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ASSESSMENT OF KNOWLEDGE, PRACTICE AND FACTORS AFFECTING KNOWLEDGE AND PRACTICE OF FAMILY PLANNING METHODS AMONG MALES IN A RURAL COMMUNITY IN EDO STATE, NIGERIA

Onaadepo O¹ Efegbere HA^{2,3,4,5,6,7} Akaninyene M⁸

¹Department of Human Physiology, College of Health Sciences, University of Abuja, FCT-Abuja

²Department of Community Medicine, Edo State University Uzairue, Edo State, Nigeria

³Global Community Health Foundation

⁴Cashville Development Foundation

⁵International College of Health Sciences and Technology

⁶International Centre of Inter-Professional Team Building

⁷Cherish Specialist Clinic

⁸Ministry of Health, Uyo Akwa Ibom State, Nigeria

Corresponding Author; Efegbere, Henry Akpojubaro ,2,3,4,5,6,7

Email: henryefegbere@gmail.com; efegbere.henry@edouniversity.edu.ng

ORCID Id: https://orcid.org/0000-0002-5599-6584

ABSTRACT

This study aims to assess knowledge, practice and factors affecting knowledge and practice of family planning methods among males in a rural community in Edo State, Nigeria. A cross-sectional descriptive study design with multistage sampling method are employed in sample selection of 323 male participants in Iyamho community, Edo State. Data is analysed and presented using descriptive statistics. Majority 126 (39%) of the respondents are within 34-41 years. Majority (96.3%) of the men know about family planning methods for men. Majority 258 (80%) knows barrier method (male condoms). Most 181(56%) of the respondents have used family planning methods before. The factors that affect accessing family planning services for males is mostly stigmatization (57.6%). In conclusion, this study provides information on the types of family planning information men are lacking and avenues for getting this information to them. Its therefore recommended reproductive health program designers need to incorporate these findings into reproductive health programs to help address barriers to improve health outcomes among males.

Keywords: Knowledge, Practice, Factors Affecting, Family Planning Methods Among Males, Rural Community in Edo State, Nigeria

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NTRODUCTION

Gender experts agree that males should be encouraged to be supportive partners of women's reproductive health while also meeting their own reproductive health needs, and engaged as agents of change in families and communities¹. Constructive male engagement in family planning entails a thoughtful, gender sensitive approach that places gender equality and women's empowerment on equal footing with other desired outcomes². The explosive increase in the nation's population emanating from indiscriminate childbearing, apart from a small number of privileged and conscientious countries that have succeeded in reducing the population growth, each pregnancy and birth remains a risk fatal experience for hundreds of millions of women worldwide³. Family planning is a means by which individuals or couples space the process of conception, pregnancy and childbirth in intervals, mutually determined by both husband and wife in order to have desired number of children that they can conveniently cater for their needs ^{2,3}. According to Ahmed ³, Family Planning is the factor that may be considered by a couple in a committed relationship and each individual involved in deciding if and when to have children. Though, rarely articulated, family planning may involve consideration of the number of children a couple wish to have as well as the age at which they wish to have them. Family Planning are obviously influenced by external factors such as marital situation, career considerations, financial position, any disabilities that may affect their ability to have children and raise them, beside many other

considerations. World Health Organization (2017), describe family planning as a way of thinking and living that is adopted voluntarily, upon the basis of knowledge, attitudes, and responsible decisions by individuals and couples, in order to promote the health and welfare of the family group and thus contribute effectively to the social development of a country. The World Health Organization (WHO) estimates that 287,000 material deaths occurred in 2010, sub-Saharan Africa (56%) and southern Asia (29%) accounted for the global burden of maternal deaths. Many countries in sub-Saharan Africa have persistent high rates of unmet need for family planning and relatively low proportions of contraceptive use. Factors affecting service provision include tenuous commodity security and suboptimal service factors⁴. At the individual woman level also, numerous obstacles work against the utilization of family planning service⁵. Studies have shown that barriers to family planning services include risk perception, insufficient knowledge needed to make informed choices, opposition from male partners, and health service limitations⁶.

Constructively engaging men, including adolescent boys, to be users of Reproductive Health services themselves, shifting gender norms, and improving communication and joint decision making in couples can be challenging and require long-term efforts as a result of low socio-economic factors⁷. This study sought to assess the Knowledge and practice of family planning methods among males in Iyamho community.

THEORETICAL FRAMEWORK The Health Belief Model (HBM):

The Health Belief Model (HBM) is by far the most commonly used theory in health education and promotion⁸. The underlying concept of the HBM is that health behavior is determined by personal beliefs or perceptions about a disease and the strategies available to decrease its occurrence. Personal perception is influenced by the whole range of intrapersonal factors affecting health behavior. The following four perceptions serve as the main constructs of the model:

- 1. Perceived seriousness
- 2. Perceived susceptibility.
- 3. Perceived benefits.
- 4. Perceived barriers.

Each of these perceptions, individually or in combination can be used to explain health behavior. More recently, other constructs have been added to the HBM: thus, the model has been expanded to include cues to action, motivating factors and self-efficacy.

Perceived seriousness: The construct of perceived seriousness speaks to an individual's belief about the seriousness or severity of negative health behavior. While the perception of seriousness is often based on medical information or knowledge, it may also come from beliefs a person has about the difficulties negative health behavior would create or the effects it would have on his or her life in general.

Perceived susceptibility: Personal risk or susceptibility is one of the more powerful perceptions

in prompting people to adopt healthier behaviors. The greater the perceived risk, the greater the likelihood of engaging in behaviors that decrease the stated risk. This is what prompts men who have sex with men to be vaccinated against hepatitis B and to use condoms in an effort to decrease susceptibility to HIV infection. It is only logical that when people believe they are at risk for contracting a disease, they will be more likely to do something to prevent it from happening. However, the opposite also occurs. When people believe they are not at risk or have a low risk of susceptibility, unhealthy behaviors tend to result. This is what has been found among older adults in the U.S. and HIV prevention behavior.

Perceived Benefits: Since change does not come easily, the last construct to the HBM is the issue of perceived barriers to change. This is an individual's own evaluation of the obstacles in the way of him or her adopting a new behavior. Of all the constraints, perceived barriers are the most significant in determining behavior change. In order for a new behavior to be adopted, a person needs to believe that the benefits of the new behavior outweigh to consequences of continuing the old behavior.

Modifying Variables: The four main constructs of perception are modified or influenced by other variables such as culture, education level, past experiences, skills and motivation just to name a few. These are individual characteristics that influence personal perceptions. For example, if one is diagnosed with an STI, they may become more self-conscious and practice safer sex due to lessons from that past diagnosis.

Cues to action: In addition to the four beliefs or perceptions and modifying variables, the HBM suggests that behavior is also influenced by cues to action. These are events, people or things that move people to change their behavior. Examples are media reports and media campaigns, advice from others, reminder postcards from a health care provider or health warnings on product labels. Knowing a person who has gone through a health behavior change and how it has benefited them can also act as a cue to action for others.

Self-efficacy: In 1988, self-efficacy was added to the original four beliefs of the HBM. Self-efficacy is the belief in one's own ability to do something⁹. People generally do not try to do something new unless they think they can do it. If someone believes a new behavior is useful (perceived benefit), but does not think he or she is capable of doing it (perceived barrier), chances are that it will not be tried.

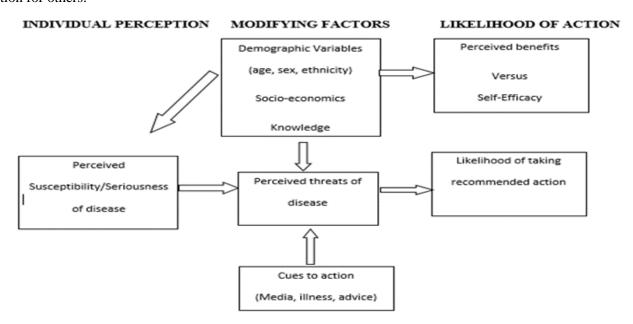


Figure 1: Diagrammatic presentation of The Health Belief Model

Source: The Health Belief Model (based on 10-14 Health Behaviour and Health Education. Theory, Research and Practice. San Francisco: Wiley & Sons

MATERIALS AND METHODS

Study Setting: The research work was carried out in Iyamho community, Edo State. Iyamho is a small town in Etsako West Local Government Area of Edo State whose headquarters are in the town of Auchi.

Iyamho is beautiful semi-urban centre following the influx of workers, visitors and students and is one of the 21 towns/villages that consist of three quarters Iyodudu, Iyitse, and Iyomila that constitute Uzairue clan in Etsako west, Edo State.

Study Design: A cross-sectional descriptive study was used to explore knowledge and practice of males in family planning methods in Iyamho community.

Target Population: The target populations used for this research are males of reproductive age between 18 to 59 years in Iyamho community, Edo State.

Sample Size Determination: In order to get a representation of all population for this study, The Cochran formula was used to estimate the sample size as follows:

 $n = Z^2 pq/d^2$

Where.

 n_0 = the desired sample size

Z = 95% confidence interval (standard value 1.96)

p = Anticipated population proportion of 34%, p=0.34)

q = 1.0 - p

d = degree of accuracy desired at 0.05

Therefore, the sample size is computed as follows: $n_{\rm 0}$

 $= \left[(1.96)^2 \ x \ (0.34) \ x \ (0.66) \right] / \ (0.05)^2, \ n_0 = 345.$

For a known population, the following formula is used; $n = n_0/1 + \lceil (n_0-1)/N \rceil$

Where,

n= sample size

 n_0 = desired sample size

N= total population

n = 345/1 + [(345-1)/5000]

n = 345/1 + [344/5000]

n = 345/1 + 0.0688

n = 345/1.0688

n = 322.8

n approximately 323.

Sampling Technique: A stratified multistage cluster sampling method is employed in sample selection.

Stage I: Three quarters (Iyodudu, Iyitse and Iyomila) were selected from the 4 using simple random sampling employing balloting. Each quarter constituted a stratum from which households were drawn for the survey.

Stage II: The sample size was proportionally allotted to each of the selected quarters.

Stage III: a systematic random sampling was done in selecting the households per quarter. This was achieved through the use of numbers to refer to each household rather than the use of names of household. The first household within each stratum was selected randomly with the next one being the nearest household that met the inclusion criteria.

Inclusion and exclusion criteria: All sexually active adult males aged between 18 to 59 years in Iyamho community were included in this study. The study excluded all adult males between ages 18 to 59 years in Iyamho community who were mentally retarded or could not speak either Etsako or English and those less than the required age.

Instrument for Data Collection: A structured questionnaire comprising of both open and close ended questions was prepared after reviewing several questionnaires from different other research to assess the knowledge and practice of family planning methods among males. It comprises of Four (4) sections 'A', 'B', 'C' & 'D'.

Section A, has questions about the demographic data of the participants such as the age, the marital status, level of education, etc. with 8 questions

Section B, seeks on knowledge of men towards family planning methods from the respondents with 6 questions

Section C, Determine the practice of family planning methods among respondents with 5 questions

Section D, factors influencing the practice of family planning methods among respondents with 9 questions.

Reliability of Instrument: The reliability of the instrument was checked using test-retest method. This was done by administering the same questionnaire to 20 respondents in the same rural community (Iyamho) in Edo state. These respondents were excluded from the main study.

After a period of two weeks the same test was administered to the same group who took the test previously. Two sets of test scores were obtained. The two sets of scores were used to compute a correlation co-efficient using Cronbach Alpha coefficient and a value of 0.845 was gotten which indicated that the instrument was reliable.

Method of Data Collection: Data collection took place over a period of three (3) weeks. In this study, data is collected using structured questionnaires. Confidentiality and anonymity of data is ensured.

Method of Data Analysis: Data was analysed using the Statistical Package for Social Science (SPSS) version 22.0

Ethical Considerations: Ethical clearance was obtained from the Ethics and Research Committee of

the Edo State University Uzairue. A verbal permission is obtained from the leaders of the communities where participants were selected and the consent of participants in the study is sought prior to their inclusion in the study. Respondents were given the right to withdraw from the research study at any time if they are no longer satisfied with the research process without fear or negative consequences. Anonymity and confidentiality are strictly ensured in the study.

Limitations of the study: This study was subjected to the following limitation.

One-site setting: The study is limited by the use of one study settings which could affect the generalizability of the study, I.e. the use of one community, because of this a further study in another setting was suggested.

RESULTS

A total of 323 respondents were recruited and all the 323 respondents completed and returned the questionnaires. This translates to a response rate of 100%.

Table 1 below shows majority 126(39%) of the respondents are within 34-41 years, 111(34.4%) are 26-33 years, 50(15.5%) are 42 years and above and 36(11.1%) are within 18-25 years. Majority 131(40.6%) are Yoruba, 123(38.1%) are Igbo and 69(21.4%) are Hausa. The educational level shows majority 143(44.3%) have secondary level education, 86(26.6%) have tertiary level of education.

Table 1: showing the demographic characteristics of the respondents

Variables	Categories	Frequency	Percent
Age in years	18-25years	36	11.1
	26-33years	111	34.4
	34-41 years	126	39.0
	42years and above	50	15.5
Ethnicity	Hausa	69	21.4
	Igbo	123	38.1
	Yoruba	131	40.6
Educational level	No formal education	38	11.8
	Primary	56	17.3
	Secondary	143	44.3
	Tertiary	86	26.6
Marital status	Single	57	17.6
	Married	207	64.1
	Divorced	40	12.4
	Separated	19	5.9
Religion	Christianity	133	41.2
	Islam	190	58.8
Employment status	Unemployed	38	11.8
	Self-employed	186	57.6
	Employed	99	30.7
Number of children	No child	37	11.5
	1child	76	23.5
	2children	41	12.7
	3children	54	16.7
	4children	66	20.4
	More than 4children	49	15.2
Desired number of children	1child	19	5.9
	2children	173	53.6
	3children	85	26.3
	4children	29	9.0
	More than 4children	17	5.3
	Total	323	100.0

According to the table 2 below, majority 311(96.3%) know family planning methods specifically for men. The knowledge distribution shows 258(80%) knows barrier method (male condoms), 67(20.6%) knows surgical method (vasectomy), 132(40.8%) knows male traditional method (periodic abstinence and withdrawal), 19(5.9%) knows oral method. It was observed from the figure above that majority of the respondents 60% know about family planning methods while 40% reported they do not.

Table 2: showing the level of knowledge on family planning methods among respondents

Variables	Categories	Frequency	Percent
Do you know any family planning	Yes	311	96.3
methods specifically for men only?	No	12	3.7
If yes, what methods do you know?	Barrier method (male condoms)	258	80.0
	Surgical method (vasectomy)	67	20.6
	Male traditional method (periodic abstinence and withdrawal)	132	40.8
	Oral method	19	5.9
What is the MOST EFFECTIVE contraceptive method for a man who has reached his desired number of children?	Condoms	108	33.4
	Periodic abstinence and withdrawal	86	26.6
	Vasectomy	95	29.4
	Pills	34	10.5
Do you know about family planning	Yes	158	48.9
services available in the community?	No	165	51.1
Have you or your partner used any	Yes	181	56.0
family planning methods?	No	142	44.0
	Total	323	100.0

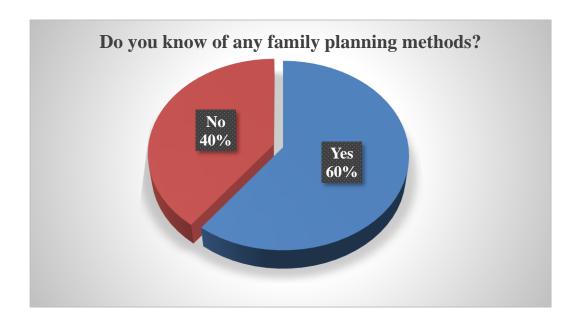


Figure 2: pie-chart showing the level of knowledge of respondents on family planning methods

Table 3: showing the level practice of males in family planning methods

Variables	Categories	Frequency	Percent
Have you or your partner used any family	Yes	181	56.0
planning methods before?	No	142	44.0
Do you use contraceptives to stop unplanned	Yes	147	45.5
pregnancy?	No	176	54.5
Do you use contraceptives anytime you don't	Yes	147	45.5
intend to get pregnant?	No	176	54.5
Does your methods of family planning changes	Yes	145	44.9
from time to time?	No	178	55.1
	Total	323	100.0

From the table 3 above, 181(56%) of the respondents have used family planning methods before, 147(45.5%) use contraceptives to stop unplanned pregnancy, 145(44.9%) changes their family planning method from time to time.

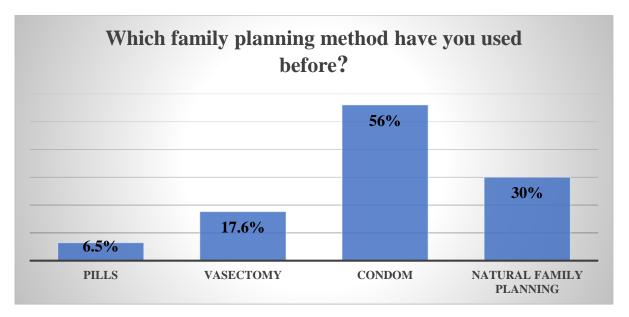


Figure 3: A bar-chart showing the practice of males in family planning methods

The figure above shows the practice of males, majority 56% use condom, 30% use natural family planning method, 17.6% use vasectomy, while 6.5% use pills.

Table 4 showing the factors associated with Knowledge and practice of males in family planning methods

Variables	Categories	Frequency	Percent
Are there any challenges to accessing family planning	Yes	213	65.9
services?	No	110	34.1
My religion prohibits it?	Yes	60	18.6
	No	263	81.4
Does distance affect your ability to go for family	Yes	121	37.5
planning services?	No	202	62.5
Is it convenient to access family planning services?	Yes	186	57.6
	No	137	42.4
Do you pay for family planning service?	Yes	227	70.3
	No	96	29.7
I use natural family planning method?	Yes	97	30.0
	No	226	70.0
I did not use it because of my previous experience of	Yes	164	50.8
family planning?	No	159	49.2
My culture disallows it?	Yes	96	29.7
	No	227	70.3
	Total	323	100.0

From the table 4 above, factors associated to the practice of family planning among men include cost (70.3%), challenges in accessing the services (65.9%), previous experiences (50.8%), distance (37.5%), culture (29.7%) and religion (18.6%).

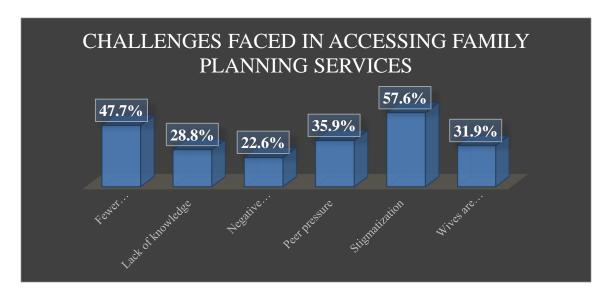


Figure 4: showing the factors associated with the Knowledge and practice of males in family planning methods

According to the figure above, the challenges faced in accessing family planning services for males include; stigmatization (57.6%), fewer contraceptive choices for men (47.7%), peer pressure (35.9%), unsupportive wives (31.9%), lack of knowledge (28.8%) and negative community perception (22.6%).

DISCUSSION

Level of knowledge of males concerning family planning methods in Iyamho community

The present study quantified knowledge and use of contraception among men living in Iyamho community. About 96.3% of the men know about family planning methods for men. This is similar but relatively lower than the 98% reported in the findings of a study conducted¹⁵. This is not surprising: while women commonly access healthcare facilities for antenatal care and childhood immunization visits, men are far less likely to have healthcare needs that bring them to hospitals and clinics where they might encounter accurate family planning information. It is therefore essential to make awareness and reach men with information about family planning methods for them. Ijeoma et al., 16-20 established that the level of knowledge of family planning among the married men in Evuma Community, Afikpo, Ebonyi State, Nigeria was high (96.4%). The

major source of information was through sensitization from health workers at the health centres as well from friends/relations. Adams²¹⁻²⁴ also revealed that a high level of awareness of family planning methods is made possible mainly through hospital campaigns followed by of information exchange between friends/relations.

Perhaps not surprisingly, men were most familiar with barrier method (male condoms), but many also named male traditional method (periodic abstinence and withdrawal), surgical method (vasectomy) and oral method. Increasing knowledge and acceptability of these methods among men could be one avenue for increasing use of these very effective methods. Importantly, such efforts will only be successful if there are also parallel efforts to address lack of availability of these methods for men ²⁵⁻³⁰

Level of practice of males in family planning methods

The study also revealed that the practice of family planning among the males in Evuma Community, Afikpo was average (56.0%). This finding indicates a gap between the level of knowledge and the practice of family planning among men. This view is similar with that of ³¹⁻³³ who revealed that majority of the respondents know about some modern

contraceptive methods, but the overall contraceptive use was very low. However, it disagrees with that of 34-37 who revealed that majority of the respondents had good knowledge regarding the meaning, types and uses of contraceptives which resulted in high attitude and good practice pattern. These findings point to the fact that there is a very wide gap between the knowledge of family planning in Evuma community and their practice of family planning. This view was supported by ³⁸⁻⁴¹ who posited that, in many other African countries, there exists a very wide gap between contraceptive knowledge and practice. They posited that current contraceptive use in Africa stood at 29 % while knowledge was well over 80 % 42-45 This view is also consistent with the findings⁴⁶ who revealed that it was not every couple who approved family planning actually practiced it for reasons such as the fear of failure, cultural and religious prohibition as well as disagreements between couple.

Family planning programs need to target men at all levels of health promotion and education with their partners to reduce misconceptions about FP methods to increase acceptance. Men's participation is crucial to help reduce misconception about side effects of contraceptive methods⁴⁷. Therefore,

FP family programs need to target men at all levels of the service. Their involvement will also lead to women's empowerment to increase effective contraceptive use and continuation to improve better health outcomes in reproductive health⁴⁸. User experiences indicate that text messages provide a novel way to raise awareness, promote behavior change and address myths and socio-cultural norms⁴⁹.

Factors associated with the knowledge and practice of males in family planning methods

The challenges faced in accessing family planning services for males in the current study include; stigmatization (57.6%), fewer contraceptive choices for men (47.7%), peer pressure (35.9%), unsupportive wives (31.9%), lack of knowledge (28.8%), culture (29.7%) and religion (18.6%), cost (70.3%) and negative community perception (22.6%). Similarly, non-approval of family planning methods by men in 36,49 was attributed to perceived risks, side effects, and sociocultural norms. Focus group discussions with men and women in rural Uganda have come out with similar findings^{45,49}. Contraceptive knowledge and use are shaped by the sociocultural environment such as personal attitudes and feelings about contraception.

Evidence shows that some men oppose contraceptive use for reasons of tradition and religion which require men to maintain the honor and position of their extended family, religious social village, group and organization. Studies have shown with similar findings in settings in rural northern Ghana⁵⁰ The complex web of social and cultural factors impedes spousal communication regarding reproductive health issues and that discourages them to take their wives to health clinics to discuss FP issues.

Conclusion

This study provides information on the types of family planning information men are lacking and avenues for getting this information to them. Its therefore recommended reproductive health program designers need to incorporate these findings into reproductive health programs to help address barriers to improve health outcomes among males.

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Recommendations

Based on the findings of the study,

- i. Attention is needed at community and governmental level to identify strategies to promote gender equity, shared decision making, shared responsibility, positive participation of men, empowering women, and to increase effectiveness of male participation in family planning use. Male focused programs, intensive education for men and religious leaders should also be considered.
- ii. Governmental and non-governmental organizations, donors and relevant stakeholders should ensure availability, accessibility and sustained advocacy for the use of FP for men.
- iii. The FP programs should incorporate the responsibility and role of males in the practice of FP service.
- iv. Service delivering centers need to be properly equipped with materials to motivate males to use the services.

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