 19	5.9 (20)	1.2 (4)	7.1 (24)
20 - 29	28.8 (98)	9.4 (32)	38.2 (130)
30 - 39	31.8 (108)	11.5 (39)	43.2 (147)
40 - 49	9.1 (31)	2.4 (8)	11.5 (39)
Total	75.6 (257)	24.4 (83)	100 (340)
Education			
Not Education	5.9 (20)	1.8 (6)	7/6 (26)
Primary	12.1 (41)	3.5 (12)	15.6 (53)
Secondary	36.8 (125)	12.9 (44)	49.7 (169)
Tertiary	20.9 (71)	6.2 (21)	27.1 (92)
Total	**75.6 (257)**	**24.4 (83)**	**100.0 (340)**
Marital Status			
Single	20.6 (70)	7.3 (25)	27.9 (95)
Married	55.0 (187)	17.1 (58)	72.1 (245)
Total	**75.6 (257)**	**24.4 (83)**	**100 (340)**
Place of Residence			
Urban	39.1 (133)	12.6 (43)	51.8 (176)
Rural	36.5 (124)	11.8 (40)	48.2 (164)
Total	75.6 (257)	24.4 (83)	100 (340)

Utilization of Family Planning

Age distribution

The acceptance and utilization of any family planning methods among the women of reproductive age was 24.4%, with the age distribution uptake that has aged 30-39 years with 11.5% as the highest, closely followed by 20-29 years with 9.4%, while 15-19 years recorded the least acceptance and uptake (1.2%).

Education

Education is considered as a gateway to socio-economic empowerment and a means to enviable family well-being. About 12.9% of women with secondary education are using family planning services compare to 1.8% with no education and 3.5% with primary education. Knowledge and the utilization of modern contraceptive method has positive relationship educational level of the women.

Marital Status

Findings revealed that 25.3% of the women used any family planning method, currently married women (21%) used a modern contraceptive method, any traditional method (4.3%), and not currently using method (74.7%) in Federal Capital Territory. Injectable (7.1%), pills (5.9%) and

IUCD (4.1%) are methods mostly used by currently married women; while the modern contraceptive methods prominent among unmarried women are: injectable (10.5%), pills (7.4%), implants (6.3%), male condom (4.2%) and emergency contraceptive (3.2%). Findings indicated that unmarried women are more likely to use modern contraceptives (24.2%) than the currently married women (19.2%).

Place of residence

Rural (52%) and urban (48%) dichotomy had a slight influence on the choice and use of the family planning. Place of residence and the knowledge of any contraceptive methods is high among women of childbearing age; however, knowledge of any contraceptives method is higher in urban area (48.8%) than women in rural area (45.6%), while modern contraceptive methods knowledge in urban area was 48.2% and rural area (44.4%). The uptake of any family planning method in urban was 12.6% and in rural area recorded 11.8%. The uptake of modern contraceptive methods has the same pattern of urban having 10.6% and rural (10.0%).

Women's Satisfaction of Contraceptives

A good product or brand has tendency of creating satisfaction in the heart of the users and capacity to retain them from switching to other brands, but a bad brand causes disloyalty and capable of making the users to discontinue with such brand. When the women were asked whether they are satisfied with the methods of their choice. Among the women currently using injectable (6.2%) claimed to be satisfied, 5.6% were satisfied with the pills, while LAM and rhythm recorded 1.5% each level of satisfaction. The findings revealed that the level of satisfaction of contraceptive methods was relatively proportional to the utilization of the methods of the women's choice.

Perceived Reasons for Low Uptake

The study revealed array of factors mitigating against utilization of contraceptive methods. Factors mentioned include: personal beliefs, side effects, desire to become pregnant, delay in conception after removal, health concerns, became pregnant while using chosen method, religious and cultural beliefs, opposition from husband, long waiting time at point of service (POS), fear of having disabled babies, attitude of health care providers, stock-out, and related health concerns. However, the six major reasons for discontinuation of modern contraceptive methods as recorded in the survey include: became pregnant while using contraceptives (33.8%), desire to become pregnant (31.8%), delay in conception (30.9%), health concerns (24.3%), fear of having disable babies (22.1%) and side effects (13.8%).

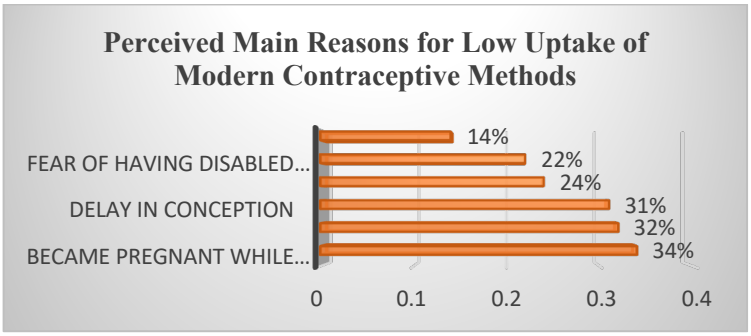


Figure (iv): Percentage distribution of perceived reasons for low uptake of modern contraceptive methods

Clues–to-Action for Uptake of Modern Contraceptives

For every decision making in life, there is always variables or important information that guides the process. Decision is reached after due consideration of the benefits and demerits of methods or alternatives available have been assessed and weighed. The greater benefits, the likelihood of chosen such method or alternative. When the women were asked what influence the decision to go for family planning services, about 91.5% of them mentioned quality of care and method satisfaction as part of the key variables that could influence their decision for uptake of FP. Other things mentioned include: friends/peers influence, attitude and beliefs, religious/traditional leaders influence, attitude of care providers and availability of commodities; access to facility; waiting time at point of service, and privacy/confidentiality.

Clues To Action
-Quality Of Care
-Client's Satisfaction
-Positive Peers -Influence/Advice
-Attitude And Beliefs
-Religious Leaders Influence
-Culture & Norms
-Privacy/Confidentiality
-Education And Age
-Economic Empowerment

Summary of the Survey Findings Using Health Beliefs Model

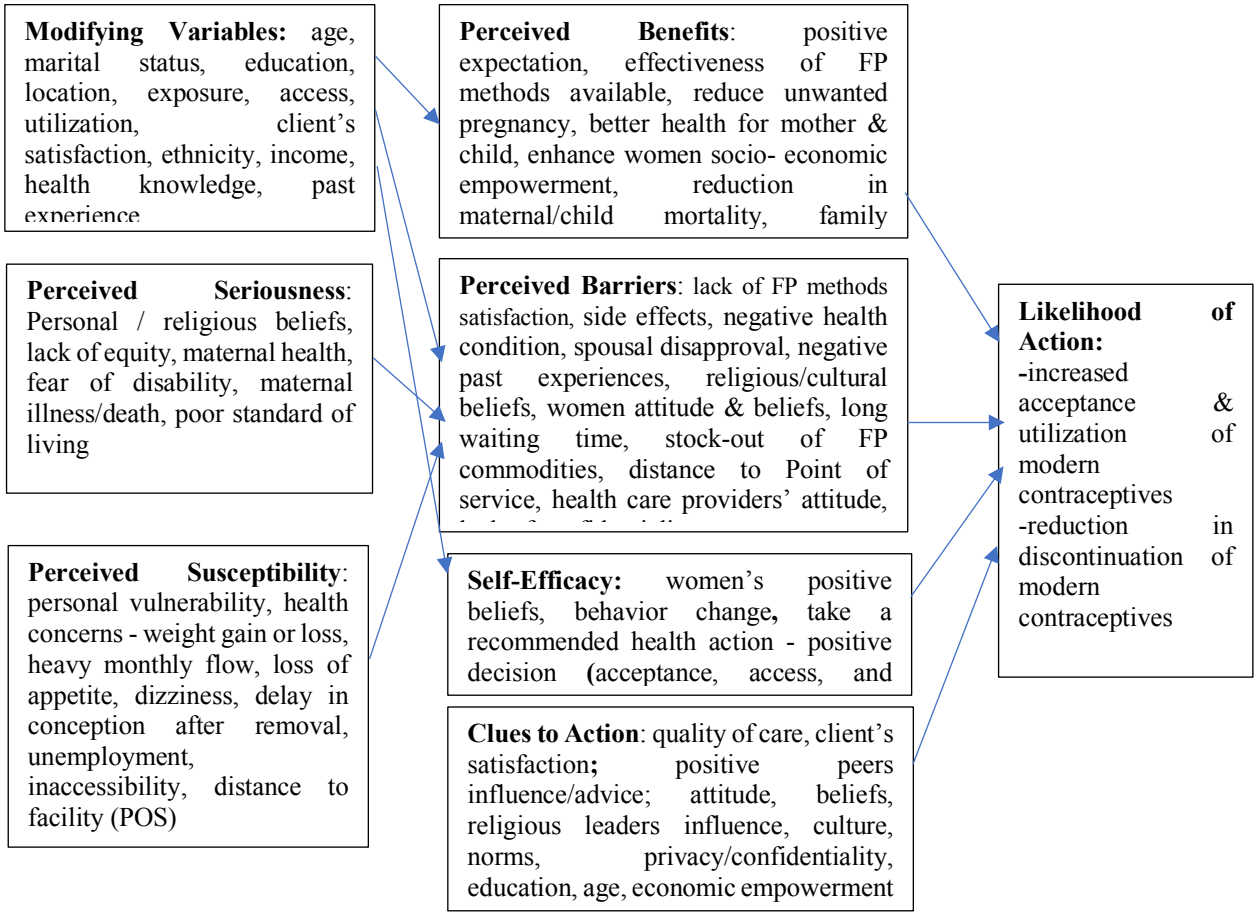


Figure (v): Using Health Belief Model to explain survey findings for discussions

DISCUSSION

Family planning refers to a conscious effort by a couple to limit or space the number of children they have through the use of contraceptive methods (World Health Organization, 2015). Another school of thought defined it as a program to regulate the number and spacing of children in a family through the practice of contraception or other methods of birth control. According to UNFPA 2018, access to safe, voluntary family planning is a human right. Therefore, family planning is central to gender equality and women empowerment, and it is key factor in reducing poverty. The Health beliefs model (HBM) core assumption is based on the understanding that a person will take a health-related action and behavioral changes if the person feels that negative health condition has a positive expectation and believe that an individual can successfully take a recommended health action. Contraceptive methods are classified as modern or traditional. Modern methods include: female sterilisation, male sterilisation, the intrauterine contraceptive device (IUD), implants, injectable, the pill, condoms, and the lactational amenorrhoea method (LAM). Methods such as rhythm, withdrawal, and folk methods are grouped as traditional.

Age

About 24.4% of the women accepted, accessed, and utilized any family planning methods in FCT, Abuja. The 30-39 years has the highest uptake of family planning service with 11.5%, aged 20-29 with 9.4%, while 15-19 years recorded the least acceptance and uptake (1.2%). This finding is in consonant with what was found in Kenya, that younger women (15–24) have lower approval for family planning than older women (Pauline Bakibinga, Namuunda Mutombo, Carol Mukiira, Eva Kamande, Alex Ezeh, Richard Muga, 2015).

Place of residence

Rural (52%) and urban (48%) dichotomy had a slight influence on the choice and use of the family planning. Although, place of residence and the knowledge of any contraceptive methods is high among women of childbearing age; however, knowledge of any contraceptives method is higher in urban area (48.8%) than women in rural area (45.6%), while modern contraceptive methods knowledge in urban area was 3.8% higher than their counterpart in rural area. The uptake of any family planning method in urban was 12.6% and in rural area recorded 11.8%. The uptake of modern contraceptive methods is almost the same in the place of residence, even thought, urban having 10.6% and rural (10.0%). The trend could possibly be attributed to similarities of urban characteristics and features that are present in all the Area Council communities with exception of few rural communities in FCT. Notwithstanding, there is more likelihood of women living in urban areas to have more access to family planning information, cover short distance to facilities, and reduced waiting time than their rural counterparts in accessing family planning services.

Marital Status

The survey findings revealed that 25.3% of the women used any family planning method, currently married women (21%) used a modern contraceptive method, any traditional method (4.3%), and not currently using method (74.7%) in Federal Capital Territory. Injectable (7.1%), pills (5.9%) and IUCD (4.1%) are methods mostly used by currently married women; while the modern contraceptive methods prominent among unmarried women are: injectable (10.5%), pills (7.4%), implants (6.3%), male condom (4.2%) and emergency contraceptive (3.2%). Findings indicated that unmarried women are more likely to use modern contraceptives (24.2%)

than the currently married women (19.2%). Sexually active unmarried women may not want to get pregnant in order to avoid any form of embarrassment that could emanate from having a child outside matrimonial home, hence, higher tendency of uptake of any form of family planning method than the currently married women that have nothing to worry about.

Education

Education is considered as a gateway to socio-economic empowerment and a means to enviable standard of living. Knowledge and the utilization of modern contraceptive method is attributable to educational level of the women. It was observed that education and knowledge about modern contraceptives played greater role in influencing attitudes towards the uptake. Most of the women without education and primary school certificate have low tendency of acceptance and uptake of modern contraceptives compared with those with higher education and knowledge. The positive association between education and modern contraceptive knowledge was significant at the point level of 5%.

Exposure to Information

Exposure in a general sense, can be defined as any of a subject's attributes (association) or any agent (effect) with which the subject may come into contact. These attributes or agents may be relevant to his or her health (Armstrong et al., 1998).

The overall intention of promotion or campaign is to create awareness about a product or brand, sell the attributes and benefits of the brand, promote healthy behavior, discourage unhealthy behavior, and a call to action; and invariably improve the information-based on the brand/product in the mind of the public. Family planning mass media campaigns or promotion is to create awareness, trial, and call-to-action among the targeted audience as well as increase the amount of available information about the health of the family especially the women.

The study findings revealed that the women had access to various means of communication and these sources have radio (30%) as top-of-mind awareness, television (25%), Newspaper (11%), Programs (15%), Flyers/ leaflets (8%), and friends/peers (11%). The same pattern was observed in access to information on family planning services. Apart from radio and television with 24% and 22% each, other sources include: Public Hospital/Clinic (16%), private clinic (12%), NGO/Government workers (9%), friends/peers (7%), flyers/leaflets (3%) and religious (2%). Diffusion theory explains how an idea, product, or practice over time via specifiable channels gains momentum, and diffuses (spread) through a specific population or social system. It based it on the adoption of idea, behavior or new product or innovative conceived by people and is considered beneficial for healthy behavior. Bittner (1984) recognizes that the media can lead someone into getting aware of the existence of an item. Hence, family planning advocates should not be wearied in aggressive sensitization, education, orientation, and providing affordable contraceptive method that could enhance increase uptake of contraceptive methods. Family planning advocates in FCT can collaborate with "Human Right Radio and Television" (**BREKETE**) due to their wide acceptance and total reach of its programs. It is crystal clear that everybody both old and young, men, women, young adolescents, government officials and even private organizations regularly listen to the program on radio and watch it on BREKETE television, hence, there is a great viewership and collaborating with such agency will yield great impact and increase likelihood of uptake. Another medium of diffusing family planning messages

is by using religious leaders as demand creation or change agents to reach their members through their sermons, pre-marriage counseling to potential couples, during marriage solemnization and normal services.

Family planning implementers can integrate community health agents (CHAs) as part of its demand creation agents to conduct home visits, to sensitize, educate, encourage and refer the women to health facility for the uptake of family planning services. With proper guidance CHAs will achieve greater height.

Knowledge and Used of Family Planning

Knowledge of family planning method is a key variable during the discussions and decision-making on the number of children to have by couples. Therefore, acquiring knowledge about fertility control by couples will aid in taking positive decision in access and choice of contraceptive method of their choice. Knowledge of contraceptive methods among women of childbearing age (15-49) years is very high. 94% of the women are aware of any form of family planning methods, while (93%) of them were able to mention at least one modern contraceptives. Findings show that currently married women (67%) and unmarried women (26%) were able to mentioned at least one modern method as top-of-mind awareness. The knowledge of contraceptive methods among the women revealed that 89% of them know Pills, IUD (38%), Condom (94%), Injections (74%), LAM (40%), Implants (9%), Rhythm (86%), withdrawal (89%), and other methods (18%). However, this high knowledge of modern contraceptive methods did not translate to increase utilization of modern contraceptives. The three most frequently used modern contraceptive methods among currently married women are injectable (7.1%), pills (5.9%) and IUCD (4.1%) while modern contraceptive methods used among the unmarried women have injectable (10.5%), pills (7.4%), implants (6.3%), male condom (4.2%) and emergency contraceptive (3.2%). The main reasons that influenced the uptake of the family planning services are spacing children by couple (12.1%), limiting the number of children (8.2%), preventing pregnancy (7.6%) and mentioned prevention of disease (6.5%). The result is in harmony with the study conducted in Ghana about the factors influencing the uptake of family planning services in the Talensi District with major influencers as space children with 94%, prevent pregnancy (84%) and sexually transmitted Infections (STIs) (84%) (Paschal Awingura Apanga and Matthew Ayamba Adam).

Adolescent Knowledge and Utilization

Adolescent knowledge of family planning is still at the rudimental stage. The utilization of the modern contraceptive methods among 15-19 years was (1.2%). This is expected because very few of the adolescents could have been exposed to family planning services due to their age which invariably, had influenced the acceptance and access. This finding is in consonant with what was found in Kenya, that younger women (15–24) have lower approval for family planning than older women (Pauline Bakibinga1, Namuunda Mutombo1, Carol Mukiira, Eva Kamande1, Alex Ezeh1, Richard Muga2, 2015).

Findings show that about 87.5% were aware of any FP methods, among this, 50% were single while 37.5% are married. In terms of awareness of modern contraceptives, 59% are aware, 12.5% were not aware among the single adolescents, while 37.5% of married adolescents were aware of modern contraceptives. The usage of contraceptives revealed that only single

adolescents (16.7%) had ever used a method and none among currently married adolescents. By Africa standard especially Nigeria, once you are married, the next thing is procreation, hence, it is in place by having none of the currently married adolescent not to have ever used family planning method. This is in total agreement with the study conducted in Uganda by George K Kiggundu[1], Mathew Nyashanu[2], and Mandu S Ekpenyong[3]: An exploratory of the actions affecting the utilization of family planning services among youth (18-24 years) at community level in rural Budaka district, Uganda supports the findings with this quote "*My partner is strongly opposed to any form of contraception because he beliefs that the reason why we got married was to have as many children as possible"* (21-year-old female participant).

By aged 15 and 16, at least few of them have married, hence, they need exposure to right and adequate information that could help them with their spouses to take rightful decision on the choice of family planning method to adopt. Therefore, more work, education, orientation/sensitization and persuasion is needed so that the young ones do not take decision that will not be in their own interest. It is believed that high uptake of family planning services among the young people can reduce early pregnancy and subsequent negative health outcomes on the young parents and their babies. Youth users-friendly centers where they can visit and access the services unhindered, unembarrassed and to feel at home is very essential and should be considered by the family planning managers.

Children's education is a critical milestone to empowerment through exposure to right information and application to respond to life challenges, hence, they should not be denied of it. On the part of government, integration of sex education in the secondary school curriculum for the children to learn and have right and adequate information on certain health issues at early stage of life be considered. This information will be of importance in shaping and controlling their attitudes, beliefs, healthy behaviors, and practices which could enhance better decision in life and also to prevent unwanted pregnancy and illegal abortion that could likely claim the lives of the young ignorant girl-child if the need arises.

Although, some school of thoughts may be against it saying such sex education could lead to promiscuity among the adolescents. Yes, it could be in one hand, and in another, it may not. However, if the merits and demerits of each action is weighed, educating them on the family planning could safe at least a life of the child. When such education is formally taught in schools, right information and messages will be passed to the young ones before they learn wrong things through their peers who may not be knowledgeable, have right and adequate information about the subject matter, invariably mislead their peers and any negative action taken after unprotected sex could result into loss of life. Young adolescents are always out to experiment things as they are growing up, but with proper guidance and education most of the vices could be prevented and the saying that *"a stitch in time saves nine"* will be more appropriate because at least a life could have been saved before the evil day comes.

The evidence from the findings revealed a high proportion of teenagers having inadequate knowledge of family planning services; even though, few of them have accessed and used the family planning methods.

Demand Side Effects

The family planning service managers have been doing a good job in promoting the uptake of family planning at the facility and community level in Nigeria. Nevertheless, there is still much room for more improvement by expanding the frontline workers at the community level. The involvement of well-trained females as role models, religious/traditional leaders, opinion leaders, motivators, community health agents (CHAs) or village health worker (VHWs) could join other existing demand creation promoters to serve as demand creation agents. The CHA/VHW could be saddled with the responsibility of home visits on regular basis to educate, sensitize, encourage and refer the women to health facility with the intent of taking up the family planning services. This will enhance positive acceptance and utilization of the contraceptives among the community members both men and women. A monitoring tools with the name of community, household name, number, days / weeks, type messages given in a particular visit, likelihood of action to be taken should be on the referral form as well as the name of CHA/VWA. The checklist or form could be retrieved on monthly basis for analysis to determine the intervention progress performance and tracking activities of the change agents. The CHA or VHA through sensitization and education will assist the communities' members to express their buy-in and beliefs that family planning (FP) practices will improve well-being of the family, individual, community and invariably affects the society at large. The FP messages as reference material for the agents should be convincing, immediate, attention-driven, call to-action and result-oriented.

The Roles Of Fp Community Demand Creation Agents Should Include:

I. Home Visits On Regular Basis
II. To Educate
III. Sensitize
IV. Encourage And
V. Refers The Women To Health Facility With The Intent Of Taking Up The Family Planning Services**.**

Fieldwork On Assessment Of Fp Services In Fct- Allen And Juliana 2019

Text messaging reminding individuals about the benefits of FP services and individual's responsibility to ensure that being engage in healthy practices are very important to the survival of the mother, child, and the comfort of the family as it is now done in COV-19 pandemic.

Integration of Religious Leaders

The findings indicated that women hold their religious leaders in high esteem and always carry out their directives because they considered them as God's representative on earth. The result is in harmony with Sunday A. Adedini, Stella Babalola, Charity Ibeawuchi, Olukunle Omotoso, Akinsewa Akiode and Mojisola Odeku, (2018) that claimed that the lives and behaviors of respondents were greatly influenced by religious beliefs, hence, positively impacted the decision-making on uptake of family planning services. The family planning manager should try to identify those influential religious leaders within the communities, pay advocacy to them, solicit for their buy-in, train them on the family planning services especially the reasons and benefits

Religious Leaders Could Deliver Fp Messages During:
-Pre-Marriage Counselling
-Marriage Solemnization Services
-Youth Meetings
-Regular Church And Jumat Services
-Encourage Women Group To Do Follow Up In Their Meetings

of the services and equip them with a brief direct messages that they can pass on to their congregation on selected services and Jumat congregations. Most of the religious leaders will agree with one or two of the benefits of family planning in **spacing the children and preventing unintended pregnancy**, hence, emphasis should be placed on these. The manager should talk less on using family planning to limit the number of children a couple could have during religious leaders training because some of them may critique it and result to argument that could disrupt the training section. The religious leaders could target the potential couples during pre-marriage counseling, marriage solemnization services, youth meetings and other members in the regular services. This awareness creation through selling the benefits of the contraceptives uptake could positively shape household economic and social lives by adopting small family size. Once the message is well taken by the couples and decision is made for the uptake of the contraceptives, other messages could be given at the point of service (POS) by the care-givers. Issue of using family planning to limit the number of children by the family could be misinterpreted by traditional/religious leaders, hence, it should be left alone to health care-giver to handle at facility level.

The researchers believe that ideas of appropriate planning and timely decision-making on small family size or number of children a couple should have will reduce stress on the family financial resources and enhance socio-economic empowerment. This could aid the potential couple to buy-in and opt for the contraceptives. When husbands that distaste the messages of family planning listening to their religious leaders who they have respect for preaching and educating members on it, could have change of hearts and make U-turn to grant permission to their wives to access and utilize the contraceptive methods. FP manager could appoint some of the religious and traditional leaders as patrons and advocate of the family planning services within their domain.

Apart from religious leaders' involvement, researchers feel FP program should be integrated into other health related curriculum at the point of entry as it is done for HIV/AIDS interventions in health facilities.

Supply Side

The goal of every public health supply chain is to improve health outcomes where person is able to obtain and use quality essential health supplies whenever he or she needs them. If the right products are supplied at the right place, at right time, at right quantity, at right price and right promotions (campaigns), issues of stock-out will not be experienced by the clients and possibility of increase in utilization of services could be guaranteed. But when the reverse is the case, increasing program impact, enhancing quality of care and improving cost effectiveness and efficiency will be lacking. Another aspect of supply side effects is attitudes of some of the care-givers. Even though few of the women complained about the attitudes of some of the health care providers, it is worthwhile to discuss it. Family planning managers should endeavour to conduct training on clients-providers' relationship knowing fully well that these women are being persuaded to come to facility to take up family planning services, hence, any little fault on the part of the care-giver could discourage them and opt-out of the services.

Pharmaceutical Company

The pharmaceutical companies that are producing modern contraceptives methods should carry out wide array of systematic desk reviews to see various complaints of the women about some of these methods. This will enable them work on or modify the chemical contents of these products that are causing discomforts or negative side effects. As soon as this review is done, aggressive brands and marketing campaigns should be instituted to create awareness of the new improved products which will re-impose confidence in the users and potential clients in future and this could lead to increase uptake of the modern contraceptive methods.

Clues–to-Action

The research findings identified some factors that serve as guide to the mystery of low uptake despite the efforts of government, international NGOs, CSO, CBOs, and FBOs to increase the uptake of the family planning services. Some of the clues obtained from the study include: quality of service, women's satisfaction of the choice method, friends/peers influence, attitude and beliefs, education, confidentiality, short waiting time at the point of service, involvement of community-based health agents and religious leaders as demand creation agents for the uptake of family planning services.

RECOMMENDATION/CONCLUSIONS

Family planning intervention requires that all hands must be on desk and all stakeholders to come together as unified force ensuring unity of purpose and everyone working toward achieving one goal which is a healthy living of the family devoid of stress. Implementing the FP program can no longer be business as usual but the one that is out to achieve better health outcomes; hence, the quality of care, client satisfaction, right products, availability of products, positive peers influence/advice; attitude, beliefs, religious leaders influence, culture, norms, privacy/confidentiality, education, and women economic empowerment should be considered as necessary and essential during implementation of family planning services. Supply side issues as discussed earlier should be considered for implementation.

The researchers recommends the review of family planning strategies, negative side effects, regular conduct of exit interview, harmonization of all stakeholders' effort to reduce duplication; government ownership, central database, and focus more on community-based approach, reach out to potential couples, married couples by religious leaders through sermons, and train village health agents to regularly conduct home visits to sensitize, to educate, encourage, and refer the couples or women to health facility for the uptake of family planning services.

Instituting a National central family planning services database will help the government, implementing partners (IPs), tertiary institutions, researchers, stakeholders and beneficiaries to have access to right and adequate data for proper planning, strategies and policies formulations. Lack of harmonized reliable sources of FP data collection and available data across the country has impinged on informed evidence-based decision-making on access, acceptance and utilization of modern contraceptive methods. Triangulation of FP data from different sources for informed decision is an uphill task, hence, government majorly rely on NDHS for strategic decision-making and policy formulation.

The paper concludes that community participation is vital in expanding access to information, services and supplies to women and girls in remote communities. Secondly, pharmaceutical companies to review the chemical components of some of the products the women complained about such as IUD, Injectable, implant and pills and make them user-friendly. Thirdly, regular in-house training of care-providers will enhance the skills and client-provider relationship.

The researchers believe that if the determinants and clues-to-actions are considered during implementation, there will be likelihood of positive action that will lead to increase acceptance and utilization of modern contraceptives; and reduction in discontinuation of modern contraceptives among women. A qualitative study is also required to dig deeper into the clues-to-action of family planning services as it affect demand – supply components of the implementation, acceptance and utilization.

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