



UNIVERSITI PUTRA MALAYSIA

***PREVALENCE OF FAMILY PLANNING PRACTICE AND ITS
DETERMINANTS AMONG WOMEN IN RURAL AREAS IN PANKSHIN
DISTRICT, PLATEAU STATE, NIGERIA***

SHEMU LILIBERT PIRITMWA

FPSK(m) 2022 2



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By

SHEMU LILIBERT PIRITMWA

**Thesis Submitted to the School of Graduate Studies, Universiti Putra Malaysia,
in Fulfillment of the Requirements for the Degree of Master of Science**

January 2021

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DEDICATION

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Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfilment of the requirement for the degree of Master of Science

PREVALENCE OF FAMILY PLANNING PRACTICE AND ITS DETERMINANTS AMONG WOMEN IN RURAL AREAS IN PANKSHIN DISTRICT, PLATEAU STATE, NIGERIA

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January 2021

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Family planning programme is a strategy to address issues on high fertility and mortality of mother and child. In rural areas where women are disadvantaged and family planning prevalence is relatively low as compared to urban areas, it is imperative to study the determining factors that influence family planning practice among women.

A cross-sectional study using a simple random sampling method was conducted in Pankshin district in Plateau State, Nigeria, from October to December 2019. A validated self-administered questionnaire was used in data collection from 302 respondents who were rural women aged 18-49 years old using the simple random sampling method. The dependent variable in this study was ‘family planning practice’ and the independent variables were individual characteristics, interpersonal characteristics and organization characteristics. Simple and multiple logistic regression were used to investigate the determinants of family planning practice.

Among 302 respondents, the prevalence of family planning practices was 48.3%. The most common method of family planning among respondents who had ever practised family planning was injectables (57.5%) while among those currently practising was implants (25.3%). Majority of the respondents were aged 29-39 (40.4%). The determinants of family planning practice were age, those within the age group 29-39 and 40-49 years old were more likely to practice family planning as compared to those within younger age groups (AOR=4.373, 95% CI: 2.197-8.703, $p<0.001$; AOR=5.862, 95% CI: 2.522-13.625, $p<0.001$). Those who had discussed family planning with their partners (AOR=9.192, 95% CI: 4.356-19.400, $p<0.001$)

and respondents who had gained the approval of their partners (AOR=2.791, 95% CI: 1.329-5.862, P=0.007).

The prevalence of family planning in this study was high as compared to other results of studies in rural areas. Age, discussion with partners and partners approval are important predictors. More efforts need to be made to gain partners support in order to improve family planning practice especially among the young couples.

Keywords: Family planning, Practice, Determinants, Women, Rural area.



Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk ijazah Master Sains

**KELAZIMAN AMALAN PERANCANGAN KELUARGA DAN
PENENTUANNYA DI KALANGAN WANITA DI KAWASAN LUAR
BANDAR DI DAERAH PANKSHIN, NEGERI PLATEAU, NIGERIA**

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Program perancangan keluarga adalah satu strategi untuk menangani isu-isu kesuburan dan kadar kematian ibu dan anak yang tinggi. Di kawasan luar bandar di mana wanita kurang bernasib baik, adalah sangat penting untuk mengkaji faktor penentu yang mempengaruhi amalan perancangan keluarga dalam kalangan wanita.

Satu kajian keratan rentas menggunakan kaedah persampelan rawak mudah telah dijalankan di daerah Pankshin dari Oktober hingga Disember 2019. Soal selidik yang dikendalikan sendiri yang sah digunakan dalam pengumpulan data daripada 302 responden yang merupakan wanita luar bandar berusia 18-49 tahun menggunakan kaedah persampelan rawak mudah. Pemboleh ubah bersandar dalam kajian ini adalah 'amalan perancang keluarga' dan pemboleh ubah tidak bersandar adalah ciri-ciri individu, ciri-ciri interpersonal dan ciri-ciri organisasi. Regresi logistik yang mudah dan pelbagai digunakan untuk menyiasat penentu amalan perancang keluarga.

Di antara 302 responden, kadar prevalens perancangan keluarga adalah 48.3%. Kaedah perancangan keluarga yang paling lazim digunakan dalam kalangan responden yang pernah mengamalkan perancang keluarga adalah suntikan (57.5%) manakala dalam kalangan yang sedang menggunakan adalah implan (25.3%). Majoriti responden berumur di antara 29-39 tahun (40.4%). Penentu amalan perancang keluarga adalah umur, mereka yang berumur 29-39 dan 40-49 tahun lebih cenderung untuk mengamalkan perancangan keluarga berbanding mereka yang berada dalam kumpulan umur muda (AOR=4.373, 95% CI: 2.197-8.703, $p<0.001$; AOR=5.862, 95% CI: 2.522-13.625, $p<0.001$). Mereka yang telah membincangkan perancangan keluarga dengan pasangan mereka (AOR=9.192, 95% CI: 4.356-

19.400, $p < 0.001$) dan responden yang telah mendapat persetujuan pasangan mereka (AOR=2.791, 95% CI: 1.329-5.862, $P=0.007$).

Prevalans perancangan keluarga dalam kajian ini adalah tinggi jika dibandingkan dengan hasil kajian lain di kawasan luar bandar. Umur, perbincangan dengan pasangan dan persetujuan pasangan adalah peramal penting. Lebih banyak usaha perlu dilakukan untuk mendapatkan sokongan pasangan untuk meningkatkan amalan perancangan keluarga terutama dalam kalangan pasangan muda.

Kata kunci: Perancangan keluarga, Amalan, Penentu, Wanita, Kawasan luar bandar.



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This thesis was submitted to the Senate of Universiti Putra Malaysia and has been accepted as fulfillment of the requirement for the degree of Master of Science. The members of the Supervisory Committee were as follows:

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- the research conducted and the writing of this thesis was under our supervision;
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LIST OF ABBREVIATIONS

AIDS	Acquired Immunodeficiency Syndrome
AFP	Advance Family Planning
ARFH	Association of Reproductive and Family Health
AOR	Adjusted odds ratio
CI	Confidence Interval
CIS-FP	Civil Society for Family Planning
CDC	Centre for Disease Control
COR	Crude odd ratio
DMPA	Dimethylol propionic acid
FMOH	Federal Ministry of Health
FP	Family Planning
GDP	Gross Domestic Product
HIV	Human Immunodeficiency Virus
ICC	Inter-Class Correlation Coefficient
IPPF	International Planned Parenthood Federation
IUD	Intrauterine Device
IMCHB	The Interaction Model of Client Health Behaviour
JKEUPM	Jawatankuasa Etika Universiti untuk Penyelidikan Melibatkan Manusia (University Ethical Committee for Research involving Humans)
KAP	Knowledge, Attitude and Practise
MOH	Ministry of Health
MSION	Marie Stopes International Organization Nigeria
₦	Naira
NET EN	Norethisterone Enanthate

NDHS	Nigeria Demographic Health Survey
NGO	Non-Governmental Organisation
NNHS	National Nutrition and Health Survey
NURHI	Nigerian Urban Reproductive Health Initiative
OR	Odd ratio
PHC	Primary Health Centre
PPFN	Planned Parenthood Federation of Nigeria
PRB	Population Reference Bureau
RHE	Reproductive Health Education
RHS	Reproductive Health Services
SEM	Socio-ecological Model
SDG	Sustainable Development Goal
SFH	Society for Family Health
SPSS	Statistical Package for Social Science
STD	Sexually Transmitted Disease
TFR	Total Fertility Rate
UN	United Nations
WHO	World Health Organization
χ^2	Chi-squared value

CHAPTER 1

INTRODUCTION

In this chapter, the background of this study, its problem statement, research question, research objectives, theoretical base and significance of the study are presented.

1.1 Background

Family planning is a process that allows couples to decide for themselves the number of children to have and the interval between the births of the children with the help of contraceptive methods. (Stover & Ross, 2010). Family planning is often regarded as the first step towards population control. From a political perspective, it has been argued to be the most acceptable resort (Berelson, 1969). Family planning is a low-cost investment that countries can adopt to safeguard their future (Starbird, Norton & Marcus, 2016).

Globally, family planning has been adopted as an effective measure to target public health issues, such as maternal mortality and high fertility, and the ever-increasing growth of populations (Joshi, 2011). As a result of the growing need to reduce the high fertility rate in several countries due to the effect that the continuous growth in population has on the quality of life, family planning has been adopted as a vital component of socio-economic development (Okech, Wawire & Mburu, 2011). Towards the advancement of socio-economic development, family planning remains a vital tool (Joshi, 2011). In Africa, particularly in the Sub-Saharan region, Nigeria is known as one of the countries with the highest population, with an estimated population of 205,290,136 (World Population, 2020). Just like in many other countries, it has not been left behind in the adoption and implementation of family planning into its health system. This is because of the understanding that practising family planning saves lives, as it provides couples with the opportunity to decide for themselves the healthiest time to have children, as well as the number of children to have. This decision can prevent maternal, infant and child mortality through the prevention of unplanned pregnancies. It also helps in the prevention of harmful, illegal termination of pregnancies, and childbearing under circumstances which may be dangerous to the lives of infants and the well-being of their mothers (Achana et al., 2015). Other than reducing cases of hunger and abject poverty by decreasing birth rates and averting over 32% of maternal deaths and 10% of child deaths, women are also empowered educationally and environmentally.

Nigeria is a heterogeneous country which consists of diverse religious and ethnic groups, (Ojie & Ewruhjakpor, 2009), and as such, there is a wide range of barriers associated with sentiments that could stand as hindrances to the adoption of family planning practices. In more recent times, concerns are being raised on the use of family planning services towards bettering the lives of families, especially women

in rural areas where a lot of factors relating to lack of exposure, access and socio-economic underdevelopment come to play (Nanlong, 2018). Even though there are family planning options available for men, (Chingle, Odunze & Mohammed, 2018), the health and well-being of women and their children are more affected, thus its importance.

Therefore, this study was conducted with the aim of investigating the determining factors associated with the adoption of family planning practice among rural women in Plateau state, Nigeria using the socio-ecological model.

1.2 Problem statement

In 2019, the global rate of family planning stood at 62%. The family planning prevalence rates in individual countries show 84% in the United Kingdom, 78.4% in Thailand, 72.7% in the United States of America, Sri Lanka 64.6%, 56.6% in Poland, Singapore 55.1% and Malaysia 52.2%, with lowest rate of 27.6% scored by Nigeria (Population Reference Bureau (PRB), 2019).

Results from previous studies show variations in the prevalence of family planning within rural and urban areas in Nigeria, with relatively higher results in the latter. For the urban areas, findings show that family planning prevalence ranges from 15%-55.2% (Mohammed, Envuladu & Okoh, 2018; Durowade et al., 2017; Apuke, 2017; Zubair & Mohammed, 2015; Chingle, Odunze, Mohammed, 2013; Eko, Osonwa, Osuchukwu, et al., 2013). However, in rural areas, findings show that family planning prevalence ranges from 2.5%-33.9% with 24% in Plateau State (NDHS, 2018; Etokidem, Ndifon, Etowa & Asuquo, 2017; Ogboghodo, Adam & Wagbatsoma, 2017; Kana et al., 2016; Ashimi, 2016; Osifo, Akpamu, Shelu, 2015; Doctor et al., 2013). The implication of poor family planning prevalence for Nigeria is an increase in maternal and infant mortality as well as high rates of abortions and unplanned pregnancies (OlaOlorun & Tsui, 2014; Ekpeyong, 2012). Also, with the current rate at which the Nigerian population is growing exponentially, there is likely to be a scarcity of the basic resources needed to sustain the populace (Joshi, 2011).

Based on the low family planning prevalence, government agencies have made efforts that are geared towards increasing the rate of adoption. For example, in 2016, an allocation of \$25,125 was made towards reproductive health and family planning in the State Health Budget by the Plateau State government. This act was geared towards increasing family planning practice and the contraceptive prevalence from 15% to 36% (Advance Family Planning (AFP), 2017). Despite this effort, there is little or no evidence on the improvement achieved from this initiative by the state government, and for this reason, this study focused on investigating if there has been an improvement in family planning prevalence.

More so, the study focused on determining the methods of family planning used in the state in relation to the resources allocated by the state. Also, in a recent study it was found that implants are largely used by women in the urban areas of Nigeria (Saifuddin et al., 2019). This finding was attributed to the allocation of resources by government to family planning initiatives and programs. Additionally, the findings of previous studies conducted in rural areas show that injectables (Kana, et al. 2016; Ashimi, et al., 2016; Doctor, et al. 2013; Avidime et al. 2010) and condoms (Ugal & Ushie, 2013; Odusina, Ugal & Olaposi, 2012; Olugbenga, Abodurin & Adeomi, 2011; Nwachukwu & Obasi, 2008) were the main methods of family planning adopted in the rural areas.

Based on the review of existing literature, studies have been carried out in other rural parts of Nigeria and some studies in Plateau state, but none has been conducted in the rural areas of Pankshin district (on the factors influencing family planning practice, including the methods used) despite it being one of the largest rural areas in Plateau State. Variables such as medical history which have not been examined in studies in Nigeria were explored in this study. In this study, family planning practice among respondents as well as the methods of family planning used were investigated alongside the determining factors and family planning prevalence post commitments and allocation of resources made by the Nigerian government to family planning. In order to achieve this, the socio-ecological model was used as the theoretical base underpinning of this study.

1.2.1 Theoretical base

A theory serves as the backbone of any research. It is the root upon which other findings can locate their bearing. Moustafa, (2014) stated that, “theory is a statement of concepts and their interrelationships that shows why a phenomenon occurs”. Theory serves as the framework for understanding a concept, and as such the socio-ecological model is used in his study as the theoretical framework. Several theories can be used as the basis for understanding the concept of family planning practice in this study such as the health belief model or the theory of planned behaviour. However, the socio-ecological model is used in this study because of its wholistic nature despite its versatility and dynamism in looking at different levels all under the same model and still incorporating the different levels. The socio-ecological model explains the role that certain individual, interpersonal, organization, community and public policy levels play in influencing women’s decision to practice family planning (Mutumba, Wekesa, Stephenson, 2018). The model is made up of five layers, where the first level is characterised by personal belief, knowledge and attitude of individuals. The second layer is the interpersonal, and it entails the individuals’ relationship with other people around, such as family, friends and spouse. The third layer is the organization and it comprises of the institutions associated with the promotion of family planning agenda such as, the hospital and the media. The fourth and fifth layers are the community and public policy. The former addresses the relationship between community and other institutions while the latter focuses on policies and laws at the local, state and national levels (Ezenwaka et al., 2020). The fourth layer is not examined in this study as the cultural aspects which include the

perception of society on family planning practice were addressed in family and friends as well as spousal support. The public policy in the fifth layer is also not being examined in this study as it is already in place (on targeted allocations for family planning).

1.3 Significance of the Study

All over the world, at one point or the other, family planning prevalence has been an issue of concern, particularly in Sub-Saharan Africa. Even more so in rural areas where access to essential resources are often scarce as compared to urban areas (PBR, 2015). When family planning practice is low, women are exposed to several complications which result in maternal and child mortality (Darroch & Sully, 2017). As a result of these health challenges, this study was conducted with the aim of examining the determinants of family planning among women in rural areas of Pankshin district to enable researchers, policymakers and health planners focus more on the specific factors that would further promote family planning practice.

Results from this research provides insight on the factors that influence family planning practice in rural areas, and then recommendations are given based on the findings of the study. During the course of this study, respondents were able to grasp an idea of family planning, its services and the methods available.

The findings of this study could assist health caregivers as well as contributing organisations in understanding the factors that are responsible for the gap in terms of the practice of family planning among rural women. More so, it is hoped that policy makers can refer to this study for the implementation of programmes and policies that will benefit respondents and the community at large. This study serves as a contribution to the body of knowledge on family planning practice and determinants of its adoption among rural women, thereby serving as a reference for other researchers. Also, findings from this study can be used for further intervention studies.

1.4 Research questions

1. What is the prevalence of family planning practice among women in rural areas of Pankshin district?
2. What are the types of family planning methods used by women in rural areas of Pankshin district?

3. Is there an association between individual characteristics (socio-demographic factors (age, educational attainment, ethnicity, religion and level of income), obstetric and reproductive history (number of children, mode of delivery, abortion and complications at birth), medical illnesses (hypertension, anaemia, heart disease, and diabetes mellitus), practices of family planning among respondents (the benefits, using family planning to limit the number of children, space children and the side effects)) and family planning practice among women in rural areas of Pankshin district?
4. Is there an association between interpersonal characteristics (partner's involvement in family planning (discussion with partner and partner's approval) and source of information on family planning (family and friends)) and family planning practice among women in rural areas of Pankshin district?
5. Is there an association between organization characteristics (accessibility of family planning services (source of family planning service and distance to facility) and source of information on family planning (hospital personnel and electronic and print media)) and family planning practice among women in rural areas of Pankshin district?
6. What are the determinants of family planning practices among women in rural areas of Pankshin district?

1.5 Research objectives

1.5.1 General objective

To determine the prevalence of family planning practice and determinants among rural women in Pankshin district, Plateau State, Nigeria.

1.5.2 Specific objectives

1. To determine the prevalence of family planning practice among rural women in Pankshin district.
2. To identify the types of family planning methods used by rural women in Pankshin district.
3. To identify the distribution of the respondents according to;
 - a. Individual characteristics
 - i. Socio-demographic characteristics (age, marital status, educational attainment, ethnicity, religion and level of income).
 - ii. Obstetric/reproductive history (number of children, mode of delivery, birth complications and abortion).

- iii. Medical illnesses (hypertension, anaemia, heart diseases and diabetes mellitus).
 - iv. Awareness of women on family planning (the benefits, using family planning to limit the number of children, space children and the side effects).
- b. Interpersonal characteristics
- i. Partners involvement in family planning (discussion with partner and partner's approval).
 - ii. Source of information on family planning (family and friends)
- c. Organization characteristics
- i. Accessibility of family planning services (source of family planning service and distance to facility).
 - ii. Source on information of family planning (hospital personnel, electronic media, print media and others).
4. To determine the associations between family planning practice among rural women in Pankshin district and:
- a. Individual characteristics
- i. Socio-demographic characteristics (age, marital status, educational attainment, ethnicity and religion and level of income).
 - ii. Obstetric/reproductive history (number of children, mode of delivery, birth complications and abortion).
 - iii. Medical illnesses (hypertension, anaemia, heart diseases and diabetes mellitus).
 - iv. Practices of family planning among respondents (the benefits, using family planning to limit the number of children, space children and the side effects).
- b. Interpersonal characteristics
- i. Partners involvement in family planning (discussion with partner and partner's approval).
 - ii. Source of information of family planning (family and friends).
- c. Organization characteristics
- i. Accessibility of family planning services (source of family planning service and distance to facility).
 - ii. Source of information of family planning (hospital personnel, electronic media, print media and others).

5. To determine the determinants of family planning practice among rural women in Pankshin district.

1.6 Research hypothesis

H1: There is a significant association between individual characteristics (socio-demographic factors (age, educational attainment, ethnicity, religion and level of income), obstetric and reproductive history (number of children, mode of delivery and complications at birth), medical illnesses (hypertension, anaemia, heart disease, abortion and diabetes mellitus), practices of family planning among respondents (the benefits, using family planning to limit the number of children, space children and the side effects)), and family planning practice among rural women in Pankshin district.

H1: There is a significant association between interpersonal characteristics (partner's involvement in family planning (discussion with partner and partner's approval) and source of information on family planning (family and friends)) and family planning practice among rural women in Pankshin district.

H1: There is a significant association between organization characteristics (partner's involvement in family planning (accessibility of family planning services) and source of information on family planning (health care givers and the media)) and family planning practice among rural women in Pankshin district.

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