



Contraceptive Use in Low and Middle Income Countries: The Roles of Socio-Economic Inequalities, Cultural and Religious Belief.

By

OBILOR, Ngozi Mary

(Sociology department, Nnamdi Azikiwe University, Awka, Anambra State Nigeria)

(Email address: nm.obilor@unizik.edu.ng)

and

OSITA-NJOKU, Agnes

(Sociology Department, Imo State University, Owerri Imo State)

Abstract

Contraceptive use is aimed at preventing conception after unprotected sex. But, certain cultural, socio-economic and religious factors may have militated against contraceptive use in Imo State thereby leading to unplanned pregnancy and its concomitant problems. In view of above, this study aimed at finding out the religious, cultural and socio-economic factors militating against contraceptive use so as to make recommendations that will increase contraceptive use in Imo state. This study anchored on the decision theory of Leonard Savage because it effectively explains how contraceptive use is influenced by religion, culture and socio-economic factors. The data used for this study were derived through observation, Key Persons Interview and secondary sources of data collection. The key persons that were interviewed comprised of 2 health workers, 2 custodians of culture and 3 religious leaders from each of the senatorial zones in Imo state. Findings revealed that the Mbaise people of the Owerri zone practice a culture that might have militated against contraceptive use and the catholic doctrine do not support contraceptive use. However, in contemporary times most of those cultural practices seem to have faded away but, the major factors militating against contraceptive use are socio-economic factors like level of education and area of residence. Therefore, the study recommended that, the government and NGOs build hospitals or contraceptive outlets especially, in rural areas so as to increase the accessibility to contraceptive. It was also recommended that they make provision for free education to all citizens, irrespective of gender.

Key words: Contraceptive, Culture, Religion, Socio-Economic, Low and Middle Income Countries

Introduction

Background to the Study

Contraceptive use is the act, means or mechanism by which conception is prevented or made less likely after an individual must have had unprotected sex with an opposite sex. Rakhi and Sumathi (2011) defined it as the intentional prevention of conception through the use of

various devices, sexual practices, chemicals, drugs or surgical procedure. According to them, this method includes; the withdrawal method, lactational amenorrhoea method, rhythm method, injectables, condoms, oral contraceptives, intrauterine devices (IUDs), female and male sterilization, hormonal contraceptive for men, diaphragm and spermicides (barrier/chemical method) etc.

Over the years, contraceptive has been an effective way of deciding child spacing. It has helped to reduce unplanned pregnancy and in some cases, sexually transmitted infections. Sonfield, Hasstedt, Kavanaugh and Anderson (2013) opined that in addition to deciding the timing and spacing of children, contraceptive also allows woman to achieve smaller family size even when they are married. They further stated that the use of contraceptive has helped to break the cycle of poverty by reducing overpopulation and increasing savings through the reduction of the number of dependents in the home. In addition to this, they stated that the use of contraceptive unlocks opportunities for economic success especially for mothers as they tend to have time to engage in other activities beside childcare and motherhood when contraceptive is used.

In stressing the importance of contraceptive use, Ogbe and Okezie (2010) have directly or indirectly associated high population growth rates, especially in the face of low productivity, with different kinds of social problems ranging from poverty, scarcity of land, hunger and environmental degradation to political instability. This is to say that, the use of contraceptive do not only control population growth but also serves as a check to the problems associated with population growth and overpopulation. Despite these benefits that have been accrued to contraceptive use, contraceptive use have been found to disrupt the normal flow of menstruation, cause acne and pain in the abdomen and breast. Kaunitz (2020) further stated that the side effects of contraceptive use could range from headaches, vomiting, dizziness etc. In contemporary times, the level of awareness on contraceptive seems to be greater than the actual usage. The 2013 Nigeria Demographic and Health Survey (NDHS) asserts that, while the knowledge of contraceptives is generally high, uptake in Nigeria is low; only 15% of

married women of reproductive age are using any contraceptive method and, only 10% are using modern methods of contraceptives (National Population Commission and ICF 2014).

Asiimwe, Ndugga & Mushomi (2013) hypothesized that the factors associated with contraceptive use may operate differently within each age group due to the differences in education, desire for children and the level of empowerment. In developing countries like Nigeria however, contraceptive use seem to have remained generally low even with the advancement in the healthcare system. Ladi, Dahiru and Aliyu (2015) assert that, the demand for contraceptives is still not being fulfilled in many developing countries. In affirmation, Singh and Darroch (2012) stated that, in developing countries an estimated 222 million women have an unmet need for contraceptive.

In order to arrest this need and the dangers inherent in the low contraceptive use many countries such as Korea, Brazil, Columbia, China, India, Bangladesh and Malawi have successfully applied some measures of contraceptive as a panacea (World Bank, 2015).

Nigeria has also adopted some measures of contraceptive as a strategy to increase contraceptive use and curb the high rate of population growth that it is presently experiencing. In doing this, Nigeria developed a blueprint for accelerating uptake of contraceptives with a target of increasing the national contraceptive prevalence rate to 36% by 2018. In addition to this, public and private owned health care systems made sure to provide contraceptive services to citizens so as to make contraceptives more accessible to the populace (Federal Republic of Nigeria 2014).

Even with these measure that have been put in place, the rate of contraceptive use in Nigeria seem to have remained abysmally low as the population of the country continues be increase geometrically while the national resources increases arithmetically. It is against this backdrop that this study tried to investigate the cultural and religious and socioeconomic factors militating against contraceptive use in Imo state.

Statement of the Problem

Contraceptives use has been effective in deciding child spacing and preventing unplanned pregnancy as well as its concomitant problems. Even when these benefits are desired among those who are sexually active, its usage remains abysmally low especially in rural areas. This has increased the rate unplanned pregnancy as well as the stress that comes thereof. In some cases, the pregnancy is not cared for due to lack of acceptance or finance. Thereby, lead to multiple maternal and child birth problems like; anaemia, third trimester bleeding, premature rupture of membranes, preterm birth, intrauterine growth retardation, neurologic disorders, chronic diseases in adult life and thus, lead to neonatal deaths and maternal mortality.

In situations where abortion is opted for, the risks are likely and vary from the destruction of womb which could cause infertility; the deformation of the child when born or the death of the supposed mother and the child. In view of this, this study aims at investigating the cultural, religious and socio-economic factors that discourages the use of contraceptive use in Imo state, Nigeria.

Research Questions

1. What are the religious, cultural and socioeconomic factors affecting contraceptive use in Imo state, Nigeria?
2. How has religious, cultural and socio-economic factors affected contraceptive use in Imo state, Nigeria?
3. How can contraceptive use be encouraged in Imo state Nigeria despite the numerous factors militating against its usage?

Objective of the Study

The study investigated the cultural, religious and socio-economic factors affecting conception use in Imo state, Owerri.

Literature Review

Impact of Religion and Culture on Contraceptive Use in Nigeria

Low contraceptive use is generally associated with traditional indigenous religions with an association to heritage and ancestry (Caldwell & Caldwell, 1987). Reproduction remains the most important outcome and purpose of life as it is believed to appease ancestors whose spirits are satisfied through the childbearing of descendants in the traditional African religion (Caldwell & Caldwell, 1987). Therefore, fertility is seen as a godsend and results in high status while childlessness perceived as a punishment for sin and evil (Gyimah, Takyi & Addai, 2006).

Hence, the use of contraceptives is stigmatised, thus posing as a barrier towards accessing contraceptive services (Caldwell & Caldwell, 1987; Yeatman & Trinitapoli, 2008). This gradual modification of religious adoption and adaptation of practices could influence the decision to either use methods of contraceptives on the one hand, or to oppose the use of methods of contraceptives on the other hand, given the effect of religion on the reproductive behaviour of people (Yeatman & Trinitapoli, 2008).

Religion is widely known to affect people's views and acceptance of contraceptive, thus affecting the outcome of their reproductive behaviour (McQuillan, 2004). Catholicism has negative attitudes towards the use of contraceptives, but Protestants are deemed to be more liberal in their acceptance of contraceptive use (Ngalinda, 1998).

On the contrary, a study in Mozambique found out that religion affects the use of contraceptive (Agadjanian, 2011). Women who followed any religion, regardless of which religion they followed were surprisingly more likely to use contraceptives as opposed to women who did not believe in religion (Agadjanian, 2011). In addition, both Catholic and Protestant Christians were found to be using more contraceptives compared to other religious groups (Agadjanian, 2011).

However, according to a study that looked at contraceptive use among young female youth (15-24 years old) in Kenya, findings revealed that Muslims were more likely to use

contraceptives as opposed to Catholics (Waitherero, 2009). But in another study in Nigeria, it was found out that contraceptive use is higher among Christians than Muslims (Adebowale, Ibisomi, Adedinin, & Palamuleni, 2013).

Among currently married women in Ghana, it was found out that religion does not affect the use of contraceptives, however, socio-economic characteristics, especially education, act as a driving force behind the use of contraceptives (Addai, 1999). Lesthaeghe (1989) further argued that the use of contraceptives largely depends on the Churches stance on contraceptive. If contraceptive is positively viewed by the Church, contraceptive use increases as opposed to when it is portrayed in a negative light (Coale, 1986; Lesthaeghe, 1989; Addai, 1999).

Furthermore, the stance of Churches varied in Europe, most notably among Roman Catholic Christians and Protestant Christians during the 19th Century (Agadjanian, 2011). Roman Catholics had higher fertility levels compared to Protestants as they were against the use of contraceptive because it went against the natural order of God. Whereas Protestants were more liberal in their use of contraceptives, thus the low levels of fertility (Freedman, Whelpton & Campbell, 1959; Agadjanian, 2011).

Yeatman and Trinitapoli (2008) found out that in rural Malawi, most religious leaders approved the use of contraceptives, thus a strong relationship was seen between the two factors. However, the level of approval differed between religious leaders. For instance, Muslims and Pentecostal religious leaders approved contraceptive use more than Catholic religious leaders. However, it was surprising to find out that while Catholic religious leaders were the least likely to approve the use of contraceptives, Catholic women used more contraceptives as opposed to Muslim and Pentecostal women, thus suggesting an inverse relationship (Yeatman and Trinitapoli, 2008).

Abraham (1996) asserts that contraceptive is generally not encouraged in Orthodox Judaism. But Geller (2005) stated that, more liberal Jewish denominations, such as Reform, permit

contraceptive use by men and women while the Buddhist allows only non-violent form of contraceptive.

Based on these divergent views on the use of contraceptive based on religious doctrines the followers or members of these doctrines do not necessarily follow this doctrine. The choice concerning contraceptive use is based on individual choices and preference. But these choices and preference is more or less based on cultural norms and belief system which could be socially, economically and religiously motivated.

Impact of Socio-economic Inequality on Contraceptive Use

Socio-economic determinants of contraceptive use include age, education, marital status, residence, household wealth, age at first marriage, number of living children and fertility intention among others (Adebowale, Adeoye, & Palamuleni, 2013; Akoth, 2012; Ettarh , 2011; Kimani, 2006; Rahayu, Utomo, & McDonald, 2009; Waitherero, 2009). The desire of women to meet their fertility intentions in terms of the number of births and timing of births (Moerland & Talbird, 2006) and women who do not want to continue childbearing are more likely to use contraceptives compared to women who wish to have more children (Rahayu, Utomo & McDonald, 2009). Similarly, women who have 3 or 4 children are more likely to use contraceptives given that they have reached their desired numbers of children compared to those with 1-2 children (Rahayu, Utomo & McDonald, 2009).

Margolis, Cox, Puckett, & Schaefer (2013) states that, approximately 56% of married women use methods of contraceptives globally. However, in sub-Saharan Africa, only 19% of married women use any methods of contraceptives (Margolis, Cox, Puckett, & Schaefer, 2013). Adetunji (2012) opined that, in sub-Saharan Africa, in almost every country, contraceptive use is higher among single women compared to married women even when they are more prone to conception. Ettarh (2011) further stated that, women living in slums have high parity and low contraceptive use.

Similarly, researches have showed that there exist rural-urban differentials in contraceptive use despite knowledge of contraceptive methods in Nigeria, Zambia and Indonesia (Olalekan

& Olufunmilayo, 2012; White & Speizer, 2007; Rahayu, Utomo, & McDonald, 2009). These studies found out that rural dwellers have lower levels of contraceptive use as opposed to urban dwellers (Olalekan & Olufunmilayo, 2012; White & Speizer, 2007; Rahayu, Utomo & McDonald, 2009). The reason for this is that they desire fewer children and have more and better access to contraceptive services and social amenities (Ayoub, 2005).

Studies have further shown that there is a higher need for family planning services in cities even though services are available (Irani, Speizer, Curtis, & Ongechi, 2012). In addition, Bogale, Wondafrash, Tilahun and Girma, 2011) found out that married women in urban areas are more likely to use contraceptives compared to their married rural counterparts.

On the other hand, education remains the most important factor that affects contraceptive use (Rahayu, Utomo, & McDonald, 2009). According to findings in Uganda, contraceptive use was higher among women with primary education than women with no education (Ojaka, 2008). In Nigeria however, it was found out that higher educated women were more likely to use contraceptives thereby decreasing their fertility (Olalekan & Olufunmilayo, 2012).

In addition, women are more likely to use contraceptives when they have any level of education compared to no education (Rahayu, Utomo, & McDonald, 2009). Furthermore, educated women who are city dweller usually marry at older ages and are more likely to use contraceptives (Adetunji, 2012). In another study in Malawi, women who are poor and do not have high levels of education compared to the wealthy are less likely to use contraceptives (Adebowale et al., 2013, Creanga Gillespie, Karklins, & Tsui, 2009, Rahayu et al., 2009). This further adds to the importance of education in contraceptive use.

In Nigeria, education has been found to relate to contraceptive use. Women of lower socio-economic status are less likely to use contraceptives than their counterparts who have high socio-economic status (Acharya 1998; (Ibisomi 2014; Shah, Shah, and Radovanovic 1998; Stephenson and Tsui 2003). Women who have a higher education are one-and-a-half times more likely to have ever used contraceptive than women with secondary education (Asekun-Olarinmoye, Adebimpe, Bamidele, Odu, and Ojofeitimi, 2013).

Partner's level of education is equally important, as it may operate through many of the same pathways (childbearing preferences) as the woman's own education, given that education levels of husbands and wives are positively correlated (Malwade 2002). However, women who are more educated than their husbands tend to use contraceptives more than women who are not as educated as their husbands (Stephen and Enoch 2014).

The growing body of knowledge has identified a number of contextual factors that influence contraceptive use; they include presence and quality of reproductive health services, macroeconomic factors, community fertility norms, female autonomy, and availability of physical infrastructure (Ejembi, Clara Ladi, Tukur Dahiru, and Aliyu, 2015). Thus, the socioeconomic factors that has proven to be major determinants of contraceptive use includes; education, social norm, income and place of residence. These factors to a large extent, accounts for the accessibility of contraceptive and contraceptive use in Nigeria.

Theoretical Framework

This study anchored on the decision theory as was propounded by Leonard Savage because; this theory effectively explains how contraceptive use is influenced by religion, culture and socio-economic factors. This theory is concerned with the reasoning underlying an agent's choices. The choices the agent chose at any given occasion are completely determined by their beliefs and desires or values. In situations of uncertainty, the theory expects that the agent should prefer the option with the greatest expected desirability or value; which should be understood according to the agent's interpretation of what is desirable and valuable.

Based on this theory, the decision to use contraceptive is based on what the individual desires and holds to high esteem. While those who hold their cultural and religious belief system in high esteem may not support the use of contraceptive or use contraceptive so as not to go against their religious and cultural belief system, those who are carefree about these cultural and religious belief.

Likewise, those who do not place much value on economic achievement, education, career achievement etc. are less likely to use contraceptive compared to their counterparts who care

about these socioeconomic achievements. Thus, the use of contraceptive is based on the choices individual makes but most importantly, these choices are influenced by the individual cultural and religious belief as well as their socioeconomic desires and values.

Research Methodology

Imo state is one of the states in south-eastern Nigeria. It is bordered by Anambra, Abia and Rivers state. The state is made up of three senatorial zones known as the Orlu zone, the Owerri zone and the Okigwe zone. According to a 2016 population projection from the 2006 population census, the area is made up of 5,408,800 persons.

The data used for this study were derived using observation, Key Persons Interview (KPI) and secondary sources of data collection technique. The Key Persons Interviewees were purposively selected so as to avoid sampling those who are ignorant of the issue under study.

In a bid to cover the entire Imo state, the study interviewed 7 key persons from each of the 3 senatorial zones. The key persons that were interviewed comprised of 2 health workers, 2 custodians of culture and 3 religious leaders from each of the senatorial zones (Owerri, Orlu and Okigwe zone) thereby, making the key persons that were interviewed 21 persons.

The researchers ensured that those interviewed on cultural factors influencing contraceptive use were indigenes of the communities or have stayed in the community for more than 5 years or both. The religious leaders that were interviewed were traditional worshippers, priest, reverend fathers/sisters and pastors. This is to ensure that all the interviewees are knowledgeable about their culture and religious doctrines.

Research Findings

All the Key Persons Interviewed stated that the most commonly used contraceptive is the male condom but, its usage is more common amongst the singles. All the key persons interviewed from Okigwe and the Orlu zone stated that they have no cultural practice that affects the use of contraceptive however, those from Owerri zone stated that the only cultural practice that may affect the use of contraceptive in Owerri is the "Ewu Ukwu" that is common amongst

the Mbaise people. According to them this practice which is aimed at encouraging child birth among women is the killing of goat at the demise of any woman who gives birth to 10 children and above. Though they stated that, this practice is rarely being practiced especially among the Mbaise people in urban areas and in contemporary times as it seems to have faded away and is being overcome by civilization.

The health workers interviewed stated that the socio-economic factors affecting the use of contraceptive include the number of children given birth to, the desire for a particular sex, income, education, occupation and area of residence. One of the health workers stated that those who desire a male or female child may not want to use contraceptive and thus, may continue conception until they get the desired sex.

All the health workers stated that those in urban areas and are educated are more likely to use contraceptive because of the accessibility to the contraceptive, their level of awareness and the economic pursuit. These according to two of the health workers influence the level of income and occupation of the people. According to them, occupation would ensure the availability of income to in which to access any form of contraceptive.

All the Pentecostal pastors and Anglican priests interviewed stated that they had no religious doctrine that goes against the use of contraceptive. They further asserted that the use of contraceptive is based on personal choice and belief system. The Catholic priests interviewed and the traditional worshippers however, shared a contrary opinion. They stated that the use of contraception is against the will of God. While the Catholic priests stated that they preach against the use of contraceptive, the traditional worshippers affirmed that the will of God is for man to reproduce and contraceptive use is never African.

Finding from the Observation

The researcher found out that the most commonly used contraceptive is the male condom followed by oral contraceptives like the postinor and the Implantation for women. However, in some cases those who do implantation end up with some complications and may even end up pregnant. It was observed that those in urban areas and women who are educated and have

a higher socio-economic status tend to use contraceptive more than those in rural areas who are not educated and have a lower socio-economic status. But, the use of contraceptive is less likely to be influenced by religious doctrine but by personal choices especially as different denominations use contraceptive irrespective of their doctrine.

It was also observed that singles use contraceptives more than the married and that the most commonly use contraceptive by singles are the condoms and the oral contraceptive.

Conclusion

Contraceptive use is influenced more by socio-economic factors than by cultural and religious factors in contemporary times. In the past, the people of Owerri had a cultural practice which supports childbirth and perhaps, militated against any form of contraceptive use. Though, this was common amongst the Mbaise people, the life style and occupation which was basically agrarian, may have also supported child birth in the entire Imo state. However, in contemporary times, the occupation of the people has shifted from agriculture to other means of livelihood like; the white collar jobs, businesses etc.

Basically, the cultural and religious belief system do not hold much influence on the people thus, the predominant socio-economic factors that influences the use of contraceptive in Imo state in contemporary times includes but are not restricted to education, socio-economic status and the area of residence. For the fact that contraceptive use allows women to pursue their socio-economic ambition even while achieving sexual gratification contraceptive use is a better justification for women in contemporary times.

Recommendation

1. There is need for government and Non-governmental Organizations (NGOs) to educate women on the importance of contraceptive use through seminars and symposiums especially, in the rural areas. Traditional leaders and youth leaders can as well be used to create awareness and educate the rural women on the need for contraceptive use.

2. There is need for government and NGOs to build hospitals or contraception outlets especially, in rural areas. This will ensure that contraceptive is accessible by all irrespective of the area of residence.
3. There is need for the government and NGOs to make provision for free education to all the citizens of the country especially women. The society should also encourage women to access this education when they are provided by the government and NGOs.
4. Efforts should be put in place by the government and NGOs to improve the socio-economic status of women. This could be through the provision of job opportunities and the encouragement of female entrepreneurship through the provision of grants and loans.

References

- Abraham, A. S. (1996). *The Comprehensive Guide to Medical Halachah*. New York: Feldheim Publishers; 220–232.
- Acharya, L. B. (1998). Determinants of Fertility in the 1970s and 1980s in Nepal. *Contributions to Nepalese Studies (Special issues)* 25:95-108.
- Addai, I. (1999). Does Religion Matter in Contraceptive Use among Ghanaian Women? *Review of Religious Research*; 40 (3), 259-277.
- Adebowale, S. A., Ibisomi, L. D. G., Adedinin, S. A. and Palamuleni, E. (2013). *Differential Effect of Wealth Quintile on Modern Contraceptive Use: Evidence from Malawi*. Retrieved from http://www.iussp.org/sites/default/files/event_call_for_papers/Extended%20abstract%20malawi.pdf on 22 August, 2021.
- Adebowale, S. A., Adeoye, L. A., & Palamuleni, M. E. (2013). Contraceptive Use among Nigerian Women with No Fertility Intention: Interaction amid Potential Causative Factors. *African Population Studies* 27 (2). Retrieved from <http://aps.journals.ac.za> 127 on 22 August, 2021.
- Adetunji, J. (2012). Marital and Non-marital Contraception in Sub-Saharan Africa: Patterns, Trends and Determinants. *Bureau for Global Health*. US Agency for International Development. Washington DC. Retrieved from <http://paa2012.princeton.edu/papers/120994> on 15 August, 2021.
- Agadjanian, V. (2011). Religion and Contraception in Mozambique: A Multidimensional Analysis. *Center for Population Dynamics*. Arizona State University.
- Akoth, O. B. (2012). The Effect of Age Difference on Contraception Use among Married Women in Kenya. *The Open Demography Journal*. Retrieved from <http://erepository.uonbi.ac.ke:8080/xmlui/handle/123456789/11367> on 19 August, 2021.

- Asekun-Olarinmoye, E.O., Adebimpe, O. W., Bamidele, J. O., Odu, O. O. and Ojofeitimi, E. O. (2013). Barriers to Use of Modern Contraceptives among Women of Inner City Area of Oshogbo Metropolis, Osun State-Nigeria. *International Journal of Women's Health* 15:647-655.
- Asiimwe, J. B. Ndugga, P. & Mushomi, J. (2013). *Socio-Demographic Factors Associated with Contraceptive Use among Young Women in Comparison with Older Women in Uganda*. DHS Working Papers. ICF International Calverton, Maryland, USA.
- Ayoub. A.S. (2005). *Effects of Women's Schooling on Contraceptive Use and Fertility in Tanzania*. University of Nevada School of Medicine. University of Nevada Las Vegas.
- Bogale, B., Wonderfrash, M., Tilahun, T. and Girma, E. (2011). Married Women's Decision Making Power on Modern Contraceptive Use in Urban and Rural Southern Ethiopia. *BMC Public Health*, 11:342; Retrieved from <http://www.biomedcentral.com/1471-2458/11/342> on 27 August, 2021.
- Caldwell, J.C., & Caldwell, P. (1987). The Cultural Context of High Fertility in Sub-Saharan Africa. *Population and Development Review*; 13(3), 409-437.
- Coale, 1986; Coale, A. J. (1986). *The Decline of Fertility in Europe since the Eighteenth Century* as a Chapter in Demographic History 1-30 in Coale, A. J., & Watkins, S.C (eds.). *The Decline of Fertility in Europe*. Princeton, New Jersey: Princeton University Press.
- Creanga, A. A., Gillespie, D., Karklins, S. & Tsui, A. O. (2009). *Low Contraceptive Use among the Poor in Africa: An Equity Issue*. Extended Abstract for IUSSP – Draft.
- Ejembi, C. L., Tukur, D. and Aliyu, A. (2015). *Contextual Factors Influencing Modern Contraceptive Use in Nigeria*. DHS Working Papers No. 120. Rockville, Maryland, USA.
- Federal Republic of Nigeria. (2014). *National HIV and AIDS and Reproductive Health Survey 2012*. Edited by Department of Reproductive Health. Abuja-Nigeria: Federal Ministry of Health.
- Freedman, R., Whelpton, P.K. & Campbell, A.A. (1956). *Family Planning, Sterility, and Population Growth*. New York, McGraw-Hill.
- Geller, B. (2005). *Judaism*. In: Manning C, Zuckerman P, eds. *Sex and religion*. Toronto: Thomson Wadsworth; 93–116.
- Ibisomi, L. (2014). Are Differences between Partners Associated with Contraceptive Use among Married Couples in Nigeria? *International Perspectives on Sexual and Reproductive Health*, 40 (1):39-45.
- Irani, L., Speizer, S., Curtis, S. and Ongechi, K. S., (2012). Impact of Place of Residence and Household Wealth on Contraceptive Use Patterns among Urban Women in Kenya, papers 122694. Retrieved from paa2012.princeton.edu on 17 July, 2021.

- Kaunitz, A. M. (2020). Patient Education: Birth Control; which Method is Right for me? (Beyond the Basics). Retrieved from <https://www.uptodate.com/contents/birth-control-which-method-is-right-for-me-beyond-the-basics> on 22 August, 2021.
- Kimani, M. (2006). Trends in Contraceptive Use in Kenya, 1989-1998: The Role of Socio-Economic, Cultural and Family Planning Factors. *Population Studies and Research Institute (PSRI)*. University of Nairobi, Kenya.
- Ladi, C. E., Dahiru, T. and Aliyu, A. (2015). *Contextual Factors Influencing Modern Contraceptive Use in Nigeria*. Demographic and Health Surveys DHS Working Papers. CF International Rockville, Maryland, USA. Retrieved from https://www.researchgate.net/publication/301284580_Contextual_factors_influencing_modern_contraceptives_use_in_Nigeria on 17 August, 2021.
- Lesthaeghe, R. (1989). *Social Organization, Economic Crisis and the Future of Fertility Control in Africa*. Pp. 475-505 in R. Lesthaeghe (ed.), *Reproduction and Social*.
- Malwade, B. A. (2002). Why does Education Lead to Lower Levels of Fertility? A Critical Review of Some of the Possibilities. *World Development* 30:1779-1790.
- Margolis, S. P., Cox, C., Puckett, A. and Schaefer, L. (2013). Exploring Contraceptive Use Differentials in Sub-Saharan Africa through a Health Workforce Lens. *Studies in Family Planning*, 29 (3): 309-323.
- McQuillan, K. (2004). When does religion influence fertility? *Population and Development Review*, 30(1): 25-56.
- Moreland, S. and Talbird, S. (2006). *The Contribution of Fulfilling Unmet Need for Family Planning for Achieving the Millennium Development Goals*. Washington DC, USAID. Retrieved from http://pdf.usaid.gov/pdf_docs/PNADM175.pdf on 26 August, 2021.
- National Population Commission and ICF International, (2014). *Nigeria Demographic and Health Survey (NDHS)*. Edited by National Population Commission. Abuja-Nigeria, Rockville, Maryland USA National Population Commission and ICF International.
- Ngalinda, I. (1998). *Age at First Birth, Fertility, and Contraception in Tanzania*. Humboldt University of Berlin. Department of Demography and Philosophical Faculty.
- Ogbe, O. A. and Okezie, C. R. (2010). Socio-Economic Determinants of Contraceptive Use Among Rural Women in Ikwuano Local Government Area of Abia State, Nigeria. National Root Crops Research Institute, Umudike, Abia State, Nigeria.
- Ojaka, D. (2008). Trends and Determinants of Unmet Need for Family Planning in Kenya. The DHS Working Papers Demographic and Health Research, Macro International Inc.
- Olalekan, A.W. & Olufunmilayo, A. E. (2012). A Comparative Study of Contraceptive Use among Rural and Urban Women in Osun State, Nigeria. *International Journal of Tropical Disease and Health*. 2(3): 214-224
- Rakhi, J. and Sumathi, M. (2011). Contraceptive Methods: Needs, Options and Utilization. *The Journal of Obstetrics and Gynecology of India*, 61(6):626-634.
- Rahayu, R., Utomo, I., & McDonald, P. (2009). Contraceptive Use Pattern among Married

- Women in Indonesia. *Paper presented at the International Conference on Family Planning: Research and Best Practices*, November 15-18, 2009, Kampala, Uganda. Retrieved from <http://www.fpconference2009.org/media/DIR169701/15f1ae857ca97193ffff83a6ffffd524.pdf> on 19 August, 2021.
- Shah, N.M., Shah, M. A. and Radovanovic, Z. (1998). Pattern of Desired Fertility and Contraceptive Use in Kuwait.” *International Family Planning Perspectives*, 24 (3):133-138.
- Singh, S. and J. Darroch, J. (2012). *Adding it all up: The Cost and Benefits of Investing in Family Planning - Estimates for 2012*. New York: Guttmacher Institute and United Nations Fund for Population Activities.
- Sonfield, A., Hasstedt, K. Kavanaugh, L. M. and Anderson, R. (2013). *The Social and Economic Benefits of Women’s Ability to Determine Whether and When to Have Children*. New York: Guttmacher Institute.
- Stephen, A. A., and Enoch, P.M. (2014). Modern Contraceptive Use, Sex Refusal, Spousal Difference in Level of Education among Married Women in Nigeria: Are they Interrelated? *International Journal of Humanities*, 4 (6):217-230.
- Stephenson, R. and A.O. Tsui, A. O. (2003). Influences on Reproductive Wellness in Northern India. *American Journal of Public Health*, 93 (11):1820.
- Gyimah, S. O., Takyi, B. K. & Addai, I. (2006). Challenges to the Reproductive-Health Needs of African Women: on Religion and Maternal Health Utilization in Ghana. *Soc Sci Med*. 62(12):2930-44.
- Waitherero, M. B. (2009). *Factors Influencing Contraceptive Use among Female Youths; Aged 15-24 years in Kenya*. University of Nairobi, Kenya.
- White, J. & Speizer, I. (2007). Can Family Planning Outreach Bridge the Urban-Rural divide in Zambia? *BMC Health Serv Res*. 7:143.
- World Bank. (2015). Ghana - Contraceptive Prevalence. World Bank. Washington. Retrieved from <http://data.worldbank.org/indicator/> on 19 August, 2021.
- Yeatman, S., & Trinitapoli, J. (2008). Beyond Denomination: The Relationship Between Religion and Family Planning in Rural Malawi. *Demographic Research*, 19 (55): 1851-1882.
- Zhang, L. (2008). Religious Affiliation, Religiosity, and Male and Female Fertility. *Demographic Research*, 18(8): 233-262.