ATTITUDES OF NIGERIANS TOWARD CONTRACEPTION AND THE FEDERAL GOVERNMENT'S POPULATION POLICY ON BIRTH CONTROL IN KADUNA METROPOLIS

BY

VICTORIA TITILAYO ADIDU (MRS)

A DISSERTATION SUBMITTED TO THE POSTGRADUATE SCHOOL,
AHMADU BELLO UNIVERSITY, ZARIA

IN PAR HAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE
OF DOCTOR OF PHILOSOPHY IN GUIDANCE AND COUNSELLING

DEPARTMENT OF EDUCATION
FACULTY OF EDUCATION
AHMADU BELLO UNIVERSITY, ZARIA

DECEMBER, 2000

t

DECLARATION

I hereby declare that this project is my own work and has not been submitted in any form for another degree at another University or institution. Information derived from published work of others has been duly acknowledged by means of references.

V.T. Adidu

V.T. Adidu (Mrs)

10/12/2500

CERTIFICATION

This dissertation titled "ATTITUDES OF NIGERIANS TOWARD CONTRACEPTION AND THE FEDERAL GOVERNMENT'S POPULATION POLICY ON BIRTH CONTROL IN KADUNA METROPOLIS" by Adidu Victoria Titilayo (Mrs) meets the regulations governing the award of the degree of Doctor of Philosophy (Ph.D), Guidance and Counselling of Ahmadu Bello University, Zaria and is approved for its contribution to knowledge and literary presentation.

.....
Prof. F.D. Kolo
Chairman, Supervisory Committee

17/01/2007
Date

.....
Dr (Mrs) A.O. Okatahi
Member, Supervisory Committee

17/01/2007
Date

.....
Dr. M. Ben-Yususa
Head of Department

17/1/2007
Date

.....
Prof. S.B. Ojo
Dean of Postgraduate School

10/09/07
Date

DEDICATION

This study is dedicated to the loving memories of my late grandmothers,

Madam Felicia Segilola Balogun

1900 - 1978

who introduced me to School.

and

Chief (Mrs) Deborah Ajibola Olatunji

1910 - 1980

ACKNOWLEDGEMENTS

I wish to express my profound gratitude and deep appreciation to Professor F.D. Kolo, my major supervisor, for his accessibility, constructive criticisms and readiness to help. He painstakingly read this work and corrected all the drafts without which this study would not have been realised. I am equally indebted to Dr.(Mrs) A. O. Okatahi, my second supervisor, who has been a source of support and inspiration to me and for the contributions she has made toward the success of this study.

My sincere gratitude goes to the following: Ms Hajara Usman, Dr. (Mrs) C.L. Ejembi, Dr. (Mrs) V.L. Amdi, Ms. Andrea Iving of International women's Health Coalition New York, and to Population Offices in Kaduna and Lagos which made it possible for me to obtain current empirical materials to support this study. My sincere thanks go to all the Nurses in various Clinics in Kaduna Metropolis especially Matron Musa of Tudun-wada Clinic who assisted me during the sample selection stage of the study.

I wish to thank Prof M.N. Kisekka, Dr. J. Hellandendu, Dr. F.O. Ogunlade, Prof J.Y. Olayemi Mr. A. Adisa, Mrs. M. Mu'azu, Prof. A. I. Ikeotuonye, Dr. M. Musa, Dr. (Mrs) F.B. Adeyanju and Mr. J. Obemeata for their various roles in seeing to the successful completion of this study.

I also wish to express my thanks to Professor A. Mustapha (DVC Administration) for his support and encouragement in my career development. Many sincere thanks are due to my parents, Chief. A. A. Balogun and Chief (Mrs) E.A. Balogun and my brothers and sisters for their commitment to my personal and career development. Special thanks and deep appreciation are also due to my husband, Dr. F.A. Adidu for his patience, understanding, love and support throughout the course of this study. Finally I am grateful to my children, Anne, Allen, Amy and Anita for their love, contribution and understanding.

V.T. Adidu (Mrs)

ABSTRACT

This study aims at examining the attitudes of Nigerian in Kaduna Metropolis toward contraception and the Federal Government Population Policy on birth control. The objectives of the study are to identify the underlying factors which prevent or discourage people from using contraceptives, and to recommend counselling strategics that could be effectively used to change those who have negative attitudes towards birth control and contraception.

The research design employed for the study is the one shot design of survey type of research method. Out of a Population of 182,777 persons who are in their reproductive age in Kaduna Metropolis, a sample size of 384 persons was randomly selected. The study employed a structured questionnaire consisting of 40 statements as the main instrument for data collection relating to attitudes about contraception and the National Population Policy. The Likert scale was used as to allow the respondents to indicate their attitudes towards the different items along a scale. The researcher and three research assistants administered the questionnaire. The t-test and the one way Analysis of variance (ANOVA) were the two major statistical techniques used for the data analysis.

The findings revealed that majority of the respondents in Kaduna metropolis showed negative atlitudes toward contraception and national population policy on birth control and there were no significant differences observed between the attitudes of the different age groups, and between gender towards contraception and the National Population Policy on birth control. The study showed that marital status, ethnic background, religious beliefs and educational level had great influence on the attitudes of the respondents in Kaduna Metropolis towards contraception and the National Population on birth control. It was also found that users of contraceptives have a higher approval and acceptance of contraceptive than non users.

The following conclusions therefore were made based on the findings of this study:

(a) Majority of the respondents showed negative altitudes towards contraception and the Federal Governments' Population Policy on birth control in Kaduna Metropolis.

(b) The Hausa and the Fulani as well as the Muslim groups displayed the least approval for the use of contraception and the National Population Policy on birth control.

(c) Education has some positive effects on the attitudes of′ respondents towards contraception and the National Population on birth control.

Based on the findings and these conclusions, the following main recommendations are made:

(1) To reduce or eliminate the negative attitudes of the people, all birth control clinic should have counselling units attached to them with trained counsellors.

(2) The Federal, State and Local governments should work with community and Islamic leaders who will educate the populace on the need for birth control.

(3) Since education has been shown to have some positive effects on contraception, governments at various levels should ensure that family life and sexuality education are made part of the school curriculum at all levels.

The following conclusions therefore were made based on the findings of this study:

(a) Majority of the respondents showed negative attitudes towards contraception and the Federal Governments' Population Policy on birth control in Kaduna Metropolis.

(b) The Hausa and the Fulani as well as the Muslim groups displayed the least approval for the use of contraception and the National Population Policy on birth control.

(c) Education has some positive effects on the attitudes of respondents towards contraception and the National Population on birth control.

Based on the findings and these conclusions, the following main recommendations are made:

(1) To reduce or eliminate the negative attitudes of the people, all birth control clinic should have counselling units attached to them with trained counsellors.

(2) The Federal, State and Local governments should work with community and Islamic leaders who will educate the populace on the need for birth control.

(3) Since education has been shown to have some positive effects on contraception, governments at various levels should ensure that family life and sexuality education are made part of the school curriculum at all levels.

KASHIM IBRAHIM LIBRARY

TABLE OF CONTENTS

Page

Title page i

Declaration iii

Certification iv

Dedication v

Acknowledgments vi

Abstract vii

Table contents ix

List of tables xii

List of figures xiv

List of charts xv

List of appendices xvi

Definitions of terms and operational definitions xvii

Abbreviations xx

CHAPTER 1: INTRODUCTION

1.1. Background 1

1.2. Statement of problem 4

1.3. Purpose of Study 7

1.4. Research questions 7

1.5. Hypotheses 8

1.6 Basic Assumptions 9

1.7. Significance of study 9

1.8. Delimitation of the study 10

1.9. Limitation of the study 11

1.10. Summary 12

CHAPTER 2: REVIEW OF LITERATURE

2.1. Introduction 14

2.2. Attitudes and Attitudes formation 15

2.3. Attitudes Measurement 18

2.4. Socio-cultural factors and birth control 20

2.5. Historical Perspective of contraception and Family Planning 24

2.6. The Concept of Family Planning in Nigeria 27

2.7. Determinants of fertility 29

2.8. Population theories 45

2.9. Population Explosion 55

2.10. Population Policies 60

2.11. Population Policy in Nigeria 60

2.12. Communication and attitudinal change in Family Planning 64

2.13. Rogers Communication Strategy 66

2.14. The Role of mass media in behavior change 69

2.15. The Role of Counseling in fertility control 72

2.16 Summary 76

CHAPTER 3: METHODOLOGY AND PROCEDURE

3.1. Introduction 77

3.2. Research Method 77

3.3. Population of study 78
3.4. The Sample 78
3.5. Sampling Technique 79
3.6.1. The Instruments 80
3.6.2 The validation and reliability of instrument 82
3.7 Administration of questionnaire 83
3.8 Data analysis 83
3.9 Summary 83
CHAPTER 4: RESULTS AND DISCUSSIONS
4.1 Introduction 85
4.2 Respondents perception in tables of frequencies and discussions 85
4.3 The testing of hypotheses 112
4.4 Summary 132
CHAPTER 5:SUMMARY, CONCLUSION AND RECOMMENDATIONS
5.1 Summary 134
5.2 Conclusions 135
5.3 Recommendations 136
5.4 Suggestions for further research 138
REFERENCES 139
APPENDICES 145

LIST OF TABLES

Table		Page
1.1	Projected Population of Kaduna State Local Government (1981 -1992	12
2.1	Distribution of birth among religious groups	39
2.2	Ratings of proximate determinants with respect to sensitivity of fertility and variability among population	50
2.3	Crude birth rates and total fertility rates by region 1950, 2000, 2025 medium variant	58
2.4	Percentage of currently married women by living children and Region. NDHS, Nigeria, 1990	63
2.5	Percentage of current married women with total demands for family service by Region NDHS Nigeria 1990	64
3.2	Sample size by age & sex	79
4.0	Respondents' distribution by sex and age	86
4.1	Respondents' Distribution by marital status	86
4.2	Distribution of Wives among respondents	87
4.3	Distribution of Children among respondents	89
4.4	Distribution of respondents by religion	90
4.5	Distribution of respondents by ethnicity	91
4.6	Distribution of respondents by qualification	91
4.7	Distribution of respondents by communication media	93
4.8	Distribution of respondents by medium	94
4.9	Distribution of respondents by policy	94

4.10 Distribution of perception of large family 96
4.11 Distribution of respondents' perceived interval for deliveries 97
4.12 Distribution of male respondents by methods of family planning 99
4.13 Distribution of female respondents by methods of family planning 101
4.14 Distribution of respondents by reason why they were using methods 103
4.15 Distribution of male respondents' perceptions on population policy and contraception 106
4.16 Distribution of female respondents perceptions on population policy and contraception 110
4.17 One way analysis of variance on attitude by age group of the respondents 113
4.18 T-test on attitude by sex 115
4.19 Male attitude test 116
4.20 Female attitude test 117
4.21 Overall attitude 118
4.22 Analysis of variance on attitude by ethnicity 121
4.23 Scheffe procedure result 121
4.24 Scheffe procedure result showing the F- value 122
4.25 Analysis of variance on attitude by religion 124
4.26 & 27 Scheffe procedure results ..... 124 & 125
4.28 t-Test on attitude by educational status 128
4.29 t-test procedure on attitude by marital status 129
4.30 t-test on attitude by users and non users 130

KASSIM IBRAHIM LIBRARY

LIST OF FIGURES

PAGE

FIGURE

2.1 Schematic Conception of Attitudes 16

2.2 Level of Unmet demand for family planning compared to governments target for contraceptive use for selected countries 33

2.3 Past and Projected population trends 56

2.4 Communication strategy 68

LIST OF CHARTS

Page

Charts

2.1 Stages of Demographic transition 47

LIST OF APPENDICES

Appendix		Page
A	Scheffe Procedure Result on Religion	148
B	Formula for calculating F-values of Scheffe test	149
C	Table for determining sample size from a given population	150
D	Letter of permission to allow candidate access to respondents	151
E	Letter to respondents to complete the questionnaire	152
F	Instrument used for the study	153

KASHIM IBRAHIM LIBRARY

OPERATIONAL DEFINITION OF TERMS

The following key terms used in this study are defined as follows:

AFFECTIVE DOMAIN: The ability to develop positive values towards the knowledge acquired on contraception and birth control to effect positive actions toward the use of contraceptives.

ATTITUDE: The Preparedness or readiness on the part of individuals to express themselves positively or negatively toward statements made about contraception and the national Population policy on birth control.

BIRTH RATE: The number of births per 1,000 people in the population.

COGNITIVE DOMAIN: The ability to deal with knowledge or information on contraception and National Population policy on intellectual basis to effect positive change.

COMMUNICATION: To make opinions, feelings, information known or understood by others.

CONTRACEPTION: Refers to the conscious use by sexually active people of chemicals (spermicide), drugs (hormones), devices (condoms, diaphragms, intrauterine devices), surgery or withdrawal method to prevent pregnancies.

COUNSELLING: A face to face dialogue with clients, using highly targetted information, Education and Counselling skills (IEC) to foster positive attitudinal change toward birth control and contraception.

CULTURE: This is defined as a complex whole of man's acquisition of knowledge, morals, beliefs, norms, customs and technology which are shared and transmitted from generation to generation.

METROPOLIS: This is a large city. e.g. important city of a region or country.

MORTALITY RATE: The number of deaths per 1,000 people in the population.

EDUCATED PERSONS: Those who posses secondary school certificate and above are classified as educated, while those who do not are classified as not educated.

FAMILY PLANNING: Conscious effort of individual to prevent, space or achieve pregnancy in order to attain the desired family size.

FECUNDITY: The capacity to bear children.

FERTILITY AWARENESS: Basic information and education on male and female reproductive anatomy and physiology as it relates to fertility.

FERTILITY CONTROL: *The control of ability to produce children.*

NATIONAL POLICY ON POPULATION CONTROL: The policy approved by the Armed Forces Ruling Council on population for development, unity, progress and self reliance limiting the number of children a woman can have to only four.

PLANNED PARENTHOOD: This is a process of planned child bearing between married couples.

POPULATION CONTROL: *Refers to the regulation of the number of people in any* country as its government deems fit.

PSYCHOMOTOR DOMAIN: The ability to translate the knowledge and values acquired about birth control in to actions using certain skills in maintaining positive family planning habits.

WITHDRAWAL (COITUS INTERRUPTUS): *A situation in which the penis is* deliberately withdrawn from the vagina, so that ejaculation occurs outside the vagina.

ABBREVIATIONS

K.A.P.	=	Knowledge, Attitudes and Practice
P.A.N.	=	Population Association in Nigeria.

Chapter 1

INTRODUCTION

1.1 Background to The Study

Population explosion has been a matter of serious concern all over the world since the beginning of the last century. This is so because the rapid growth of population is adversely affecting the quality of living as there is a serious imbalance between family resources and family sizes especially in third world countries like Nigeria (Adzenga & Obasa 1978)

Before examining the problems of recent population growth, it is necessary to look at the way in which the world's population expanded in the past. According to Bell (1976), it has been estimated that the population of the world at the end of the Neolithic period (8000-7000 B.C.) was between 5 million and 10 million. By the beginning of the Christian era, the world's population probably numbered between 200 and 300 million. At the start of the modern era (1650), world population had reached 500 million. The present world population is estimated to be 6.2 billion (Adogbor 1987, Baiyegbon 1991). This population explosion is a result of high birth rate and low death rate (Bell, 1976).

The rapid growth of the world's population has continued to attract man's attention over the ages. A publication by the United Nation Population Council (1972) reported that

> *There is surely no greater problem facing mankind today than the growth of world's population at a rate which is out of proportion with the present and prospective rates of increase in economic and social development.*

In her statement in "Time is Running out!" Pintasilgo, President of the Population and Quality of life - Independence Commission (1993) warned that:

> *Today more than 1 billion people live below poverty line, the International Community is not capable of coming to their assistance, nor of ensuring them food, housing, education, health and even work or a healthy environment. She added that if population growth follows its current trend, there will be extra 3 billion people on this planet "what will we do?, witness passively their exclusion? promote their destruction?, sentence them to a life which is mere survival? (Population and quality of life commission No 1 Oct. 1993, P 3).*

She suggested that the foremost priority is to mobilize all our capacities of imaginative - thinking, decision making efficiency and solidarity to ensure that respect for the dignity of every human being is not lost, and urged everyone to participate in this task.

Likewise, Rock (1963) stated that the expected growth of the worlds population, even according to minimum estimates, is a kind that puts before humanity great problems, the like of which it has never known before.

McNamara in his 1979 Presidential address to the Governors of the World Bank also said that short of nuclear war itself, it (population) is the greatest issue that the world faces over the decades immediately ahead. It inevitably is a determinant of humanity in future, and requiring far more attention than it is currently receiving.

Enrlich (1971:224) also remarked that:

> *The current situation of global over population is so serious and the built in potential for further population increase is so great that the only sensible strategy for humanity today is to end population growth, limiting births and increasing social justice are not alternatively strategies to preserving society, they are necessary compliments.*

John & Sutton (1968) in Adzenga Obasa (1978) also observed that demographic studies have really brought into focus the rather startling facts that surround the world-wide population explosion. They warned that it would be a great misunderstanding of facts if people everywhere, in the world, failed to realize that someone else's problem today will be theirs tomorrow. This means that no country even though under populated now should forget fertility control, "For the need will surely arise some day." (Adzenga and Obasa, 1978, P 8). Those who have studied the demographic situation in Third World countries as well as those who are involved in socio-economic planning for these countries are fully aware of the consequences of population explosion. Gadalla (1975) and Goliber (1997) have shown that there is a need for fertility control in the developing countries. This has to be done by making the populace of such countries become more aware of their nations' population problems and their implications.

Many countries, especially the developed ones, have mapped out measures to combat the problem. In such countries, successes have been achieved. Efforts are being made to control population in developing countries like Nigeria but not much seems to have been achieved because many Nigerians are still having more than four children, and the level of contraceptive use is still very low (Ejembi & Bandipo, (1990)

473237

1.2 Statement of problem

Shehu (1999) observed that the most pressing issue facing Nigeria and indeed the whole of Africa today is how to reduce poverty in recent times. Socio-economic development and improvement in the well being of the people depends largely on the relationship between population and resource availability and utilisation. Consequently, it is increasingly difficult to alleviate poverty and other population related economic problems unless the rapid population growth is significantly reduced (New Nigeria, Feb. 15, 1999 P.20). Likewise, the United Nations Development Programme (UNDP) in its annual reports on Africa estimated that 38 million Nigerians were engulfed in absolute poverty in 1995, that at least half of the Nation's population are regarded as under nourished, that the 51 million ill-fed Nigerians constitute 25% of the million under fed in Africa alone (UNDP, 1996).

According to the state of world's Press (1991), Nigeria is reported to be the most populous country in Africa with a total population of 88.5 million in 1991. A population growth rate of 3.3 percent and a total fertility rate of 6.3 per woman, indicate that these absolute numbers will continue to increase in a very substantial rate if nothing is done to arrest it. An infant mortality rate of one hundred and four in a thousand population (104/1,000) and Maternal mortality rate of eight hundred in hundred thousand population (800/100,000) further illustrate the seriousness of demographic and health issues facing the Nigerian Government (State world's Press 1991).

The problem inherent in this population explosion has brought about wide adoption of population/family planning policies in developing world (Population Report, 1974). With the International recognition and consideration of the population issue, the question that is frequently asked is what measure, directly or indirectly can be taken to facilitate the decline of population explosion in Nigeria?.

In Nigeria, over half of the population is under 15 years of age thus producing a high dependency ratio. Also, because people are moving in large numbers from rural to urban areas, the Government has to provide more housing facilities, electricity, water and food in these growing cities. Despite the government's efforts there are still serious problems of housing and unemployment in these cities (Population Policy 1988). Because of this situation, there has been a public outcry about the rate of population growth in Nigeria as it is indicated in comments made in the National dailies almost on weekly basis. Such comments include those of Kale (1989:7), "famine a mechanism of population control." Fetuga (1990:29), "Family planning a basic human right." Akapanudo (1993:1), "Horrors of uncontrolled breeding," Ajigah and Aina (1992:8), "population pollution and global resources", Fashomi (1992:B2), "The need for fewer children", Omelu (1992:B4), "population outgrows food production" Durojaiye (1994:23) " 38 million Nigerians were engulfed in absolute poverty in 1995", (UNDP report 1996), 'Hunger remains the greatest threat to people in Africa', Ijeoma (1996), "food security and next millennium", and Osunkeye (1998), "Population health and economic development, just to mention a few.

This outcry has led demographers, health workers, and Population Association in Nigeria (PAN) to call on the Federal Government to address itself to the issue of population explosion in Nigeria, to avoid the "demographic trap of standing room only" (Orubuloye & Oyeneye, 1983, Adogbor, 1987).

Recognising the consequences and implications of this situation at the family and societal levels on agricultural development, land and energy resources, education, employment and health, the government of Nigeria approved a National Population Policy on February 4th, 1988. The main focus of the National Population Policy is to reduce the

fertility rate by introducing the use of contraceptives, limiting the number of children a woman should have to four, and limiting the fertility age of women to between 18 - 35 years. Despite the Governments efforts to halt the escalating population growth, the impact of contraceptive use in Nigeria has not been much especially in the Northern part of the country (Ogbona & Mamman, 1990). In their studies of determinants of fertility levels in Kafanchan a town in the Southern part of Kaduna state, Ogbona & Mamman, (1990), found a life time fertility of a woman to be seven. Bandipo and Ejembi (1990) also found low level of contraceptive use in their study of fertility pattern and its determinants among rural Hausa communities in the Zaria environment.

This researcher developed interest in this topic as a result of her counselling experience with clients. Aside from career problems, one of the commonest problems dealt with, was marital conflicts, majority of which were caused by poverty and lack of communication among spouses. Many husbands were not able to cope with the demands of their family size, and yet were demanding for more children. Also, among the youths on campus the number of females students with unwanted pregnancies and babies were many and were increasing compared to the previous years. From the researcher's interaction with the married clients, the majority were not aware of the implications of Population explosion and various contraceptive methods and therefore were not using any method to control or space their children. Among the youths there are many of them who are not ready for parenthood and yet are sexually active and are not contracepting. This has led to unwanted pregnancies and abortions. It is gratifying to note that those the researcher has been able to counsel on the need to prevent unwanted pregnancies were very receptive to the idea.

The researcher then felt that this could be a generalised situation and thus the basis for this empirical study to research into the attitudes of Nigerians towards contraception and the National Population Policy on birth control in Kaduna Metropolis.

1.3 Purpose of Study

The study is designed to achieve the following objectives.

1. To examine the general attitudes of both males and females of reproductive age (for females from age 16-50 years and for males 16-60 years), both married and unmarried, in Kaduna metropolis towards contraception and National Population Policy on birth control.
2. To identify some underlying factors which discourage or prevent people from using contraceptives in Kaduna metropolis.
3. To examine the general problems of contraceptive usage in Kaduna metropolis.
4. To recommend counselling strategies that can be used effectively with those who have negative attitude towards birth control and contraceptive use.

1.4 Research Questions

The study seeks answers to the following questions:

1. What are the attitudes of the different age groups toward contraception and the National Policy on birth control in Kaduna metropolis?
2. What are the attitudes of male and female respondents toward contraception and the National policy on birth control in Kaduna metropolis?
3. Does ethnic background affect the attitudes of respondents toward contraception and the National Population policy on birth control in Kaduna metropolis?

4. Does religious beliefs affect the attitudes of respondents toward contraception and the national Population policy on birth control in Kaduna metropolis?

5. Does the level of literacy affect the attitudes of respondents toward contraception and the National Population policy on birth control in Kaduna metropolis?

6. Does marital status affect the attitudes of respondents toward contraception and the National Population Policy on birth control in Kaduna metropolis?

7. What are the attitudes of the contraceptive users and non-contraceptive users toward contraception and the national population policy on birth control?

1.5 Hypotheses

On the basis of the research questions and available evidence, the following null hypotheses were formulated:

There is no significant difference

1. in the attitudes of different age groups
2. between male and female respondents in their attitudes
3. in attitude of different ethnic groups
4. in attitude of different religious groups
5. between those who are educated and those who are not in their attitudes
6. between those who are married and those who are not married in their attitudes
7. between users and non users of contraceptives in the attitudes toward contraception and the National Population Policy on birth control in Kaduna Metropolis.

1.6 Basic Assumptions

The following assumptions have been made:

1. That there is a high fertility rate in Kaduna metropolis.
2. That attitudes associated with the acceptance and rejection of contraceptives and population policy can be objectively investigated and established.
3. That a good number of females and males in Nigeria are aware of the National Population policy and contraceptive methods.
4. That being aware of contraception and population policy does not necessarily indicate the practice of it.
5. That various factors such as age, sex, religion and literacy level will affect the acceptance or rejection of contraception and National Population Policy on birth control
6. That if there is adequate education on the importance of family planning and if family planning services are accessible, people will be willing to use them.

1.7 Significance of Study

As there is no much information on the perception of Nigerians toward population policy, this study is very important because its result would be useful to the government policy makers and other foreign agencies, funding the family planning programs in Nigeria.

It will also be of importance to the Doctors and Nurses who are involved in the formation of family planning programme and their implementation especially in the Northern States.

The study intends to identify some of the areas of discontentment among Nigerians about contraception and population policy, and suggest appropriate measures that would be taken to improve the family planning services.

This study will also draw the implications for the involvement of professional counsellors, psychologists and teachers in the promotion of contraceptives use in collaboration with health workers in schools, social welfare officers and other religious gatherings such as churches and mosques.

The teachers would educate our youths on population matters, sexual regulation before the children enter the ages of marriage and child bearing to enable the children to make informed choices when they get married. The professional counsellors and psychologists will employ their counselling and communication skills such as active listening, empathy, positive regard and non judgmental attitudes to win their clients' confidence and show concerns for their sexual and reproductive health and welfare and will be able to change their values which encourage high fertility.

Since the study is explorative, its results may expose further areas of research in family planning process.

1.8 Delimitations of the Study

The study covers the attitudes of respondents towards contraceptives and the Population Policy on birth control in Kaduna metropolis. Kaduna metropolis extends to four local government areas namely, Kaduna North, Kaduna South, Rigachuku and Chukun. Kaduna metropolis like any other capital city in the country, has had its share of economic and social problems. The projected population of Kaduna State Local Government for 1981-

1992 shows that the population of Kaduna metropolis has doubled its population in 1992, within the space of 26 years 1963-1989 (population census of Nigeria, National Census board Lagos 1981-1995) (See table 1.1).

This study is delimited to Nigerians in Kaduna Metropolis because of the fact that in terms of cultural background and ethnic differences, Kaduna Metropolis reflects a pattern of varieties that exist through the capital cities in the Northern States. However, to draw conclusions for the whole of the Northern capital cities is not the intention here. The study is also delimited to the attitudes of different age groups, marital status, educational level, sex, ethnic groups and users and non users of contraceptives.

1.9 Limitations of the Study

One of the limitations of this study was that the samples were selected randomly from health centres in various areas rather than directly due to the scope of study. The result was that the respondents were not as randomly selected as they would have been if they had been sampled directly.

Another limitation was that some of the respondents were skeptical in giving information because of the sensitive nature of issues that are related to sexuality and sexual habits. The researcher had to reassure them that the information would be useful to them.

Also the Likert -type scale used for the study, being a summated scale, only the total scores of the respondents were used for the analysis thereby giving only a general picture of thre attitudes of respondents exhibited toward contraception and the national population Policy on birth control. This was a limitation because the pattern of response on the individual items of the instrument was ignored.

473237
RG
137

Table 1.1. Projected Population of Kaduna State Local Government 1981-1992.

Local Govt.	L.G.A. Hqtrs	Census 1963	1981	1986	1987	1988	1989	1990	1991	1992	Percent Distr.
B/Gwari	B/Gwari	29,798	46,475	54,402	56,143	57,939	59,794	61,707	63,682	65,718	2.03
Chikun	Kujama	69,717	108,735	127,282	131,355	135,558	139,896	144,373	148993	153,761	4.75
Igabi	Turunku	115,676	180,415	211,947	217,947	224,119	232,199	239,547	247,212	225,123	7.89
Ikara	Ikara	295,908	461,515	540,238	557,525	575,366	593,788	612,779	632,387	652,624	1 4.24
Jema'a	Kofa	168,906	263,436	308,371	318,239	328,422	338,932	349,778	360,970	372,521	11.52
Kachia	Kachia	101,550	158,383	185,399	191,332	197,455	203,773	210,294	217,023	223,968	6.93
Kaduna	Kaduna	149,910	233,808	273,690	282,448	291,486	300,814	310,440	320,374	330,626	10.22
Kaura	Kaura	51,394	80,157	93,830	96,832	99,931	103,129	106,429	109,835	113,349	3.51
Kauru	Kauru	43,815	68,336	79,993	82,553	85,194	87,920	90,734	93,637	96,634	2.99
Lere	S/Naka	146,710	228,818	276,848	276,419	285,264	294,393	303,813	313,535	323,568	10.01
Soba	Mausana	156,894	244,701	286,440	295,607	305,066	314,828	324,903	335,299	346,029	10.70
Z/Kataf	Zonkwa	125,303	195,430	228,765	236,095	243,640	251,437	159,483	267,786	276,355	8.55
Zaria	Z/City	97,721	152,411	178,409	184,118	190,010	196,090	102,365	208,840	215,523	6.00
Total		1,553302	2,442621	2,835855	2,926602	3,020253	3,116901	3,116642	3,319575	3,425001	100

Source: 1993 population Census of Nigeria, National Census Board, Lagos Growth Rate: 2.5% (1963 - 1981) 3.2% (1981 - 1995).

1.10 Summary

The major purpose of this study was to examine the attitudes of people in Kaduna Metropolis toward the National Population Policy on birth control and the use of contraception. This researcher developed interest in this topic as a result of the various birth control problems brought to her as a counsellor by clients over the years.

Seven hypotheses and seven related research questions were formulated for the study. Likewise, six basic assumptions and five significance of the study were made. The study was delimited to Kaduna Metropolis only. Specifically, the study covers Kaduna North, Kaduna South, Rigachukun and Chukun local government areas.

KASHIM IBRAHIM LIBRARY

CHAPTER 2

REVIEW OF RELATED LITERATURE

2.1 Introduction

The main objective of this chapter is to review certain related theoretical issues and discuss them as they relate to Attitudes and population explosion in general, population policies and the concept of family planning in Nigeria.

The relevant literature are discussed in this chapter under the following broad headings:

a. Attitudes and attitude formation

b. Attitude measurement

c. Socio-cultural factors and birth control

d. Historical perspective of contraception of family planning

e. The concept of family planning in Nigeria

f. Determinant of fertility

g. Population theories,

h. Population explosion

i. Population policies

j. Population policy in Nigeria

k. communication and attitudinal change in family planning

l. Rogers' communication strategy

m. The role of Mass Media in behaviour change

n. The role of counselling in fertility control.

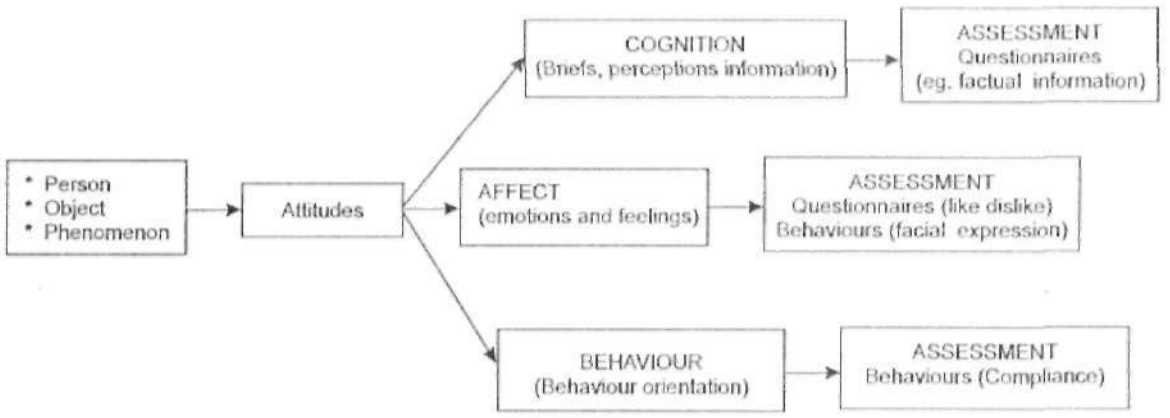
2.2. Attitudes and Attitude Formation

Mukherjee (1978) defines attitudes as one's feelings, thoughts and predisposition to behave in some particular manner towards some aspect of one's environment. Rokeach (1968) feels that an attitude is a relatively enduring organization of beliefs around an object or situation predisposing one to respond in some preferential manner. Rosenberg (1960) defines attitudes as predispositions to respond in a particular way towards a specific class of objects.

According to Rosenberg (1960), when attitudes are studied, what are observed are the evoking stimuli on the one hand and the various types of response on the other. Mukherjee (1978) maintains that each belief within an attitude organization is conceived to have three components: A cognitive component, an affective component and a behavioral component, figure 2.1 shows the conception of attitudes.

Rosenberg (1960) see the affective component as sympathetic nervous responses, while MacIver, (1969), in Onyebe (1981), asserts that affect responses suggest fear, hatred, love or pity. The cognitive component represents a person's knowledge, held with varying degrees or certitude about what is true or false, good or bad, desirable or undesirable. It also includes perceptions, conceptions and beliefs about the attitude object. Mukherjee (1978) feels strongly that an attitude must have a behavioral component because, a belief being a response predisposition must lead to some action when it is suitably activated.

Figure 2.1. **SCHEMATIC CONCEPTION OF ATTITUDES**



SOURCE: Rosenberg et al, (eds) Attitude Organisation and change University Press 1960 Page 3.

It is very important to note however that not all of the three predispositions need necessarily become activated by an attitude object or situation. Which one is activated depends on the particular situation within which a particular attitude object is encountered. This is why Rosenberg (1960) stated that for certain types of Research, it may be sufficient to use a single response as the index of an individual's attitude. For this study, an attempt is made to measure aspects of the three components of attitudes, through the respondents written and verbal statements on population policy and contraception.

To understand the characteristics of attitudes, it is necessary to know how attitudes are formed and the type of functions they perform.

While there may be a possible hereditary basis for attitudes as Allport (1935) suggested, Rokeah (1968) asserted that attitudes are acquired through the principles of

473237

learning. According to Krench (1962) the major determinants of attitude formation, are individual wants, information, group affiliation and personality. Krench (1962) agreed with Mukherjee (1978) that, in coping with various problems so as to satisfy his wants, the individual develops attitudes. He develops favourable attitudes towards objects and people, that satisfy his wants. For example if a patient evaluates his final goal object (being alive is good) favourable, he will also evaluate his means - goal object (his doctor) favourable. Conversely, the individual will develop unfavourable attitudes towards objects and persons that block the achievement of his goals.

Attitudes are also shaped by the information to which the individual is exposed. The validity of the attitudes held by people will depend to a large extent on how sufficiently well informed they are. The nature of our sources of information is also crucial to the formation of valid attitudes. This point is stressed when Krench (1962) asserts that for all individuals, facts are frequently mediated by either people as authorities and the amount of discrepancy between the fact and the individual's belief will be dependent upon validity of assertions of authorities.

Group affiliations also determine an individual's attitude. Many of the attitudes of the individual have their source and their support in the groups, to which the individual gives his allegiance. His attitudes therefore tend to reflect the beliefs, values, and norms of his groups. to maintain his attitudes, the individual must have the support of like - minded people.

Personality also determines an individual's attitude. While group influences upon development is to produce uniformity of attitudes among the members of various social groups. Diversity could be noticed in the midst of uniformity. A major factor responsible for diversity is the existence of personality differences among individuals. Warren (1976:9)

defines personality as "the general principles and organization of internal psychological functioning." While one's personality will reflect in almost every-thing one does, one's attitudes has reference outside the person to the specific social object of attitude. (Onyabe, 1981).

However Segall et al. (1963) said there are six ways of acquiring information upon which dispositions are based. They are

1) blind trial and error

2) general perception

3) perceptions of other's responses

4) perception of the outcome of other's explorations.

5) verbal instruction relevant to behavior and

6) verbal instructions about object's characteristics.

Campell (1963) and Roserberg (1960) believe that dispositions acquired by these different modes are psychological equivalent and that the several modes combine addictively to result in stronger dispositions.

2.3 Attitude measurement

The measure of attitude is a complex matter. By predisposition is meant preparedness or state of readiness to respond. To Roserberg (1960) being predispositions, attitudes are not directly observable or measurable. Instead they are inferred from the way we react to particular stimuli. According to Rokeah (1968) a person with a particular attitude is predisposed to selectively perceive, recognize, judge, interpret, learn, forget, recall and think in ways congruent with his attitudes. He maintains that while there is agreement on the view

that attitudes lead to a preferential or discriminatory response, there is little agreement on the basis for the preferential response. That is, it is not clear whether a positive or a negative preference is due to the fact that the attitude object or situation is effectively liked or disliked, or because it is congnitively evaluated as good or bad. For example excessive alcohol is bad, but many people enjoy it. Medicine is good but one might dislike the taste. Whether or not the preferential response will be positive or negative will therefore depend on the relative strength of one's evaluative beliefs and one's positive or negative feelings. A person may make favourable response to an object toward which he harbours negative feelings. If he believes the object to be sufficiently good for him. How a person responds to an attitude object or situation may involve both positive or negative, or it may be a resolution of opposing forces between affection and evaluation. (Onyabe, 1981). In support of his position; Smith (1966) in Onyabe (1981) said that attitudes are customarily measured by eliciting acts of judgement; agreement or disagreement with standard statements of opinion. He suggested that a person's attitude on a controversial issue may be co-odinated to the range of discriminable opinion positions that he finds acceptable. The person's latitude of acceptance will typically be narrower than the accompanying latitude of rejection when he is highly ego-involved with issue or when his position is extreme. Smith (1966) went further to say that in responding to a persuasive communication that advocates some position on the issue, the respondent places it on a subjective, pro-con scale of favourability with respect to the issue. Maximum persuasive effect are to be expected when the position advocated falls near the boundary of the recipient's latitude of acceptance. Under such conditions the recipient is likely to minimize its judged distance from his own position, and to be open to its influence. When position of the communication falls within the respondents latitude of rejection, he is likely to exaggerate its judged distance from his own stand, and to resist influence.

It has been argued that, the fact that a person's attitude may always be characterized as pro or con, for or against the object, means that attitude scales have a region where the sign changes. This he calls the neutral region, to one side of which attitude grow more positive, to other side of which they grow more negative. A score falling within the neutral region must indicate the absence of any attitude (Krech 1962).

MacIver (1969) is of the opinion that it is difficult, if not impossible, to measure in any mathematical sense, the degrees of favour and disfavour or liking and disliking. He maintains that attitudes measures are generally concerned with attitude, not in their full significance, but in a simplified form, as merely expressing favour or disfavour of some object. It is imperative, therefore to ensure that the object or situation itself, have precisely the same significance for the various persons who exhibit attitudes towards it (MacIver 1969 in Onyabe 1981). It is the researcher's assumption that population policy and contraception has the same significance for all Nigerians.

Although attitude measurement has its limitations, attitude scales do permit us to sort out the favourings and disfavourings, likings and disliking of a group of people as exhibited at any one time towards some particular interest in a series of grades or rates. (Onyabe, 1981). Such scales when carefully constructed and expertly used should provide us with very useful information about social situations. For this study, the grading and ranking of Nigerians in Kaduna metropolis according to their attitudes toward population policy and contraception should give useful information about how they feel about contraception, and the government population policy on birth control.

2.4 Socio-Cultural Factors and Birth Control

The desire for large families and the consequent non-acceptability of birth control is the norm in many traditional societies. Bell (1976) confirmed this. He asserted that for most

mankind history, having large families is desirable and usually inevitable and anyone who tried to change this "natural" process has been seen as a deviant (Bell, 1976).

Weeks (1981) also noted that in virtually every society, individuals feel pressured to have children but in some societies the pronatalist pressures are stronger than in others. Caldwell (1977) found that in traditional society, nearly all parents have social and economic gains which increase with family size. Societies everywhere have developed social institutions to encourage child bearing and reward parenthood in various ways. Chapera, (1966) in Bell, (1976) also found several factors that encourage the Kgatha (a tribe in South Africa) with many children . A woman with many children is honoured. Married couples acquired new dignity after the birth of their first child. Many cultures, the world over, attach great importance to the act of procreation. In a review of studies in India, Mandelbaum (1974) in Bell, (1976) reported that typically a woman knows of no acceptable role for herself than wife and mother. Therefore a woman's destiny lies mainly in her procreation (Bell, 1976).

In African societies, much value is attached to procreation. To buttress this point. Kisekka (1989;3) asserts that the desire to have as many children as God grants is a fundamental traditional African value which is also buttressed by both Christianity and Islam, it is true that both religion and tradition envisage sex as mainly if not solely for the purpose of procreation.

In Ghana, Gisie (1975) in Ogunronbi (1991), found out that Tallensi regard the perpetuation of their lined decent as of transcendent importance to the Asante, prolific children are honoured. A mother often boast of her achievement with the number of her children, and is giving a public ceremony of congratulations. Children often follow rapidly after another. By contrast infertile women are given little or no prestige, contempt and malicious pity (Ogbonna & Manuman, 1990).

In Nigeria, marriage is universal. Every man or woman aspires to satisfy this social obligation. The mean age at marriage is seventeen years (Kisekka 1989), (Ogbona and Maman 1990). According to a popular Yoruba saying (a tribe in Nigeria), "Children are the cloth of the body without children one is naked." Other tribes have similar saying and beliefs. These statements attach a lot of magnitude to having children. Infertility is a source of pain, anxiety and shame so in Nigeria, high unregulated fertility is the norm.

Among the social-cultural factors that tend to promote large family size in Nigeria are value placed on children as security in old age, as economic assets that is human labour in an essentially agrarian economy, and the large prestige attached to large size. In this regard male children are usually favoured because they are the ones who will inherit not only their father's property but more importantly, will carry on their family names when their parents are dead. (Ejembi & Bandipo 1990).

From the discussion above, it can be seen that if a woman is unfortunate to have only female children, she has to continue to have more children, with the hope of getting a male child. This could have contributed to women having more children in Nigeria.

Lack of access to good health care is also a factor which has contributed to high fertility rate in Nigeria. The high incidence of infant mortality play, a dominant role in shaping this. This is because the high infant mortality rate negates any rational attempt to family planning as couples find it impossible to predict with confidence how many children will survive from a given number of deliveries. But with the decreasing mortality rate being observed in many developing countries including Nigeria, this is leading to high survival rates which may now create demand for contraceptive use.

In the demographic sample survey conducted by the World Health Organization (WHO) in ECA States, they found out that the most common stated reason for non-use of

contraceptives in most African countries was a desire for more children (United Nations Economic Commission for African: xiv).

Caldwell & Caldwell (1987) also noted that the pressures for high fertility far outweigh any need to limit family size. They maintain that sub-Saharan Africa many well offer greater resistance to fertility decline than any other world region due to a cultural system that operates directly to sustain high fertility (Caldwell & Caldwell 1987:409).

Odile (1987) from his study on the demand for fertility control in sub-Saharan Africa, also argued that fertility rate remains high not because of lack of access to contraception but lack of demand. Ejembi & Bandipo (1990) confirmed this. In their study of fertility pattern and its determinants among rural Hausa communities in Zaria environment, they found the level of practice of contraception to be very low. Ogbona & Manman (1990) also found total life time birth rate of a woman to be seven in Kafanchan.

Others maintain that desire to achieve a small family size is not enough reason for using contraception. They argued that other factors such as illiteracy, low income, male dominance, lack of husband - wife communication, insufficient family organization, could prevent the realization of small family desires in most developing countries Hill & Pebley (1989).

Many Nigerians believe that Nigeria was wealthy in the 70's and had potentials for development, and therefore argued that the magnitude of the country's population problems was unlikely to be such that called for extensive emergency or panic action. Mott & Fapohunda (1973) are examples of them. They argued that Nigeria has many National resources and concluded that population control should be left to individuals and should not be policy of the Federal Government.

This is what led Gadalla (1978) to conclude that unless people are compelled by circumstances to want fewer births, family planning programmes will not

succeed in solving population problems of the developing world. This is why an adequate population policy must concentrate on changing people's motivation towards child bearing as an essential pre-requisite of family planning. All that is needed is the motivation to change the values of the society which encourages a high fertility rate. To achieve this there is the need to encourage more education and literacy.

It is also believed that now in the face of current economic recession, many couples are consciously adopting measures to limit their family size. The high inflation rate, and the new national population policy may also be having some effect on the attitude of Nigerians towards family planning.

2.5 Historical Perspective of Contraception and Family Planning

Contraception can be defined as the totality of conscious actions of the individual by means of which the occurrence of an unintended pregnancy is prevented (Adebayo, 1991). According to Ladipo et al. (1982) Family planning is synonymous with contraceptive services in Nigeria.

The socio-economic and environmental consequences of population density are of direct and indirect concerns to everyone. The main reason for control of population is to avoid the outstripping of resources by the population. Contraceptive may also be desirable where there are medical contraindication to child birth, and a personal desire to have no children at a particular time.

While most societies, preliterate and literate have accepted large birth rates as natural as was discussed earlier, it is also true that in many of these societies at various times, some people have attempted to control conception (Bell, 1976).

In most societies of the past, there was no knowledge of how conception occurred, and therefore no awareness of a process that could be halted by some contraceptive measure. Societies had to wait to try to do something about birth control until pregnancy could be seen or the infant born. Therefore in primitive societies, the chief method of birth control was abortion and in many societies infanticide.

Other practices that were used according to Bell (1976) were delayed marriage, celibacy, sex taboos limiting the time and frequency of sexual intercourse, pre-puberty coition and prolonged lactation.

Egyptian Papyri dating from 1850BC, contain instructions for introducing of crocodile dung in to the vagina prior to coitus as a contraceptive pessary or paste. The writings also contained the placement of tampons made up of lint soaked in honey, in front of the cervix before coitus. It is not clearly known what the "lint" consisted of but it might have been a plant product that used to hold the honey at the cervix so as to absorb semen from the vagina (Keown (1970), in Bell, 1976).

Around A.D. 125, Soranez of Greece also suggested the instruction of absorbent soft wool in to the vagina. His writings were notable for their exceptional clarity and detailed description of several other contraceptive techniques in addition.

Women of Central Africa used bulky pads of chopped grass or rags to block the cervix. These customs were similar to the use of a ball of bamboo paper by the Japanese women, Willow leaves by Islamic women and seaweed by women of pacific Island (Bell 1976). Besides, mechanically blocking the cervix, various portions and solutions placed in the vagina probably had spermicidal effects. Early vaginal spermicide were developed of necessity in the home from common house hold materials such as vinega in concentration

of two table spoons to a cup of water or lemon juice at one table spoon to a pint of water (Bell 1976).

In Nigeria, contrary to wide spread belief, the concept of birth control is not new. Nigerian women have used various traditional methods which they believe will limit their family size. Among the various traditional methods that were practiced include the eating of potash, use of charmed rings, padlocks, virginity circumcision, native sponge to prevent conception and prolong breast feeding coupled with temporary separation of wife from husband during lactation period. This practice is still seen in many parts of Nigeria especially the Northern part, but it is fast becoming outdated among the elites in the cities (Fummilayo, 1986). Other methods used were sexualabstinence, celibacy and withdrawal or coitus interruptus method. The sexual abstinence was usually for the females. The males could have sexual relationship outside marriage. This shows clearly that the population of pre-modern societies has used a host of varying methods to control their fertility and this has helped to keep their fertility rate well below potential.

In recent times, some of these methods were dropped either because of their inefficiency or possible damage to life of the women that use them. Some of the methods have been modified, while others have actually paved the way for development of new perfect ways of contraception. In Nigeria, the available modern forms of family planning methods include oral contraceptives, condoms, diaphrams, intrauterine contraceptive device, safe period, abstinence, progestogen, female and male sterilization. All these methods could not be effectively used without counselling.

2.6 The concept of family planning in Nigeria

Family planning has been an issue of the developed world, but has now spread to the developing countries of which Nigeria is one.

The family planning council of Nigeria known as planned Parenthood Federation of Nigeria was inaugurated in 1964 by Dr. O. A. Jones. It was the outcome of a survey carried out in Lagos under the auspices of the Path Funder in 1960 that acted as a pointer to the urgent need for fertility regulation.

The population Council of Nigeria established in May 1975 as the National Development plan was the first body to look into population problems of Nigeria. They decided that facilities should be designed to protect mothers on a large range basis from repeated and unwanted pregnancies, as well as to enable parents space their children for better feeding, clothing and education (Ottong 1988).

The current National population policy was set up in 1988 to look at the current population explosion in Nigeria and make feasible recommendations that could be implemented and practiced on family planning concerning birth control. The study concluded that it was possible for Nigerians to control their fertility rate and reduce their excessive rate of population growth thereby improving the standard of living of all Nigerians.

The goals of the National population policy include the improvement of the standard of living of the people to promote health and welfare, and to achieve lower population growth rates through reduction of birth rates by voluntary fertility regulation methods that are compatible with the attainment of economic and social goals of the Nation (National population policy 1988).

In spite of the population policy the impact of family planning has not been much. It has been argued that family planning is seen as foreign and viewed with skepticism, and at times confronted with stiff opposition. Therefore it is looked upon as a radical innovation that is foreign to African culture (Ottong, 1988).

Some Nigerians see family planning as a ploy by the West to control the rest of the world particularly the third world countries like Nigeria (Kyari, 1992).

Others see family planning as a class issue. It is seen as an attempt to threaten the poor with extinction to avoid the likely revolution of poor majority (Ottong, 1986). It has also been argued that Africa culture is not conducive either to the idea or to the practice of reducing family size (Caldwell, 1968). Family planning programmes therefore are faced with myriads of problems in Nigeria, some of which include insufficient personnel, lack of equipment, ignorance, religion, and cultural resistance, as well as social political misconceptions (Amdi 1993). The population policy has also been criticized for failing to properly address within its strategies for population control the family planning responsibilities of men as the other vital half of population problem. So it appears that the undue emphasis and limitations placed on women's reproductive capabilities has conveniently under played men's responsibilities to control the number of children they bear in like manner (Okediran 1994). This, many Nigerians felt has made the population policy merely a policy statement with no formal force of law since its formulation (Okediran 1994) also noticed that for any population policy to be effective, the status of women has to be improved which includes improving their socio-economic development and living standard.

From the above discussion, in the researcher's opinion, to change behavior of people towards family planning in Nigeria, the values, norms and customs of the people must be

considered. Educating towards the use of family planning should be made to form part of the recipients attitudes to help them make a decision towards the use of family planning methods. Also, the role of men in fertility control must not be overlooked especially in sub-Saharan Africa where major decisions are taken by men including the number of children a woman could have. Therefore in the view of the research, solving the population problem requires more than simply provision of contraceptives.

2.7.0 Determinants of fertility

According to Farooq and Decaff (1991), in the study of fertility, there does not exist any one satisfactory unifying theory that can be tested through empirical investigation. This is because more than one theory may suggest the importance of a given variable for similar or different reasons, and a given empirical variable may be used as a proxy for more than one theoretical concept. However, there are a number of variables which appear repeatedly in the empirical literature of fertility determinants which come to be regarded as important factors by the majority of scholars in this field. A selection of these variables will be reviewed.

2.7.1 Marital status

In the proximate determinants approach, marital status is intended to represent exposure to sexual intercourse, frequency of sexual intercourse is the underlying variable of interest, but information on this is rarely available. A few studies have been able to show directly, data on coital frequency, but these have been limited to only a few industrialized countries. This, in the researchers opinion, is because sex and sexual matters are regarded as being personal in Sub-Saharan Africa. In explaining historical patterns or cross-sectional

variations in fertility, Farooq and Decaff (1991) found that the proportion of the population ever married, the age at marriage or entry into sexual union and the prevalence of widowhood, divorce and remarriage, are sometimes more powerful factors than fertility within marriage itself. Kumar in population report (1987) agrees with them. He cited example that the low fertility of eighteenth and nineteenth century in Europe was explained by the high proportion of women who never married.

2.7.2 Age at marriage

Age at marriage, or duration of marriage are also frequently used as explanation variables. In studies of variation in fertility at the individual level, it is argued that early marriage enhance, high fertility levels, while late marriages and permanent celibacy, result in low fertility (Bongrates (1981). This was also noticed when the mean age at marriage wa raised to 23.5 years, and only 60% of women of reproductive age were married in North and South Vietnam. The total fertility rate changed from 6.1 to 4.0. Allman, J. in population reports (1990).

In general, while late age at marriage was associated with lower overall fertility in some countries, marital fertility tended to be higher for couples marrying later. This is because marriage decisions are in many ways a form of economic behaviour. For example, in pre-modern European population, marriages were often supposed to take place only after the couple could provide a socially prescribed level of income, or standard of living for themselves and their children. Thus not only does age at marriage act to influence fertility, in some cases expectations concerning fertility may affect age at marriage as well (UN 1987).

The strong association between age at marriage and aggregate fertility measures which has been supported by empirical research suggest that age at marriage can be used as a policy tool to influence fertility Farooq and Decaff (1991), Bongrates (1981) also argued that the factors that affect divorce will also affect fertility rate because he felt that women in stable marriage are most likely to have high fertility than those who have their marriage disrupted. This, in the researcher's opinion, may not apply to most women in sub-Saharan Africa, where women divorced only to get married soon after, and continue to have children Amdi (1993).

2.7.3 Contraception

Another variable is contraception. Contraception is central to the issue of fertility regulation since some form of contraception must be practiced if sexually active people are to reduce their fertility below its natural level. Contraception includes traditional and modern birth control methods, as well as sterilization and abstinence.

Measures of contraception range from very simply dichotomous representation of use versus non use of any contraceptive methods, to estimates of the contraceptive effectiveness of individual methods, and to the proportion of the reproductive life spent contracepting.

According to Farooq and Descaff (1991), the use of contraception is often found to be negatively associated with past fertility. The causality however may be operating in both directions simultaneously, because not only does the use of contraception affect fertility, but past fertility experiences and desire for future children, may influence decision of whether or not to use contraception.

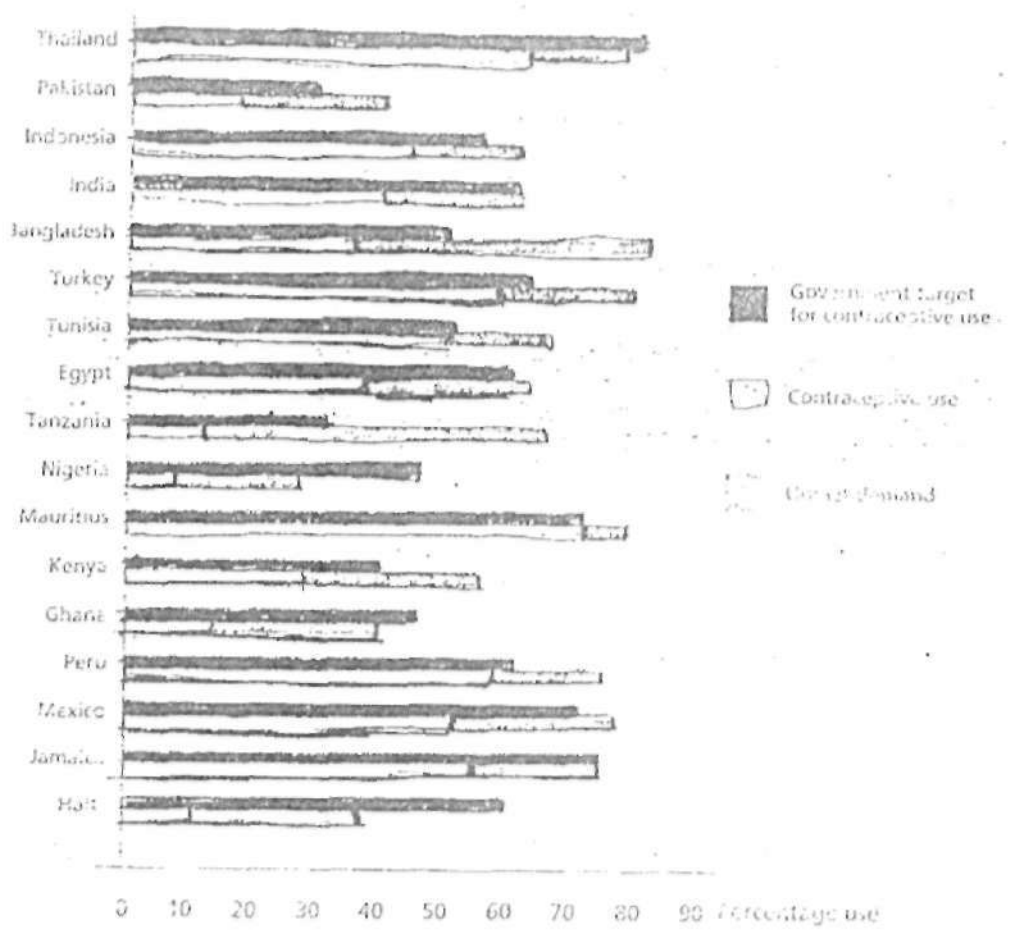
There has been a lot of debate as to the possibility of implementing wide spread use of contraception in the developing countries through family planning programmes.

Ladoja (1993) stated in a paper presented at the University of Arizona Glendale U.S.A. that it is absurd that most agencies and Western Governments, now choose to focus too much on family planning programmes "when it is clear that the root causes of high birth rates and thus population growth in Africa is the lack of alternatives to child bearing as a source of economic security and social and political power". Population control is thus unlikely to aid economic recovery and social development if the structural foundations and features that Africa's socio-economic formations which creates the harshness and uncertainties of daily life for most Africans remained unchanged Ladoja (1993:10). This view however has not been verified by empirical studies. Some also argued that it is not good to attempt family planning programmes in a traditional society before it is "modernized". This view was not accepted because people do not have to be modernized before they can be motivated to use family planning methods. Their motivation depends on the type of communication techniques used in informing them Amdi (1993). Some also argued that the present economic conditions in most developing countries now favour a strong well designed motivation and communication strategies Amdi (1993).

Others noted that the use of contraceptive can be done through market approach that people do not need motivation and persuasion, but the provision of information and efficient services. Gadalla (1978) also argued that satisfied contraceptive users will sell the idea of family planning to non-users. This presents some hope for successful implementation of the family planning programmes in developing countries.

Government programmes, policies and legislation which promote the use of contraceptive can have an important influence on fertility. China is an example of potential effectiveness of such measures. Also in Thailand with lesser degrees of direct control by the government, family planning services is well documented. However in sub-Saharan Africa, Nigeria inclusive, where national family planning has been in operation for years, contraceptive prevalence is very low. So it is important to understand the circumstances under which couples adopt contraception in any giving country. A casual look at Fig.2.2 confirms that the level of contraceptive use in Nigeria is far below the government target.

Figure22 Level of unmet demand for family planning compared to government target for contraceptive use for selected countries



2.7.4 Post - Partum Infecundability

The primary cause of prolonged post-partum infecundability is breast feeding. Prolonged and intensive breast feeding has been shown to delay menstruation, inhibit ovulation and reduce the likelihood of conception. Breast feeding practices vary widely across countries.

On average, women in the developing countries breast feed 2.5 times longer than do women in more advanced countries. Therefore breast feeding has made a substantial contribution to fertility control in many areas in sub-Saharan Africa, but it is an unreliable method at an individual level. The changing pattern of urbanization, education, and employment, has now led to reduction in duration of breast feeding. This has been shown to increase fertility in the absence of the use of other methods of birth control (Mcnamara M., & Lauris 1981), in Farooq & Descaff (1991), (Ejembi & Bandipo 1990).

2.7.5 Education

The fifth variable is educational attainment. Female education attainment especially has received a great deal of attention in fertility research due to the relatively strong evidence of its importance. There are a number of avenues through which female education may influence fertility. Examples of such avenues include increasing the opportunity cost of women's time, exposure to Western ideas concerning family size, facilitating access to information concerning the decision-making role of women Farooq & Descaff (1991).

The results of empirical research have been fairly consistent indicating a negative relationship between educational level and fertility rate. For example, Avwunuma (1977) observes that "Birth control will have little impact in a country where large proportion of the

population live in poverty, where the gap between rich and poor is wide, where there is high unemployment rate and especially where there is low education". Molnos (1968) in a similar research in East Africa concluded that the more education one has, the better one will accept birth control. Vankeep (1971), in Mexico, also found that positive attitudes towards birth control from respondents with higher education (Adzenga and Obasa 1978)

In comparison, women of low social class, and no education were of the idea that contraception could be harmful (Adzenga and Obasa 1978). Oni and Mccarthy (1989) noted from their study of family planning, knowledge attitudes and practices of males in Ilorin Nigeria that men with no formal education are less likely than the educated respondents to approve the use of contraception. In a review of WFS (World Fertility Survey Countries), it was found on the average, when not controlling for other factors, women with seven or more years of schooling, gave birth to three fewer children than did women with no schooling. Education is also an area in which government policy can have substantial influence. Improving education, both in terms of quantity and quality is an objective that is universally recognized as being important to social and economic development. In many developing countries however, especially in the Northern part of Nigeria education levels remain very low, and in some cases education of male children is much more strongly encouraged both through societal attitudes, and official policies and programmes than that of the female children. This situation deserves serious attention, not only because of the linkages between female education and fertility, but also for reasons of improving health nutrition, enhancing female productivity and development (Farooq and Descaff 1991).

2.7.6 Religion

Another variable worth reviewing is religion. Even though there are literatures which deal extensively with the influence of religion on fertility, there is still considerable uncertainty as to whether religion, independent from other social factors, has effects on familiar and societal levels of fertility. This could be because there could be disparity between peoples religious doctrines, and their actual beliefs and practices Amdi (1993).

The major religion, of the Eastern world do not have explicit ideologies with regard to birth control so religions and beliefs in Eastern world have not been a major factor in resistance to population control. However in the major parts of the Western world, and specifically in the United States of America, religious values have had a major impact on population control. Different Churches have different views about the practice of birth control. Protestants groups are almost unanimous in giving strong endorsement to birth control. This was strongly demonstrated in a statement adopted in (1961) by the General Board of the National Council of Churches of Christ in the United States that "birth control in such a way that are mutually acceptable to husband and wife in Christian conscience, and secure from corruptions of sensuality and selfish needs is a right and important factor in Christian family life" Bell (1976:102). Members of the Church are urged to work for adequate resources for birth control, including public health and welfare agencies.

Bell (1976) also noted that the support for birth control methods among the Jews have parallel developments among the protestants. The initial endorsements among Jews first appeared in 1931. Now all Jewish groups except the most extreme orthoddox groups endorse birth control. The basic theological difference between the Catholic doctrine, and that of protestants and Jews, relates to the basic purpose of marriage. The Catholic Churches believe

that procreation is the primary reason for marriage with companionship and vocation being secondary. Therefore according to the Catholic Church, birth control by any chemical or mechanical means violate the natural law. Hartfield (1972) notes that at present the Roman Catholic Church permits its members to use only certain methods of birth control which are Rhythm method and abstinence. On the broadest level however it was observed by Bell (1976) that many Catholics are not too different from non Catholics in controlling their family size. For example he noted an annual birth rate of 18.1 per 1000 for all Catholic Countries of Europe compared to 18.0 per 1,000 in non Catholic countries of Europe. He also noted variations among American catholic in their acceptance of birth control. Catholics who did not go to Catholic schools behave more like protestants with respect to fertility, than those who go to Catholic schools. Also, all available evidence indicates that there is a wide gap between the position of the Catholic Church on birth control and what majority of Catholics actually do (Westoff 1961: 64, Whelpton et al, 1966: 83).

Hartfield (1972) noted there is no definite teaching about contraception in the Qur'an, and so the opinion of Muslims is therefore divided. Some are opposed to any form of birth control on religious grounds. For example, Zohira (1965) in Bourge(1970) who is an influential scholar of Islamic theology argued that "the primary end of marriage is procreation." It is therefore a sin against nature and biological disposition to prevent conception. He said that the meaning of marriage is the community life belief in the spouses of which child is the fruit and visible embodiment Bourge (1970:206).

According to Islamic Sharia, Muslims may control their fertility only under following reasons:

a. If the life of the child and that of the mother is in danger.

b. In cases of financial incapability but not because of poverty per se.

c. In case either spouse suffers from a chronic or hereditary disease which may be transmitted to the children.

The only methods permissive in this case are withdrawal or using a barrier outside the uterus. The Sharia also encourages child spacing but not to stop conception completely. Hartfield (1972) noted that in spite of all these, the government of a number of predominantly Muslims countries such as Egypt, Pakistan, Turkey and Tunisia actively support birth control.

In Nigeria, the two main religions, Christianity and Islam have opinion that human beings must multiply in the world and that God is the giver of children and nobody has any right to control their number. The Muslim in Nigeria especially those with low education have a large number of children which is encouraged by the practice of polygamy which permits a Moslem to have up to 4 wives. Some studies in Nigeria about religion and fertility did not show much difference among clients from different religion. Ascadi, (1972) in their survey of fertility and family planning in Nigeria noted that religion did not have much influence on fertility control in Nigeria because it is only slight differences that was observed among different religious groups. See table 2.1 for details.

Table 2.1: Differences Among Religious Groups

Number of live births	Protestant	Catholic	Muslims	Others	Total
0	2.0	2.2	3.0	3.7	2.6
1	5.3	7.4	4.4	11.6	6.0
2	11.2	10.1	8.9	11.6	10.3
3	14.1	13.4	11.6	9.9	12.7
4	14.9	17.3	16.4	16.7	15.9
5	14.9	15.1	15.7	12.8	15.0
6	15.3	13.4	19.4	9.9	15.8
7	9.7	7.7	8.9	12.4	9.4
8	5.8	7.7	6.1	7.0	6.3
9	3.9	2.5	3.5	2.9	3.4
10	3.9	2.5	3.5	2.9	3.4
10 plus	2.7	3.3	2.1	2.5	2.6
Total	**99.8**	**100.1**	**100**	**100**	**100.0**

Source: Ascadi C.T. et al (1972) Survey of fertility & Family planning in Nigeria. Institute Faculty of Social Sciences, University of Ife, November, 1972, p.117.

Other studies noticed some difference. For example, Isiugo -Abanihe (1994) in the data collected in 4 Nigerian cities found the average number of children desired by muslims were 6.21, while Roman Catholic were 5.45, and Protestant people were 6.04.

As the economic hardship is now biting hard on Nigerians, every woman regardless of her religion, is opting to use one form of contraceptive methods to have the number of children she can cater for.

2.7.7 Abortion

Historically, abortion has probably been the most important influence in holding population below what it could have been, but the extent to which abortion has influenced population growth is not yet known and probably never will be known . This is because it is more difficult to obtain accurate information on the practice of abortion than on contraceptive use. Abortion is therefore rarely incorporated in empirical research.

In recent decades, abortion has been used in many countries as a major means of controlling birthrate, first in Japan then in Russia and subsequently all countries of Eastern Europe with exceptions of East Germany and Albania who have permitted abortions on socio-economic grounds (Bell 1976). It was observed that as a result of legal abortions in these two places, their birth rates dropped rapidly and they have the lowest fertility rate in the world today. But this can not be applied to all countries because in some countries where abortion has been legalized like the United States of America and India, Abortion has not been found to reduce the fertility rate much Gadalla (1978:132).

Ryder & Off (1971), suggest that abortion does not compete with contraception, but rather serves as a back up when the latter fails, or when contraceptive devices or information are not available. He added that as contraceptives become customary, the incidence of abortion recedes even without its being banned. The researcher tends to go along with Ryder because abortions can be prevented by effective use of contraceptives, and many women would rather use contraceptives than abort. Abortion is also a controversial policy issue in many counties due to diversity of opinions concerning the morality of its use and the rights of pregnant women, Farooq and Descaff (1991). However, despite various opinions against abortion, many western countries have legalized it to avoid its complications.

2.7.8 The Direct costs and benefits of children

Many economists have argued that the presence of children within a family involves direct costs and benefits for the parents, and the variations in these may be a major determinant of fertility. The new home economics approach of modelling the demand for children explicitly incorporates these concepts.

The direct costs of children include such things as expenditures on food, education, clothing, dowry and medical care. The benefits of children include productive activities in the household, income earned, support in old age, and the consumption utility derived from children. According to Fawcett (1983) calculations of the costs and benefits of children would need to include psychological and social costs and benefits.

Although the costs and the benefits of children as determinants of fertility, have received a great deal of attention in the theoretical literature, empirical research and conclusions in the area are lacking, Farooq and Descaff (1991). This is largely due to the difficulty of obtaining quantitative measures of these costs and benefits, because there is no corresponding market price for children as there is with other commodities. Also many of the costs and benefits incurred in developing countries are not monetized. Therefore Data concerning expenditures on children are rarely available. Farroq and Descaff (1991) noted that the limited empirical research in this area is reviewed by Nag (1981), but the evidence is too impressionistic to draw a tentative conclusions.

2.7.9 Socio-cultural factors

According to Farooq (1985) various socio-cultural factors are frequently incorporated in household level studies of fertility. Examples of such variables include ethnicity and

family structure. The effects of these variables vary greatly across populations, and are best considered on a country-by-country basis. From the policy point of view it is observed that these variables are less of interest because they are generally not subject to changes through interventions. However, any empirical study should consider their potential effects so that their omission does not bias analysis of other variables.

2.7.10 Preferences

According to Farooq and Deeaff (1991), it is almost universally accepted in the study of fertility that differences among couples as to their preferences for children, in terms of the number of children desired, sex of children and quality of children, contribute to differences in fertility behavior. However, there is a strong divergence among scholars as to whether and how this concept should be pursued in theoretical and empirical research. Those who support the new home economics approach de-emphasize the role of preferences on the ground that they are difficult, if not impossible, to measure and incorporate into empirical analyses of fertility. Other researchers felt that the inclusion of tastes in the study of fertility is of utmost importance and efforts should be made to further this area of investigation. In the researchers opinion the issue of male preference is very important and need empirical studies in Nigeria as previous research has shown that many Nigerians prefer to have more male children than females.

2.7.11 Male involvement

Many events have happened in the past twenty years that have raised some doubts about restricting male involvement in fertility control. Meredith (1989) noted that a "retreat"

from interest in contraception was noticed among young men during early sexual activity which followed the replacement of condom and (withdrawal) by the oral contraceptive in the early 1970s. The great benefits which the pill brought to the psychic liberation of women also liberated men in a more individualistic way such that it was no longer easy to persuade male generations to take back their share of contracepting which they had once held when methods were restricted to the condoms and diaphragms.

Secondly, the sudden arrival of AIDs in early 1980's and the implication of the fact that none of the female controlled contraceptive methods are thought to offer any protection against disease. The condom and the need for male contraceptive control and responsibility, returned with a new prominence. The global threats of AIDs has brought forth major educational efforts to persuade men to contracept if not for sake of pregnancy prevention then physical survival Meredith, (1989).

The role of men in family planning has also been examined. The husbands approval of contraceptive plays a decisive role in male dominated societies like Nigeria. In Indonesia it was found that the husbands approval was the most important determinant of contraceptive use among fecund women Joesoet, Andrew, & Budi(1988).

In the patriachial traditional African family, the role of the husband is paramount in couples decisions about fertility regulation. Oni and McCarthy, (1989) noted that the traditional African pattern of male involvement in fertility decision making is clearly reflected in existing studies of men's influence over these matters in Nigeria. In a study carried out among married Nigerian students, one out of every five women who was not using any contraceptive method provided the husband's objection as the main reason for non use.

Another study revealed that men have not encouraged their wives to use contraceptives because they felt it will undermine their own authority as the head of the household, and will also encourage their wives to be unfaithful. Adekunle & Ladipo (1992) also noted that in Nigeria sex roles influence the power relationships within couples making it difficult and often impossible for females to determine when? with whom?, and under what conditions they can have sexual relations. In general, since a woman social and economic status depends on her fertility, many Nigerian women value pregnancy more than their state of healths and may engage in risky sexual behavior. So despite the intensive public education on the protective value of condoms and spermicides in reducing risk of genital infections they found that many women still are not able to insist their men use these barrier methods (Adekunle & Ladipo 1992). The women generally are expected to provide sexual pleasure on request, to deliver as many children as possible preferably males. They are therefore blamed for infertility and reproductive failure.

Isiugo - Abanihe (1994) in his study of Reproductive motivation and family size preferences among Nigerian men concluded that the characteristic male - dominated and patrilineal traditions support large family size and that men's reproductive motivation, to a large extent, affects the reproductive behavior of their wives. The policy implication of these findings is the need for programmes targeted at men to change their attitudes about population matters and motivate them, and hence their wives to produce smaller families (studies in family planning 1994, 25, 3:149 - 161).

2.8 Population Theories

2.8.1 Mercantilism

The population theory that was dominant in the period preceding Malthus was known as "mercantilism" Mercantilists believed that a nation's strength rests on economic power, and that the larger the population, the stronger the nation would be. Mercantilists were condemned on economic grounds that a larger population means more food which is not attainable because production in agriculture and industry, both follow the law of diminishing returns. The growing population hence will tend to undermine the living conditions which is evident in most of the third world countries (Singa 1996).

2.8.2 Malthus Population Theory

Malthus (1978) in his essay, "principle of population," postulated that man's power of procreation always and everywhere is greater than his ability to produce food.

He asserted that population always tends to outgrow the positive checks like famine, war, National disaster like flood earthquakes and by preventive checks through postponement of marriage and abstinence. Malthus theory raised a storm of controversy among scholars in the field. Most of his opponents agreed to his biological view, but disagreed with his pessimistic outlook. They replaced Malthus explanation by the argument that the progress in civilization could lead to a lowering down of national population growth (Singa 1996). The Malthus debate also brought forth some social theories of population growth as well. They were mainly influenced by observations on relationship between social status and fertility level that the ambitious high life style is attainable by restricting the size of family (Singa 1996).

2.8.3 Biological Laws of population Theory

Rymond Pearl (1920), in (Singa 1996), asserted that the law of human growth is the same as that which governs the growth of lower living organisms. All living organisms grow in size rapidly at first, then slowly, and thereafter maintain a state of no growth until the organisms die, describing a complete cycle. Based on this analogy Pearl (1920) introduced a mathematical formula called "logistic growth curve" to describe population growth. His theory was condemned on the ground that it is arbitrary, and does not take account of social and economic changes that have profound effect on the population growth (Singa 1996).

2.8.4 Demographic Transition Theory

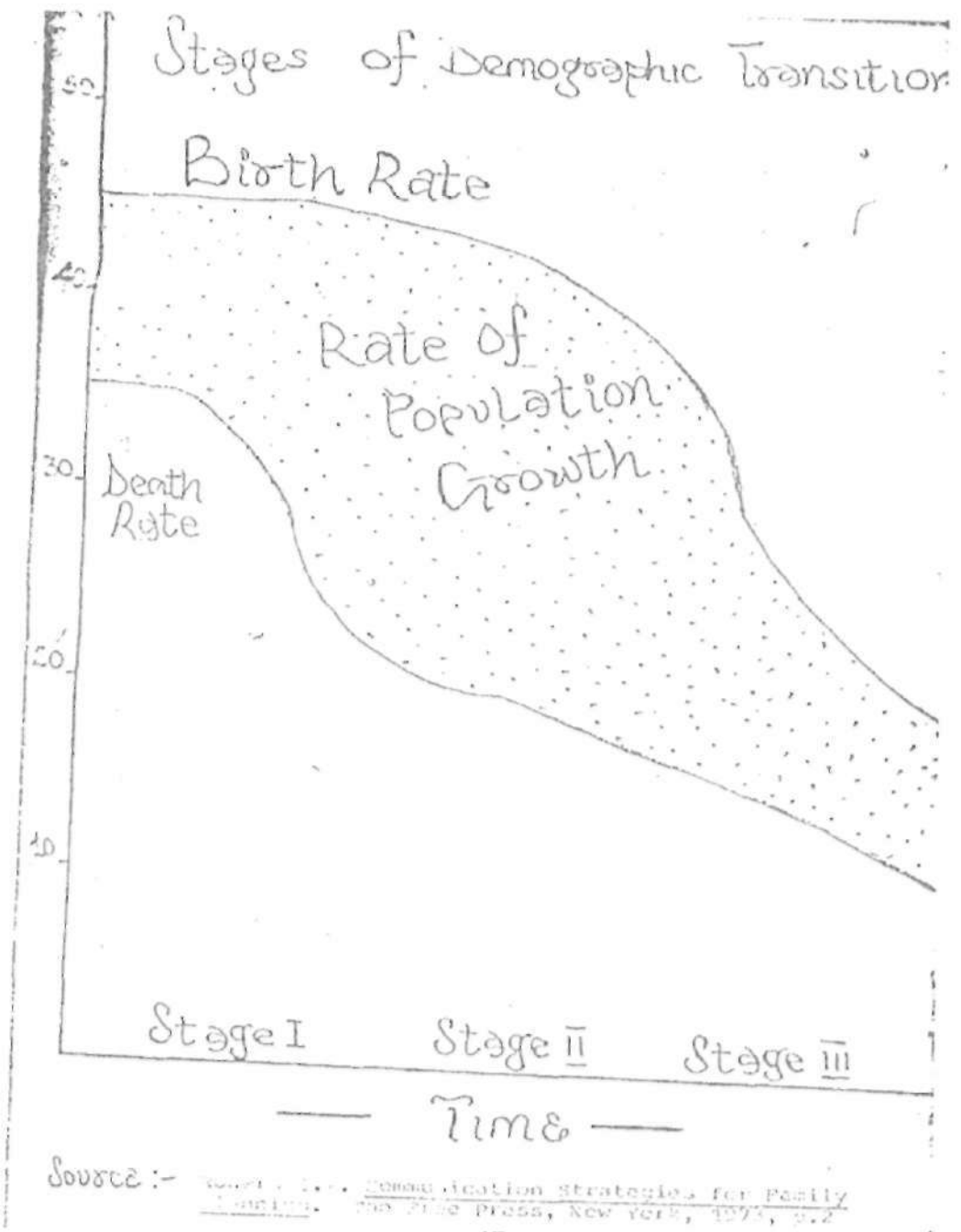
This theory holds that societies tend to move through 3 distinct demographic stages, namely:

1. high birth rate and high death rate
2. high birth rate and low death rate
3. low birth rate and low death rate.

When the birth rate equals death rate, the population is said to be stable, whether both are low or high. Industrialization is said to bring technological progress, and improvements in public health, which tends to decrease the death rate. Birth rate may remain at their former level or even increase. Eventually, there is a decrease in birth rate, so that the third stage of demographic transition is achieved. During the transitional stages, nations experience exponential growth. Most developing countries according to Frejka (1973), are in the transitional period.

The demographic transition from high to low fertility, involves moving from natural fertility to one in which individual couples deliberately control their fertility by changes in behavior. It has been shown that family planning programmes accelerate transitions from traditional natural fertility to deliberately controlled fertility Amdi (1993). Chart 2.1 signifies the demographic transition in most developing countries.

Chart 2.1



Source :- [illegible] Communication Strategies for Family Planning. The Free Press, New York, 1973, p.2

KASHIM IBRAHIM

The main purpose of most family planning programmes is to enhance the decrease in birth rate, and thus enable a country to reach stage III. It is at this stage that the citizens of a country will enjoy the benefit of improved nutrition, better education and achieve better National progress (Amdi 1993). This theory suggests that the decline in fertility was partially a response to the decline in mortality and associated pressures of rapid population growth, and partially a response to the changing social and economic factors associated with socio-economic development and modernization.

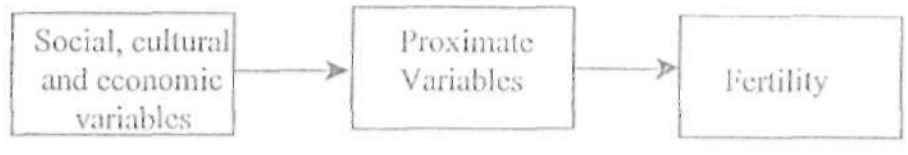
The shortcomings of the demographic transition theory according to Farooq and Decaff (1991) are that the precise mechanisms by which fertility reduction is initiated and proceeds to fairly stable low levels are not clear and vary widely among societies. It has also been argued that this theory gives little attention to potential alternate responses to the pressure of rapid population growth such as migration, and to the possibility of a positive influence of development of fertility such as better health and nutrition of women, a decrease in the length of breast feeding, a decline in post - partum abstinence, a reduction in widowhood, higher levels of income and shifts in income distribution.

Coale (1979) in Farooq and Decaff (1991) in support of this argument, gave an example of the Soviet Asian Republics in 1970, where high levels of fertility persisted in the face of low mortality and subsequently increased per capital income. Despite these shortcomings there does appear to be some correlation between the extent of fertility decline, the level of development, and the availability of modern contraceptive techniques.

2.8.5 Proximate or Intermediate Approach

Another theory of fertility is the proximate or intermediate approach which is based on the fact that birth is a result of exposure to sexual intercourse, successful conception,

gestation and parturition. This theory presents a systematic way of looking at the routes through which socio-economic factors influence fertility. The proximate variables can be thought of as providing the link between social, cultural and economic factors on the one hand, and the psychological processes which ultimately determines fertility on the other. This is a simple view of Proximate approach to fertility.



Freeman (1986) in Farooq and Decaft (1991) noted that the proximate variables stand between fertility and all other preceding variables. They immediately determine fertility and all other variables act through a combination of them.

The concepts underlying the intermediate variables approach was first proposed by Davis and Blake (1956), but have been widely used in fertility research most notably by Bongaarts (1978 and 1982). He identifies a set of seven intermediate variables that affect fertility. These are presented in table 2.2 with an assessment of their relative importance in accounting for variables in fertility.

Table 2.2: Ratings of proximate determinants with respect to the sensitivity of fertility and variability among populations.

Intermediate Fertility Variables	Sensitivity of Fertility to Intermediate Variables	Variability among populations	Overall Rating
Proportion married	***	***	***
Contraceptive use	***	***	***
Prevalence of abortion	**	***	***
Postpartum infecundability	**	***	***
Fecundability	**	**	**
Spontanneous intrauterine mortality	*	*	*
Permanent Sterility	**	*	*

*** high ** medium * low or absent

Source: Bongaarts (1982).

The first variable listed captions exposure to regular intercourse through marriage or some other form of consensual union. This would vary across populations according to age at marriage, the extent of divorce and re-marriage, and the prevalence of widowhood during the child bearing years. The second and third variables measure the prevalence of deliberate marital control, while the remaining four variables are components of natural marital fertility, that is marital fertility in absence of deliberate fertility control. Thus the effects of social practises which influence post partum infecundability, such as polonged breast feeding or abstinence from intercourse after child birth, and which are not consciously practised at the

individual level in order to reduced fertility, are included in the estimation of natural fertility but are removed in the estimation of potential fertility. Natural fertility is thus always less than or equal to potential fertility (Farooq and Decaff 1991).

The major shortcoming of Bagaats theory is that the nature of this sort of examination is primarily descriptive and does not itself provide an analysis of socio economic causality, but it does allow the researcher to identify paths through which fertility behavior and the out come may be altered, and therefore provides a useful orientation for the study of socio-economic determinants of fertility (Farroq and Decraff 1991).

2.8.6 Models of Individual Fertility Decision making

In order to obtain a more complete understanding of fertility bahaviour and outcomes, there is a need for theoretical models of fertility to address the issue of how individual couples determine their family size. The theory of individual fertility decision making as postulated by Caldwell (1976), 1978 and 1982) addressed this issue.

The theory is characterized by an underlying assumption of some degree of rationality, in that couples are viewed as making decisions concerning family size on a consideration of perceived advantages or disadvantages associated with children. Caldwell's (1976, 1978 and 1982) model ties in with the demographic transition, but offers a different perspective on demographic transition that was discussed earlier. He asserts that the key to the demographic transition is the direction and magnitude of inter-generational wealth flow at the individual family level. He said it is only when the balance has shifted from a regime of net flows wealth from children to parents to one of net flows wealth from parents to children, is fertility decline economically rational. Furthermore he added that this shift will

not occur unless the social transition, to the emotional nucleation of the family has taken place, that is when the emotional bonds and attendant obligations are stronger between conjugal partners, and their offspring than any other relatives acquaintances or institutions.

Within the context of the historical experiences of European population, in Caldwell's opinion, families had already undergone this shift before the mortality decline marking the beginning of the demographic transition. He said that this social transition will take place in the developing countries as a result of exposure to Western ideas concerning the family through education and mass media.

The shortcoming of Caldwell's theory is that it does not explicitly treat individual influences that affect inter-generation wealth flows, but several of the factors listed in the discussion of demographic transition theory which are associated with socio-economic development are posted to contribute to fertility reduction, can be seen as forces which would shift the balance of inter generational wealth flows towards children in the context of Caldwell's view. However, according to Caldwell's interpretation, these factors would not have effect without the prior adoption of Western views of the family size. From this perspective, it is crucial to examine not only the levels of socio-economic development and modernization, but also at the extent to which western attitudes have been assimilated at the individual level (Farooq and Decraff 1991).

Mincer (1963) in Farroq and Decaff (1991), made a major contribution to this model because his work addressed the issue of the "value of time" within the context of fertility determination. He emphasized that it is important to recognize not only the financial costs of raising children but also the opportunity cost of time devoted to child care especially by the mother.

This concept of viewing time as an impute to the household production has been incorporated in much of the subsequent work in the new home economics tradition, Willis (1973) in Farooq and Deeaff (1991). An increase in the wife's wage would thus have two offsetting effects on fertility. First an income effect which is positive because it would allow the family to afford more children and negative price effect resulting from the increased value of the wife's time in wage labour. Empirical findings tend to confirm that the price effect dominates in industrialized countries, resulting in a negative relationship between women's wages and fertility. However, in developing countries, the results are less clear. There are many factors which differentiate the situation from that of the industrialized countries, the most notable one is the belief that women's work and child bearing are as incompatible in the developing world due to the fact that these activities are often engaged in, simultaneously, and because of the presence of extended family members, and house maids, to care for children while the mothers are out working.

2.8.7 Neo-classical Micro-Economic Analysis of Consumption Decisions

An alternative theoretical framework of reproductive behavior derives from neo-classical micro-economic analysis of consumption decision at the household level. In this model, families are thought to choose fertility level so as to maximize their well being represented by the utility function in the language of economics, subject to certain exogenously determined constraints. The most commonly considered constraint is the scarcity of household resources as captured by the budget constraint, which equals household expenses with household income. The parameters of the budget constraint are determined by such factors as the marked wage, the cost of children and the other household expenses.

Becker (1960) was one of the first economists to recognize that since children contribute "utility" and since they have a "price", then the fertility decision is in some sense like other consumer behaviour. The main elements of this models are that households should be viewed both as consumers of children and other goods, and also as producers. Using purchased market goods, and other house hold resources, as inputs-of the consumption items from which they ultimately derive utility. Within this framework, one can analyse the roles of productive factor prices, market prices and income in determining the optional production and consumption strategies of households in general, and in determining the optional number of children in particular (Farooq and Decraff 1991).

Another important refinement of the theory which was formalized by Becker (1960) is commonly referred to as the quantity-quality trade off.

The underlying concept here is that not only do parents value the number of children which they have, they also value the quality of those children which is typical proxies empirically by education. Since quality of children can also be thought of as having a price in that resources are required to improve quality, parents must decide how to allocate their limited resources between quantity of children and quality of children. Therefore as income rises, the effect on fertility will depend on whether the demand for number of children increases more rapidly then does the demand for quality of children, or vice versa.

In the researcher's opinion, the home economic models of fertility behaviour has been formulated with the circumstances of the industrialized countries. This may not be applicable in Nigeria because not many people in Sub-Saharan Africa especially in the Northern part of Nigeria attach importance to Western education so even if their incomes rises, their fertility rate may not change, since their culture encourages a large size. Therefore except

they are taught to realize the importance of quality in children, this theory might not be applicable to most people except for the few educated ones who know the importance of education. This is why this theory has been subjected to criticisms regarding its application to the developing world.

2.9 Population Explosion

Population growth is one of the greatest threats today and constitutes social and economic problems in many countries. Adoghor (1987) Bayegbon (1991) observed that the population of the world which now stands at 6.2 billion, will be 6.8 billion by the turn of this century. At this rate three children will be born every second. This means that 250,000 new infants will enter the world daily, and 95 million children will be born yearly. The majority of these children will be born in the Third World countries Malthus (1974) was the first scholar who drew attention to the imbalance between population growth and means of subsistence. He strongly believed that the imbalance in the rate of population increase and the means of subsistence was the major cause of mass poverty in the world (Population Bulletin 1974).

In pre-industrial societies, fertility was high but it was almost equally matched by mortality. Periodic famines and epidemics acted as check to natural increase. The demographic transition from high birth and death rates, to a low one, took place in Europe in the 18th and 19th centuries. Death rates fell first as improved agricultural and industrial technology made more food plentiful, and enabled man to cope more adequately with the environment. In developing countries such as Asia, Africa, Caribbean Islands and Latin America, birth rate has remained high and static, while death rate has been showing continuous fall resulting in high growth rate.

Fig. 2.3 shows the past and projected trends of both industrialized and developing regions from 1650 -2100.

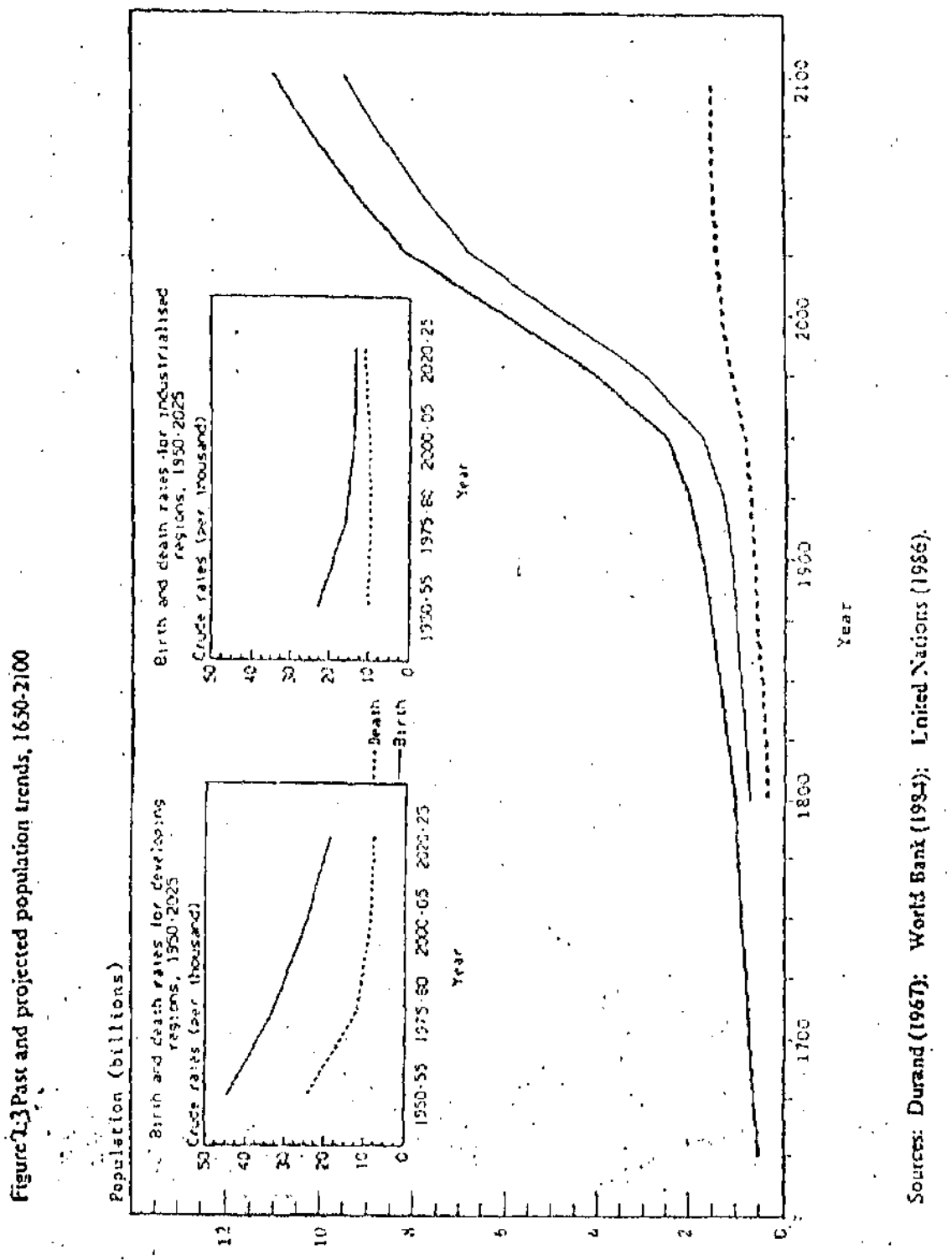


Figure 2.3 Past and projected population trends, 1650-2100

Sources: Durand (1967); World Bank (1984); United Nations (1986).

In the industrialized countries decline in birth rate is caused by deliberate control of fertility within marriage. In contrast, the developing countries, in the absence of significant fall in birth rate, are having a hard time to balance population growth with available resources. This has led to a measured increase of the people living in poverty. Shinga (1996), noted that by the turn of this century, over 50% of the population of developing countries will be under 25 years of age. This increasing number of children will strain the capacity of the families and societies as a whole to provide the necessities of life like food, clothing, shelter, education and health care.

The world fertility survey (WFS) data in table 2.2 also indicates regional average in the crude birth rate ranging from 35 per thousand population in Latin America and Caribbean to 45 in Africa. In reference to trends fertility had declined quite rapidly in some of the developing countries in the Caribbean basin, Mauritius and the Republic of Korea. Some largest countries also have reported declines in fertility, most notably China, India, Indonesia and Mexico. For example the birth rate in China has declined from 37 to 18 (UN, 1986).

On the other hand, the fertility decline has been quite limited in such large countries like Pakistan, Bangladesh and Nigeria (UN, 1986).

KASHIM IBRAHIM LIBRARY

Table 2.3: Crude birth rates and total fertility rates by region 1950, 2000 and 2025, medium variant

Region	CBR			TFR		
	1950-55	2000-05	2000-25	1950-55	2000-05	2000-25
World	37.3	27.3	17.7	4.94	2.82	2.36
Industrialised	22.7	13.8	13.4	2.80	2.02	2.12
Developing	44.4	24.4	18.6	6.12	3.01	2.40
Africa	48.3	40.1	26.5	6.47	5.37	3.17
Eastern Africa	49.8	41.7	28.3	6.56	6.12	3.38
Central Africa	46.6	41.0	26.4	5.89	5.49	3.09
Northern Africa	43.9	26.3	19.0	6.76	3.36	2.33
Southern Africa	41.7	33.3	22.9	5.60	4.30	2.76
Western Africa	48.8	45.1	29.0	6.62	6.22	3.50
Americas	33.8	20.2	17.1	4.63	2.62	2.32
Latin America	42.5	23.6	18.7	5.86	2.90	2.40
Caribbean	37.6	22.9	19.6	5.16	2.86	2.60
Central American	47.4	25.5	19.3	6.76	3.03	2.42
Temperate South America	27.5	19.1	16.2	3.52	2.48	2.21
	45.6	23.7	18.7	6.36	2.91	2.39
North America	25.1	13.8	13.5	3.43	2.08	2.10
Asia	42.7	20.1	15.7	5.87	2.46	2.11
East Asia	40.8	15.5	14.0	5.68	1.94	2.10
China	43.6	15.5	14.0	5.21	1.91	2.11
Japan	23.7	13.3	12.4	2.77	1.98	2.09
Other East Asia	36.8	18.1	14.8	5.00	2.30	2.02
South Asia	44.6	23.3	16.7	6.04	2.83	2.12
Southern Asia	44.0	21.7	16.0	5.80	2.52	2.04
Southern Asia	44.7	23.2	17.9	6.11	2.84	2.08
Western Asia	45.8	28.9	21.0	6.37	3.81	2.56
Europe	19.8	12.5	12.5	2.56	1.87	2.05
Oceania	27.6	17.3	14.5	3.78	2.35	2.05
Australia and New Zealand	23.5	13.5	12.4	3.21	1.89	1.98
USSR	26.3	16.1	15.2	2.85	2.29	2.25

Source: UN (1986)

The discovery of the population explosion in the Third World dates back from the middle of 1950's when demographers began to realize that although the export of Western public Health measures to the developing world was radically reducing death rates, fertility remained high. This has resulted in a scaring rate of population increase reaching 2.3% a year in Asia, 2.5% in Africa, and 2.9% in Latin America (Population Bulletin 1974).

Many Third World countries including Nigeria have very high population rates with doubling time estimated to be about 20 years. Frejka (1973), in analyzing the population dynamics of developing countries, demonstrated that even if population growth is reduced to replacement level, that is if the net reproduction rates become one, there would still be substantial expansion in the population before it stabilizes. This dynamic is similar to the situation in Europe at the beginning of 19th century. The average birth rate in Europe then was 2.5% per annum with an estimated total fertility rate of 5.5. There has been a drastic decline in the population growth rate, with the current total fertility rate estimated to be 2.2. The changes in the population dynamics observed in Europe formed the basis of the demographic transition theory. To address the population issues, International Conferences on population organised under the auspices of the United Nations are being held every ten years. The first inter-governmental world conference was held in Bucharest in 1974 where the world population plan of action aiming at helping coordinate population trends and trends of economic and social development was accepted. The second conference that was held in Mexico city in 1984 reaffirmed and expanded the world population programme of action to include social and economic development as a central factor to resolve population and population related problems. The Third World population conference took place in Cairo in 1994. This conference adopted a programme which enjoins on the International Community a set of objectives as well as goals which include sustained economic growth in the context of sustainable development, education especially for girls, gender equity and equality, infant, child and maternal mortality reduction and provision of universal access to reproductive health services including family planning and sexual health.

473237

2.10 Population Policies

There is no agreed opinion as to what constitutes population policy. According to the world bank staff reports (1974) policies whose explicit objectives is to reduce fertility are considered as population policies. The process of population policy formation is based on demographic knowledge. Population policies are formulated in the context of human rights of free choice and decision.

2.11 Population Policy in Nigeria

As far back as 1970, the Government of Nigeria was aware of the fact that the country was growing at a rapid rate, but did not consider this growth rate an impediment to economic development and progress. This optimism was borne out of the belief that the country had sufficient resources to meet the demands of a growing population. This official position was asserted by the Nigerian delegates to the population conference at Bucharest with the statement that "given the efficient administration of the country's resources, the capacity of the economy to cope with a population growth rate of 2.5 percent per annum is not in doubt." It was not until 1988 that a comprehensive National population policy of Nigeria was formulated. The Armed forces Ruling Council approved a National policy on population for development, unity, progress and self reliance on the 4th of February, 1988. According to National population policy (1988) the goals of the National policy on population for development are:

i. To improve the standard of living and the quality of life of the people of Nigeria.

ii. To promote their health and welfare, especially through preventing premature death and illness among high risk groups of mothers and children.

iii. To achieve lower population growth rates through reduction of birth rates by voluntary fertility regulation methods that are compatible with the attainment of economic and social goals of the Nation.

iv. To achieve more even distribution of population between urban and rural areas.

In order to achieve these goals the objectives of population policies are.

1. To promote awareness among the citizens of this country of population problems and the effects of rapid population growth on development within the shortest possible times.

2) To provide to everyone the necessary information and education on the value of reasonable family size to both the individual family and the future of the nation in achieving self reliance.

3) To educate all young people on population matters, sexual relationships, fertility regulation and family planning before entering the ages of marriage and child bearing, to assist them towards maintaining responsible parenthood and reasonable family sizes within their ability to foster.

4) To make family planning means and services to all couples and individuals easily accessible at affordable cost, at the earliest possible time to enable them to regulate their fertility.

5) To provide fertility management programmes that will respond to the needs of sterile or sub-fertile couples to achieve reasonable self fulfillment.

6) To improve demographic data for economic and social development planning.

7) To enhance integrated rural and urban development in order to improve the living conditions in the rural areas and to slow down the rate of migration from rural areas to the cities. The targets for the population polices are:

i) To reduce the proportion of women who get married before the age of 18 years by 50 percent by 1995 and by 80 percent by the year 2,000.

ii) To reduce pregnancy to mothers below 18 years and above 35 of age by 50 percent by 1995 and by 90 percent by the year 2,000.

iii) To reduce the proportion of women bearing more than four children by 50 percent by 1995 and by 80 percent by the year 2,000.

iv) To extend the coverage of family planning service to 50 percent of women of child bearing age by 1995 and 80 percent by year 2000

v) To direct a significant proportion of the family planning programme in terms of family life education and appropriate family planning service at all adult males by the year 2000.

vi) To reduce the number of children a woman is likely to have during her lifetime, now over 6 to 4 per woman by the year 2000 and reduce the percentage rate of population growth from about 3.3 percent per year to 2.5 percent by 1995 and 2 percent by the year 2,000.

vii) To reduce the infant mortality rate to 50 per 1,000 live births by the year 1990 and 30 per 1,000 live births by the year 2,000 and the crude death rate to 10 per 1,000 by 1990 and 8 per 1000 by the year 2,000.

viii To make available suitable family life education, family planning information services to all adolescents by the year 2,000 to enable them assure responsible parenthood.

ix) To provide 50 percent of rural communities with basic social amenities by 1990 and 75 percent by the year 2,000. In order to stimulate and sustain self reliant development.

x) To make family planning services available to all persons voluntarily wishing to use them. Priority to be given to high risk clients, for example women under 18 or over 35, those with four children, those with previous complicated pregnancies of childbirth, or those with chronic illness which increase the health risk of pregnancy. The most strategy for implementing the population policy is to make family planning service easily available, safe and culturally acceptable. This is to be accompanied by an aggressive information, education and communication programme (population *Policy* 1988) (*Singa* 1996).

Table 2.4 shows the percentage of currently married women who want no more children by number of living children and region.

Table 2.4: Percentage of currently Married women who want no more children by number of living children and Region, NDHS Nigeria, 1990

Number of Living Children								
Region	**0**	**1**	**2**	**3**	**4**	**5**	**6+**	**Total**
Northeast	2.3	3.6	4.5	4.3	10.0	17.6	17.6	9.2
Northwest	1.2	2.8	5.8	11.0	1.5	21.0	21.0	10.1
Southwest	0.6	4.2	4.5	10.4	19.3	26.6	26.6	21.8
Southeast	0.0	2.4	5.5	9.6	27.8	29.6	29.6	23.4
Total	**1.4**	**3.3**	**5.1**	**8.8**	**16.9**	**24.0**	**44.3**	**15.4**

Table 2.5 also show the percentage of currently married women with total demand for family planning by Region. (NDHS Nigeria 1990).

Table 2.5: Percentage of Current Married Women with Total Demand for Family Planning Service by Region, NDHS, Nigeria 1990

Region	For spacing	For limiting	Total	percentage of demand satisfied
Northeast	15.4	7.5	22.9	8.8
Northwest	8.6	6.8	15.4	7.9
Southwest	18.2	17.0	35.3	25.4
Southeast	19.0	19.0	30.8	39.5
Total	**14.9**	**11.9**	**26.8**	**22.5**

It is apparent from these tables that there is profound lag not only in motivation, but also in the delivery planning service. This also shows that there is a considerable doubt if the target could be reached within the stipulated period unless, of course, if efforts are intensified to stimulate demand and raise the capacity to ensure supply (Singa 1996).

2.12 Communication and Attitudinal Change in Family Planning

Communication can be defined as the process by which an idea is transferred from a source to a receiver with the intent to change his behaviour (Rogers 1973:42). Bakare (1992) also defined communication as a process of transmitting information and meaning as a means of influencing feelings, thoughts, attitudes and behaviour. This shows that the purpose of communication is to bring about certain desired effects on the part of the receiver. This effects may help to alter the receivers knowledge to the idea that is being communicated in order to change his/her attitude towards the idea. Therefore the concern of communication is to change behaviour. To bring about behavioural changes, the adoption of contraceptive methods and thus decrease in fertility, the values, norms and customs of the society must be taken into consideration. So in developing countries education towards the use of family

planning should be made to form part of the recipient attitudes to help him make a decision towards the use of family planning methods satisfactorily. In order to change attitudes in family planning, the family planning provider must take into consideration the effects and the role of the cognitive, the affective and the psychomotor domains. This is because the three domains are relevant to family planning teaching. The cognitive domain is the ability to deal with knowledge or information on or intellectual basis, the effective domain involves ways of handling emotions and the action domains embraces the use of psychomotor skills.

In the cognitive domain the individuals who want to use family planning methods to reduce their family size or space their children must first know which methods will contribute to this goal, understand why these methods of family planning are useful and have access to the methods best suited for their needs. Without the knowledge, change will be unlikely to take place.

In the affective domain the individual may realize or recognize that there are rewards or benefits in trying to reduce their family size. This can however encourage them to respond to the use of family planning. Also, accepting the values that are attached to the reduction of family size helps individuals develop a value system engaging in action that will lead them to reducing their family size. This will result in having a healthier family, and their quality of life would improve (Amdi, 1993).

The psychomotor domain is also very important, because acquiring the knowledge and translating them into values is not enough to change people behaviour. Each individual must translate the knowledge and the values into action by using certain skill carefully in maintaining the family planning habits.

Although the three domains are separated in order to conceptualise behavior, there is virtually no separation between them. It has been argued by Schemer that behavior may

be conceptualized as being embodied in a cognitive emotional matrix in which no true separation is possible. This argument was further strengthened by Rokeah (1968) when he noted that an attitude must have a behavioural component because a belief being a response predisposition must lead to some action when it is suitably activated.

Studies of Communication aimed at prôducing attitudinal change have given rise to 3 variables which are the validity of the source of the communication, the nature of communication itself and the characteristics of the audience to whom the communication is directed. Attitudes of individuals are flexible, and they change quite considerable, under the influence of persuasive well organized communications, especially if the nature of appeal is mild and the communicator is credible, trustworthy and an expert in the field. But there is a limit to such changes. (Sheriff and Houland 1961 in Murkerjee, 1975) researched into this aspect, and postulated their latitude of acceptance model which shows that if the communication falls on the rejection areas of attitude dimension then the communication will not be effective.

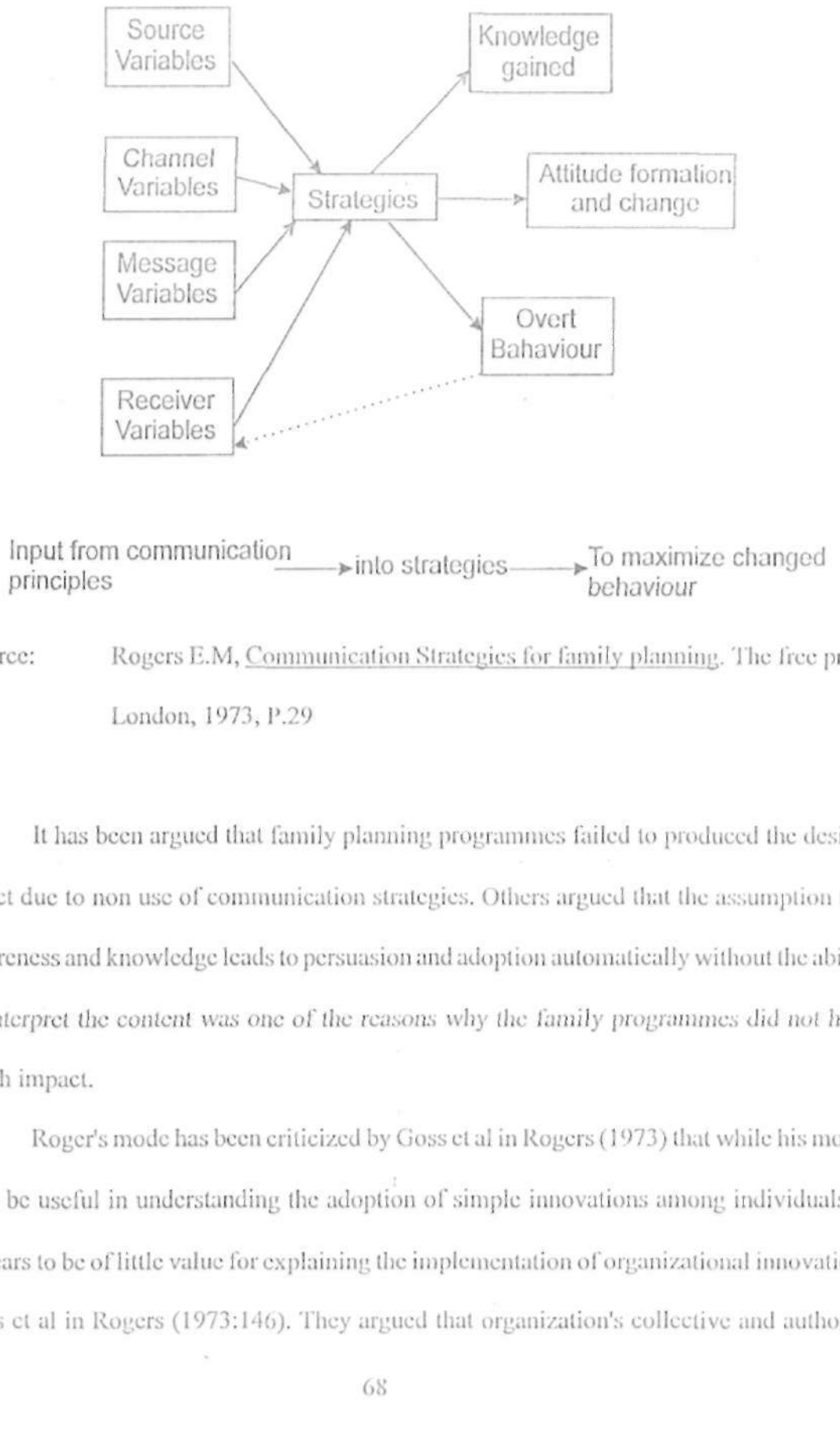
Meguire & Papageorgis (1961) also found that changing attitudes is not that easy, that even laws threatening penalties often fail to change behaviour. People do not necessarily change their behaviour simply because a health worker or a political leader, or even a family member asks them to do so. Rather behavioural change is a gradual process depending on person's experiences and his perception of the personal importance of change (Meguire, & Papageorgis1961).

2.13 Rogers communication strategy

Changing behaviour through transfer of new idea, could be done through a strategy or a frame work of action. This could be illustrated with the aid of Roger's strategy.

A channel is the means by which a message travels from the source to a receiver. It deals with physical transmission of message. The most important single element in the communication process according to Rogers & Everett(1973) is the receiver, and more often they are usually forgotten. Sources may have good knowledge of their message but they may not express it in a meaningful way in terms of their receivers ability to understand. Communication effects are the changes in a receiver's behavior. This, however, depends on the effect desired by the source. The effects should help to change the receiver's notion of knowledge about the idea to help change attitude and also change the receiver's overt behavior such as his or her use of contraceptive. These changes are supposed to occur in sequence and a feedback through a response by the receiver to the source's message, which the source could use to modify his subsequent messages. The feedback could either be positive or negative. The positive feed back shows that the intended effect of the message is achieved while the negative shows the reverse. This may distort the elements of the communication process and signifies that adjustment has to be made to source desired effect. Fig.2.4 illustrates Rogers' communication strategies for family planning.

Fig2.4 Communication Strategy



Source: Rogers E.M, Communication Strategies for family planning. The free press, London, 1973, P.29

It has been argued that family planning programmes failed to produced the desired effect due to non use of communication strategies. Others argued that the assumption that awareness and knowledge leads to persuasion and adoption automatically without the ability to interpret the content was one of the reasons why the family programmes did not have much impact.

Roger's mode has been criticized by Goss et al in Rogers (1973) that while his model may be useful in understanding the adoption of simple innovations among individuals, it appears to be of little value for explaining the implementation of organizational innovations Goss et al in Rogers (1973:146). They argued that organization's collective and authority

decisions could be better options. This in the researcher's opinion could be true since the interest of everybody in a group would be taken in to consideration in collective decision making. The individual's opinion may not matter much since he or she would simply be told and would have no choice but to comply.

2.14 The Role of Mass Media in Behaviour Change

Mass media and counselling are ways by which programme planners have attempted to change people's behaviour to increase the acceptability of family planning methods.

The influence of mass media on behaviour has been subject to much research over the last 50 years.

Some studies suggested that mass media had little effect since people were more influenced by personal contacts and selective perceptions (Lazersfeld et al, 1948, Hymen and Shatsly, 1974, in Population report 1986).

Other researchers looking at more and more sophisticated campaigns designed to change a variety of behaviours show that some mass media campaigns have indeed been able to change behaviour because they were better planned and executed, relied more on personal counselling and community interaction (Rogers & Everett 1975). The reasons for this lack of consistent impact are not clear. Some suggested that campaigns may have no impact because they were of poor quality, or did not reach enough people to make a measurable difference or a combination of both. Some argued that the impacts of mass media faces considerable methodological problems so it is difficult to prove that the observe changes resulted from mass-media exposure alone, and not from other influences.

Atkin (1981) in his book of Mass media information campaign effectiveness ruled that mass media communication is most successful at changing behavior when it:

a. Is designed to reach a specific audience

b. Comes from a source or a person or group that the audience likes, understands and believes.

c. Comes through familiar communication media.

d. Provides message that is engaging personally, relevant and novel.

e. Tells the audience what to do and how to do it and

f. is coordinated with locally available supplies and services (Hilgard et al. 1975:265-279).

It has been found that well researched mass media campaigns that are entertaining as well as informing seem to have the greatest impact (Population Reports, series J. No.38, Dec. 1989:7)

Social learning theory as outlined by Bandura (1971) and others also suggested that mass media may have far more capacities than acknowledge role of creating public awareness or spreading specific information. Infact, because people learn by observation, and by using other people as role models, the mass media can directly have a potent influence on behavior, the entertainment components of mass media, especially drama and songs, not only attract peoples interest but also move them emotionally.

Therefore mass media can create a strong link between the viewers, and the performers (Kincard et al, 1988; Sabido, 1981). In family planning promotion, evidence is accumulating that well planned mass media approaches can influence attitudes and change behavior. In Latin America, for example, Miguel Sabido's "telenovelas" (television serials or soap operas") on family planning led to substantial increases in family planning acceptance (Sabido, 1981). in Pop. report Dec. (1989).

Also the hit songs that Tatiana and Jenny sang to promote sexual responsibility among Latin youths promoted thousands of calls and letters to counselling centers for young

people (Keneeud et al, 1988). They also noted that six months after the songs peaked commercially young people still remembered the messages and songs (Population reports Dec. 1989)

Coming home to Nigeria, the use of entertainment or the "enter-educate" approach adopted by Henry et al (1979), has shown evidence of impact in the three projects that were largely concentrated in capital cities of different states in Nigeria, Ilorin in Kwara state, Enugu in Anambra state and Ibadan in Oyo state.

In the "enter-educate" approach used in Nigeria titled "Mama Olu told me to come, "Mama Olu is a grandmother, played on television by an actual health worker, who scolds her grand daughter for having too many children too quickly. The young woman who visits the clinic said Mama Olu told me to come has seen television and has decided to use family planning (studies in family planning 1989).

The "enter-educate" approach builds on social learning theory of Bandura (1971). An important part of social learning is modeling. A person observes other people and uses their behaviour as a model for his or her own behaviour.

Even though the "enter-educate" projects can influence behavior as was verified, in the researcher view, the "enter educate program" may not reach enough people to make measurable impact in Nigeria. This is because about 76% of Nigerians live in the rural areas where electricity and television are not available. Therefore the advertisement is targeted to less than 25% people in the population, Because even among the 25% of people that is said to be living in the urban areas, not all of them can afford to own a television or a radio. Also, most of the family planning messages are usually written in English or in the three main languages in Nigeria namely Hausa, Yoruba and Igbo. Nigeria has many ethnic groups with over 250 different languages. To reach more people the messages will have to be translated

into different languages. This is because in the researcher's opinion, people cannot learn new behaviour unless they understand the message and pay attention to it. Going by Hilgard et al. (1975) recommendation, a policy formation should be made in each local government area to involve some of the local people in the planning of programmes since they are the ones who knows their own people including their values and norms so will know how the program will be more acceptable to them. Also, religion and community leaders such as the Pastors and Imams, and village chiefs should be part of the mobilization and education process. Those who are credible should also be involved in programme planning. For example, aside from the doctors and nurses, counsellors and psychologists who are experts in changing the behaviour and attitudes of people.

2.15 The Role of Counselling in Fertility Control

Counselling can be defined as a face to face communication in which one person helps another to make decisions, and act on them (population Reports, 1987:1) Counselling is the heart of family planning programmes. This is because face to face discussion with a family planning provider can be a crucial step for a person in deciding to use a family planning method and learning how to use it correctly.

According to population reports (November, 1987:1) family planning counselling can consist of six parts described by the word GATHER.

G - Greet clients in a helpful way

A - Ask clients about their family

T - Tell clients about available family planning methods

H - Help clients decide what methods they want

E - Explain how to use methods chosen

R - Return visit plan (follow up visit)

Counsellors and client would exchange information. The client should be encouraged to think and talk about her or his concerns, circumstances, and family planning needs. The counsellor will describe appropriate family planning methods, their risks and benefits, and when a client chooses a method, she/he would be told how to use it.

In a good counselling situation, the counsellor will not only give accurate clear information, but will also establish a relationship of trust and confidence with the client. This is done by using his/her counselling skills such as active listening, non judgemental attitude, empathy, patience, positive regard and total acceptance of the client, and by telling them the truth. Then some of the clients who are worried, uncertain or suspicious may come to trust the counsellor, ask questions, express feelings and offer information. If the counsellor cares, the client is more likely to rely on the counsellor, and to return if she/he needs help.

The counsellor will also use her/his counselling skills to introduce behavioural change intervention (BCI). These are highly targeted Information, Education, and Communication (IEC) based intervention which will provide correct information and functional knowledge on contraceptives and foster attitudinal shift and positive change among the target population. Best practices according to Nnorom (1998) include the use of Interpersonal Communication and Counselling (IPC).

Traditionally, most family planning training concentrate on reproductive physiology, family planning methods and technical skills. Less attention was paid to methods of listening and responding to clients in an empathetic way, how to help them make decisions, and how to inform and instruct clients in ways they will remember and follow. Recognizing that providers need these communication and counselling skills, programmes in Brazil, Burkina Faso, Ghana, Guatemala, Morocco, Nigeria, the Philippines, Tunisia, and Turkey among others now focus much more on training of providers to be good communicators and

counsellors (population reports, 1987). This is because, for peoples to practice family planning successfully they need to:

1. recognize that family planning can benefit them and their families.
2. Know how to practice family planning correctively, and
3. Know where to obtain services or supplies.

The counselling process helps clients to decide whether they want to use family planning, and if they do, to choose in an informed way what method they want, and to be able to use and practice family planning effectively and safely. A number of studies suggest that more attention to counselling can encourage more clients to start using family planning. This is true in both clinic - based and community out reach programs. In a 1984-85 study in Benin, Nigeria, which covered 19 months period, more women who had received special counselling sections returned after six week post partum visit for family planning than those who did not attend the counselling section programme.

Also in a 1984 study in Tunisia, it was found that an outreach worker's house-to-house counselling led to a greater increase in contraceptive use than adding a new service site (population reports 1987).

A hospital study in the early 1970s in Beirut, Lebanon, demonstrated that one-on-one education and counselling increases family planning use among post partum mothers.

In 1950, in Japan when family planning programme began by Nihon Kokan (Japan Steel Company) for its employers individualized counselling combined with group instruction, increased contraceptive use more than group instruction only. Even where there is no direct evidence on the level of use, better counselling appears to help clients choose methods that suit them better. For example in Jakarta, Indonesia among IUD users who routinely received counselling before and after insertion, 90 percent were still users over one

year and 79 percent over two years compared to those who were counselled after insertion only if they had complaints. Only 52 percent were still users after one year, and 29 percent after two years (population reports, 1987:5). From above discussions, clients are likely to practice family planning longer if they are adequately counselled. Such counselling should offer clients sufficient information to make an informed choice among methods. If clients request a specific method, they should be given unless there are medical contraindications. They should be told about possible side effects and disadvantages as well as the advantages of the method they choose. This is why more trained counsellors should be involved in counselling the clients. Although no research has directly addressed the issue of rumours and misinformation, counselling may also be the best means to combat rumors and misinformation about contraceptive methods. Rumors and misinformation are widespread in many countries and they seem to be the major barriers to contraceptive use. For example in a recent survey among women age 18 - 45 in eight developing countries between 20 to 50 percent thought that oral contraceptives increased the risk of breast, uterine and stomach cancer. Women were also worried that oral contraceptives caused sterility and birth defects. Only 25 to 35 percent were aware of the possible adverse cardiovascular effects of oral contraceptives, and almost none were aware of their beneficial effects in reducing the risk of anaemia. A 1977 Dominican Republic study found that unfavourable rumours led to discontinuation of a variety of effective methods. Focus group discussions conducted in Indonesia also found that people needed more and more accurate information about family planning, and this was why many of them were not using any of the modern methods (Population Reports 1987:7)

Summary

The literature reviewed in this chapter covers the theories of attitudes, determinants of fertility, population explosion, Nigeria population and concept of family planning.

Attitudes are shaped mainly by information to which the individual is exposed, his wants, his group affiliation and his personality. When an individual is confronted with a controversial issue, she places it on her own pro/con scale, whether or not the position of the issue falls within or outside the respondents' latitude of acceptance.

Most of the studies reviewed showed that there is high fertility rate in Nigeria and that there is the need to intensify fertility control programmes if the objectives of the National Population Policy are to be achieved. The personal variables that were found to influence fertilty rate were age, sex, marital status, education, religion, male involvement.

Chapter 3

METHODOLOGY AND PROCEDURE

3.1 Introduction

The main focus of this chapter is to discuss the research design, population, sample, validation of instrument, data collection and statistical techniques employed in analysing data for the study.

3.2 Research Method

The design of this research is a one shot design of survey type of research method. In one shot design of survey type of research method, questionnaires are distributed without a pretest, and after filling by the respondents questionnaires are collected for analysis without going back to the respondents. The survey approach was adopted for this study because, according to Mukherjee (1978), Selltiz, Wrigntsman & Cook, (1976), it is the most popular method for studying social attitudes. This is beeasue the way people behave might be different from how the law or the society expect them to behave. If other methods were used for data collection, data collected might not be reliable, also, any issue that has to do with sexual habits or sexuality is usually seen as being personal, private and therefore very sensitive.

This is why one shot design of survey type of research method has been adopted. According to Neale & Liebert (1980), a survey design involves gathering information about a large number of people by questionning, phoning or interviewing a few of the subjects. The respondents or the sample is a small scale replica of the population under study. The people interviewed are called respondents because they respond to questions. Therefore, the survey permits the study of representative samples and the making of inferences from the

generalisation to populations that cannot be studied as a whole in one research exercise. The survey is thus a formal procedure, a way of getting information that is more or less isolated from the personality, the values, beliefs predispositions of the researcher. This is why it can produce information that is more reliable for decision making than personal judgement and guesses (Selltiz, Wrigntman & Cook, 1976).

3.3 Population of Study

The population for this study were males and females who are in their reproductive age in Kaduna metropolis i.e (16-50 years of age for the females and 16 - 60 years of age for the males).

The percentage of this age group in Kaduna metropolis is estimated to be 48.4% which is 182,777 of the total population of 377,639.

The total population of Kaduna metropolis according to 1991 census is estimated to be 377,639. Out of this 182,318 are said to be males while 155,321 are said to be females (1991 census).

3.4 The Sample

In line with Krejcie and Morgan (1970) a total of 384 male and female respondents were the sample size. See appendix "C" which shows the table for determining sample size from a given population. As can be seen from the table, Krejcie and Morgan (1970), recommended that for a population the size of this study (182,777), a sample size of 384 should be drawn.

The proportionate sampling technique was used. In other words, the different target age groups for both males and females in this study was drawn according to its proportional

representation in the total population. Therefore out of the 384 that form the sample size, 200 were males and 184 were females. See table 3.2 for number of males and females by age and their proportional representation in the sample size.

Table 3.2 Sample size by age and sex

Males = 200

Females = 184

Age Range	Males		Females	
	No	%	No	%
Below 18 Years	45	11.0	42	11.0
18 - 35 Years	95	23.1	92	23.1
Above 35 Years	60	14.3	50	14.3
Total	**200**	**48.4**	**184**	**48.4**

3.5 Sampling Tech[illegible]s

To obtain a true representation of the total population, stratified sampling method was used. Kaduna metropolis was divided in to two areas. The first part was Kaduna North which extends to Rigachuku local government area. This area is predominantly moslems Hausa and Fulani. The second area is Kaduna South which extends to Chikun local government area. This area is predominantly Christians and non Hausas. Each area was zoned into two distinct residential areas corresponding to the social class of residents. The elite area, mainly inhabited by high and middle level civil servants, business men and migrants, and the low income area housing poorer migrants and indigenous people. This is the generally unplanned, densely populated part of the city. This division is done to reflect the religious and social differences as well as the cosmopolitan nature of Kaduna metropolis. Purposive Sampling

technique was used to select 420 respondents from health centres in both areas. Using proportinate sampling method, 180 respodents were chosen from kaduna North and 240 respondents were chosen from Kaduna South. According to Selltiz (1976), Proportionate sampling method guarantees the inclusion in the sample of diverse elements of the population, and ensures that these diverse elements are taken account of in the proportions in which they occur in the population.

3.6.1 Instrumentation

The questionnaire was used to generate the required data. This is because questionnaires are useful when factual information is desired, as it can be used to obtain information about the past, the present and anticipated events as well as opinions about prevailing conditions and practices (Osuala, 1987). The items in the questionnaire are the adopted version of the National Fertility survey of Nigeria (Ascadi, 1972) and a Manual for Survey of Fertility and Family Planning (Caldwell, 1977). The questionnaire consists of 40 statements relating to the attitudes of Nigerians about contraception and population policy. The instrument cover the following dimensions:

a) Background of subjects

b) Factors associated with population policy.

c) Factors associated with knowledge and practice of contraception.

d) Attitudinal statements on population policy and contraception.

According to Selltiz et al (1976), the type of summated scale most frequently used in the study of social attitudes follows the pattern devised by Likert. The researcher therefore decided to use the Likert scale. In Likert scale, the respondents are asked to respond to each item in terms of five degrees of agreement. Out of the 40 statements in the questionnaire, 16

statements are attitudinal statements which are adequate, according to (Borg & Gall, 1989), they recommended eight. Other questions were added to the instrument to provide supportive information on the respondents attitudes. The rest were open ended items requesting the respondent to write his/her feelings about the National population policy and contraception. The purpose of those items was to give the respondents opportunity to express their favourable and unfavourable opinions about aspects of population policy and contraception that might not be included in the attitudinal statements. The attitudinal statement being the Likert - type scale were scaled on a 5 point format.

The favourable (positive) statements were scored 5 points for strongly Agree, 4 points for Agree, 3 points for undecided, 2 points for Disagree and 1 point for Strongly Disagree. The unfavourable (negative) statements were scored 1 point for Strongly Agree, 2 points for Agree, 3 points for undecided, 4 points for Disagree and 5 points for Strongly Disagree. According to Nisbeth and Entwistle (1970), the values of the scores on the statements with Strongly Agree can be added to those of Agree to make up for opinions representing Agree if the researcher is not interested in the degree (Strongly Agree or Agree) to which respondents agree with the statements. By the same token, values of Strongly Disagree can be added to those of Disagree to get the values of those who disagree for the same reason.

In line with the above recommendations therefore, each respondent's total score on the attitude statements represented his/her attitude level. Respondents who scored up to the total obtainable for the neutral (undecided) points were categorized as those with unfovaourable attitudes. Those with total scores above the neutral points were similarly categorized as those with favourable attitudes (Onyabe, 1981). The reponse for the open-ended questions were coded and reported in percentages to show those with favourable and unfavourable attitudes.

3.6.2 Validity of Instrument

Validation of instrument was based on the procedure suggested by Kerlinger (1973) and Gray (1976). According to them, experts in the various aspects of the discipline in which research is being conducted can help to validate a research instrument through carefully analysing it and making desired amendments. In validating the instruments, the researcher sent four copies of the questionnaire to a group of specialists in Guidance and Counselling, Sociology, Community Medicine and Psychology. They served as jurors for Vetting and assessing the face and content validity. Their recommendations were used in restructuring some of the items that were found to be ambiguous or not very relevant by two third agreement, as was recommended by Gray (1976). The final draft which consisted of 40 items was then produced and administered for pilot testing. The test was to ascertain the reliability and validity of the instrument. In addition, the test was to test the internal consistency of the instrument.

The study involved 55 males and 45 females randomly selected from health clinics from Zaria and Makarfi areas of Kaduna State. The researcher personally distributed and administered the questionnaire to the respondents. 49 males' and 42 females' questionnaire distributed were duly filled and returned. The result of the pilot study shows reliability coefficient for the total questionnaire to be 0.80 and that of attitudinal questionnaire alone was 0.87. These values of reliability compared favourably with 0.79 to 0.90 range recommended by Helmstadter (1964), and Nisbeth and Entwisle (1978).

This was determined by a split half method. The Split half method is useful because it excludes two sources of error that are present in many research situations. These include individual differences from day to day on many variables such as mood and level of fatique. Secondly, in spite of the researcher's efforts to maintain standard condition when tests are

given on different occasions, many small variations are likely to occur in the testing situation. The split half method took care of the two situations. The instrument was therefore adopted for the study.

3.7 Administration of Questionnaire

The researcher employed three research assistants to work with her to administer the questionnaire. The three research assistants were trained on how to administer the questionnaire on the respondents and after a period of time collect the completed questionnaire for analysis.

3.8 Data Analysis

Data generated were analysed using t-test for hypotheses: Two, five, Six and Seven and Analysis of Variance (AVOVA) was used to test hypotheses: One, three and four. The one way analysis of variance and t-test which were more relevant were applied as appropriate to test the significance of the differences in the attitudes of respondents about the variable used. Results were interpreted and presented to all the 7 (Seven) hypotheses raised in the study.

3.10 Summary

In this chapter, the research design, the study population and samples, validation of instrument, data collection and the statistical techniques used in the study were discussed.

The research design used was the one shot design of survey type of research method. The population of the study is the 182,777 males and females who are in their reproductive age in Kaduna metropolis. Out of this population, a sample size of 384 was randomly

sampled using the proportionate sampling technique. An adopted instrument consisting of 40 statements relating to the attitudes of Nigerians about contraception and Population Policy was used. The instruments was validated in a pilot study which was carried out in Zaria and Makarfi area of Kaduna State. The result of the pilot study suggested that the instrument was reliable and valid. The data generated were analysed using the t-test for hypotheses, two, six, and seven. Likewise, Analysis of Variance (ANOVA) was used to test hypotheses; one, three, and four.

Chapter 4

RESULTS AND DISCUSSION

4.1 Introduction

In this chapter, the data collected for the study was analysed. The results were interpreted and discussed in relation to the objectives of the study. The analysis was structured to reflect the responses of the male and female respondents respectively. The respondents were then combined, where required, to meet the purpose of study.

The chapter is structured into three main sections. The first part consists of respondents attitudes in tables of frequencies and discussions. The second part consists of the testing of hypotheses, and the related research questions raised in the study. A general discussion of the findings of the study make up the last section of the chapter.

4.2 Respondents' Background/personal Data

A total number of four hundred and twenty (420) questionnaire forms were sent out between August 1998 and March 1999. Out of this number, three hundred and seventy one (371) respondents (88%) filled and returned the questionnaires. This figure was made up of two hundred and six (206) males, one hundred and sixty five (165) females. The respondents were selected within the age range of below 18 years, eighteen to thirty five years, and above thirty five years. This is because this age range are the main targets of National population policy on birth control.

Table 4.0. shows the respondents by their age, range, and sex.

Table 4.0: Respondents Distribution by Sex and Age

Age Range	Males		Females	
	Freq.	%	Freq.	%
Below 18 Years	38	18.4	26	15.8
18 - 35 Years	105	51.0	91	55.2
Above 35 Years	63	30.6	48	29.1
Total	**206**	**100**	**165**	**100**

47323

From table 4.0, it can be seen that 38 or 18.4% of the respondents are male who are below 18 years of age, while 26 or 15.8% are females who are below 18 years of age. By the same token, 105 or 51.0% of the respondents are males of between 18 and 35 years of age, while 91 or 55.2% are females of between 18 and 35 years of age. Sixty three or 30.6% constitute males who are above 35 years of age and 48 or 29.1% are females of above 35 years of age.

Table 4.1 shows the respondents' distribution by marital status.

Table 4.1: Respondents' Distribution by Marital Status

Marital Status	Males		Females	
	Freq.	%	Freq.	%
Married	164	79.6	128	77.6
Non married	42	20.4	37	22.4
Total	**206**	**100**	**165**	**100**

From table 4.1, among the 206 male respondents, 164 or 79.6 percent were married, and twenty percent (20.4%) were not married. The corresponding percentage of female

respondents who were married were 77.6% and those not married were only 22.4%. This is not surprising because in Nigeria marriage is universal and every man or woman aspires to fulfil this social obligation. Ogbona and Mamman (1990) found the mean age at marriage to be seventeen years. Anyone who is not married at the age that the society expects is seen as a deviant and may be stigmatised especially the females who are expected to marry earlier than their male counterparts. Evidence from available literature and previous research have shown that age at marriage and the proportion of people married could be a factor for high fertility rate in sub Saharan Africa (Bongaats, 1982).

Table 4.2. shows the distribution of respondents and the number of wives who were with them at the time of study.

Table 4.2: Distribution of Wives among Respondents

No. of Wives	Males		Females	
	Freq.	%	Freq.	%
Non	44	21	33	21.2
One wife only	77	37.4	68	41.2
Two wives	47	22.8	30	18.2
Three wives	22	10.7	23	13.9
Four wives	16	7.8	9	5.5
Total	**206**	**100**	**165**	**100**

Table 4.2. shows that out of the total male respondents that were married, thirty seven percent (37.4%) had one wife. About twenty three percent (22.8%) had two wives and eleven percent (10.7%) had three wives staying with them respectively, at the time of study. Only eight percent (7.8%) had four (4) wives in their houses. Among the female respondents, forty

one percent (41.2%) had no other wife staying in the house, eighteen percent (18.2%) had one partner while fourteen percent (13.9%) had two partners or wives in the house staying with them. Only 5.5% stayed in their matrimonial homes with three other wives as shown in the table.

Although 37% of the male who were married had only one wife and 41% of women who are married had no partner, it is worth noting that the percentage of males who had more than one wife was 41.3% and that of the female whose husbands had more than one wife was 37%. These figures have implications for the National Population Policy, if Nigeria is to reduce her population, the National Population Policy of four children per woman would have to be revisited by the policy makers.

This is because if a man has two or more wives it means he would have more than four children so the fertility rate would still be high. In the traditional setting of this survey it was also observed that in place where there were more than one wife there is usually competition among the wives to have more children since the number of children a woman has would determine the amount of inheritance the children would get, if their father dies. This behaviour has negative impact on contraceptive use and has to be addressed, if the objectives of population policy are be achieved.

In table 4.3, the respondents are shown by their number of children according to their sexes.

Table 4.3: Distribution of Children among Respondents

No. of Children	Males				Females			
	Males		Females		Males		Females	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%
No Children	47	22.8	51	24.8	31	18.8	27	16.4
1 - 3 Children	80	38.8	70	34.0	78	47.3	91	55.2
1 - 6 Children	30	14.6	33	16.0	26	15.8	24	14.5
7 Children and above	49	23.8	52	52.2	30	18.2	23	13.9

The need for this sex distribution in this table was informed by the fact that couples often go out of their ways in order to get male or female children. The sex structure of the children could sometimes be the determining factors that has encouraged high fertility rate among most couples. Though the distribution seem relatively proportional, the percentage of the respondents who seem to have no children at all is relatively high. This could be because of the unmarried respondent in the sample.

The respondents were next examined on any pregnancy that resulted in miscarriages. About twenty two percent (21.8%) of the men said that their wives had pregnancies that resulted in miscarriages. The corresponding number of respondents among the females who said they had pregnancy that resulted in miscariages was forty nine percent (49%). Miscarriages could also be a determinant of the number of children a woman would have or whether they would accept to use contraceptives or not.

Table 4.4:shows the Distribution of respondents by religion.

Table 4.4: Distribution of Respondents by Religion

Religion	Males		Females	
	Freq.	%	Freq.	%
Roman Catholic	41	19.9	44	26.7
Protestant	60	29.1	46	27.9
Muslims	98	47.6	69	41.8
Traditional Religion	7	3.4	6	3.6
Total	**206**	**100**	**165**	**100**

From table 4.4, it can be observed that majority of the respondents were Muslims. Among the males there are 47.6% Muslims while among the females there are 41.8%. This is not surprising because Kaduna metropolis where the study took place is predominantly Muslims (Hausa and Fulani). This is the Northern part of Kaduna metropolis.

This was followed by the protestants with twenty nine percent (29.1%) for males, and twenty eight percent (27.9%) for females respectively. Catholics accounted for twenty percent (19.9%) of the male respondents and twenty seven percent (26.7%) of female respondents. The traditionalists were only about three percent (3.4%) among the males and about four percent (3.6%) among the female respondents. In Nigeria, the two main religions (i.e Christianity and Islam) preach/pontify that human beings must multiply in the world, and that God is the giver of children. Therefore, nobody has any right to control their number. This could have negative effects on National Population policy and contraceptive usage in the country because if the number of children in a family is too large, this has implications for socio-economic development, education, employment and general development of the

country. There is thus the need to embark on education in order to change these negative attitudes.

Table 4.5. Shows the respondents according to their ethnic groups

Table 4.5 Distribution of Respondents by Ethnicity

Ethnic Group	Males		Females	
	Freq.	%	Freq.	%
Hausa/Fulani	66	32.0	52	31.5
Yoruba	28	13.6	30	18.2
Igbo	21	10.6	31	18.8
Others	91	44.2	52	31.5
Total	**206**	**100**	**165**	**100**

The table shows the distribution is more towards the minority ethnic groups and the Hausa and Fulani respondents. Among the males, the Igbos were the least, but among the females the Yorubas were the least. Others include the minority groups. These group of people are the Gwaris, the Jabas the Kages, the Katafs, the Igalas, the Nupes, the Tivs, the Idomas, the Biroms, and others.

Table 4.6 shows the respondents and their level of education.

Table 4.6 Distribution of Respondents by Qualification

Qualification	Males		Females	
	Freq.	%	Freq.	%
No Formal Education	56	27.2	53	32.1
Primary Education	27	13.1	30	18.2
Secondary Education	70	34.0	52	31.5
University	53	25.7	30	18.2
Total	**206**	**100.0**	**165**	**100.0**

KASHIM ... LIBRARY

From the information contained in table 4.6, seventy three percent (72.8%) of the male respondents, had one form of education or the other, twenty seven percent (27.2%) did not have any form of education at all. The corresponding percentage for the female respondents were sixty eight percent, (67.7) and thirty two percentage (32.1% respectively. The percentage of both males and female who acquired University education are relatively low. The percentage of females with no education, and with University education is lower compared to that of the males. This could be because in the area of study, education levels remain very low, and in many cases the education of male children is strongly encouraged both through the societal attitudes and official policies of the Government. Girls also married early in this area which discourages modern education. Since it has been argued by Molnos (1968), Vankeep (1971), Oni and McCarthy (1989), that those who are highly educated are more receptive to contraception, It means that to achieve the objectives of the National population policy on birth control, more Nigerians must be educated.

In a review of World Fertility Survey (WFS), it was also found on the average that when not controlling for other factors, women with seven or more years of schooling gave birth to three fewer children than did women with no schooling. Therefore, female education deserve serious attention not only because of the linkages between female education and fertility, but also for enhancing female development and productivity.

Out of the male respondents who were educated, only sixty-one percent (61.2%) said they read newspapers. The percentage of females who read newspapers was about fifty five (54.5%). Ninety-nine percent (99%) of male respondents said they listen to radio and 98.5% of women said they listen to radio. This is not surprising because in the area of study it was observed during the field work that most people have radios and they listen to it including those who even live in the rural areas.

Table 4.7 shows the frequencies of the respondents rate of reading Newspaper and listening to radio.

Table 4.7 Distribution of Respondents by Communication Media

Rate of Listening	Male				Female			
	Papers		Radio		Papers		Radio	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%
No Response	79	38.5	1	0.5	78	47	6	3.6
Occasionally	15	7.3	7.3	5	2.4	22	13.3	6.1
Sometimes	41	19.9	44	21.4	33	20.4	85	51.5
Always	71	34.5	156	7.7	32	19.4	64	38.8
Total	**206**	**100.0**	**206**	**100.0**	**165**	**100.0**	**65**	**100.0**

The table shows that radio was the most listened to media of communication by the respondents. The discrepancy between the male and female figure could be due to the fact that the men tended to have more leisure time than the women. Ninety three percent (93%) of the male respondents said they have heard of the National Population Policy and about ninety six percent (96.4%) of the female respondents also said they have heard about the policy. This implies that the majority of the respondents have heard about population policy though it seems that more females are aware than the males. This could be because the females attend clinic and hospital more than the men as it is shown in Table 4.8 where 26.1% of women said they got the information from hospitals compared to 11.2% of men.

Table 4.8 shows the medium through which the respondents heard of the policy.

Table 4.8: Distribution of Respondents by Medium

Medium	Males		Females	
	Freq.	%	Freq.	%
No Response	14	6.8	7	4.0
Thru Friend	17	8.3	28	17.0
Thru TV	21	10.2	28	17.2
Thru Radio	81	39.3	25	15.2
Thru Hospital	23	11.2	43	26.1
Others	50	24.3	34	20.6
Total	**206**	**100.0**	**165**	**100.0**

The table shows that policy information circulate among the respondents on a proportional bases through all the suggested media.

Table 4.9 shows the respondents' attitudes to the National Population Policy.

Table 4.9 Distribution Respondents' Attitudes on Policy

Attitudes	Males		Females	
	Freq.	%	Freq.	%
No Response	6	2.9	12	7.3
Against Religion	59	28.6	40	24.2
It will improve life	59	28.6	24	14.5
Against Culture	20	9.7	20	12.1
It will improve health	30	14.6	47	28.5
A ploy by West to control us	32	15.5	22	13.3
Total	**206**	**100.0**	**165**	**100.0**

The table shows a high percentage of male respondents, about twenty nine percent (28.6%) believe that it would improve life even though the same percentage believe it was against their religion. The percentage of female respondents who believe it was against their religion was twenty four (24.2%). This tends to confirm the literature by Bell (1976) which argues that it is uncertain if religion does not have effect on familiar and societal levels of fertility. The table also shows that about twenty nine percent (28.5%) of the female respondents compared to about fifteen percent (14.6%) of male respondents believe it would improve their health. This could be because it is the women that get pregnant and go through labour and they could be aware that less number of children might improve their health.

The overall percentage of the two groups of respondents did not seem to favour the federal Government Policy on birth control. However, almost all respondents did not disclose or did not know or have an idea of the number of children they wanted, when they got married. For example, seventy one percent (70.9%) of the males and seventy percent (70.3%) of the females did not respond to this question, sixty seven percent (66.5%) of the males said they wanted more children with an average of two boys and one girl each. On the female side, the percentage of those who wanted more children was sixty (60%) with an average of two boys and two girls each. The percentage of male respondents is higher than that of female respondents because in most African countries the males tend to desire more children than female respondents. This could be because in most African countries men conceive having many children as an epitome of pride and a status symbol in the society. Children are also seen as instrument of inheritance, as security in old age particularly with respect to male Children. The reasons why the percentage of women is lower could be because women are now becoming conscious of controlling their fertility to improve their health.

Questions relating to the ideal number of children were also asked and the analysis showed that among the male respondents the ideal family size (number of children) is five made up of three boys and two girls, while the women would prefer seven children consisting of four boys and three girls. This shows that both sexes have a desire for more than four children and both sexes also showed preference of having more male children than females. This points to the fact that the National Population Policy has not been widely accepted by the populace and therefore a lot of a work has to be done to educate and disseminate information to make the populace become more aware of the Nation's population problems and their implications.

The issue of sex preferences should also be considered by the policy makers because it could be a factor that is encouraging high fertility rate in the country.

Table 4.10 shows the attitudes of respondents of what a large family size is.

Table 4.10: Distribution of Respondents' Attitudes of Large Family

Size of Family	Males		Females	
	Freq.	%	Freq.	%
Do not know	29	14.1	18	10.9
1 - 5 persons	43	20.9	12	7.5
6 - 10 persons	39	18.9	65	39.5
11 and above	95	46.1	70	42.2
Total	**206**	**100.0**	**165**	**100.0**

The table shows most respondents both males and females mainly consider a family of eleven persons and above as a large family. The male respondents believe that the ideal age for a girl to have the first child should be between 16 and 20 years. Sixty one percent of the males were of this opinion, For the female respondents only (56.4%) believe that a girl should marry between 16 - 20 years. Thirty eight (38.2%) of the female respondents felt that a girl should have the first child when she is above twenty one years of age compared to about thirty four (33.5%) of the males. This could be because the women were more exposed to education on population and fertility control from the clinics and hospitals as was indicated in their source of information table and that they believe that a woman needs to be more mature to be able to cope with child bearing.

Table 4.11 shows the perceived ideal interval between deliveries considered healthy by the respondents.

Table 4.11:Distribution of Respondents' Perceived Interval For Deliveries

No. of Years	Males Perception		Females Perception	
	Freq.	%	Freq.	%
Don't know	31	15.0	10	6.1
1	22	10.7	12	7.3
2	133	54.9	81	49.1
3	37	18.0	59	35.8
4	3	1.5	3	1.8
Total	**206**	**100.0**	**165**	**100.0**

In the table, it could be seen that both males and female respondents tends to favour the two years interval between each delivery. The female respondents tended to favour a two

years and three years interval. This could be due to the fact that females are the ones that get pregnant and deliver babies and are aware that they need 2 to 3 years to rest for reproductive health reasons as a result of teachings they got from the hospital and clinics.

Ninety nine percent (99%) of the male respondents said they have heard that there are methods used by couples to delay or prevent pregnancy. About the same proportion of the female respondents (98.8%) also said they have heard of such methods. Table 4.12. shows the different methods and respondents level of awareness and probable use of such methods as a tool for family planning and adoption of the Federal Government Policy on birth control. The methods are classified into four categories. Those requiring doctor's prescription, those not requiring doctor's prescription, folk methods and traditional methods.

Table 4.12 Distribution of Male Respondents by Methods of Family Planing

Methods	Heard				Known?				Used			
	Yes		No		Yes		No		Yes		No	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
By Doctors Prescription												
Pill	148	71.8	58	28.2	120	58.3	86	41.7	28	13.6	178	86.4
Tubal Ligation	39	18.9	167	81.1	33	16.0	176	84.0	6	2.9	200	97.1
IUCD	95	46.1	111	53.9	60	29.1	146	70.9	8	3.9	198	96.1
Diaphragm	68	33.0	138	67.0	41	19.9	165	80.1	1	0.5	205	99.5
Injectables	114	55.3	92	44.7	109	52.9	97	47.1	8	3.9	198	96.1
Vasectomy	31	15.0	175	85.0	22	10.7	184	89.3	2	1.0	204	99.0
Not By Prescription												
Condom	166	80.6	40	19.4	175	85.0	31	15.0	100	48.5	106	51.5
Forming Tablets	28	13.6	178	86.4	26	12.6	180	87.4	1	0.5	205	99.5
Jelly or cream	32	15.5	174	84.5	20	9.7	186	90.3	3	1.5	203	98.5
Suppositories	23	11.2	183	88.8	19	9.2	187	90.8	3	1.5	203	98.5
Sponge	26	12.6	180	87.4	16	7.8	190	92.2	0	0.0	206	100.0
Folk Methods												
Abstinence	124	60.2	82	39.8	111	53.9	95	46.1	43	20.9	163	79.1
Rythmn	91	44.2	115	55.8	84	40.8	122	59.2	30	14.6	176	85.4
Withdrawal	133	64.6	73	35.4	142	68.9	64	31.1	43	20.9	163	79.1
Douche	19	9.2	87	90.8	3	1.5	203	98.5	0	0.0	206	100.0
Longer Breast Feeding	92	4.7	14	55.3	82	39.8	124	60.2	41	19.9	165	80.1
Traditional	114	5.3	92	44.7	88	42.7	118	57.3	36	17.5	170	82.5

A close examination of the table reveal that the male respondents have heard most of the methods and devices listed on the table. However, their awareness differs greatly between methods. For example, the methods that require doctor's preseription tend to have

been heard and known most by the male respondents with exception of tubal ligation and vasectomy where the percentage of those who have heard or known about them were less than thirty percent. The diaphragms seems not to be very popular with the male respondents as well as could be seen in the tables. The respondents knowledge of the methods did not reflect in their usage as could be seen in the pill which about 14% said they have used. No other method has a percentage usage of up to 4% percent.

The scores for the birth control that do not require a doctors's prescription did not fare better in their usage. The only exception in this category is the condom, as could be seen from the table. The higher knowledge and usage recorded for the condom could be ascribed to the popular campaign in the mass media for its usage. As regards the awareness of other methods or devices in category, their percentages scores were relatively too low. This could be seen on examination of the table.

The folk methods were those generally used by different people. Aside from pills and condom, these methods seem to be favoured by some respondents. Abstinence and withdrawal could be seen to be used by over twenty percent 20% among the male respondents. This could be because they are more convenient for people as they do not have to go to a doctor for prescription. Abstinence and withdrawal methods also demands a high sense of self discipline which many may not be willing and able to practice and this could be a factor for the high fertility rate in Nigeria. Prolonged breast feeding and traditional methods are discovered to be practised by about twenty percent (19.9%) and about eighteen percent (17.5%) respectively. The rhythm methods was only used by about fifteen percent (14.6%) of the male respondents. The douche method was the only method not seem to be known or used by any of the male respondents.

Table 4.13. Shows the distribution of female respondents by methods of family planning.

Table 4.13: Distribution of Female Respondents by Methods of Family Planning

Methods	Heard				Known?				Used			
	Yes		No		Yes		No		Yes		No	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
By Doctors Prescription												
Pill	131	79.4	34	20.6	106	64.2	59	35.8	43	26.1	122	73.9
Tubal Ligation	24	14.5	141	85.5	48	29.1	117	70.9	0	0.0	165	100.0
IUCD	98	59.4	67	40.6	69	41.8	96	82.2	8	4.8	157	95.2
Diaphragm	59	35.8	106	64.2	28	17.0	137	83.0	1	0.6	164	99.4
Injectables	102	61.8	63	38.2	91	55.2	74	44.8	14	8.5	151	91.5
Vasectomy	35	21.2	130	78.8	42	25.5	123	74.5	2	1.2	163	98.8
Not By Prescription												
Condom	147	89.1	18	10.9	141	85.5	24	14.5	73	44.2	92	55.8
Forming Tablets	35	21.2	130	78.8	24	14.5	141	85.5	1	0.6	164	99.4
Jelly or cream	25	15.2	140	84.8	27	16.4	138	83.6	1	0.6	164	99.4
Suppositories	32	19.4	133	80.6	19	11.5	146	88.5	1	0.6	164	99.4
Sponge	31	18.8	134	81.2	23	13.9	142	86.1	2	1.2	163	98.8
Folk Methods												
Abstinence	116	70.3	49	29.7	104	63.0	61	37.0	49	29.7	116	70.3
Rythmn	97	58.8	68	41.2	102	61.8	63	38.2	36	21.8	129	78.2
Withdrawal	107	64.8	58	35.2	95	57.6	70	42.4	24	14.5	141	85.5
Douche	20	12.1	145	87.9	9	5.5	156	94.5	1	0.6	164	99.4
Longer Breast Feeding	113	68.5	52	31.5	103	62.4	62	37.6	67	40.6	98	59.4
Traditional	86	52.1	79	47.9	79	47.9	86	52.1	29	17.6	136	82.4

An examination of the two tables (table 4.12 and 4.13) shows that the female respondents were more aware of the four categories of birth control methods listed in the questionnaires. This could be due to the fact that most of the methods are used by females. The score for the usage of pill among the male respondents' wives was fourteen percent compared to twenty six percent among the female respondents. Aside from the two percent on tubal ligation usage which it seems the female respondents were aware of, but did not use, the record of usage among the birth control methods requiring doctors prescription were generally better than those recorded by the male respondents. The female respondents did not

473237

RECLIVE

seem to favour birth control methods that do not require prescription. The only exception here was condom where forty four percent (44%) was recorded among this group of respondents.

With the folk methods, the awareness level among female respondents almost double the percentage recorded by the male respondents. This is particularly noticeable in the area of prolonged breast feeding which over sixty percent (60%) used as could be seen from table 4.13. Abstinence was another method where thirty percent (29.9%) was recorded among the group compared to twenty one percent (20.9%) among the male respondents. The difference between the male and female respondents could be due to the fact that society socializes and expects a woman to suppress her sexual urges more than men and are therefore expected to be more virtueos and disciplined regarding sexual behaviour, in comparison with the males.

The percentage of both male and female respondents who have known and heard about traditional methods are quite high. Fifty two percent (52.1%) of females, and fifty -five percent (55.3%) of males said they have heard about traditional methods and eighteen percent (18%) of both male and female respondents said they have used traditional methods before.

The general observation from tables (4.12 and 4.13) show that both male and female respondents are aware of the various types of contraceptive methods. What is lacking is putting this knowledge into practice. This shows that the cognitive domain was present but the psychomotor domain was still dormant. If the Federal Government is to adopt the four children per woman policy the majority of our populace must adopt and use at least one form of contraceptive. Therefore policy makers must look for effective means of getting more people to use contraceptives to control the high fertility rate in the country.

The high usage recorded for condoms among both male and female respondents could be due to the current campaign against sexually transmitted diseases especially AIDS. So the respondents might be using condom as a protection against infections not as a contraceptive device although the condom serves both purposes. The high percentage use of condoms also points to the fact that if government intensifies its campaign efforts on contraception, more people will use them.

The next question put to the respondents was whether they were using any of the methods at the time of this study. Only twenty four percent (24%) of the male respondents as against thirty five percent (35%) of the female respondents said they were using one method and/or the other. This tends to confirm the findings of previous research studies that the level of contraceptives use among Nigerians are relatively low (Ejembi & Bandipo, 1990; Calldwell, 1987, Amdi, 1993).

Table 4.14 shows some of the reasons that the respondents who were not using contraceptives gave.

Table 4.14: Distribution of Respondents by Reasons Why They Were Not Using Method

REASONS	MALE		FEMALE	
	FREQ.	%	FREQ.	%
No comment	93	45.1	69	41.8
Not available	6	2.9	2	1.2
Against religion	12	5.8	8	4.8
Against culture	4	1.9	1	0.6
Not allowed by husband	86	41.7	80	48.5
Not affordable	5	2.4	5	3.0
	206	**100.0**	**165**	**100.0**

Table 4.14 shows that forty five percent (45.1%) of males and about forty two percent (41.8%) of the females did not indicate their reasons for not using any method of contraceptive. Majority of those who indicated their reasons said their husbands would not allow them to use contraceptives or they would not allow their wives to use them. About forty nine percent (48.5%) of the females and about forty two percent (41.7%) of the males said this. This findings is in agreement with the findings of Joesoet, Andrews & Budi (1988) Oni and McCarthy (1989) and Isiugo-Abanike (1994) who found that husband's approval of contraceptives play a decisive role in male dominated societies like Nigeria. Evidence from past literature also reveal that men have not encouraged their wives to use contraceptives because they felt it will undermine their own authority as the head of the household and will also encourage their wives to be unfaithful (Oni & McCarthy, 1989). The policy implication of these findings is the need for major educative efforts targeted at men to persuade them to change their negative attitudes towards contraceptives and motivate them and their wives to produce smaller families. An attempt was made to find out among the users of contraceptives, if they have used some methods that have affected their health or that have failed them. Seventeen percent (17%) of the male respondents said their wives have used methods that have failed them mainly IUCD and pills while the percentage of female respondents who have used some methods that have failed them was twenty seven percent (27.3%). Ten percent of the male respondents also said their wives have used methods that have affected their health and made them to stop, and the corresponding percentage of the female respondents was twenty one percent (21.2%). This could be because some of them might have not used the methods regularly or correctly. But even when used correctly some methods sometimes fail or affect the women's health, which could have discouraged them from using contraceptives. This also points to the need for counselling in

all service points so that counsellors could talk about each method and their side effects, and attend to whatever personal problems they may be having, as doctors and midwives are usually too busy to attend to their patients and also handle personal problems.

Most of the respondents, eighty two percent (82%) of males and eight four (84%) of females, said that family planning service facilities were available in their communities. This tends to support the findings of Odile (1987) when he argued that fertility rate remains high not because of lack of access to contraceptives but lack of demand.

Table 4.15 shows the perception of male respondents towards population policy and contraception.

Table 4.15: Distribution of Male Respondents' Attitude on Population Policy and Contraception

S/n	Population Policy/Contraception	Agee		Undecided		Disagree	
		Freq.	%	Freq.	%	Freq.	%
1.	A family that has more than 4 children is large	74	35.9	20	9.7	112	54.4
2.	Population policy was to improve quality of life	102	49.5	52	25.2	52	25.2
3.	Process of bringing children should not be tampered with	83	40.3	21	10.2	102	49.5
4.	Couples will decide fertility rate of FP	104	50.5	55	26.7	47	22.8
5.	Children from large family lack proper growth	128	62.1	25	12.1	53	25.7
6.	Lower population requires contraceptives	80	38.8	36	17.5	90	43.7
7.	Contraception negates morals	69	33.5	42	20.4	95	46.1
8.	FP are available and accessible	57	27.7	46	22.3	103	50.0
9.	Radio and T.V. Advert has create and promote awareness	41	19.9	37	18.0	128	62.1
10.	Contraceptives promotes promiscuity	64	31.1	38	18.4	104	50.5
11.	Children of these days need Family planing	85	41.3	48	23.3	73	35.4
12.	If leaders are involved more people will accept FP	106	51.5	57	27.7	43	20.9
13.	People use FP to delay or prevent pregnancy	82	39.8	64	31.1	60	29.1
14.	FP is a ploy by the West	88	42.7	32	15.5	86	41.7
15.	A girl should be allowed to marry before the age of 18	96	46.6	14	6.8	96	46.6
16.	A woman should have all her children between 18 and 35 years of age	90	43.7	65	31.6	51	24.8

From the table, it could be seen that the majority of the male respondents did not agree that a family that has more than four children is necessarily a large one. The implication here is that such attitude does not favour the National Policy on birth control in the country. It could be seen from the table that fifty percent (50%) of the male respondents agreed that the population policy was adopted by the government to improve the standard of living and quality of life of the populace. Contrary to this perception, the respondents

seem to be divided on the mode of achieving the objective of the policy. The table shows that (50%) felt the process of birth could be controlled, while about forty percent (40.3%) of the male respondents did not think that man has any right to tamper with the process of bringing children to the world. They see children as God's gifts to mankind, sacred gift that must not be tampered with. Those who felt that the birth process could be tampered with also felt that couples will control their fertility if information and family planning services were available and accessible to them.

Sixty two percent (62%) agreed that children from large families are likely to lack good nutrition, attention and other things necessary for proper development. However their responses to the use of contraceptives to limit the number of children did not agree with that perception. Only thirty nine percent(39%) of the male respondents agreed that contraceptives could be used to limit the number of children in the country. About eighteen percent (17.5%) of them did not even respond to that question. Based on these responses, if objectives of National Population policy are to be achieved by the year 2000 as was stipulated, then families must control the number of their children to match with available resources so that their children can be better looked after. Every effort must therefore be made to limit the number of children per family by promoting the use of contraceptives.

The non accessibility of family planning services in some of the communities could be based to their negative perception of contraceptives expressed in the table. As could be seen in the table, fifty percent (50%) of the respondents said that family planning was not available and accessible in their area which contradicts their earlier response when majority of them said family planning services were available in their communities. It could be that where such were available they were probably not accessible. Only about twenty eight percent (27.7%) said that such services were available and accessible in their communities.

As could be seen from the table, the advertisement in radio and television on family planning has not really changed peoples behaviours. as indicated by the sixty two percent (62.1%) of the male respondents. This could be because people could not ask questions about the methods from the television or radio, as they would be able in a counselling process.

About thirty four percent (33.5%) and thirty one (31.1%) of the male respondents said that contraception negates the existence of moral standard in the society and that contraceptives promote promiscuity which is in variance with their perception in which (41.3%) of them said that children of these days are sexually active and need family planning education from the Secondary School. A large percentage of the male respondents fifty two percent (51.5%) felt that if community leaders are involved in the promotion of contraceptives, many people will use them.

This implies that campaign and various advertisement on the methods of family planning still lack more in terms of coverage and involvement. The table also shows that only about forty percent (39.8%) agree that people in their areas are using contraceptives to delay pregnancy compared to forty three percent (42.7%) who believe that population policy and family planning programme is a ploy by the Western Countries to control the rest of the world, especially the third world countries in which Nigeria is one. This belief could be a factor why many of the men are not using any form of contraceptives or allowing their wives to use contraceptives. The conclusion that one could draw from this is that a lot of rumors and myths have been attached to contraceptive use that might be preventing people from using them.

When the male respondents were asked if a girl should be allowed to get married before the age of 18. The male respondents were equally divided on this question. About forty seven percent (46.6%) said they agree and same percentage (46.6%) said they

disagreed. When asked if a woman should have all her children between eighteen and thirty five years as stipulated by the National Population Policy, forty percent (40%) agreed, thirty two percent (31.6%) were undecided and twenty five percent (24.8%) said they disagreed. This also shows that the policy makers and family planners need to intensify their efforts in by involving not only medical personnel but teachers community leaders, counsellors and psychologists in their mobilization and educational process so as to shed the myths and rumours attached to birth control and to encourage people to see the advantages of having fewer children.

Table 4.16 shows the percentage of the female respondents attitude towards contraception and population policy.

Table 4.16 Distribution of Female Respondents' Attitude on Population Policy and Contraception

S/n	Population Policy/Contraception	Agee		Undecided		Disagree	
		Freq.	%	Freq.	%	Freq.	%
1.	A family that has more than 4 children is large	55	31.1	5	3.0	107	64.8
2.	Population policy was to improve quality of life	84	50.9	29	17.6	52	31.5
3.	Process of bringing children should not be tampered with	69	41.8	19	11.5	77	46.7
4.	Couples will decide fertility rate of FP	105	63.6	32	19.4	28	17.0
5.	Children from large family lack proper growth	115	69.7	18	10.9	32	19.4
6.	Lower population requires contraceptives	75	45.5	25	15.2	65	39.4
7.	Contraception negates morals	58	35.2	31	18.8	76	46.1
8.	FP are available and accessible	51	30.9	32	19.4	82	49.7
9.	Radio and T.V. Advert has create and promote awareness	44	26.7	21	12.7	100	60.6
10.	Contraceptives promotes promiscuity	65	39.4	31	18.8	69	41.8
11.	Children of these days need family planing	85	51.5	27	16.4	53	32.1
12.	If leaders are involved more people will accept FP	107	64.8	32	19.4	26	15.8
13.	People use FP to delay or prevent pregnancy	57	34.5	46	27.9	62	37.6
14.	FP is a ploy by the West	65	39.4	33	20.0	67	40.6
15.	A girl should be allowed to marry before the age of 18	73	44.2	7	4.2	85	51.5
16.	A woman should have all her children between 18 and 35 years of age	77	46.7	30	18.2	58	35.2

From the table, the percentage of the female respondents who did not think that a family that has more than four children is necessarily large are higher than that of the male respondents. The females were 65% compared to 54% of the males. The percentage of females who were of the opinion that the National population policy was adopted to improve the quality of life was also higher than that of the male respondents. This is in agreement with previous responses of the female respondents which shows that women still want more

children than four even though they believe that the population policy was adopted to improve the quality of life of the populace.

As could be seen from the two tables the responses of the female group seem to tally with that of the men, that the process of bringing the children to the world should not be tampered with. Sixty four percent (63.6%) of the female respondents felt that couples would control the number of children they would have if information and family planning services are made available to them. Both female and male respondents agreed that children from large families are likely to suffer more than those from smaller families.

The percentage of women who agreed to this statement are slightly higher than that of men, seventy percent (70%) compared to sixty two percent (62%) of men. More of the females respondents, about forty six percent (45.5%) compared with about thirty nine percent (38.8%) of the males felt that contraceptives must be accepted in the country as a way of realizing the objectives of National Population Policy. Forty six percent (46.1%) among both male and female respondents disagreed that contraceptives would negate the morals in the society. However the percentage of females who felt that contraceptives promote promiscuity is higher among the females than the males. This could be as a result of the way the women are socialized in the society to be more strict when it comes to the issue of sexuality. Fifty percent (50%) of both males and females said that family planning methods are not available or accessible in their area.

Forty one percent of the female respondents also felt that contraceptives will not promote promiscuity in the society and this could explain why about fifty two percent (51.5%) of them felt that the children need family planning education from the Secondary School level because they seem to be more sexually active at this stage. This percentage is higher than the score by the men as could be seen from the two tables: More of the women,

sixty five percent felt that the involvement of community leaders and local associations will encourage the acceptance of contraceptives. This could be because most of the community leaders are men, and the women, because of culture and low level of education need their approval to use contraceptives.

Their attitude about the policy as a ploy by the western countries to control the less developed countries of the world is almost the same as men. However, the low score (34.5%) on whether contraceptives should be used to delay pregnancy did not seem to reveal the awareness they seem to exhibit. As to whether girls should be allowed to marry before the age of eighteen, 52% disagreed and only 46.7% of them agreed that a woman should have her children between 18 and 35 years of age as stipulated by the National Population Policy. However, a general look at the two tables[1] reveal that women were more decisive on most issues raised in the questionnaire. The percentage of unexpressed opinion was relatively lower than that observed among the men. Also, the women had higher percentages in favour of contraceptives than the men. This could be because most of the contraceptives are used by females and they do concern them more than the males.

4.3 Testing of Hypotheses

Seven hypotheses and seven related research questions were raised in this study concerning the respondents demographic variables and their attitudes to the issue of contraceptives and the Federal Government policy on birth control. The hypotheses are stated as follows:

HYPOTHESIS ONE (HO_1): There is no significant difference in the attitudes of different age groups towards contraception and the National Population policy on birth control in Kaduna Metropolis.

KASHIM IBRAHIM LIBRARY

Three age groups are those below 18 years, those between 18 and 35 years and those above 35 years (both male and females) were involved in the study.

Their scores on attitudinal perception of contraception and the Federal Government Policy on birth control were used as the dependant variables in the analysis of variance conducted for the test. The result of the test is shown in table 4.17

Table 4.17: One Way Analysis of Variance on Attitude by The Age Group of the *Respondents*

Source of Variation	Degree of Freedom	Sum of Squares	Mean Squares	F Ratio	P Probability
Between groups	2	81.620	40.810	0.308	0.7351
Within Groups	368	48753.161	132.481		
Total	370	48834.781		P. > 0.05	

Table 4.17 shows that the computed F value is 0.308. The computed probability level of acceptance 0.7351 was found. This shows that P>0.05. The table (critical) value is 2.60. The computed F value is lower than the table (critical) value. This means that there is no significant difference observed in the attitudes of different age groups toward contraception and the National Population Policy on birth control. The null hypothesis was thus retained.

It is evident from tables 15 and 16 that the different age groups have negative attitudes towards contraception and the National Population Policy. Although there were slight differences in the attitudes of those within the ages of 18 years and below and those above 35 years, in favour of birth control and contraception, but this was not found to be significant when tested under hypothesis one.

In tables 4.15 and 4.16, it was discovered that the respondents do not generally tend to favour birth control that limited the number of children couples could have. This perception generally could have contributed to the low scores of the respondents. However, these findings tend to confirm similar findings by Bell (1976) and Kisekka (1989) in which they found that birth control is not usually accepted in African societies because large number of children was often considered as an achievement.

One would have expected to see a significant difference between the attitudes of different age groups in Kaduna Metropolis but the study shows that there is none. This reasoning is premised on the fact that the younger respondents are more exposed to radio, T.V. and print media advertisements on contraception and birth control and one would have expected them to be more liberal and receptive towards contraception and birth control. Also, according to the Population policy (1988) the youths are affected more by unemployment and poverty due to the economic recession and one would have thought they would be more receptive to any measure taken to address the issue of population explosion.

The insignificant difference between different age groups toward contraception and birth control could also be due to the fact that the youths have also internalized their parents value of a large family size. It could also be understood that the methods of advertisement adopted by the Government are not effective in changing peoples attitudes towards birth control. This points to the fact that the National Population policy on birth control and contraception have not been widely accepted by the populace because they have negative attitudes towards them and therefore a lot of work has to be done to mobilize and educate the populace so that they could be more aware of Population problems and its implications using counsellors and teachers who can educate them effectively with their counselling and teaching skills, if the objectives of the National Population Policy are to be achieved.

KASHIM

HYPOTHESIS TWO (HO_2): There is no significant difference between the attitudes of male and female respondents towards contraception and the National Population Policy on birth control in Kaduna metropolis.

This hypothesis and the related research question require the classification of the score of male and female respondents separately. The result of the test is shown in table 4.18

Table 4.18: Means, Standard Deviation and T-value of Attitudes of Respondents by Gender.

Variables	N	Mean	SD	DF	SE	t-test	T-critical	P
Males	206	48.306	12.463	369	0.868	-1.08	1.96	0.282
Females	165	49.600	10.134		0.789	(NS)		

NB: Ns= not significant at 0.05 level.

From table 4.18 above, the observed or calculated t is -1.08. P is higher than 0.05 (P>0.05). The table value or t-critical is 1.96 at 0.05 significant level. The t-table value is greater than the t-calculated value. This implies that there is no significant difference observed between the male and the female respondents in their attitudes towards contraception and the national policy on birth control. The null hypothesis was thus retained. A look at the mean scores in tables 4.19. 4.20 also showed that the two means are almost equal to the expected scores, if respondents have no opinion in the three items. This implies that majority of male and female respondents have negative attitudes towards the national policy on birth control and contraceptives. Though the females scores are slightly higher than that of the males, the difference is not statistically significant.

The scores of the items on contraception and birth control is presented in Table 4.19 and 4.20 for easy comprehension and analysis.

Table 4.19: T-test for Male Respondents (Observed Vs Expected)

Item No.	N	Mean	SD	SE	T	P
1.	206	2.631	1.869	0.130	-2.83	0.005
2.	206	3.485	1.664	0.116	4.19	0.000
3.	206	2.801	1.901	0.132	-1.50	0.130
4.	206	3.539	1.643	0.114	4.71	0.000
5.	206	3.728	1.732	0.121	6.03	0.000
6.	206	2.903	1.819	0.127	-0.127	0.440
7.	206	2.733	1.781	0.124	-2.15	0.033
8.	206	2.539	1.718	0.120	-3.85	0.000
9.	206	2.155	1.606	0.112	-7.55	0.000
10.	206	2.568	1.795	0.125	-3.45	0.001
11.	206	3.117	1.752	0.122	0.95	0.340
12.	206	3.597	1.610	0.112	5.32	0.000
13.	206	3.005	1.854	0.129	0.04	0.190
14.	206	3.005	1.854	0.129	0.04	0.970
15.	206	2.985	1.947	0.136	-0.11	0.910
16.	206	3.364	1.632	0.114	3.20	0.002

In table 4.19, three (3) is the expected score for those with no decision. A score higher than 3 implies positive attitudes towards contraception and National Population Policy on birth control. Apart from items 2,4,5,12 and 16 on the table, all other scores are below the expected score and this implies a negative attitude towards the policy and contraception. By the same token, table 4.20 shows the female respondents with the test of determination on whether they have positive attitude towards contraception and National Population Policy.

Table 4.20: T-test for Female Respondents (Observed vs Expected).

Item No.	N	Mean	SD	SE	T	P
1.	165	2.345	1.863	0.145	-4.51	0.000
2.	165	3.388	1.779	0.189	2.80	0.006
3.	165	2.812	1.949	0.152	1.24	0.220
4.	165	3.933	1.539	0.120	7.79	0.000
5.	165	4.006	1.602	0.125	8.07	0.000
6.	165	3.103	1.860	0.145	0.71	0.480
7.	165	2.782	1.795	0.140	-1.56	0.120
8.	165	2.624	1.795	0.140	-1.56	0.120
9.	165	2.321	1.746	0.136	-4.99	0.000
10.	165	2.915	1.836	0.143	-0.59	0.550
11.	165	3.388	1.793	0.140	2.78	0.006
12.	165	3.982	1.508	0.117	8.36	0.000
13.	165	2.939	1.705	0.133	-0.46	0.650
14.	165	2.976	1.794	140	[illegible]	0.850
15.	165	2.855	1.958	2		0.340
16.	165	3.230	1.800		1.64	0.100

Table 4.20 shows the perception of female respondents on contraception and the National Population Policy. The female respondents scored five (5) items positively in favour of the policy and contraception. Even though their scores showed a slight increase over the male respondents, this difference was discovered not to be significantly different from the negative attitudes observed among the male towards the policy and contraception.

In other to get the true picture of the overall attitudes of the respondents, the attitudinal scores of all the respondents (male and female) is combined and presented in table 4.21.

Table 4.21: t-Test for Respondents(Observed vs Expected).

Item No.	N	Mean	SD	SE	T	P
1.	371	2.5040	1.8692	0.0970	-5.11	0.000
2.	371	3.4420	1.7144	0.0890	4.97	0.000
3.	371	2.8059	1.9200	0.0997	-1.95	0.052
4.	371	3.7143	1.6072	0.0834	8.56	0.000
5.	371	3.8518	1.6788	0.0872	9.77	0.000
6.	371	2.9919	1.8373	0.0954	-0.08	0.093
7.	371	2.7547	1.7848	0.0927	-2.65	0.085
8.	371	2.5768	1.7356	0.0901	-4.70	0.000
9.	371	2.2291	1.6697	0.0867	-8.89	0.000
10.	371	2.7224	1.8191	0.0944	-2.94	0.035
11.	371	3.2372	1.7730	0.0921	2.58	0.010
12.	371	3.7682	1.5752	0.0818	9.39	0.000
13.	371	3.0593	1.7075	0.0886	0.67	0.050
14.	371	2.9919	1.8255	0.0948	-0.09	0.093
15.	371	2.9272	1.9501	0.1012	-0.72	0.047
16.	371	3.3046	1.7074	0.886	3.44	0.007

In the table 4.21, above scores were measured with a constant of three (3) implying that respondents were neither expected to be positive or negative in their responses. The t-values per each of the item measure the differences between the expected constant and the observed scores. In the table, the mean score above 3 had positive responses, while those below 3 had negative responses. The P values show the extent to which such responses are either positive or negative. The overall score (last item on the table) did not show any significant difference from the expected constant of 3. From the above tables and analysis, it could be concluded that the majority of the respondents both males and females, generally

had a negative attitudes towards the national policy on birth control and contraception in Kaduna metropolis.

These findings are in support of what Kisekka (1989:3) found and she referred to as the African value. According to her, Africans honour and value large numbers of children. In other words, for Africans to have many children, they must have negative attitudes towards contraception. This negative attitude observed here also tends to corroborate Weeks (1981) findings which opined that people do not accept birth control if the need to have children is very strong in such societies. Therefore, it is not very usual that birth control does not seem to be popular among Nigerians.

One would have thought that the women who are more exposed to education on population and fertility control in ante-natal clinics than the men would have positive attitudes to population policy and contraception but the study did not show any significant difference. The non significant difference between male and females negative attitudes towards contraception and the National population policy on birth control could have resulted from the fact that both sexes have a desire for more than four children that were stipulated in the national policy on birth control.

From the analysis of the study, it was observed that the ideal number of children for the males is five children made up of three boys and two girls while the female prefer seven children consisting of four boys and three girls. This could be because children are seen as instrument of inheritance, as security in old age particularly the male children. The negative attitudes of both males and females in Kaduna metropolis could also explain why there is a low level of contraceptive use in Kaduna metropolis and why Nigerians are still having more than four children. This could also be because many women feel that the population policy is gender biased by allowing a man with four wives to have 16 children, while a woman can

only have four. The implication of this is that if this trend should continue many families will not be able to cater for their children nor will they be able to produce their children with good quality education.

This situation therefore calls for greater need for the policy makers to intensify their effort to educate the populace in an effective way so that they can be aware why it is reasonable to have the number of children they could cater for.

HYPOTHESIS THREE (HO_3): There is no significant difference in the attitudes of the different ethnic groups towards contraception and the National Population Policy on birth control in Kaduna Metropolis.

Four classifications of the respondents were made here. These were; the Hausas and the Fulanis as group one, the Yorubas and the Igbos as groups two and the three respectively. Other minorities such as the Kages, the Katafs, the Jabbas, the Gwaris, the Igallas, the Idomas, Rivers, the Nupes, the Biroms etc, were classified into group four. These groups constituted the independent variables. Table 4.22 shows the analysis of variance conducted on the groups attitudes. The adoption of the one way analysis of variance was informed by the number of groups involved in the test (Steel & Torrie1960:100). According to them, the one way analysis of variance is the statistical procedure used in testing between more than two groups in an independent variable in relation to dependent variable (attitude). The idea is to determine whether or not there is any significant difference between the groups in their scores in the dependent variables.

Table 4.22: Analysis of Variance on Attitude by Ethnicity

Source of Variation	Degree of Freedom	Sum of Squares	Mean Squares	F Ratio	P Probability
Between groups Within Groups	3 367	4606.080 44228.782	1535.360 120.514	12.740*	0.000
Total	**370**	**48834.782**		**P. > 0.05**	

NB: * = P< 0.05

From table 4.22, the computed F value is 12.740. The computed probability level of acceptance is 0.000 was found. This shows that P<0.05. The table value or critical value is 2.60. The computed F value (12.740) is higher than the table value. This implies that there is a significant difference observed between the attitudes of the different ethnic groups towards contraception and the National Population Policy on birth control. The null hypothesis is therefore rejected.

In order to find out the ethnic group(s) that favour or did no favour contraception and population policy, a post hoc test was carried out on the means, using the Scheffe procedure. The result of the Scheffe test is presented in table 4.23.

Table 4.23: Scheffe Procedure Result

N	Mean	Group	
118	43.941	Hausa and Fulani	Ranges for the 0.05 level
143	50.514	Others	3.97 3.97 3.97
58	52.017	Yorubas	Table Ranges.
52	53.096	Igbos	

Table 4.24 is deduced from the Scheffe procedure result above

Table 24: Scheffe Procedure Result Showing the F-value for One Ethnic Group vs The Other.

Groups	F-Value*	Decision
Hausa/Fulani Vs Others	3.97	Sig.
Hausa/Fulani Vs Yoruba	3.97	Sig.
Hausa/Fulani Vs Igbo	3.97	Sig.
Others Vs Yoruba	0.173	NS
Others Vs Igbo	0.275	NS
Yoruba Vs Igbo	0.083	NS

* The F-values in this column, were obtained using the formula presented in Appendix B.

From table 4.24, it can be observed that the Hausa Fulani group scored an F-value of 3.97 each when compared with others, the Yoruba and the Igbo. However, the comparison of others vs Yoruba showed that there was no significant difference (0.173) observed. Similarly, comparison of others vs Igbo showed no significant difference (0.275). Finally, Yoruba vs Igbo showed a no significant difference (0.083)

This means that majority of respondents in Hausa/Fulani group disagreed with birth control and the use of contraceptives. That is their F-value was significantly different from those of the Yorubas, the Igbos and those of other ethnic groups who responded to the questionnaire. As the result has shown, all the other ethnic groups tend to be in favour and are positively disposed towards the National Population Policy on birth control and contraception. Although the other three groups scored differently but such differences were not discovered to be statistically significant.

From the post hoc test carried out on the mean scores of different ethnic groups on their attitudes using the Scheffe procedure, it was discovered that the igbos tended to have the most positive attitudes, and the approval of the policy and contraception. This score was followed by that of the Yorubas and other minority ethnic groups in Kaduna metropolis. The Hausa and the Fulani groups were discovered to have the most negative attitude towards the National Policy on birth control and contraception. The difference between the Hausa and Fulani ethnic group was found to be statistically significant. This was shown in table 4.24. This means that ethnic background had effects on the attitudes of the respondents towards national policy on birth control and contraception. These findings agreed with that of Ejembi and Bandipo (1990) which found that the level of practices of contraception is low in the Hausa community in their study.

The difference between the attitudes of the Hausa and the Fulani group and the other ethnic groups could be due to the fact that majority of Hausa and the Fulani groups in Kaduna metropolis are Muslims, and both their religion and culture permit them to marry more than one wife and believe that marriage is for procreation, and that only God has a right to determine their number. It is not too surprising to find that the Igbo respondents tended to have the most positive attitudes and approval of the policy than the Yorubas as this could be due to the fact that majority of the Igbos are Christians, while the Yorubas are made of both Christians and Muslims.

HYPOTHESIS FOUR (HO_4): There is no significant difference in the attitudes of the different religious groups towards contraception and the National Population Policy on birth control.

The religious groups were classified into four. These were: Catholics, Protestants, Muslims and the traditionalists. Table 4.25 shows the result of the one way analysis of variance carried out on the test.

Table 4.25: Analysis of Variance on Attitude by Religion

Source of Variation	Degree of Freedom	Sum of Squares	Mean Squares	F Ratio	P Probability
Between groups	3	6834.431	2278.144	19.906*	0.000
Within Groups	367	42000.351	114.442		
Total	**370**	**48834.782**		**P. > 0.05**	

NB: * = P<0.05

The result shown in the table above shows that the computed F value is 19.906. The computed probability level of 0.000 was observed. This shows that P<0.05. The table or critical value is 2.60. The computed F value is higher than the table value. This shows that there is a significant difference between the religious denominations and attitudes of the respondents towards contraception and birth control. The null hypothesis is therefore rejected.

On the observation of significant difference between attitudes and religious beliefs, a post hoc test was conducted using the Scheffe test procedure. The result is shown on tables 4.26 and 4.27. The purpose of this test is to determine the religious group(s) that was significantly different from the others in their attitudes towards the National Population Policy on birth control and contraception.

Table 4.26. Table of Means Based on Scheffe Test

S/n	Group (Scheffe order)	N	Mean
1.	Muslims	167	44.150
2.	Traditionalists	13	51.538
3.	Protestants *	106	52.594
4.	Catholics *	85	53.141

Table 4.27 Is deduced from the Scheffe procedure result showing the F-value for one Religion vs the other

S/n	Religion	F-Value	Decision
1.	Muslims vs Traditionalists	0.259	NS
2.	Muslims vs Protestants	3.97	Sig.
3.	Muslims vs Catholics	3.97	Sig.
4.	Traditionalists vs Protestants	0.036	NS
5.	Traditionalists vs Catholics	0.053	NS
6.	Potestant vs Catholics	0.076	NS

From table 4.27 above, the Muslims showed significant differences (F-value of 3.97 each) when compared with the Protestants and the Catholics. The comparison of the Muslims and the traditionalists showed that there was no significant difference (0.259) observed between the two groups. By the same token, there was no significant differences observed between the traditionalists and the Protestants (0.036), the Traditionalists and the Catholics (0.053) and the Protestants and the Catholics (0.076).

This means that generally Muslims differed from other religious groups on birth control and the use of contraceptives. Also, from table 4.27, their mean score of (44.150) was significantly different from those of the Catholics (53.141) and the Protestants (52.594). The results in these tables showed that the Catholics and the Protestants are significantly different from the Muslims followed by the traditionalists in their attitudes to population policy and contraception. From the large numbers of the Muslims (167) among the respondents, the low score and the negative attitude observed is not surprising. The Muslims do not seem to encourage birth control as could be seen from the Scheffe test.

From the test of hypothesis four above, it was discovered that significant differences existed between the different religious denominations in their attitudes towards contraception and population policy on birth control. The difference between the Muslims and the other religious groups was highly significant. Therefore, it was found from the various test carried out above that religions had an effect on the attitudes of the respondents in Kaduna metropolis towards the national population policy on birth control and contraception.

These findings are in agreement with that of Isiugo Abanike (1994) who found that Muslims desired more children on the average than non Muslims. The findings are however at variance with that of Ascadi (1972), and Amdi (1993) who did not find religion to have much influence on fertility control in Nigeria. One major reason for the contradiction might be the time lag between the findings of Ascadi et al (1972), Amdi (1993) and this one in 1999.

The 28 years between the period of Ascadi's (1972) work and this study and the 6 years lag between Amdi's (1993) study and this one, is long enough for people to have changed their attitudes. One major factor that could also be responsible for the variance observed among the Ascadi findings of (1972) Amdi (1993) and this one, could be due to political and economic reasons. In 1972, when Ascadi et al conducted their research work the country was much stabilized and the economy was very buoyant. In fact, the then Head of State (General Yakubu Gowon) was quoted as saying that "our problem was not money but how to spend it". In 1999, when the present research work was conducted things had changed for the worst economically and politically in the country and this could be the reason why people have politicized their religions towards government policies and hence the contradictions between the two findings.

The consensus negative feelings of the Muslim respondents in kaduna metropolis towards birth control could also be attributed to the fact that some Muslims felt that the idea of having less number of children and the introduction of contraceptives is a ploy by the Western world (mainly Christians) to reduce the number of Muslims to give political advantage to the Christians (Kyari, 1992).

473237

To achieve the objectives of the national Population policy, the policy makers need to put their perceptions into consideration and involve Muslim leaders, health workers, counsellors, teachers and community leaders in each local government area in their mobilization and enlightenment programmes. This is because the religious and the community leaders understand their norms and their people better and would know how best to educate and convince them that having less number of children is in their own interest. This might change their negative attitudes towards birth control. The study also showed that the Catholics are more in favour of birth control then other groups.

This findings does not agree with the stand of the Catholic Church on contraceptives since the Catholic Church believes that procreation is the primary reason for marriage and therefore believes that birth control by any chemical or mechanical means violates the natural law Hertfield (1972). This also confirm the evidence that indicated that there is a wide gap between the position of the Catholic Church on birth control and what majority of Catholics actually do Bell (1976).

HYPOTHESIS FIVE (HO_5): There is significant difference between the attitude of those who are educated and those who are not educated towards contraception and the National Population Policy on birth control in Kaduna Metropolis.

In the test of hypothesis five, those who attained secondary school certificate and above were classified as educated, while who those who did not, were classified as not

educated. A t-test procedure was adopted in the test. The result is shown in table 4.28

TABLE 4.28: Means, Standard Deviations and t-Value of attitude of Respondents by Educational Status

Variables	N	Mean	SD	DF	SE	t	T Critical	P
Educated	262	51.317	10.993	369	0.679	6.69*	1.96	0.000
Not Educated	109	43.028	10.010		1.010			

NB: * = P<0.05

Table 4.28 shows that the critical table value is 1.96. The observation here is that the computed t value is higher than the table value. P is lower than 0.05 (ie P<0.05). This implies that there is a significant difference between those who are educated and those who are not educated in their attitudes toward the National Population Policy on birth control and contraception. The educated group were found to have positive attitudes toward the National population Policy on birth control and contraception, than the uneducated respondents. The null hypothesis is therefore rejected.

In the test of hypothesis five, it was found that education has a great effect on the attitudes of respondents toward the National Population Policy on birth control and contraception. As noted above, those who are educated have positive attitudes towards the approval and acceptance of the policy, while those who are not educated had the least approval and acceptance. It is also evident from these results above that the rate of approval and acceptance were discovered to increase with increase in the level of education. Education is therefore a major determinant of the positive attitudes exhibited by the respondents toward contraception and the National policy on birth control. This finding is in agreement with those of Vankeep (1971) who found that there was a positive attitude towards birth control from respondents with a higher education. This was also confirmed by

Oni and Mccarthy (1989) who found that men with no education are less likely than educated respondents to approve the use of contraception.

In a review of the World Fertility Survey (WFS), it was also found that on the average, women with seven or more years of schooling gave birth to three fewer children than did women with no education. The reason why majority of respondents in Kaduna Metropolis have negative attitudes towards contraception and the National Population Policy on birth control could be because their level of education is very low. Girls also marry early in the research area which discourages modern education. Since it has been argued by Molnos (1968), Vankeep (1971), Oni and Mccarthy (1989) and Farooq and Deeraff (1991) that those who are educated are more receptive to contraceptives, it then means that to achieve the objectives of the National Population Policy on birth control more Nigerians would have to be educated.

HYPOTHESIS SIX (HO_6): There is no significant difference between the attitudes of married and unmarried respondents towards contraception and the National Population Policy on birth control in Kaduna Metropolis.

The result of the t-test conducted in the test of this hypothesis is shown in table 4. 29.

Table 4.29: Means, Standard Deviation and t-value of Attitudes of Respondents by Marital Status

Variables	N	Mean	SD	DF	SE	t	T Critical	P
Married	292	48.134	11.747	369	0.687	2.43*	1.96	0.016
Not married	79	51.646	10.073		1.133			

NB: * = P<0.05

Table 4.29, shows that P<0.05. This means that the computed t value (2.43) is greater than the critical table value (1.96). This shows that there is a significant difference between the attitudes of married and unmarried respondents toward contraception and National Population Policy on birth control in Kaduna Metropolis. The null hypothesis is therefore rejected.

The effect of the marital status of respondents on their attitudes towards contraception and Population Policy on birth control was investigated in the analysis in hypothesis six (HO_6). It was found that married respondents have the least approval for contraception and the National policy on birth control than the unmarried respondents. The approval of birth control and contraception rate of the unmarried respondents were found to be significantly different from that of the married respondents. While the unmarried respondents seem to encourage birth control and contraception, the married respondents seem to discourage birth control and contraception. Thus, it can be concluded that marital status determines, to a great extent, the attitudes of respondents toward birth control and contraception in Kaduna Metropolis. These findings are in line with the findings of Bell (1976) in which he found that a woman knows herself as only a wife and a mother. In a similar study carried out by Farroq and Decraff (1991), marital status was found to be a major factor of fertility among women. Kumar, (1973), also confirmed this finding by citing 18th century and 19th century women's low fertility in Europe to the high proportion of women that never married. These findings are at variance with the findings of Amdi (1993) which reported that married women are more receptive to contraception than unmarried women. One major reason for this contradiction could be due to the fact that this study was conducted in Kaduna Metropolis (an urban area) where more women are educated and are more exposed to both electronics and print media messages on birth control, and also have better

KASHIM IBRAHIM LIBRARY

access to family planning services than those in the rural areas. This points to the fact that if youths are educated effectively and have access to family planning services they would develop positive attitudes toward birth control and would make informed choices based on what methods they want and would practice family planning effectively and safely.

HYPOTHESIS SEVEN (HO_7): There is no significant difference between the attitudes of users and non users of contraceptives towards contraception and the population policy on birth control and contraception.

Various users of all forms of contraceptives were classified as users, while those that were not using any method at all were classified as non users.

Table 4.30 shows the result of the t-test performed on the means of the two groups.

Table 4.30: Means, Standard Deviations and t-value of Attitudes of Respondents by Users and non Users.

Variables	N	Mean	SD	DF	SE	t	T Critical	P
Users	107	55.720	8.884	369	0.859	7.88*	1.96	0.000
Not Users	264	46.100	11.276		0.694			

NB: * = P<0.05

Table 4.30 shows that P<0.05. The critical table value is 1.96. The computed t value is 7.88 and it is higher than the critical table value. This means that there is a significant difference between the attitudes of users and non users of contraceptives towards contraception and birth control. The null hypothesis is therefore rejected.

The implication here is that the users of contraceptives have a higher rate of approval for the National Policy on birth control and contraception than non users. This difference in attitude was found to be statistically significant as shown in table 4.30.

From the analysis of HO_7 above, the users of contraceptives were discovered to have a higher rate of approval of the National Population Policy on birth control and contraception than the non users of contraceptives. The test difference was performed in hypothesis seven. It was found that non users generally have negative attitudes toward most issues concerning birth control and contraceptives.

This attitude of non users could be a major factor in the generally negative attitude observed in this study, since users are fewer in number than the non users. This findings also confirms the earlier finding of Gadalla (1978) which reported that users of contraceptives have a higher rate of approval and acceptance of contraception than non users of contraceptives. Therefore, to promote the use of contraceptives, the users of contraceptive could be used as models to educate the non users to shed the rumours and myths attached to contraceptive use.

4.4 Summary

The t-test and the one way analysis of variance (ANOVA) were the two main statistical tests used for the data analysis.

The analysis showed that out of the seven null hypotheses tested, only two null hypotheses dealing with the influence of attitudes by age groups and gender were retained.

Those dealing with marital status, ethnic groups, religious groups, educational levels and users and non users of contraceptives were rejected at 0.05 level of significance. Meaning that significant differences were found between the attitudes of those who are married and those who are not, between different ethnic groups, different religious groups,

different educational levels and between users and non users of contraceptives towards contraception and the National Population Policy on birth control in Kaduna Metropolis. Post hoc test, using Scheffe procedure was used to identify differences in opinion wherever they occurred.

In the next chapter, findings will be fully summarized and concluded with full recommendations.

Chapter 5

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary

The major concern of this study was to examine the attitudes of both males and females of reproductive age (married and unmarried) towards contraception and national population policy on birth control in Kaduna Metropolis, and to examine background factors if any, that are related to the attitudes of Nigerians towards contraception and National Population Policy on birth control.

Chapter one discussed how Population growth has adversely affected the quality of life of persons in many countries including Nigeria. It also discussed why the Federal Government adopted the Population Policy in 1988 in Nigeria. The statement of problem, the objectives of study, the hypotheses upon which the study is focused were also stated, including the importance of study and the likely benefits of its result.

Chapter two focuses on the review of literature which covers theories of attitudes, determinants of fertility, Population explosion, Nigeria Population and the concept of family planning.

In chapter three, the research design, the study population, the sampling procedure adopted in the study, validity and reliability of the instrument, data collection and statistical method of data analysis were discussed.

In chapter four, the data collected for the study were interpreted and discussed in relation to the objectives of the study.

Chapter five focused on the Summary, conclusions and recommendations. Suggestions were also made for further research into the area.

5.2 Conclusions

The following are the main conclusions that could be drawn from the findings of this study.

1. That majority of the respondents are not fully aware of the implications of population growth and large family sizes in Kaduna Metropolis and so still favour a large family size.
2. That majority of both male and female respondents have negative attitudes towards contraception and the National Population Policy on birth control in Kaduna Metropolis.

   Their lack of full awareness and negative attitudes towards contraception and the National Population Policy on birth control could be the reason why contraceptive use is still very low and why many Nigerians are still having more than four children in Kaduna Metropolis. The implication of this is that, if this trend should continue, many families will not be able to feed their children, nor will they be able to provide their children with good quality education. This will lead to higher unemployment and crime rates and the level of poverty will increase.
3. That the Muslims and the Hausa and the Fulani group have the least approval of contraceptives and birth control.
4. That the most effective medium of communication in Kaduna Metropolis is the radio.
5. That Education and counselling skills can be used to change people's attitudes toward the acceptance and use of contraceptives.
6. That husbands approval still plays a decisive role in contraceptive use as many women who were not using contraceptives gave husband disapproval as the main reason for not using them.

7. Thus birth control clinics are not available in some areas in Kaduna metropolis and in some places where there are birth control clinics, they lack qualified personnel and facilities.

5.3 Recommendations

Based on the findings of this studies, its discussion, and the conclusions drawn therein, the following recommendations are thus made:

1. Since it was found in this study that the respondents are not fully aware of the implications of population growth, and large family size, it is recommended that:

(a) The Federal Government should take a more active part in population control by mounting an aggressive enlightenment programme to alert the populace about the National's population problems and their implications.

(b) By the same token, the issue of polygamy should be considered with a stipulated number of children for a man that has more than one wife. This should be stated clearly and enforced.

(c) Education messages about contraception on the radio, Television and Print media such as posters, pamphlets, hand biffs and newspapers should be translated into many local languages not just the three main languages that we have at the present to reach more people in the communities.

2. Since it was also found in this study that education has a great positive effect on the attitudes of the respondents toward the approved and acceptance of contraception and the National Population Policy on birth control. It is recommended that:

(a) the Federal Government should make education available and compulsory up to secondary school level for both boys and girls in all states of the federation.

(b) the Federal government and Family Planners should employ more counsellors to work with health workers in each community so that they help to educate and win the confidence of the populace to translate their knowledge about contraceptives into action.

(c) Since birth control clinics are not available in some areas in Kaduna metropolis, more birth control clinics should be opened and these should be well equipped with facilities.

(d) All birth control clinics should have counselling units attached to them with trained female counsellors. This is because the counsellors will not only give accurate and clear information but will also use their counselling and communication skills to establish a relationship of trust and confidence with the clients so that the clients who are uncertain or suspicious may come to trust the counsellors, shed the myths and rumours attached to contraceptives and hence change their negative attitudes.

(3) Since it was also found in this study that those of the Hausa/Fulani group as well as those of the Islamic religious group have a negative attitude toward contraception and the National Population Policy on birth control, it is recommended that;

(a) Community leaders, youths and opinion leaders should be actively involved in the planning, mobilization, and family planning education in their communities.

(b) Various religious leaders and users of contraceptives should be used as models in Churches, Mosques, and in other social gatherings to sensitise the populace about the national Population problems and their implications, and to promote contraceptives usage.

(4) Finally, since it was found that husband approval still plays a decisive role in contraceptives usage, it is recommended that;

(a) the Federal Government should direct educative programmes toward men so as to change their negative attitudes toward birth control and to motivate the men and their wives to produce the number of children they can adequately care for.

(c) The populace should be made aware of the different methods of birth control, applications, possible side effects and remedies. These could change the people's negative attitudes toward contraception and birth control.

5.4 Suggestions for Further Research

To provide a broad and balanced picture of this study, it is suggested that further research work should be carried out in the following areas:

1. A study similar to this should be carried out in other Capital cities in Northern Nigeria. The findings of such study could provide the basis for greater confidence in making generalization to Northern capital cities as a whole.
2. The issue of male child preference as a determinant of fertility rate needs further investigation in Nigeria.
3. The effects of traditional contraceptives methods on women's health should be investigated.
4. A research should also direct its focus at understanding the reason why a large proportion of Nigerians show strong resistance to change in their reproductive behaviour.

REFERENCES

Adebayo, E. M. (1991). The use of contraceptives among single female students of Ahmadu Bello University Zaria. Unpublished Masters thesis, Faculty of Education, A.B.U., Zaria.

Adebusoye, P.M. (1992). Sexual Behavior, Reproductive Knowledge and contraceptive use among young urban Nigerians. International Family Planning perspectives. 18, 2, 66 - 70.

Adekunle, A.O. & Ladipo, O.A. (1992). Reproductive tract infection in Nigeria: Challenges for a fragile health infrastructure. In Germain A. et al. (Eds.), Reproductive tract infections: Global impact and priorities for women's reproductive health. Plenum press, New York.

Adzenga, J.A. & Obasa E.Y. (1978). Attitudes of couples towards birth control in Lokoja Kwara State and Surulere, Lagos State. Unpublished final year project. Faculty of Education, Ahmadu Bello University, Zaria.

Adoghor, G. (1987). Avoiding the demographic Trap. The Nigerian experience. In Nigerian Think and grow rich. Industrial and financial magazine. 1, 1,12.

Ajigah J. & Aina A. (1992). Horrors of uncontrolled breeding New Nigerian on Sunday, October 28th,

Allport, G.W. (1935). Attitudes', in Murchion, C. (Ed.), A Handbook of social psychology, Worcester, Clark Univ. Press.

Akpanudo, B. (1993). Family Planning a basic human right New Nigerian, Tuesday May 6th.

Amdi, V.L. (1993).Educational and sociological factors of family Planning behavior among men and women in Kaduna state: A case study of six Local Government area in Kaduna state. Unpublished Ph.D thesis, Faculty of Education, A.B.U., Zaria.

Anonymous (1974). Population Report, Vol. xviii, p.1. Population Information Programme, Maryland.

Anonymous, (1987). Population Reports. "Counselling makes a difference." Series J. number 35. Population Information programmes Maryland, USA.

Anonymous, (1969). Family Planning council of Nigeria. Annual Report, Lagos, Nigeria.

Anonymous, (1990). Polities on Population Around the World. Population Bulletin, p.9-12, 6, 29 Public reference Bureau.

Ascadi G.T. (1975). In Survey of fertility and family planning in Nigeria Research report, Ile-Ife, University of Ile -Ife, Nigeria pg 3 - 105

Ascadi, G.T. (1972). Nigerian vital Registration and Demographic Surveys in A.A. Igun and G.T. Ascadi (Eds) Demographic Statistics in Nigeria, Ile-Ife, University of Ile - Ife, 187 - 188.

Avwunuma, U.P. (1977). The Role of Family Planning in Nigeria. Lagos Weekend, 30th September.

Bakare, M. (1992). Strategies for effective communication with Students. A paper presented at workshop on rising incident of crime in higher institution in Nigeria held at University of Lagos.

Bandura, A.L. (1971). Social Learning Theory. N.Y. General Learning Press.

Bayegbon, M. (1991). Appraising Nigerians's Population problem Vanguard News paper. January.

Becker, G.S. (1960). "An Economic Analysis of Fertility", in Ansley J. Coale (Ed.), Demographic and Economic Change in Developed Countries. Princeton: Princeton University Press.

Bell, R. (1976). Social deviance. A substantiative analysis. Illinois USA. The Dorsey press Home wood 88 - 119.

Bongaarts, J. (1978). A frame work for analysing the proximate Determinants of fertility. Population and Development Review vol. 4, no 1.

Bongaarts, J. (1982). "The fertility inhibiting effects of the intermediate fertility variables", Studies in family planning. vol. 13, No. 6/7.

Borgue, D.J. (1970). In Mass Communication and Motivation for Birth Control, Community and Family Planning. Study centre, Chicago University Press.

Brown, M., (1996). Participatory advocacy a counter to media imperialism planned parenthood challenges

Caldwell, J.C. (1977). The economic rationality of high fertility: A investigation illustrated with Nigerian survey data. Population studies 31(2).

Caldwell, J.C. (1968). The control of family size in Tropical Africa Demographic S 2 p. 298 - 619.

Caldwell, J. and Caldwell, P. (1987). The cultural context of high fertility in sub-Sahara Africa Population and Development Review. 13:3, 409 - 437.

Chapera, S. (1966); in Bell, R. (1976). Social deviance, A substantiative analysis. Illinois USA. The Dorsey press Home wood 88 - 119.

Davis, K. & Blake, J. (1956). "Social Structure and Fertility: An Analytical Framework", Economic Development and Cultural Change, Vol. 4, No. 3.

Durojaiye, B. (1994). "Population out grows food production" in National Concord, Monday, February 21st 1994:23.

Enrlich, P.R. (1971). The Population Bomb. New York Bulletin Books Revised Ed.

Ejembi, C.L. & Bandipo, A. (1990). fertility pattern and its determinants among rural Hausa, community, Department of Community Medicine, A.B.U., Zaria.

Farooq, C.M. (1985). Household fertility decision making in Nigeria. International Family Planning perspective Vol.6, No.4. December, p.74 - 78.

Farooq, C.M. & Decraff, D. (1991). Fertility and Development. An introduction to theory. Empirical research and policy issues: Training in population and development planning. International Labour office Geneva.

Fashomi, D. (1992). "Population, pollution and global resource" in global Concord, Monday. February 27:B2.

Fawcett, J.T. (1983). "Perception of the value of children: Satisfaction and Costs", in Bulatao & Lee (Eds.), Determinant of fertility in developing countries. New York: Academic Press.

Federal Office of Statistics Institute of Research Development. Macro Systems inc. April (1990).

Federal Republic of Nigeria, National Policy on Population for Development Unity, progress and self Reliance, Ministry of Health, Lagos 1988.

Fetuga, O. (1990). "Famine a mechanism of population control."In Daily Times, Tuesday, January 23rd 1990:29.

Freeman, R. (1987). The contribution of social science research to Population policy and family planning programme Effectiveness studies in family planning 18 (2) p.57 - 82.

Frejka, T. (1973). The future of Population growth. New York. Wiley.

Funmilayo, O. O. (1986). Generic barrier to the acceptance of family planning in Nigeria Proceedings of an International Workshop on Family Planning. University of Ibadan 89 - 95.

Gadalla, S.M. (1978). Is there hope? (Survey of Fertility and Family Planning in Rural Egyptian Community). The American University in Cairo Press, p.26.

Gisie, R. (1975); in Ogunrobi, A. (1991). Knowledge Attitudes and Practice of family planning among soldiers of Bassawa. A final year project. Community Medicine, A.B.U., Zaria.

Germain, A. & Orduray, J. (1989) Population Control and women's Health. Balancing the scales. New York International Women's Health Coalition and Overseas Development Council, p. 15.

Gloss, D. (1971). In Rogers, S. & Everett M. (1975) Communication Strategies for family planning. London, the Free-press p.146.

Goliber, T.J., (1997). Population and Reproductive Health in sub-Saharan Africa Population Bulletin Vol. 52 No. 4.

Gray, L.R. (1976). Education Research competencies for analysis and application. Columbus Ohio Charlse,E.M. Publishing Company.

Harmburg, M. (1977). Statistical Analysis for Decision Making 2nd edition New York Harcoust Brace Jovanovich Inc.

Hartfield, U.J. (1972). Family planning in the Christian Marriage in Nigeria. Ibadan Dayster press.

Helmstadter,G.C. (1964). Principles of Psychological measurement New Jersey Prentice Hall Eglewood Clips.

Henry, A. & Poitrow, P.T. (1979). Age at Marriage and Fertility. Population report series No. 4, Baltimore. Population information programme. John Hopkins University.

Hilgard, E.R., Atkinson, R.C. & Atkinson, R.L. (1975). Introduction to psychology. 6th Edition. Harcourt Brace Jovanovich, Inc. N.Y.

Hill, K. & Pebbley, A.R. (1989). Child mortality in the developing world. Population and development review 15.

Hymen, B. & Shatsly T. (1974); in Population Reports (1986). Men - New focus for family planning Programs series J. No 33.

Isiugo, A. (1994). Reproductive Motivation and family planning size among Nigerian men. Studies in Family Planning. 25, 3: p. 149 - 161.

Iwere, N. (1997). Report on the Research into socio-cultural and Economic factors which influence women's ability to practice safe sex. Community life project. Lagos Nigeria.

Joesoet, M.R., Andrew, L.B. & Budi, U. (1988). Husbands approval of contraceptives in Metropolitan Indonesia and Programme Implications. Studies in Family Planning. V.9(3).

Kale, B. (1989). "Population and culture, " in Sunday Times, May 7th.

Keown, C. (1970); in Bell, R. (1976). Social deviance. A substantiative analysis. Illinois USA. The Dorsey press Home wood 88 - 119.

Kerlinger, L.C. (1973). The Morphology of behavioural Research New York Holt Rinehart & Winston.

Kisekka, M.(1989). Reproductive health research and advocacy: Challenges to women's associations in Nigeria. Paper presented at the Women's Health Research Network in Nigeria Panel at the Society of Gynecology and Obsterics of Nigeria Conference, September.

Krejie, R.V. and Morgan, D.W. (1970). Determining sample size for research and activities education and psychological measurement, p.608.

Krench, D. (1962). Individual in society: A Textbook of Social Psychology, McGraw-Hill Book Company.

Kumar, J. (1971). A comparison between India fertility and Late Nineteenth century Swedish and Finnish Fertility Population studies vol. 25, no 2.

Kyari, A, (1992). Population, global influence & wealth New Nigerian, October, 28:5.

Ladoja, R.A (1993). "Threat from population"excerpts from a speech recently delivered at the University of Arizona in Sunday Concord May 23, P. 10

Ladipo N. D., Paxman, O.A. & Otalorin, E.O. (1982). studies in family planning sexual behavior, contraceptive practice and Reproductive Health among Nigerian Adolescents studies in family planning Vol. 17, April.

MacIver, A. (1969); in Onyebe, V.O., (1981). The attitudes of school teachers towards teaching as a career Unpublished Ph D thesis Faculty of Education, A.B.U., Zaria.

Malthus, T.R. (1978). An essay on principle of population as it affects the future improvements of society London, Macmillian and Co. Ltd.

Mandelbaum, A. (1974); in Bell, R. (1976). Social deviance. A substantiative analysis. Illinois USA. The Dorsey press Home wood 88 - 119.

Meguire, W.J. & Papageorgis, D. (1961). The relative efficacy of various type of prior belief-defense in producing immunity against persuasion. Journal of abnormal and social psychology, 62.

McNamara, R.S. (1979). Address to the Governors of the World Bank, Belgrade

McNamara, M. & Lauris, D. (1981); in Farooq, C.M. & Decraff, D. (1991). Fertility and Development. An introduction to theory, Empirical research and policy issues: Training in population and development planning. International Labour office Geneva.

Meredith P. (1989). Male involvement in planned parenthood International planned parenthood federation Regents Park U.S.A.

Mincer, A. (1963); in Farooq, C.M. & Decraff, D. (1991). Fertility and Development. An introduction to theory, Empirical research and policy issues: Training in population and development planning. International Labour office Geneva.

Molnos, A. (1968). Attitudes Towards family planning in east Africa. C. Hurst & Co London PP 160, 195, 211 & 255

Mott, F. & Fapohunda, O. (1975). Population and Development in Nigeria. Nigerian Institute of Social and Economic Research Ibadan Nigeria p 80-82.

Mukherjee, A. (1978). Educational psychology for teachers, students and Parents. Calcuta Publishing Company.

Nag, M. (1981). "Economic Value and Costs of Children in Relation to Human Fertility" in Eberstadt N. (Ed.), Fertility Decline in Less Developed Countries. New York: Praeger Publishers.

Neale, J.M. & Liebert, R.M. (1980). Science and Behaviour; An Introduction to Methods of Research. 2nd Edition New Jersey: Hall. Inc. Englewood Cliffs.

Nie, H.N., Hull, C.H, Jenkins, J.G.; Steinbrenner, K & Bent, D.H.(1975). Statistical Package for Social Sciences (SPSS) New York MCgraw-Hill Book Company Insurance.

Nisbet, J.D. & Entwisthe N.J., (1970). Educational Research methods Britain: University of London Press Ltd. Hagell Weston and Viney ltd.

Nnorom, J.A., (1998). Sexual transmission of HIV in Nigeria. Best practices and lessons learnt: A paper presented at the National Conference on HIV/AIDS prevention and control, Abuja.

Odile, F. (1987). The demand for fertility control in sub-Saharan Africa: Studies in family Planning.181 -201.

Ogbona, D.O. & Mamman, M.M. (1990). Determinants of fertility levels in Kafachan (a town in Southern part of Kaduna state, The Indonesia journal of Geography, 00120, No 59, June.

Ogunrobi, A. (1991). Knowledge Attitudes and Practice of family planning among soldiers of Bassawa. A final year project. Community Medicine, A.B.U., Zaria.

Okediran, A.Y., (1994). Environment and population. An assessment of situation of women in Nigeria. A paper presented at the National NGO forum for the 4th women's world conference in Bejing for (WILDAF) Nigeria at I.I.T.A Ibadan

Omelu, C. (1992). "The need for fewer children." In midweek Concord, Thursday, June, 25th. B4.

Omorodion, F. (1990). In project on Rural Community structive and contraceptive use in Nigeria. University of Benin.

Oni, G.A. & McCarthy, J. (1989). Family Planning, knowledge Attitudes and practices of Males in Ilorin Nigeria. International family Perspectives, 17 2nd, June 50-53.

Onyebe, V.O., (1981). The attitudes of school teachers towards teaching as a career. Unpublished Ph.D thesis Faculty of Education, A.B.U., Zaria.

Orubuloye, O. & Oyeneye, O.Y., (1993). Population and Development in Nigeria. Nigerian Institute of Social and economic Research, Ibadan, Nigeria Pp.80 -82.

Orubuloye, I.O., & Caldwell, J.C., Caldwell, P., & Gigi S. (1994). Sexual Net working and Aids in Sub-Saharan Africa. Health Transition, Series No.4.

Osuala, E.C.,(1987). Introduction to Research methodology Onistha: Africana Fep Publishers.

Osunkeye, O., (1998). Food Security and next millennium. New Nigeria on Sunday, July 5, P.11.

Otolorin, E.O. (1982). Studies in family planning sexual behaviour.

Ottong, A. (1988). Family planning on the politics of population control in Nigeria in population and Nigerian political system, proceedings of population Association of Nigeria p 80.

Pearl, R. (1920); in Singa, P. (1996). Demography for Medical and Pharmaceutical Students Department of Community Medicine, Ahmadu Bello University, Zaria. P.149 - 154.

Population Reports (1986). Men - New focus for family planning Programs series J. No 33.

Population reports (1987). Counselling makes a difference series J. number 35.

Population information program, Center for communication programs, John Hopkins University Battinmore, Maryland USA.

Population information program. The John Hopkins Hampton House 624 North Broad way Baltimore Maryland 21205 USA. P.

Population and quality of life Independence Commission No. 1 October 1993.

Population Reports (Sept - Oct 1987). Employment based family planning programs. Series J. number 34.

Rock, J., (1963). The Time has come - A Catholic Doctor's proposals to end the battle over birth control, New York

Rogers, S. & Everett, M. (1975). Communication Strategies for family Planning. The free press, London. Pp. 43 - 154.

Rokeach, M. (1968). "Attitudes beliefs and values International Encyclopedia of Social Sciences Vol.1 (1969) P.449-547.

Rosenberg, (1960). Attitude organization and change, an analysis of consistency among attitude components, Yale University Press.

Ryder, M. & Off J.O. (1971). Reproduction in United States Princeton University Press, P. 206

Sabido, C. (1981); in Population reports (1987). Counselling makes a difference series J. number 35.

Segall, M.H.; Campbell, D.T. & Herskovites, A.(1963). Cultural Difference in perception of geometric illusions. Iowa University, U.S.A.

Selltiz, C., Wrigntsman, L. & Cook, S.W. (1976). Research Methods in social relation, Holt Rhinehart and Wiston. New York.

Singa, P. (1996). Demography for Medical and Pharmaceutical Students Department of Community Medicine, Ahmadu Bello University, Zaria. P.149 - 154.

Shehu, U. (1999). Population Health and Economic Development New Nigeria Monday Feb. 15 P.20.

Sheriff, A. & Howland, R. (1961); in Mukherjee, A. (1978). Educational psychology for teachers, students and Parents. Calcuta Publishing Company.

Steel, R.C.D., & Torrie, J.H (1960). Principles and Procedures of Statistics New York: MC Graw-Hill Book Company Insurance.

The state of World's Children (1990). UNICEF and Oxford University Press.

The State of World's press (1991). in the United Nations Development programme UNDP (1996). Annual Report

The State of World's children (1990). UNICEF and Oxford University Press.

Vankeep, P. (1971). family planning in Mexico D.F. International Health Foundation Geneva Switzerland

Weeks, J. (1981). Sex, politics and society: The regulation of sexuality since 1800. New York: Longman.

Westoff, C.F. (1961). Family growth in metropolitan America. Princeton, N.J.: Princeton university press.

Whelpton, P.K. (1966). Fertility and family planning in the United States, Princeton N.J.: Princeton University press.

Willis, R. (1973); in Farooq, C.M. & Deeraff, D. (1991). Fertility and Development. An introduction to theory, Empirical research and policy issues: Training in population and development planning. International Labour office Geneva.

World population News Service (1998). People working together for solutions in 59 Countries POPLINE Vol. 20 May June 1998.

World Population New Service (1998) "Population explosion not over" POPLINE September - October Vol. 20, 1998.

APPENDIX A

SCHEFFE PROCEDURE RESULT ON RELIGION

Ranges for the 0.05 level

3.97 3.97 3.97

The ranges above are table ranges. The value actually compared with Mean (J) - Mean (I)

*is 7.5645 + Range * Sqrt (1/NC)I) + 1/N(J)*

Mean	Group	
44.1497	MUSLIM	OTC
51.5385	TRADITIO	
52.5943	PROTEST	*
53.1412	CATHOLIC	*

(*) Denotes pairs of groups significantly different at the 0.05 level.

APPENDIX B

FORMULA:

CALCULATING F-VALUES OF SCHEFFE TEST

$$F = \frac{(X_1 - X_2)}{(MSW)\left(\frac{1}{n_1} + \frac{1}{n_2}\right)(K - 1)}$$

Where:

F = F value

X_1 = Mean of the first group

X_2 = Mean of the second group

Value of

MSW = Value of Mean squares within group

n_1 =Total number of observations or samples in first group

n_2 = total number of observations or samples in second group

K = total number of groups in the study.

Appendix C

EDUCATIONAL AND PSYCHOLOGICAL MEASUREMENT

Table for determining Sample size from a given Population

N	S	N	S	N	S
10	10	220	140	1200	201
15	14	230	144	1300	207
20	19	240	148	1400	302
25	24	250	152	1500	300
30	28	200	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	317
45	40	290	165	1900	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	339
75	63	400	196	3000	341
80	66	420	201	3500	346
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364
120	82	600	234	8000	367
130	97	650	242	9000	308
140	103	700	248	10000	370
150	108	750	254	15000	375
160	113	800	260	20000	377
170	118	850	265	30000	379
180	123	900	209	40000	380
190	127	950	274	50000	381
200	132	1000	278	75000	382
210	130	1100	285	100000	384

Source Krejcie, Robert V. & Morgan, Daryle W. (1970). "Determining Sample size for research activities" Educational and Psychological instrument 30, 1970, p.60

APPENDIX D

Department of Education
Ahmadu Bello University,
Zaria.

5/3/98

TO WHOM IT MAY CONCERN

MRS V.T ADIDU

This is to certify that the above named student is a Ph.D candidate in the Department of Education, Ahmadu Bello University. She is working on the Attitudes of Nigerians towards contraception and the National Population Policy on Birth Control in Kaduna metropolis. Her investigation instrument is the questionnaire she needs your assistance to be able to gain access to peoples in your organisation for her data collection.

The university will be most grateful for all you would do to facilitate the progress of her research,.

Your sincerely

SIGNED
Head of Department
Professor M.J. Shuaibu.

APPENDIX E

Counselling Centre,
Student Affairs Division,
Ahmadu Bello University,
Zaria.

20th November, 1996

Dear Respondent,

This questionnaire is for a study of Ph.D. thesis proposal.

You are requested to help us to know how Nigerians feel about National Population of four children per woman and contraception.

Please respond to the information required as honestly as possible and to the best of your knowledge. All information will be treated with utmost confidentiality.

Please supply every item of information by putting an appropriate response number in each of the boxes required.

Yours sincerely.

V.T. Adidu (Mrs).
The Researcher.

APPENDIX F

MEN'S ATTITUDES TOWARDS FAMILY PLANNING MALE QUESTIONNAIRE

INTRODUCTION

This questionnaire is aimed at finding out the attitudes of Nigerians towards the Federal Government's policy on population control and contraception.

Please answer the questions as accurately as possible Do not write your name. All information provided in this questionnaire will be treated with strict confidentiality.

Section 1

1. How old are you? Below 18 ( ) 18 - 35 ( ) above 35 ( )

2a. Are you married Yes ( ) No ( )

3. Number of children Sons ( ) Daughters ( )

4. How many of your children have died?

5a. Has your wife/wives had any pregnancies that resulted in miscarriages.

Yes ( ) No ( )

5b. If yes, how many times ( )

6. What is your religion? a. Roman Catholic ( )

b. Protestant ( ) c. Muslim ( ) d. Traditional belief ( ) e. None ( )

7a. Nationality.....

7b. What is your ethnic group? ----------

8a. Did you go to school? (a) Yes ( ) (b) No ( )

8b. What is the highest degree or certificate that you earned?

9a. Do you read newspapers or magazine? Yes ( ) No ( )

9b. If yes how often?

a) Always ( )

b) Sometimes ( )

c) Occasionally ( )

10a. Do you listen to Radio? Yes ( ) No ( )10b.

How often? (a) Always ( ) b. Sometimes ( ) (c) Occasionally ( )

Section II

Factors Associated with Population Policy

Recently the Federal Government put up a policy that all Nigerians should control the number of children they are to have to 4 children per woman.

11a. Have you heard of this policy Yes ( ) No ( )

11b. If your answer is 13a is your Yes how did you hear about this policy? Through a friend( ) Through Television ( ) Through Radio ( ) Through Hospital ( ) Others ( )

Specify ----------

11c. What do you think of this policy? (a) It is against our religion ( ) (b) It will improve the quality of life in this nation ( ) (c) It is against our culture ( )

d. It will improve women's health ( )

e. It is a ploy by the Western world to control us ( )

12a. If married, when you first got married, did you have an idea of how many children you wanted? Yes ( ) No( )

12b. If yes, how many Boys ( ) Girls ( )

13a. Do you what more children now? Yes ( ) No ( )

13b. If yes, how many? Boys( ) Girls ( ) As many as God grants ( )

14. What do you think is the ideal (generally desirable) number of children for a family in this area?

Boys ( ) Girls ( ) I don't know ( )

15. Some families are called small, others are called large (With many children). What number of children do you consider a large family. Number ( ) I don't know ( )

16. What age do you think is best for a woman to have the first child? Years ( ) I don't know ( )

17. What interval between two successive deliveries do you think is the most healthy? Years ( ) I don't know ( )

Factors Associated with knowledge and practice of family planning.

18. Have you heard that there are methods used by couples to delay or prevent pregnancy? Yes ( ) No ( )

19. If yes, what methods have you heard about? list them

---

20. Married couples can delay or prevent pregnancy in the following ways. Tick the ones you have heard about, know and used.

Birth Control Form

Method	Code	Method heard	Method know	Method used
Birth control methods requiring doctors prescription				
Pill				
Tubal ligation				
IUDC (insert uterine device)				
Diaphragm				
Injection				
Vasectomy				
Birth control methods not requiring doctors prescription				
Condom (Rubber)				
Foaming tablets				
Jelly or Cream				
Suppositories				
Sponge				
Folk Method				
Abstinence				
Rythmn (safe period)				
Withdrawal				
Douche				
Prolonged breast feeding				
Traditional Methods				

23a. Is your wife currently using a method? Yes ( )No ( )

23b. 1. It is not available in our area ( )

2. It is against our culture ( )

3. It is against our religion ( )

4. I will not allow her to use it ( )

5. I cannot afford to buy it. ( )

24a. Has your wife/wives used any method that has failed. Yes ( ) No ( )

24b. If yes, which ones, state them

---

25. Has your wife/wives ever used any method that affected her/their health that she/they have to stop or change to other method Yes ( ) No ( )

25b. *If yes which ones, state them*

---

26. Are family planning service facilities available in your community?

Yes ( ) No ( ) I don't know ( )

Section III

Attitudinal Statements on Population Policy and Contraception

Please read each of the following statements carefully. Then Tick ( ) for each whether you.

1. Strongly Agree

2. Agree

3. Undecided

4. Disagree

5. Strongly Disagree

Note: SA = Strongly Agree
A = Agree
U = Undecided
D = Disagree
SD = Strongly Disagree

		SA	A	U	D	SD
1.	A family that has more than 4 children is said to be large					
2.	The population policy was adopted by the government to improve the standard of living and quality of life of this nation					
3.	Children are gifts from God and noting should tamper with their being brought to the world.					
4.	Couples will make rational decisions about their fertility rate if information and family services are available to them.					
5.	The children from a large family is likely to lack good nutrition, attention and other things necessary for proper growth.					
6.	To achieve lower population rates, contraception must be accepted by Nigerians					
7.	Contraception negates the existence of moral standards and expectations in a society					
8.	Family planning is available and accessible in our communities					
9.	The advertisement of family Planning services on the radio and television has helped greatly to create awareness among the people of this nation.					
10.	Contraceptives promote promiscuity.					
11.	Children of those days are sexually active than in the past so need family planning from secondary school level					

12.	If the community leaders and local associations are not involved in promoting family planning methods more people will accept contraception.					
13.	Many people in my area used family planning method to delay or prevent pregnancy.					
14.	Family planning programmes is a ploy by the West to control the rest of the world particularly the third world.					
15.	A woman should be allowed to get married before the age of eighteen					
16.	A woman should have all her children between eighteen and thirty-five years of age					

WOMEN'S ATTITUDES TOWARDS FAMILY PLANNING
FEMALE QUESTIONNAIRE

INTRODUCTION

This questionnaire is aimed at finding out the attitudes of Nigerians towards Federal Government's policy on population control and contraception.

Please answer the questions as accurately as possible Do not write your name. All information provided in this questionnaire will be treated with strict confidentiality.

Section I

Please Tick in the appropriate box

1. How old are you?

Below 18 ( ) 18 - 35 ( ) above 35 ( )

2. Are you married? Yes ( ) No ( )

2b. If yes, how many wives does your husband have? ( )

3. How many children does your husband have?

Number ( ) Sons ( ) Daughters ( )

4. How many children do you have? ( )

Sons ( ) daughters ( )

5a. Have you had any pregnancy that resulted in a miscarriage? Yes ( ) No ( )

5b. If the answer to question N0.5 is yes. How many ( )

5c. How many of your children have died? Sons ( ) Daughters ( )

6. What is your religion? a. Roman Catholic ( ) b. Protestant ( ) (c) Muslim( )

d. Traditional belief ( ) e. None ( )

7a. Nationality

7b. What is your ethnic group?.....

8a. Did you go to school? (a) Yes ( ) (b) No ( )

8b. What is the highest certificate that you earned?

9a. Do you read newspapers or magazine?

Yes ( ) No ( )

If yes? 9b. How often? a. Always ( ) b. sometimes ( ) c. Occasionally ( )

10a. Do you listen to Radio? Yes ( ) No ( )

If yes?

10b. How often? a. Always ( ) b. sometimes ( ) c. Occasionally ( )

Section II

Factors Associated with Population Policy

Recently the Federal Government put up a policy that all Nigerians should control the number of children they are to have to 4 children per woman.

11a. Have you heard of this policy Yes ( ) No ( )

11b. If your answer to No.13a is Yes. How did you hear about this policy?

Through a friend ( ) Through Television( ) Through Radio ( ) Through Hospital ( )

Others ( ) Specify ----------

11c. What do you think of this policy?

a. It is against our religion ( )

b. It will improve the quality of life in this nation ( ) c. It is against our culture ( )

d. It will improve women's health ( )

e. It is a ploy by the Western world to control us ( )

12a. If married, when you first got married, did you have an idea of how many children you wanted? Yes ( ) No ( )

12b. If yes, how many Boys( ) Girls ( )

13a. Do you want more children now? Yes ( ) No ( )

13b. If yes, how many? Boys ( ) Girls ( ) As many as God grants ( )

14. What do you think is the ideal (generally desirable) number of children for a family in this area?

Boys ( ) Girls ( ) I don't know ( )

15. Some families are called small, others are called large (with many children). What number of children do you consider a large family. Number ( ) I don't know( )

16. What age do you think is best for a woman to have the first child? Yes ( ) I don't know ( )

17. What interval between two successive deliveries do you think is the most healthy?

Years( ) I don't know ( )

Factors Associated with knowledge and practice of family planning.

18. Have you heard that there are methods used by couples to delay or prevent pregnancy?

Yes ( ) No ( )

19. If yes, what methods have you heard about? list them

---

20. Married couples can delay or prevent pregnancy in the following ways. Tick the ones you have heard about, know and used.

Birth Control Form

Method	Code	Method heard	Method know	Method used
Birth control methods requiring doctors prescription				
Pill				
Tubal ligation				
IUDC (insert uterine device)				
Diaphragm				
Injection				
Vasectomy				
Birth control methods not requiring doctors prescription				
Condom (Rubber)				
Foaming tablets				
Jelly or Cream				
Suppositories				
Sponge				
Folk Method				
Abstinence				
Rythmn (safe period)				
Withdrawal				
Douche				
Prolonged breast feeding				
Traditional Methods				

21a. Are you currently using a method? Yes ( ) No ( )

21b. If no, why are you using a method? ( )

1. It is not available in our area ( )

2. It is against our culture ( )

3. It is against our religion ( )

4. My husband will not let me to use it ( )

5. I cannot afford to buy it. ( )

6. I don't want to use any ( )

22a. Have you used any method that has failed? Yes ( ) No ( )

22b. If yes, which ones, state them

23a. Have you ever used any method that affected your health that you have to stop or change? Yes ( ) No ( )

23b. If yes which ones, state them

---

24. Are family planning service facilities available in your community?

Yes ( ) No ( ) I don't know ( )

Section III

Attitudinal Statements on Population Policy and Contraception

Please read each of the following statements carefully. Then Tick ( ) for each whether you.

1. Strongly Agree

2. Agree

3. Undecided

4. Disagree

5. Strongly Disagree

Note: SA = Strongly Agree
A = Agree
U = Undecided
D = Disagree
SD = Strongly Disagree

		SA	A	U	D	SD
1.	A family that has more than 4 children is said to be large					
2.	The population policy was adopted by the government to improve the standard of living and quality of life of this nation					
3.	Children are gifts from God and noting should tamper with their being brought to the world.					
4.	Couples will make rational decisions about their fertility rate if information and family services are available to them.					
5.	The children from a large family is likely to lack good nutrition, attention and other things necessary for proper growth.					
6.	To achieve lower population rates, contraception must be accepted by Nigerians					
7.	Contraception negates the existence of moral standards and expectations in a society					
8.	Family planning is available and accessible in our communities					
9.	The advertisement of family Planning services on the radio and television has helped greatly to create awareness among the people of this nation.					
10.	Contraceptives promote promiscuity.					
11.	Children of those days are sexually active than in the past so need family planning from secondary school level					

12.	If the community leaders and local associations are not involved in promoting family planning methods more people will accept contraception.					
13.	Many people in my area used family planning method to delay or prevent pregnancy.					
14.	Family planning programmes is a ploy by the West to control the rest of the world particularly the third world.					
15.	A woman should be allowed to get married before the age of eighteen					
16.	A woman should have all her children between eighteen and thirty-five years of age					