PREDICTORS OF FEMALE LECTURERS REPRODUCTIVE HEALTH BEHAVIOUR IN TERTIARY INSTITUTIONS IN NIGERIA

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Abstract

Women reproductive health behaviour (RHB) has generated a lot of interest from researchers across many disciplines because of complications on women health generally. Previous studies on women's RHB had focused on various categories of women and teenagers leading to a gap in literature on women in the tertiary institutions. This study, therefore, examined the extent to which cultural norms/religious belief, peer influence and mass media exposure influenced the RHB of female lecturers in tertiary institutions in South western Nigeria. The survey research design was adopted. The purposive sampling technique was used to 540 academic workers from thirteen tertiary institutions in South western Nigeria. Two instruments were used: RHB Scale (r=0.81) and RHB Determinants Scale with sub-scales, cultural/religious belief (r=0.83), mass media (r=0.75), and peer influence (r=0.71). Three hypotheses were tested at 0.05 level of significance to determine the RHB of female workers. Pearson product moment correlation and content analysis was used to analyse data collected through the questionnaire form the respondents. Seventy-five percent of respondents exhibited good RHB. Their significant strength of relationships with RHB was ranked: religious/cultural belief (r=0. .066); mass media exposure (r=0.070), and peer influence (r=-0.602). Mass media exposure, cultural norms/religious belief and peer influence

strongly predicted reproductive health behavior of female lecturers in sampled tertiary institutions. Improvement in the reproductive health behaviour among tertiary institutions female lectures calls for government to encourage and motivate women having two or more children to adopt family planning through mass media messages

Keywords: Reproductive health behaviour, Tertiary institutions' Female lecturer's Reproductive health decision

Introduction

Participation in workforce determines the employment status which can strongly influence women's reproductive health (United Nations, 1987; Sunil & Pillai, 2010). Female workers in tertiary institutions participate in various academic and management activities, like research, conferences, teaching, community services, administration, in addition to the regular household responsibilities such as, childbearing. Participation in workforce provides women with income-earning opportunities, which can influence their reproductive health by empowering them to have control over reproductive decision. Fertility decisions at a given time depend to a large extent on current situations within the family. Each birth may, therefore, be influenced by a different set of motivational, cultural and family conditions .Some of these situations includes:

- a. No decisions that may occur when a couple does not foresee that pregnancy result from particular actions
- b. Misperceive their fecundity and or lack knowledge of fertility decisions.
- c. Passive decision which take place when particular habits or customs within the culture reinforce the childbearing behaviours acceptable for group survival.
- d. Active decisions which take place when the couples are aware of a number of things
- e. Probability of pregnancy
- f. Possibility of regulating fertility and the fact that costs and benefits are attached to fertility outcome (Odimegwu, Omideyi & Okemgbo , 2001)

Within the mainstream of reproductive health literature, the understanding of the role of culture in influencing behaviour has been largely informed by structural-functionalist social theory (Price & Hawkins, 2007). Within this paradigm, typified by work such as that of Freedman (1987) cited in Price and Hawkins (2007) culture is (mis) understood as a set of prescribed norms that guide social behaviour, and attitudes are seen as synonymous with these cultural norms and expectations. In general, an individual's decision is shaped by the perceived attitudes and behaviours of others in the community (Rimal & Real, 2003). Community norms regarding family size and family planning, then, are likely to influence women's own attitudes, and ultimately influence their use of family planning. Some scholars have argued that culture influences men's attitudes towards family planning. For instance, cultural and religious background of an individual can have a significant effect on men's attitudes toward family planning and reproductive health (Kaida, KippHessel & Konde-Lule, 2005).

Culture persuades the members of a society to act according to a tradition that has been in existence for generations. There are some cultural beliefs that the norm of family life is related to children: children will raise the family status, are an asset to the labour force and social security, and a preference for a son is as a result of the potential for the longevity of the clan (Dewi, 2009). Moreover, Oladeji and Folaranmi (2007) submit that the concept of informed choice in family planning can be applied to a wide range of sexual and reproductive health decisions. According to the authors ,informed choice on reproductive decision making focuses on whether to seek to avoid pregnancy, whether to space and time one's childbearing, whether to use contraception, what family method to use, and whether and when to continue or switch methods. The principle of informed choice focuses on the individual yet most people's family planning decisions also reflect a range of outside influences, community norms have, to a large extent, determine individual childbearing preferences and sexual and reproductive behaviour. Social and cultural norms, gender roles, social networks, religion and local beliefs influence peoples' choices (Bosveld, 1998 guoted in Oladeji&Folaranmi,2007).

Household and community influences can be so powerful that they can obscure the line between individual desires and community norms. For instance, in some cultures, many women reject

contraception because bearing and raising children is the path to respect and dignity in the society (International Planned Parenthood Federation, 1996; Cherkaovi, 2000; Barnett & Stein, 2001). Most women use contraception because having small families is the norm (Mkangi, 2000; Lutz, 2003). Religion is one of the most important social institutions as well as the oldest socio-cultural characteristics associated with mankind and civilization created over thousands of years of known history, finding its influence in all societies, acting as a powerful system of social control with pervasive effects on various aspects of people's lives, attitudes and behaviour (Haloi & Limbu 2013). Religion can be articulated as a multidimensional concept, which includes different levels and measures (Norris & Inglehart, 2004; Southworth, 2005). These may be divided into three main aspects. The first is affiliation - the identification with a specific religion (or lack of such identification); the second dimension is religious practice, most commonly measured as frequency of attendance at religious services; while the third is belief, which can be measured by self-rated religiosity or the importance of religion in one's life (Voas, 2009). To Dewi (2009), religion can sometimes act as a barrier to join family planning, as it is in Uganda, where the Anglican Church followers express a greater acceptance of family planning than Catholics and believers of Islam do. Studies have found that women are more religious than men and that their religiosity has a stronger impact on their behaviour than their male counterparts (Miller & Hoffman, 1995; Krause, Ellison & Marcum, 2002). Beit-Hallami and Argyle (1997) asserts that women are more likely to be attracted to religion because many of the traits valued in religion are considered feminine traits, such as obedience to God and the nurturing of others. Gender socialization and the roles associated with it may partially explain why women may be more prone to adhere to the sexual scripts emphasized by their religious community than men. Explanations for the effect of religion and religiosity on fertility behaviour emphasize the central role that major religions take in shaping the family and childbirth (Lehrer, 2004). The high value that is ascribed to family and children in most religions, with its social implications, is also stressed by Norris and Inglehart (2004:23):

> One of the most central injunctions of virtually all traditional religions is to strengthen the family, to encourage people to have children, to encourage

women to stay at home and raise children and to forbid abortion, divorce, or anything that interfere with high rates of reproduction.

These differences are expressed in the religious texts and teachings of various denominations, including instructions of reproductive behaviour and family roles (Sherkat. 2000: Adsera. 2006). The mechanism through which religion affects fertility could be better understood through the wider context of social organization, including social norms and gender role perceptions associated with the religious group (Goldscheider, 1984 & 2006). Building on Goldscheider's approach to religion and fertility, McQuillan (2004) defines specific social and political settings in which religion would play an important role in shaping demographic behaviour. According to him, religious norms about family and fertility are most likely to influence behaviour when religious institutions have the means to communicate these teachings to their members and to enforce compliance, through formal organizations or informal social pressure. He acknowledges, the role of religion as a moral builder .Religion will affect reproductive behaviour when it articulates norms relevant to fertility; can communicate these values and promote compliance; forms a central component of the social identity of its followers.

McQuail (2000) describe mass media as a means of communication that operates on a large scale, reaching and involving virtually everyone in a society to a greater or lesser degree. Media is a plural of medium, which means a channel or vehicle through which something is carried or transmitted. In other words, mass media are channels of communication in a modern society, primarily the print and the electronic media. He notes that mass media is an organized means for communicating openly and at a distance to many receivers within a short space of time. The mass media is an integral part of people's lives and society. People live in a world influenced and shaped by the sights, sounds, opinions and values provided by the mass media. Broadcast media transmit information electronically, through television, film, radio, movies, CDs, DVDs and some other devices, like cameras and video consoles. The, print media use a physical object as a means of sending information, such as a newspaper, magazines, brochures, newsletters, books, leaflets and pamphlets. The term also refers to the organizations which control these technologies, such as television stations or publishing companies (Potter, 2008;*Oxford Advanced Learners Dictionary*, 2010). Mass communication is a process of transmission of information, cultures, opinions, and attitudes, and so on to a relatively large, heterogeneous and anonymous audience simultaneously (Sambe, 2008).

Mass media interventions have been successful in changing and nurturing both public health activities and social and cultural norms (Stuart, 2009). Family planning and reproductive health are two areas which have been widely used in mass media messaging for some time, particularly in the developing world. A handful of examples of successful interventions include the promotion of vasectomies in Brazil, Africa and Guatemala (Kincaid& Merritt et al 1996; Dunmoye, Moodley & Popis, 2001; Penteado, Cabral, Diaz, Diaz, Ghiron& Simmons ,2001), encouraging HIV prevention and testing (Anon 2006; Rahman & Rahman 2007; Chandra, Jamaluddin, Masih, Faiyaz, Agarwal, & Kumar, 2008; Marum, Morgan ,Hightower, Ngare & Taegtmeyer,2008;Muula 2008) and the broader prevention of Sexual Transmitted Infections STIs (Kim & Marangwanda,1997; Jato, Simbakalia, Tarasevich, Awasum, Kihinga & Ngirwamungu, 1999; Babalola & Vonrasek, 2005; Bertrand & Anhang, 2006).

There is evidence that family planning messages through media play an important role in increasing the knowledge of family planning methods, increased knowledge for acceptance and use, especially in those areas where the literacy level is low (Fikree, Khan, Kadir, Sajan & Rahbar , 2001;Saluja, Sharma, Choudhary, Gaur& Pandey, 2011). Several recent empirical studies have shown that mass media campaigns may lead to behavioural changes and in this way reduce fertility (Islam & Kabir, 2000; Agha & Van Rossem, 2002; Das Gupta, Zhenghua, Bohua, Zhenming, Chung & Hwa-Ok, 2003; Cheng 2011; Rabbi, 2012). Mass media exposure in Bangladesh was found to have a significant difference in fertility, even after controlling for the effects of contraception and socio-economic status (Rabbi, 2012). Cheng (2011) established that in Taiwan mass media and social networks played important roles in disseminating contraceptive knowledge and women transformed this knowledge into behaviour that is, contraceptive knowledge reduced fertility. Another study in Pakistan showed that people who had exposure to condom advertisements on radio or television experienced increase in the following areas: perceived availability of contraceptives, discussion of family planning, approval of family planning, and procurement of contraceptives (Agha & Meekers, 2010).

Lindroos and Luukkainen (2004) aver that Nigeria is a country where modern family planning usage is one of the lowest in the world. This may be due to lack of useful information to those who really need the information as a majority of the Nigerian populace live in the rural areas where there is poor access to modern means of communication including the mass media. Oladeji (2008) observes that communication and decision-making play a vital role in ensuring informed choice of family planning and reproductive health behaviour. Effective communication/decision making allows people to seek what is best for their own health and to exercise their right to good quality health care (Rimal, Ratzan, Arntson & Freitmuth, 2002). Osakue(2010) notes that radio and television have been quite effective in creating family planning awareness in urban Nigeria. This is because the urban dwellers have greater access to the mass media. According to a survey of predominantly urban areas, about 90% of all urban households have radio set and about 60% own television set in Nigeria (Information, Education and Communication, July 1996) and the likelihood that people living in urban areas would readily have access to family planning information as purveyed through radio and television media is high. But to make this level of family planning awareness effective among the generality of Nigerians, the mass media should have a hold in the rural areas where a larger number of the people live. The spread of television and radio, as well as the rise of an independent press, and increasing literacy rates in many countries offer new opportunities for family planners and other health care organizations to inform the public and reach opinion leaders (Poitrow, Treiman, Rimon, Yum &Lozare, 1994).

While examining the knowledge and practice of family planning methods among the currently married adolescent women (CMAW) in India, Narsary (2009) observes that exposure to the mass media and husband-wife communication play a significant role in family planning matters. Obaid (2006) and Abd El-Aziz (2006) recognize the importance of the radio and television media as effective instruments in family planning education in Jordan and Egypt respectively. Similarly, in a research conducted with the aim of assessing the knowledge, understanding and attitude of couples towards family planning across two ecological settings of Jammu District in India, it was found that television and magazines were the major accessible sources of information on family planning to couples (Dhingra, Manhus, Kohli & Mushtaq, 2010). A peer group is a primary group of people, typically informal, who share similar or equal status and who are usually of roughly the same age, tend to travel around and interact within the social aggregate. Members of a particular peer group often have similar interests and backgrounds, bonded by the premise of sameness (Wolf, 2008). A peer group consists of a group of people, usually of similar age, background, and social status, with whom a person associates and who are likely to influence the person's beliefs and behaviour. It is a group of people who share certain social characteristics, such as age, class, occupation, or education, and interact on a level of equality. An individual may be a member of several peer groups, including friends, schoolmates, and coworkers (American Heritage New Dictionary of Cultural Literacy, 2005).

Newson, Postmes, Lea and Webley (2005) argue that, although the amount of practical support available from a kinship network may be one of the factors that influence reproductive decisions at the individual level, if viewed at the population level, kin altruism may have a more important effect. Individuals operating in a social network provide each other with a vast amount of social information. Research in social psychology has shown that the exchange of social information that occurs within a group creates and maintains the social norms or culture of the group (Postmes, Haslam & Swaab, 2005). Women who belong to social groups through discussions between group members develop a canon of values and beliefs that provide explanations for many of the decisions, including reproductive decisions that are made by group members. For instance, the belief that each child needs his or her own bedroom will motivate a couple who can only afford a threebedroom home to avoid having a third child.

Some studies have shown that, while social networks exert a strong influence on more people's reproductive attitudes and behaviour, family planning programmes themselves influence social norms through the diffusion of new ideas about contraceptives (Cleland & Mauldin, 2001). Some review of studies over the last two decades,

particularly a research carried out in 1996, found that programmes have helped convert people's interest in having fewer children into a definite demand for contraception. They have done so largely by making contraceptive use more accessible, common and acceptable in many communities (Freedman, 1997). Rutenberg and Watkins (2002) affirm that, during the course of the day, women often speak to other women about family planning and experience with contraceptive use. For many women, informal communication is a primary source of family planning information. In West Africa, where fertility has been high and practice of modern contraception rare in such settings, information that individuals acquire through social interaction may have a critical bearing on their reproductive decision-making. The connections among individuals' social networks become the pathways along which innovative demographic attitudes and behaviour can diffuse. The underlying assumption of peer group influence is twofold. First, it is generally assumed that people belonging to the same age group tend to confide in one another. Secondly, this is one very significant way in which women learn and communicate; they learn from one another. In doing so, they provide an opportunity for women of childbearing age to learn about reproductive health behaviour from each other.

Statement of the problem

Women reproductive health behaviour has generated a lot of interest from researchers across many disciplines because of complications on women health generally. Hence, improving RHB of women which is a key aspect of the Millennium Development Goals requires a proper understanding of its predisposing factors. Previous studies on women's RHB had focused on various categories of women and teenagers leading to a gap in literature on women in the tertiary institutions, as studies have not targeted this category of women. It is on the basis of this that this study examined the examined the extent to which cultural norms/religious belief , peer influence and mass media exposure influenced the RHB of female lecturers in tertiary institutions in South western Nigeria.

Objectives of the study

The objectives of study were; to:

- i. establish the relationship between cultural norms/ religious beliefs and reproductive health behaviour among female lecturers in tertiary institutions .
- ii. determine the extent to which mass media exposure influences reproductive health behaviour among female lecturers in tertiary institutions .
- iii. examine the extent to which peer influence affects reproductive health behaviour among female lecturers in tertiary institutions .

Research Hypotheses

- H01: There is no significant relationship between cultural norms/ religious beliefs and reproductive health behaviour among female lecturers in tertiary institutions in Southwestern Nigeria.
- **H0₂:** There is no significant relationship between mass media exposure and reproductive health behaviour among female lecturers in tertiary institutions in Southwestern Nigeria.
- **H0₃:** There is no significant relationship between peer influence and reproductive health behaviour among female lecturers in tertiary institutions in Southwestern Nigeria.

Methodology

The research design adopted for the study was the descriptive survey research design of the ex-post-facto. This design was adopted because it helps to describe and interpret the conditions or relationships that exist, opinions that are held, processes that are going on, effects that are evidence or trends that are developing. This type of design is usually adopted where the researcher does not aim at manipulating the variables of the study since the variables have already occurred. The population for this study consisted of female academic staff that had spent at least two years in the tertiary institutions in Southwestern, Nigeria.

Inclusion criteria

The inclusion criteria for the study were:

- i) they must be female academic staff that have spent at least two years in tertiary institutions
- ii) they must be female academic staff working in tertiary institutions
- iii) they must be married
- iv) they must be female academic staff above the legal age, 19 years and above

The multi-stage sampling procedure was adopted for the study.

First stage

In the first stage, the purposive sampling technique was adopted to pick thirteen tertiary institutions (five federal universities, four federal polytechnics and four colleges of education).

Second Stage

In the second stage the stratified sampling technique was used to divide the tertiary institutions into faculties for the universities; schools for the polytechnics, and schools for the colleges of education.

Third stage

The simple random sampling technique was used to select 550 respondents from various faculties and schools.

Instrumentation

The instruments for data collection were developed and self-structured by the researchers. It is tagged *Reproductive Health Behaviour Scale and "Reproductive Health Behaviour Predictors Scale*. Section A of the instruments focused on the respondents' bio data such as age, age at marriage, religion, educational attainment, income per month, current residence and so on. The validity and reliability of each of the questionnaire were determined separately. The instruments were complemented with the use of the qualitative methods- In-depth Interview (IDI) and Focus group Discussion (FGD) - which helped to strengthen the research findings.

Reproductive Health Behaviour Scale

This instrument was developed by the researchers to collect information on reproductive health behaviour of female lecturers on family size, timing and spacing of children, number of children and use of contraceptives to prevent unwanted/unplanned pregnancies and safe sex relations. It was made up of a section of 18 items drawn on closed ended questions respectively. The validity of the instrument was ascertained through face and content validity by experts in the fields of Community Development and Social Welfare and Nursing in the University of Ibadan, Ibadan. The corrections, criticisms and opinions of these experts were carefully studied and incorporated into the final draft copy before subjecting it to pilot study. The reliability of the instrument was determined through test, re-test method within an interval of two weeks among 20 respondents in a state university that was not part of the study. The result of Cronbach Coefficient of alpha value of 0.81 was obtained, indicating high accuracy of the instrument

Cultural /religious beliefs and reproductive health behaviour scale

This scale in Section F, was also developed to collect information on the influence of cultural background/religious belief on reproductive health behaviour. It was made up of one section. The scale consisted of 17 items on a modified four-point rating scale of Strongly agree (SA), Agree (A), Disagree (D) and Strongly disagree (SD). The corrections, opinions and modification of experts served as the method of achieving the face and content validity of the instrument. The reliability of the instrument was determined through the test, re-test method within an interval of two weeks among 20 respondents in a state university that were not part of the study. The result of Cronbach Coefficient of alpha value showed 0.83

Mass- media exposure and reproductive health behaviour scale

This instrument in Section G, focused on mass media exposure on reproductive health behaviour. It consisted of 14 items of positive statements measuring mass media exposure on reproductive health behaviour, mass media exposure on the knowledge of contraceptive use and ovulatory cycle. It contained a modified four-points Likert scale of Strongly Agree (SA), Agree(A), Disagree (D), and Strongly Disagree (SD) which carried the weights of 4,3,2,1, respectively. The face and

content validity of experts in the fields of Community Development/ Social Welfare and Nursing in the University of Ibadan, Ibadan helped in reworking this scale. The reliability of the instrument was determined through the test, re-test method within an interval of two weeks among 20 respondents in a state university who were not part of the study. The result of Cronbach Coefficient of alpha value showed 0.75.

Peer influence and reproductive health behaviour scale

This scale, in section I, was developed by the researcher to collect information on the influence of female lecturers peers on theirreproductive health behaviour. It was made up of one section of 10 items drawn on a modified four-point rating scale of strongly agree (SA), agree (A), disagree (D) and strongly disagree (SD).

The validity was obtained through examination by some experts to establish the content validity of the instrument. The experts consisted of scholars in the fields of Community Development and Social Welfare and Nursing in University of Ibadan, Ibadan. They included the researcher's supervisor and other members from the university. The reliability of the instrument was determined through the test, re-test method within an interval of two weeks among 20 respondents in a state university who were not part of the study. The result of Cronbach Coefficient of alpha value showed 0.71.

Results and Discussion of Findings

H01: There is no significant relationship between cultural norms/ religious beliefs and reproductive health behaviour among female lecturers in tertiary institutions in Southwestern Nigeria.

Table 1: Pearson Product Moment Correlation Coefficient onRelationship between Cultural Norms/Religious Beliefs andReproductive Health Behaviour

Mean	Std. Dev.	Ν	R	Ρ	Remark
15.5813	7.8195				
		540	.066*	.000	Sig.
13.0915	2.1138				
	15.5813	15.5813 7.8195	15.5813 7.8195 540	15.5813 7.8195 540 .066*	15.5813 7.8195 540 .066* .000

** Sig. at .05 level

It is shown in the table above that there was significant relationship between reproductive health behaviour and cultural norms/ religious beliefs among lecturers in the tertiary institutions in southwestern Nigeria ($r = .066^*$, N = 540, P < .05). Therefore, the null hypothesis is rejected. The result in table also shows that cultural norms/ religious beliefs determine the number of children the women had. From the findings, one could say that religion prescribes a code of life, a system of beliefs, attitudes and practices which individuals share in groups. This orientation towards life and death is supposed to affect one's reproductive health behaviour. Moreover, religion refers to a system of attitudes, beliefs and practices which individuals share in-group. In Nigeria there are various religious groups. Belonging to a religious affiliation is a relevant factor in understanding individual decisions affecting reproductive health behaviour.

Religion is, perhaps, one of the social attributes of relative importance in Nigeria as there are various faiths like Islam, Christianity and African traditional belief system. The respondents in this study, belonged to different religious groups. Religion is one of the most important social institutions as well as the oldest socio-cultural characteristics associated with mankind and civilization created over thousands of years of known history, finding its influence in all societies, acting as a powerful system of social control with pervasive effects on various aspects of people's lives, attitudes and behaviour (Haloi & Limbu 2013). Religion can be conceptualized within socio cognitive models of health behaviour because religious beliefs and practices often influence cost/benefit analyses, value perception, perceived behavioural control, and social influence. There is a growing body of literature that has found religious involvement to have a salutary effect on health behaviour and outcomes (Chatters, 2000).

Among the Muslim participants, there were some who claimed that Islam addresses the use of contraceptives, and reported that they were living in agreement with what is written in religious texts on the topic. One of the IDI participants said:

> Islam does not prohibit contraceptive use. It prohibits abortion. Islam does not encourage women to go for abortion in case she got pregnant unexpectedly, as a practising Muslim I practise the traditional method of avoiding unwanted pregnancy I'm blessed with children,

both girls and boys. (Academic staff)

A participant in the IDI supported this idea, and argued that Islam supported contraceptives based on the idea that it was necessary, to prevent poverty:

It's obvious that Allah will punish one for aborting any child because children are the gift of Almighty Allah and the work of Him alone. If a person doesn't have enough wealth then she should not have many children. The children may suffer from poverty after they come to this world. Sharia supports the idea of limiting the number of children. (Academic staff)

The FGD provided opportunity to address the issue of religion on reproductive health behaviour. In one of the session, it was noted that: Islam is a religion that believes that, no matter the status of the women she must be submissive and believe in procreation. It now depends on the husband whether he wants many children or not and the wife must obey.

There are some studies indicating that there is no statistical association between the practice of family planning and religion (Abraham, Adamu & Deresse, 2010; Nanda, Adak & Bharati, 2011) and a mixed influence of religion on women's contraceptive practices (Ohlendorf & Fehring,2007). Sarkar (2008), who studied reproductive biology, found that that the use of contraceptives is approved by some Muslims because the Islamic faith stresses that children have a right to education and future security. This entails that the number of children in a family may have to be limited, and birth controlled. This is similar to some of the views among the IDI participants in this study. However, a KII female Christian participant argued that:

> To me, the Bible says multiply and replenish the world, that is bring children to the world, and it also says parents should take proper care of them as parents will give account of them when they go to heaven. What the Holy Book is saying is that I should give birth to the number I can take care of. My church has given counselling not to abort any unwanted child, Matrons in

my group have encouraged women to plan the number of children they want by going for family planning and I am using one method presently which is better than committing a big sin against God (Academic staff)

One of the participants argued that religion positively influences reproductive health behaviour through the use of contraceptives:

My religion (Orthdox Church) encourages contraceptives use because religion doesn't want us and our children to suffer. So the religion doesn't prohibit ist use rather it prohibits sin against God through abortion. (Non – academic staff)

Similarly, another female academic staff in the FGD remarked that: Christian faith advocates one man one wife as written in the Holy Bibble (Bible); which some families have imbibed therefore such family's family size tends to be smaller because there is no competition among wives as to who would produce the greater number of children.(FGD/University)

The participants all saw children as an essential issue for the married people, as they believed that children are gifts from God, and that the woman must receive all God gives them. Abortion was seen as a sin against God. The experience of the female workers that participated in the IDI and FGD showed how religious beliefs influenced their reproductive health behaviour. Religious texts were interpreted differently. This could affect their attitude towards their reproductive health behaviour in different ways. Previous research has extensively highlighted the relevance of religious affiliation and reproductive health behaviour. A cross-sectional study conducted in Shantibagh and Vaidyanath Nagar community in KotekarPanchayat at Mangalore among rural women in India by Aras, Veigas and D'souza (2012) shows that there is correlation between religion and reproductive health behaviour.

Reproductive health behaviour is greatly influenced by culture. The reproductive behaviour of most women in Africa is guided by the culture of silence embedded in them (Muoghalu, 2011). On the cultural aspect of reproductive health behaviour one of the female workers remarked thus:

I will say cultural beliefs to some extent, influence the decisions women make as regards the number of children they want, contraceptive usage and spacing, I'm a Yoruba woman. The cultural believe is that children are the heritage of future and extended family believes that a woman must give birth to many children that at old age this children, will be source of wealth for the family. (academic female lecturer)

Another participant expressed her view thus:

In this modern age things are changing a bit, most educated couples now give birth to few children let say between 2 and 3 and its more common among women living in urban centres now. I live in Lagos hardly will you see couples having 4 or 5 children these days, the culture is changing gradually unlike in those days that our parents have 7 and more . My parents had 6 of us but I have only 3 children. (Academic female lecturer).

Also a contributor in the FGD stated that;

In almost all cultures, particularly among yorubas, women respect their husband and obey them even if you are a professor, doctor or president you must submit to your husband. Women don't just do anything regarding their reproductive health; culture does not permit it.

The IDI and FGD support the opinions of Srikanthan and Reid (2008) that the perception and the behaviour related to reproductive health are strongly determined by prevailing cultural and religious values. The female workers in tertiary institutions work in urban areas. Their reproductive behaviour could be affected by culture and religious belief. This agrees with the findings of Reed, Briere and Casterline (1999); Shapiro and Tambashe (2001) and Kravdal (2000& 2002) that one of the three community characteristics is proximity to urban areas

because, historically, ideas supporting low fertility diffused from urban to rural areas through migratory processes.

Moreover, female workers are usually residing in urban areas making them to have access to transportation, information and healthcare facilities, which may affect their reproductive health behaviour. Saha (1994) agree that access to community infrastructural development, modern amenities, like electricity; farming machinery; and health services have the potential to reduce economic and social uncertainty in a community and thereby turn the economic calculus against high fertility.

H0₂: There is no significant relationship between mass media exposure and reproductive health behaviour among female lecturersin tertiary institutions in Southwestern Nigeria.

Mass -Media Exposure and Reproductive Health Behaviour

To determine the relationship between mass-media exposure and reproductive health behaviour among female lecturer sin tertiary institutions in southwestern Nigeria as raised by

H0₂: Pearson Product Moment Correlation analysis was used. The result is presented in Table 2

 Table 2 Product Moment Correlation Coefficient on Relationship

 between Mass -Media Exposure and Reproductive Health Behaviour

Variables	Mean	Std.	Ν	R	Ρ	Remark
		Dev.				
Reproductive	10.1591	7.1005				
Health Behaviour			540	.070*	.000	Sig.
	8.8659	01.4899				
Mass- media						
exposure						

** Sig. at .05 level

The table above shows that there was significant relationship between reproductive health behaviour and mass-media among female lecturers in the tertiary institutions in Southwestern, Nigeria ($r = .070^*$, N = 540 P < .05). The null hypothesis was, therefore, rejected. The findings in this

study reveals that there is significant relationship between mass-media exposure and reproductive health behaviour among the female lecturers in the tertiary institutions in southwestern, Nigeria. In Nigeria, radio has been established to have a broad range of users across the country among the citizen of Nigeria irrespective of their socioeconomic status, people are believed to be listening to radio either everyday or most days (Society for Family Health, (SFH) 2003). The SFH reported that 65% of adult population in Nigeria listens to radio at least once every day. The SFH further suggested that the use of radio for HIV/AIDS education and family planning can reach both the literate and the illiterate.

This finding is supported by Witte, Girma and Girgre (2001) and Lee (2004) who argue that the use of radio for health promotion and campaign on family planning and HIV prevention in Ethiopia revealed that almost 64% of the respondents reported daily listening to radio in that country. Similarly, Ubah and Sani (2009) in a work on Benue State, Nigeria, discovered that 66% of the respondents reported to have listened to radio, at least once every day.

The empirical findings of previous researchers also support the hypothesis stated above, Adhikari (2010) found that in Nepal, massmedia exposure (radio/TV) has an important effect on reproductive behaviour. It could be because radio and television programmes and the values they disseminate are transmitted directly into the home. They have the potential to directly affect every member of the household. Even those with little or no schooling (Reed, Rona &Casterline, 1999). Media images and messages may also influence fertility by increasing consumption aspirations, which may in turn decrease preferences for a large family (Hornik & McAnany,2001).The role of the mass-media in changing both patterns of contraceptive use and notions of ideal family size could be another reason for low fertility among those exposed to mass media (Kulkarni, 2003). The IDI conducted agreed that the mass-media has been a source of information for them particularly on their reproductive health behaviour. A female non academic staff has this to say:

> I listen to radio programmes on family planning almost twice in a week. It has been very educative and entertaining which has helped me a lot on ovulation period, the types of family planning methods that one

can use in case one wants to space or time one's children and even prevent unwanted pregnancy. I don't have much time to read newspapers or go on the internet I listen a lot to radio programmes

Another participant stated thus:

I have four children. It was while listening to radio programme that I learnt a lot on contraceptive and its importance in the life of a mother. The message on the radio affected me very much positively, including the value of small families.

Another IDI participant summarized thus:

I watch the cable network a lot, particularly the ones on health it called the Doctors. It is very educative and entertaining discussing on women health generally, on contraception, menstruation, pregnancy, ways of preventing illness and diseases it has helped me a lot.

A female lecturernoted thus:

I listen to reproductive health programmes by Society for Family Health. It is a very good programme meant for all women to adopt family planning by visiting the nearest clinic in order to space one's children and the benefits for both the women and family

Female lecturers believed that the mass-media, particularly radio and television have been entertaining and educating exposing women to knowledge and dangers of not practising good reproductive health behaviour. The mass-media, for a very long time, has been identified as a very powerful source of communication.

Mass media messages through television or radio have the potential influence on the promotion of the use of family planning. One participant in the FGD avered that:

I watch television everyday when I am at home when there is electricity and when not I put on the generator to watch programme on clinic matters. Another woman in FGD expressed a similar view:

I listen to radio and watch television on family planning progranmme.

Only few of the participants in the FGD claimed to read magazines or use the Internet occasionally. They argued that they did not have sufficient time to read newspapers. Also, every participant had heard about family planning methods in the media. All of them claimed that exposure through mass media positively influenced their adoption of contraceptives.

Osakue (2010) assets that radio and television have been quite effective in creating family planning awareness in urban Nigeria. This is because the urban dwellers have greater access to the mass media. According to a survey of predominantly urban areas, about 90% of all urban households have radio sets and about 60% own television sets in Nigeria (Information, Education and Communication, 1996) .The likelihood that people living in urban areas would readily have access to family planning information through radio and television is high.

Evidence from studies on the interrelation between the mass media and reproductive health has convincingly showed that radio and television play a major role in informing and shaping life aspirations and personal value, especially among women of childbearing age .The two types of media help in providing reproductive health education on issues of family planning, contraceptive usage, HIV/AIDS and other Sexually Transmitted Diseases (STDs) behaviour (Sedgh, Bankole, Okonofua, Immarhiagbe, Hussain & Wulf, 2009). The media, particularly the radio and television have important roles to play in influencing women reproductive health behaviour .They have the advantage of wider coverage. Public health campaigns are aimed at informing and educating people, most especially women. This provides the foundation for possible behaviour change. The radio and television are important channels for educating women through soaps operas, drama series and jingles, which are powerful catalysts for behavioural changes.

Oladeji (2008) observes that communication plays a vital role in ensuring that informed choices of reproductive health behaviour are made. This allows people to seek which approach is best for their own health and to exercise their right to select the quality of health care that they consider appropriate. It has been argued that the mass media, especially radio and television, has been quite effective in creating awareness on issues of women reproductive behaviour. Williams (2007) avers that there is strong evidence that the mass media, particularly educational and entertainment broadcast media, have played a significant role in a number of countries in bringing about changes in reproductive behaviour and in promoting the adoption of other health measures. Examples are radio and television soaps in Brazil (Westoff & Bankole, 1997), Ethiopia(Singhal, Cody, Rogers & Sabido, 2003), India (Singhal & Rogers, 1999), Niger and St Lucia (Vaughan, Regis & St. Catherine, 2000) and Tanzania (Rogers, Vaughan, Swalehe, Rao, Svenkerud & Sood, 1999). Exposure to the mass media has substantial effects on female workers' attitudes towards their reproductive health behaviour in the study area because they are residents in urban areas. Some advantages that urban women have over their rural counterparts are higher levels of knowledge, access to services, education and health promotion programmess that use the urban focused mass media, thus leaving out their rural counterparts who may be largely influenced by traditional practices (Audu & Ekele 2002; Adetoro, Taiwo, Martin & Ann, 2007). When a woman is exposed to the outside world through communication and discussion, she becomes aware of various novel health services and developments, and their benefits (Mohammed, 2001). Thus, the workplace of these workers could be an appropriate setting for addressing sensitive reproductive health issues, since it is a place where they spend a considerable amount of time interacting with other members and their colleagues.

H0₃: There is no significant relationship between peer infuence and reproductive health behaviour among female workers in tertiary institutions in Southwestern

Peer Influence and Reproductive Health Behaviour

To determine the relationship between peer influence and reproductive health behaviour among female lecturers in tertiary institutions in southwestern Nigeria as raised by

H0₃: Pearson Product Moment Correlation analysis was used. The result is presented in Table 3.

Variables	Mean	Std.	Ν	R	Ρ	Remark
		Dev.				
Reproductive Health	11.5120	6.032				
Behaviour			540	-	.000	Sig.
				.602*		-
Peer Influence	9.2193	4.437				

 Table 3 Pearson Product Moment Correlation on Relationship

 between Peer Influence and Reproductive Health Behaviour

** Sig. at .05 level

It is shown in the above table that there was significant relationship between reproductive health behaviour and peer influence among female lecturers in tertiary institutions in southwestern Nigeria ($r = -.602^*$, N= 540, P < .05). Therefore, the null hypothesis was rejected. Casterline, Zebal and Haque (2001), Godley (2001), Berhman, Kohler and Watkins, (2002), Barber, Pearce, Chaudhury and Gurung (2002), Madhavan, Adams and Simon, (2003) all examined the influence of individual or groups on reproductive health behaviour. They claim that it gives bearing on reproductive behaviour, particularly contraceptive behaviour. In the IDI conducted among female workers, one of them expressed her views on the influence of peer group on reproductive health behaviour. She stressed that:

> When you are with your friends especially your mate there is nothing you cannot tell one another. My friends have been supportive to me a lot. They encourage me to go for family planning as I got pregnant while breastfeeding my baby (Non-academic staff)

A female academic staff described how peer group influenced her reproductive health behaviour. She said:

I feel more comfortable talking to my friend. She is a lecturer in Public Health, she gives me information regarding family planning methods and encourages me to adopt the best that would not give me side effects. She has three kids so also do I.

Another female academic participant in the IDI explained how peer influence motivated her to adopt contraceptives use:

I have seen women who use contraceptives to limit the number of children, in order to improve their lives. So we learn from each other and it motivates us to use contraceptives. If a family has too many children, it is impossible to improve the life and to meet all the needs of many children.

Responses also showed show that female workers' decisions about reproductive health behaviour may be influenced by their relationship within her peers whether within the work environment or outside. Peers also have a notable influence on contraceptive use among the female workers in the IDI conducted: If a woman perceives that most of the others in her community/group are using modern methods, she is more likely to use them as well. Peer influence is, one of the determinants women should place great concern on, as they freely discuss issues of reproduction with other women of the similar age group and age.

This finding is supported by Manski's (2004) study which revealed that when women are uncertain of the merits of modern contraception, they decide about the method to use on the basis of discussions with network members. Studies from countries such as Kenya, Thailand, Cameroon and the Philippines demonstrate that a woman's contraceptive use is positively related to perceived encouragement by social network members and negatively associated with perceived disapproval (Casterline, Perez & Biddlecom, 1997, Valente et al, 1997; Godley 2001). This finding supports those of other studies which confirmed that, during the day, women often speak to other woman about family planning and experience with contraceptive use and that, for many women, informal communication is the primary source of family planning information (Rutenberg & Wakins, 2002).

Female workers may belong to one group or the other, as a peer group consists of group of people usually of similar age, background and social standing with whom a person associates. A peer group is likely to influence a person's beliefs and behaviours. These findings buttresses observations of various scholars that everybody belongs to informal social networks that influence behaviour to some degree. Examples of social networks are extended family, friends, neighbours and formal and informal associations (Roger, 1999; Panel on Population Projection Committee on Population and National Research Council, 2000; Montogometry & Chung ,2000)

Conclusion

The results from the questionnaire, IDI and FGD provided rich insights and in-depth data in both quantitative and qualitative forms on the determinants that should be considered towards reproductive health behaviour of female workers. The study showed that:

- mass-media exposure through the radio and television positively determined the reproductive health behaviour of female workers in tertiary institutions in southwestern ,Nigeria
- ii) peer influence was considered as a determinant of reproductive health behaviour of female workers
- iii) Cultural norms/religious beliefs determined and were related to the reproductive health behaviour of the female workers

Recommendation

It was understood from this present study that there was some evidence regarding the impact of the determinants on reproductive health behaviour of female lecturers.

- However, to ensure improved reproductive health behaviour among female lecturers in tertiary institutions, there is the need to strengthen the use of the mass media particularly radio and television programmes to promote better reproductive health behaviour.
- In addition, government should encourage and motivate women having two or more children to adopt family planning through mass media messages.
- Government as well as NGOs and international organizations should take many policies and programmes to improve reproductive health issues.
- It is necessary to encourage inter-spousal communication, particularly initiatives by women. Women must be exposed to their rights (especially women's rights in every sphere of life) with the help of print and electronic media, special lectures, especially in educational institutions at all levels.
- Women's participation in decision making process should also be encouraged For this purpose, government must create

awareness on the importance of participation of family members particularly the women in decision- making processes through the media and special lectures in educational institutions at all levels.

References

- Abraham W, Adamu A, & Deresse D 2010. The involvement of men in family planning an application of transtheoretical model in WolaitaSoddo Town, South Ethiopia. *Asian Journal of Medical Science*; 2: 44–50.
- Adetoro A.A, Taiwo O.L., Martins O.O. and Ann M.T., 2007. A community-based investigation of the avoidable factors of maternal mortality in Nigeria: the pilot experience. *Afr Health sc*, 7: 176-81
- Adsera, A. 2006a. religion and changes in family-size norms in developed countries. *Review of Religious Research*, 47(3), 271-286.
- Agha, S. and Meekers, D. 2010. Impact of an advertising campaign on condom use in urban Pakistan. *Studies in Family Planning*, 41(4), 277-290.
- Agha, S. and Van Rossem .R 2002. Impact of mass media campaigns on intentions to use the female condom in Tanzania. *International Family Planning Perspectives* 28(3):151-158
- American Heritage New Dictionary of Cultural Literacy, 2005
- Anon I. 2006. Media crucial to AIDS fight. *AIDS Patient Care and STDs* 20(9): 662
- Aras R.Y, Veigas I, D'souza N. 2012. Gender variables and reproductive behaviour of women from rural Mangalore, South Karnataka, India. International Journal of Collaborative Research on Internal Medicine & Public Health. 4(3):167-179.
- Arowomole, K. A. 2000 Modern business management (theory and practice). Sango-Ota, Ade-Oluyinka Commercial Press.
- Audu L.R. and Ekele B.A. 2002. A ten year review of maternal mortality in Sokoto Northern Nigeria. West African Journal of Medicine. 21: 74-6.
- Babalola, S. and Vonrasek C 2005. Communication, ideation and contraceptive use in Burkina Faso: an application of the propensity score matching method. *Journal of Family*

Planning and Reproductive Health Care 31(3): 207-212

- Barber, J, Pearce L .D, Chaudhury .I, and Gurung .S 2002. Voluntary associations and fertility limitation, *Social Forces* 80(4): 1369-1401.
- Beit-Hallahmi B and Argyle M. 1997 The psychology of religious behaviour, belief and experience. Routledge., New York: Taylor and Francis.
- Bertrand, J.T and Anhang R 2006. The effectiveness of mass media in changing HIV/AIDS related behaviour among young people in developing countries. *World Health Organization Technical Report Series*: 205-241
- Casterline J.B., Perez A.E. and Biddlecom A.E. 1997, Factors underlying unmet need for family planning in the Philippines, *Studies in Family Planning*, 28(3):173–191.
- Chandra, H., Jamaluddin, K., Masih, L., Faiyaz, K. Agarwal, N. Kumar, D. 2008. HIV/AIDS awareness through mass media. The measurement of efforts made in an urban area of India." *Indian Journal of Public Health* 52(3): 171-172
- Chatters L 2000. Religion and health: public health research and practice. Ann Review Publication in Health; 21:335–67.
- Cheng, Kai-Wen 2011. The effect of contraceptive knowledge on fertility: the roles of mass media and social networks. *Journal of Family and Economic Issues*, 32(2): 257–267.
- Cherkaovi, M. 2000. Fertile changes. ORGYN: 27-32
- Cleland, J. and Maudlin, W. 2001. The promotion of family planning by financial payments: the case of Bangladesh. *Studies in family planning*, 22(1), 1-18.
- Das Gupta M, Zhenghua J, Bohua L, Zhenming X and Chung W and Hwa-Ok B, 2003. Why is son preference so persistent in East and South Asia? a cross-country study of China, India and the Republic of Korea," The Journal of Development Studies, 40(2), Pp 153-187
- Dewi V.Y 2009 Factors that influence male participation in family planning and reproductive health in Indonesia. Retrieved from http;/itp-bkkbn.org/pulin
- Dhingra R., Manhas S., KohliN and Mushtaq A. 2010. Attitude of couples towards family planning. *Journal of Human Ecology*, 30(1): 63-70.

- Dunmoye, O. O. Moodley, J and Popis . 2001 "Vasectomy in developing countries." *Journal of Obstetrics and Gynecology* 21(3): 295-297
- Fikree F.F., Khan A., Kadir M.M., Sajan F. and Rahbar, M.H. 2001. What influences contraceptive use among young women in urban squatter settlements of Karachi, Pakistan? *International Family Planning Perspectives*, 27:130-6.
- Freedman R. 1987. The contribution of social science research to population policy and family planning effectiveness. *Stud Family Planning*; 18:57-80.
- Freedman, R. 1997. Do family planning programmes affect fertility preferences? A literature review. *Studies in Family Planning* 28(1), 1-13.
- Goldscheider, C. 1984. "Migration and rural fertility in less developed countries. inRural Development and Human Fertility, W. A. Schutjer and C. S. Stokes (Eds). New York NY: Macmillan. Pp. 34-48.
- Goldscheider, C. 2006. Religion, family and fertility: What do we know historically and comparatively? Religion and the decline of fertility in the Western world. Derosas, R. and van Poppel, F. (Eds.). Dordrecht: Springer. Pp. 41-57.
- Haloi A. and Limbu D.K. 2013. Socio-economic factors influence the age at first marriage of Muslim women of a remote population from North-East India. *Antrocom Online Journal of Anthropology*, Vol. 9. No. 1.

Information, Education and Communication (IEC), July 1996

- International Planned Parenthood Federation (IPPF) 1996 IPPF Charter on Sexual and reproductive rights. London: IPPF 63p.
- Islam, M.A. and Kabir, M. 2000. Does mass media program has any impact on the pregnancy status of rural women. *Jahangirnagar University Journal of Science*, 22 & 23, 245-255.
- Jato, M.N., Simbakalia C, Tarasevich J.M., Awasum D.N., Kihinga C.N.B, and Ngirwamungu, E. 1999. The impact of multimedia family planning promotion on the contraceptive behavior of women in Tanzania." *International Family Planning Perspectives* 25(2):60-67
- Kaida A., Kipp W., Hessel P. and Konde-Lule, J. 2005. Male participation in family planning: results from a qualitative study in Mpigi District, Uganda. *Journal of Biosococial Science*, Vol.37, pp.269-

286.

- Kim, Y. M. and Marangwanda C. 1997. Stimulating men's support for long-term contraception: a campaign in Zimbabwe. *Journal of Health Communication* 2(4): 271-297
- Kincaid, D. L., Merritt A. P, Nickerson, L. Buffington, S.C, Castrol, M.P.P and Castro, B.M., 1996. Impact of a mass media vasectomy promotion campaign in Brazil. *International Family Planning Perspectives* 22(4): 169-175
- Krause N., Ellison C. and Marcum J. 2002. The effects of church-based emotional support on health: do they vary by gender. Sociology of Religion. 63:21-47
- Kravdal, Ø. 2000. A search for aggregate-level effects of education on fertility, using data from Zimbabwe. *Demographic Research* 3.
- Kravdal, Ø. 2002. Education and fertility in sub-Saharan Africa: individual and community effects. *Demography* 39:233-250.
- Lee, B. 2004. The effectiveness of entertainment –education as media health campaigns: the effects of entertainment narrative and identification on HIV/AIDS preventive behavior. Unpublished PhD Dissertation. Michigan State University
- Lindroos A. and Luukkainen A 2004. Antenatal care and maternal mortality in Nigeria. From <http://www.uku.fi/kansy/eng/antenal_care_nigeria.pdf> (Retrieved November 7, 2010).
- Lutz, W. 2003. Reproductive behaviour in industrialized countries. The future, population of the world, Lutz W. (Ed.). Laxenburg Austria, International Institute for Applied System Analysis. P. 267-294.
- Manski C.F. 2004. Measuring expectations. *Journal of the Econometric Society*Vol 72 *Econometrica*, 72 (5), 1329-1376.
- Marum, E., Morgan G., Hightower A., Ngare C. and Taegtmeyer M. 2008. Using mass media campaigns to promote voluntary counseling and HIV-testing services in Kenya. *AIDS* 22(15): 2019-2024.
- McQuail, D 2000. *Mass communication theory*. 4th Edition. London: Sage Publication.
- McQuillan, K. 2004. When does religion influence fertility? *Population and Development Review* 30(1): 25-56.

- Miller A and Hoffman J. 1995. Risk and religion: an explanation of gender differences in religiosity. *Journal for the Scientific Study of Religion*. 34:63-75.
- Mkangi, K. 2000. The social cost of smaller nuclear families: a critique of demographic transition (Occasional papers from summary series B). *Development Studies* (2): 43-49
- Mohammed, S. 2001. Personal communication networks and the effects of an entertainment-education radio soap opera in Tanzania. *Journal of Health Communication* 6 (2): 137–54
- Mohd, K. H. 2005. Small and medium-sized enterprises in Malaysia-Role in isuues. Sintok:UUM Press.
- Montgomery, M.R. and Chung, W. 2000. Social network and the diffusion of fertility control: The Korean case presented at the seminar on values and fertility change. Sponsored by The International Union for the Scientific Study of Population, Sion, Switzerland, Feb 16-19, 44p.
- Muoghalu C.O. 2005. The career woman and reproductive health behaviour in Nigeria. A case study of Ile-Ife and Lagos retrieved from http://www.ajol.info
- Muula, A.S. 2008. South Africa's national response to HIV and AIDS treatment: Popular media's perspective. *Croatian Medical Journal* 49(1): 114-119.
- Nanda J, Adak DK, Bharati P. 2011. Contraceptive practices among adolescent married women in Tamil Nadu, India. *Asian Pacific Journal Tropical Disease*; 137–141
- Narsary P.K. 2009. Knowledge and use of contraception among currently married adolescent women in India. *Studies on Home and Community Science*, 3(1): 43-49.
- Newson, L., Postmes, T., Lea, S.E.G. and Webley, P. 2005. Why are modern families small? toward an evolutionary and cultural explanation for the demographic transition. *Personality and Social Psychology Review, 9*.
- Norris, P. and Inglehart, R. 2004. Sacred and secular: religion and politics worldwide. Cambridge: Cambridge University Press.
- Obaid B.N. 2006. The dynamics of spacing and timing of births in Jordan: analysis based on hazard models. Cairo: Cairo Demographic Centre. *Obstetrics and Gynecology*, 106:1228-1234.

- Odimegwu, C.O., Omideyi A.K. and Okemgbo C. 2001. Couple characteristics and fertility decisions in Imo State Nigeria. Paper Prepared For Pan 2001 Annual Conference, UCN. Lagos October 14-17
- Ohlendorf J and Fehring RJ. 2007 The influence of religiosity on contraceptive use among Roman Catholic women in the United States. Linacre Quarterly; 74: 135–144.
- Oladeji D. 2008. Communication and decision making factors influencing couples interest in family planning and reproductive health behaviours in Nigeria. Studies Tribes Tribals 6 (2); 99 -103 http: www.krepublishers.com /02
- Oladeji D. and Folaranmi O. 2007. Socio-cultural and norms factors influencing family planning choices among couples in Ibadan metropolis, Nigeria Me/dweu Pakistan Journal of Social Sciences 4 (3): 419-423.
- Oxford Advanced Learner's English Dictionary, 2010. Oxford University Press..
- Panel on Population Projections, Committee on Population and National Research Council, 2000
- Parr, N. 2002. Family Planning Promotion, Contraceptive Use and Fertility Decline in Ghana. *African Population Studies*. 2002; 17(1): 83-101.
- Penteado, L. G., and Cabral, F et al. 2001. Organizing a public-sector vasectomy programme in Brazil. *Studies in Family Planning* 32(4): 315-328
- Piotrow P., Treiman K., Rimon J., Yum S., and Lozare B. 1994. Strategies of family planning promotion. *Washington, D.C.:* World Bank Technical Paper No. 223, P. 20.
- Postmes, T., Haslam, S.A. and Swaab, R. 2005. Social influence in small groups: an interactive model of social identity formation. *European Review of Social Psychology*, 16, 1-42
- Potter, W. J 2008. Arguing for a general framework for mass media scholarship. *SAGE*. p. 32.
- Price N.L. and Hawkins K. 2001. Young people's sexual and reproductive health: towards a framework for action. Managing Reproductive life: Cross-cultural Themes in Sexuality and Fertility, Tremayne S, (ed). Oxford: Berghahn Books: 194-220.

- Rabbi, A.M. 2012. Mass media exposure and its impact on fertility: Current Scenario of Bangladesh. *Journal of Scientific Research*, 4(2), 383-395.
- Reed H., Rona B. and Casterline. J. (Eds). 1999. The role of diffusion processes in fertility change in developing countries: Report of a Workshop. Washington, D.C. :National Academy PressRenne.
- Rimal R.N., Ratzan S.C., Arntson P. and Freitmuth Y.S. 2002. Reconceptualising the patient: health care promotion as increasing citizens' decision-making competencies. *Communication*, 9(1): 61-74.
- Rimal, R.N., and Real K. 2003. Understanding the influence of perceived norms on behaviours. *Communication Theory* 13(2): 184-203.
- Rogers E.M., Vaughan P., Swalehe R.M.A., Rao N., Svenkerud P., and Sood S. 1999. Effects of an entertainment-education radio soap opera on family planning behaviour in Tanzania. *Studies in Family Planning* 30(3): 193-211.
- Rogers, E.M. 1999. Diffusion of Innovation. 1st ed. New York, Free Press
- Rutenberg, N. and Watkins, S.C. 2002. The buzz Outside and clinics: Conversations and Contraception in Nyanza Province, Kenya. *Studies in Family Planning* 28(4): 290-307.
- Saha, T. D. 1994. Community resources and reproductive behaviour in rural Bangladesh. *Asia-Pacific Population Journal*. 9:3-18.
- Saluja,N., Sharma S, Choudhary S, Gaur D and Pandey S. 2011. Contraceptive knowledge, attitude and practice among eligible couples of rural Haryana. *The International Journal* ofHealth, 12(1).
- Sambe, J.A. 2008. Introduction to mass communication practice in Nigeria. Ibadan: Spectrum Books. 100pages
- Sarkar, N. N. 2008. Barriers to condom use. European J. of Contraception and Reproductive Healthcare. 13(2), 114-122
- Shapiro, D. and Tambashe. B.O. 2001. Fertility transition in urban and rural areas of sub Saharan Africa. Population Research Institute. The Pennsylvania State University, University Park, PA.
- Sherkat, D. E. 2000. That they be keepers of the home: the effect of conservative religion on early and late transitions into housewifery. *Review of Religious Research* 41:344-358.

- Singhal, A., Cody. M., Rogers E.M., and Sabido M. 2003 Entertainment-Education and Social Change: History, Research and Practice. Mahwah, New Jersey, Lawrence Erlbaum Associates.
- Society for Family Heath. 2003. Enhancing Nigeria's response to HIV/AIDS Program. From Accessed on 11/12/2010
- Southworth, J. R. 2005. Religion' in the 2001 census for England and Wales. *Population, Space and Place, 11 (2), 75-88*.
- Srikanthan, A and Reid, R.L 2008 Religious and cultural influences on contraception. Retrieved from http;www.sogc.org/jocs/abstractsfull on Dec. 10, 2012
- Stuart B. 2009. Mass media and reproductive behaviour: serial narratives, soap operas and telenovelas. The future of human reproduction. Working Paper St. John's College, Oxford &Vienna Institute of Demography. University of Oxford and the Vienna Institute of Demography, Austrian Academy of Science.
- Sunil, T. S., and Pillai, V. K. 2010. *Women's reproductive health in Yemen*. Amherst, New York: Cambria Press.
- Ubah, V.U. and Sani, R. M. 2009. The role of radio in the campaigns against the spread of HIV/AIDS among farmers in Makurdi local government area of Benue State, Nigeria Journal of Social Science 19(3): 179-184.
- Vaughan. P, Regis. A and St. Catherine. E 2000. Effects of an entertainment-education radio soap opera on family planning and HIV prevention in St. Lucia. *International Family Planning Perspectives*, 26(4):148-157.
- Verma, T., J. and Adams, J. and White M. 2007. "Portrayal of Healthrelated Behaviours in Popular UK Television Soap Operas." *Journal of Epidemiology and Community Health* 61(7): 575-577
- Voas, D. 2009. The rise and fall of fuzzy fidelity in Europe. *European* Sociological Review, 25 (2), 155-168.
- Westoff, C. and Bankole A. 1997. Mass media and reproductive behaviour in Africa. Demographic and Health Surveys Analytical Reports No.2, Macro International Inc, Calverton, Maryland
- William N. R 2007 The effectiveness of entertainment mass media in changing behaviour. Population Media Center PO Box 547 Shelburne, Vermont 05482 USARetrieved from http://w ww.populationmedia.org/
- Witte, K., Girma, B. and Girgre, A. 2001. Ethiopia reproductive health

communication project: Family planning HIV/Aids prevention formation and baseline study. *Addis Ababa, Ethiopia*: JHU/CCP and Ethiopia National Office of Population

Wolf, S 2008. Peer groups: expanding our study of small group communication. Thousand Oaks, CA: Sage publications, Inc. ISBN 978-1-4129-2686-7