ST JOHN'S UNIVERSITY OF TANZANIA

KNOWLEDGE, ATTITUDE AND PRACTICES RELATED TO ISSUES CONCERNING POPULATION GROWTH IN COMMUNITY MEMBERS OF CHANG'OMBE STREET IN DODOMA, CENTRAL TANZANIA

PAUL INNOCENT MWENDA

MASTER OF ARTS IN COMMUNITY DEVELOPMENT

2015

ST JOHN'S UNIVERSITY OF TANZANIA

KNOWLEDGE, ATTITUDE AND PRACTICES RELATED TO ISSUES CONCERNING POPULATION GROWTH IN COMMUNITY MEMBERS OF CHANG'OMBE STREET IN DODOMA, CENTRAL TANZANIA

THIS DERSATATION IS SUBMITED IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE MASTER OF ARTS IN COMMUNITY DEVELOPMENT OF ST. JOHN'S UNIVERSITY OF TANZANIA

2015

COPYRIGHT

DECLARATION

I, PAUL INNOCENT MWENDA declare that, this dissertation titled "Knowledge, attitude and practices related to issues concerning population growth in community members of Chang'ombe Street in Dodoma, Central Tanzania" is my own work. It has not been and will not be presented for any other course of study. I confirm that appropriate credit has been given where reference has been made to the work of others.

_____ _____

(MA Com Dev) Date

SUPERVISOR'S CERTIFICATION

I, the undersigned, certify that I have read and hereby recommend for acceptance by St. John's University of Tanzania a dissertation entitled "Knowledge, attitude and practices related to issues concerning population growth in community members of Chang'ombe Street in Dodoma, Central Tanzania" in fulfilment of the requirements for the Master of Art in Community Development.

_____ _____

Date

(Supervisor)

DEDICATION

I dedicate this thesis to my dear mom and dad Juliana Kinyamagoha and Innocent Mwenda whom dedicated their resources, time and passion to support me, while lived to witness the successful completion of this thesis. Their interests and enthusiasm in the education of all their children is greatly cherished and appreciated.

ACKNOWLEDGEMENTS

Firstly I thank the Almighty God for the great gift of life he has blessed me with since my birth. May his light keep on guiding me and shine upon people who made me finish this dissertation successfully including my parents Innocent Mwenda and Juliana Kinyamagoha and my brothers and sisters Michael Mwenda, Noel Mwenda, Abel Mwenda, Grace Mwenda, Theresia Mwenda and Salome Mwenda.

Also, I would like to express my sincere appreciation to my supervisor for her assistance and constructive criticisms and ideas all over my study. I feel honored to have had the opportunity to work under her supervision. Moreover, I would like to extend my sincere thanks to all residents of Chang'ombe Street whom showed cooperation and commitment to participate in the study, their contribution is honored. Finally my thanks pause to all my classmates especially Mr Denis Komba for their cooperation, team working and academic support my God bless them all.

TABLE OF CONTENT

LIST OF TABLES

.

LIST OF APPENDICES

ABBREVIATIONS

BDHS	-	Bangladesh Demographic and Health Survey
FP	-	Family Planning
FPM	–	Family Planning Methods
FPS	-	Family Planning Services
HIV	-	Human Immunodeficiency Virus
ISSA	-	Integrated System for Survey Analysis
IUD	–	Inter Urine Device
KAP	-	Knowledge Attitude and Practice
MIFS	-	Mean Ideal Family Size
MNCEF	-	Mean Number of Children Ever-Fathered
MNLC	-	Mean Number of Living children
NBS	-	National Bureau of Statistics
NGOs	–	Non Governmental Organization
SJUT	-	St John's University of Tanzania
TDHS	-	Tanzania Demographic and Health Survey
UMATI	-	Chama cha uzazi na Malezi bora Tanzania
UN	–	United Nations
UNFPA	-	United Nations Population Fund
UNICEF	-	United Nations Children Fund
URT	–	United Republic of Tanzania
WHO	-	World Health Organisation

ABSTRACT

This study explored knowledge, attitude and practice related to issues concerning population growth in community members of a selected densely populated area of Dodoma, Central Tanzania. The study employed qualitative and quantitative research approaches with a survey design. Interviews were conducted with 40 men and women aged 20 years and above living in Chang'ombe Street in Dodoma who were randomly selected. Thematic analysis was done to analyse qualitative data while percentages chi square and frequencies were used for quantitative data.

Findings suggest that there is a statistically significant association between age, education level, marital status, occupation and preferred number of children ($p<0.05$). Hence preferred number of children increased as the age of the participant increased while it reduced as the level of education of participant increase. A reason like expecting children to help their parents during their old age was the main reason for having children. However 95% of all participants were aware of family planning; while the most commonly known methods among both men and women were birth control pill, injectables, and male and female condoms and natural methods. Furthermore, some of participants (65%) in the study area have observed to have positive attitude toward family planning, but despite their knowledge of FPM, usage was reported to be very low. Tin the aspect of population growth, majority of participants observed to understand the concept of

population growth and its impact and recognise that there is a problem of population growth in Chang'ombe Street.

This study concluded that issues of population growth are well known by participants but don't seen their own role in creating the problem; while education has noted to be the major factor which shape behaviours of individuals so equal education opportunities especially secondary school uptake should be provided to all children.

CHAPTER ONE

INTRODUCTION

1.1 Chapter overview

The study aimed to investigate knowledge, attitude and practice related to issues concerning population growth in a highly populated area of Dodoma, Central Tanzania. This chapter comprises the background of the problem, statement of the problem, research objectives, research question, and significance of the study as well as definition of terms.

1.2 Background

Despite efforts to control population growth in the world there is still high fertility and rapid population growth in many nations (Population Reference Bureau, 2013). United Nations Population Fund *(UNFPA), (2014)* comment that country like India and China has initiated strong policies and programmes to promote birth control and strengthen programmes to increase contraceptive practice; however, the problems of high fertility and low contraceptive practice remain challenging.

Population Reference Bureau (2013) report that the current world population growth rate is 1.1% annually which amounts to an annual increase of around 75 million people. However there are some regions in the world like the Middle East and Sub Saharan Africa, South Asia and Latin America where the population growth rate is above 2% annually (UNFPA, 2014). Some countries have

experienced negative population growth mainly in Eastern Europe due to low fertility rates and emigration. In Southern Africa there is relatively slow population growth due to high rates of HIV related deaths (UN Population Projection, 2012).

In developing countries particularly in Africa the issue of rapid population growth still persists, with low usage of contraceptives being one of the contributing factors (UNFPA, 2014). Serious consequences including increasing poverty and environmental stress have been observed to be the outcome of rapid population growth (UNFPA, 2014b). Adeyinka, Asabi, and Adedotun (2012) note that even when communities have knowledge on modern family planning methods, negative attitudes can affect their uptake.

In Tanzania, various specific programmes have been initiated to address the situation since independence that includes education and family planning services delivery. While there has been an increased use of contraception over the last two decades, the population of Tanzania has tripled from 12.3 million in 1967 to 44.9 million in 2012. The current population growth rate is 3.0% annually and the total fertility rate is 5.7 children per woman; these rates are amongst the highest in the world (National Bureau of Statistics (NBS) Tanzania and ICF Macro, 2011).

In central Tanzania the consequences of rapid population growth have been reported to include food insecurity among rural areas, environmental degradation due to the increase of human activities, and conflicts among farmers and pastoralists. In towns it appears to lead to overcrowding, health problems like eruption of diseases and poor maternal health, increase of crime, stress on social services, emergence of unplanned settlements as well as an increase in poverty (Madulu, 2005; Milline, 2007; UN, 2014; Zhihong, Abulrahman, & Xiaoying, 2014).

Currently in Dodoma region of central Tanzania, the yearly population growth rate is 3.4% (United Republic of Tanzania (URT), 2013). This is high even though some previous studies have reported that communities have good knowledge levels concerning the use of family planning methods but there is a low response on the usage of modern family planning methods (Lwelamira, Mnyamagola, & Msaki, 2012; Mosha & Ruben, 2013; NBS Tanzania & ICF Macro, 2011).

Population growth is a phenomenon which has drawn attention worldwide and Tanzania in particular. Governmental and non-governmental efforts have been employed to provide family planning knowledge and services so as to control population growth with limited impact.

1.3 Statement of the problem

Currently, in Dodoma region there is inadequate studies about community's knowledge on what influences population growth in highly populated areas within the region. Worldwide and in Tanzania in particular, population growth is a perplexing issue.

Data shows that Tanzania's population has tripled in 45 years and Dodoma's population growth rate is higher than the average Tanzanian rate. Measures to address population issues may continue to be ineffective because there is a lack of specific information about particular communities' knowledge, attitude and practice related to issues of population growth in the high populated areas. Inadequate of information about knowledge, attitude and practices of Dodoma residents could lead to inappropriate initiatives to address population growth issues.

This study intends to fill the gap of knowledge about communities' knowledge, attitude and practice related to issues of population growth Chang'ombe Street in Dodoma. Information about communities' knowledge, attitude and practice related to issues of population growth in high populated area in Dodoma will allow for a better understanding of population issues in the region and for more appropriate targeted strategies to be planned and implemented that will help to reduce rapid population growth and improve the welfare of humanity, now and in the future.

1.3 Research objectives

1.3.1 General objective

To investigate knowledge, attitude and practices related to issues concerning population growth in community members of Chang'ombe Street in Dodoma, Central Tanzania.

1.3.2 Specific objectives

i. To investigate factors which determine preferred family size in community members in Chang'ombe Street in Dodoma region.

ii. To assess the knowledge, attitude and practice of community members in Chang'ombe Street in Dodoma region on family planning methods.

iii. To investigate perspectives of community members in Chang'ombe Street in Dodoma region on population growth.

1.3.3 Research Questions

a) What are the factors which determine preferred family size in community members in Chang'ombe Street in Dodoma region?

b) What are the knowledge, attitude and practice of community members in Chang'ombe Street in Dodoma region on family planning methods?

c) What are the perspectives of community members in Chang'ombe Street in Dodoma region on population growth?

1.4 Purpose and significance of the study

Investigation of human behaviour, perspectives and experiences is one of the ways to understand the nature of human problems. Data from this study may assist policy makers, governmental institutions and non-governmental organizations (NGOs) to design different interventions appropriate for the current situation. Given the rapid population growth rate of 3.4% in Dodoma and its potentially serious consequences data which will guide development of subsequent programmes and research are needed.

The present study aimed to make contributions to the field of population management and family planning to the community. In addition, the present study aimed to explore community perceptions and opinions regarding issues of population growth and how they respond.

The present study intends to make contributions to the knowledge base of factors that influence preferred family size in the community of Chang'ombe Street.

In addition, the study is available to provide useful information to development planners, policy makers, and technocrats to guide them in development of subsequent programmes of population control in highly populated areas.

1.5 Definition of key terms and concepts

Knowledge is facts, information, and skills acquired through experience or education; the theoretical or practical understanding of a subject (Cambridge Dictionary, 2015).

Attitude is a predisposition or a tendency to respond positively or negatively towards a certain idea or objective (Cambridge Dictionary, 2015).

Practice – is the utilization of skill or actual application or use of idea, belief, or method as opposed to theories about such application or use (Cambridge dictionary, 2015).

Family planning - is selected measures that allow people to have control over their fertility (WHO, 2015).

Population growth: is an increase in the number of people that reside in the country, state, county or city (World Bank, 2015a).

Population growth rate: is the increase in a country's population during a period of one year expressed per 1000 people (World Bank, 2015a).

Total fertility rate: the number of children that would be born to a woman if she were to live to the end of her childbearing years and bear children in accordance with current age specific rates (World Bank, 2015b).

1.6 Summary

The introduction of the study has covered the background of the problem, statement of the problem, research objectives, research question, and significance of the study as well as definition of terms. Generally rapid population growth is a perplexing agenda, its impact and consequences are increasing as population increases. Various initiatives have been employed by the government and nongovernmental organisations to deal with the problem have had limited effect in some countries. The research objectives of this study have intended to investigate knowledge, attitude and practice related to issues concerning population growth in Dodoma, Central Tanzania. the study has significance for the government, NGOs and policy makers since the research questions have been structured to yield results on the factors which determine family size, perspectives of the community on population growth and the level awareness and practice of communities toward family planning. Key terms have been defined.

CHAPTER TWO

LITERATURE REVIEW

2.1 Chapter overview

Many studies explore communities' knowledge, attitude and practice related to issues concerning family planning. Knowledge, attitude and practice related to population growth are addressed by few published studies, and a few of these are reported in central Tanzania with reference to Dodoma region. This chapter summarises representative available literature from different continents and countries, and presents some theoretical perspectives.

2.2 Theoretical Literature Review

2.2.1 Population Growth Issues

2.2.1.1 Classical Theories Of Population Growth

Many theorists have postulated about population growth. Two of the most influential are Malthus and Boserup.

- ***Malthusianism***

Malthusianism can be understood as the political/economic thought of Reverend Thomas Robert Malthus (1766 – 1834) whose ideas were first developed during the industrial revolution. In 1798 he wrote "An Essay on the Principle of Population" (Mathus, 1997) which argued that "population tends to increase at a

faster rate than its means of subsistence" (Mathus, 1997).He predicted that if population is not checked by moral restraint or disasters such as diseases and wars it will be eventually checked by poverty and famine (Martin, 2009).

- ***Boserup's theory of population***

The Danish Economist Ester Boserup (1910-1999) believed that people have the resources of knowledge and technology to increase food supplies. She suggested that population growth has enabled agricultural development to occur. She assumed that people knew the techniques required by more intensive systems and used them when the population grew. Her arguments focus on the ideal that demographic pressure (population density) promotes innovation and higher productivity in use of land (irrigation, weeding, crop intensification, better and seeds) and labour. On the other hand, Boserup admits that overpopulation can lead to unsuitable farming practices which may degrade the land (Marquette, 1997).

2.2.2.2 Factors affecting population size / growth

There are many factors that affect population as described by different scholars. Commonly identified factors are mortality, fertility and net migration, religion and cultural factors.

- ***Fertility***

Kaplan (1996) understands fertility as the natural capability to produce offspring. Fertility has a major impact on population growth because of its multiplier effect. If parents have a large number of children, those children can in turn have many children, and so on (O'Neill et al.1999).

- ***Mortality***

Law and Morris (1998) understand mortality rates to be the incidence of death in a population. Changes in mortality at different ages have different consequences for population growth and age structure. When child and infant mortality decline, for example, a greater proportion of babies will survive to adulthood to have their own children and contribute to future growth. Mortality decline among the older population has a more short-term effect on population growth because the survivors are already past reproductive age (Davis, 2011).

- ***Migration***

Migration is the movement of people from one place in the world to another for the purpose of taking up permanent or semi-permanent residence, usually across a political boundary. An example of "semi-permanent residence" would be the seasonal movements of migrant farm labour. People can either choose to move ("voluntary migration") or be forced to move ("involuntary migration").

Migrations have occurred throughout human history, beginning with the movements of the first human groups from their origins in East Africa to their current locations in the world (Castles, Miller &Ammendola, 2005).

Migration occurs on a variety of scales: intercontinental, intra continental, and interregional. One of the most significant migration patterns in Tanzania has been rural to urban migration to seek opportunities. These movements have an impact on population distribution and population density (Castles, Miller & Ammendola, 2005).

- ***Culture and religion***

Cultural factors influence family size. In Africa, children are often seen to be a sign of prestige and a man or woman who doesn't have a child may suffer socially and psychologically. Parents with a large number of children are traditionally considered to be fortunate. Some ethnic groups in Tanzania continue to practice polygyny. In most developed countries, many people have the culture of having small families. Culture is an ever changing phenomenon because different social, economic, environmental and political factors prevail in particular regions (Schwartz, 2006). Religion can also have a profound effect on family planning. Many religions promote large families to help perpetuate their religious group or glorify a higher power. For example, Orthodox Judaism encourages large families in order to perpetuate Judaism. Roman Catholicism

promotes large families for the same reason, as well as rejecting the use of any "artificial" means of birth control as contrary to God's will. Devout followers of a religion with these types of values will often have large families regardless of other factors, such as economic ones. This can be seen in countries like Israel (Judaism) and Brazil (Catholicism), which have high percentages of religious followers in their populations. Both countries have high birth rates and high population growth rates (Mc Goldrick, Giordano, & Garcia-Preto, 2005). Some religions and cultural groups allow polygyny (having more than one wife). For instance, Islam favours polygyny and allows men to have up to four wives, each of them are expected to produce offspring (Schwartz, 2006).

2.2.2.3 Population growth and development.

The consequences of population growth on economic development have attracted the attention of economists ever since Adam Smith wrote his "Wealth of Nations". Smith wrote, "The annual labour of every nation is the fund which originally supplies it with all the necessaries and conveniences of life" (Smith & Nicholson, 1887). Subsequently Malthus and Ricardo raised concerns about the effect of population growth on the economy.

It has been claimed that a growing population helps in economic development by providing manpower and expanding markets for goods (Ramchandani, Stein, Evans, & O'Connor, 2005). However, rapid population growth goes with increased demand for services like food, water, health care and housing as well

as an increase in exploitation of natural resources. If the population increases while resources remain constant or even reduce, this situation has implications for economic development and the wellbeing of the communities because resources become scarce. If the increased population remains unproductive and dependent, this threatens development (Ramchandani at el. 2005).

2.2.2.4 Theoretical concepts of family planning.

- ***History of family planning.***

Worldwide, family planning has been used for millennia. Coitus interruptus is described in the Old Testament of the Bible which means “rejected sexual intercourse, withdrawal or pull-out method” which allow to avoid insemination; periodic abstinence was used in ancient India and the precursor of the condom was used in Egypt as far back as 1350 BC (Edwards, 1994). Family planning is not a new agenda; what is new is “modern family planning methods”.

Since 1959 The Family Planning Association of Tanzania, which is now known as *Chama cha uzazi na Malezi bora Tanzania* [UMATI], was the Tanzanian organization responsible for promoting family planning for the wellbeing of mothers and children. In 1969 the Tanzanian Ministry of Heath rendered child spacing services as part of Maternal and Child Health services. In 1990, family planning was then mainstreamed in the development agenda, various efforts were taken to promote awareness and usage of modern family planning. Radio

Programmes and campaigns like "*Zinduka"* which means "be awake" and the "Green Star" campaign were established to boost usage of modern family planning methods. Since the year 2000 the emphasis on family planning appears to have reduced due to efforts being redirected towards fighting HIV/AIDS (NBS Tanzania & ICF Macro, 2011).

- ***Types of family planning methods***

There are many methods of birth control. 'Modern' Methods of family planning have been grouped into four major groups which involve the following methods as shown in table 2.1

TABLE 2.1 FAMILY PLANNING METHODS

GROUP OF METHODS	VARIETIES OF METHODS
Hormonal methods of birth control	Transdermal patch Contraceptive ring Injection method Implants Emergency contraceptive pills Hormone impregnated IUD (Intra urine device) Birth control pills
Barrier methods of birth control	Male condom Female condom Diaphragm Sponge Spermicide
Natural family planning	Abstinence Fertility awareness Lactation Amenorrhea Method (LAM) Withdrawal Sterilization

Source: (WHO, 2014)

- ***Overall advantages of family planning***

Family planning has been identified by the World Health Organisation (WHO) as one of the six essential health interventions needed to achieve safe motherhood and by the United Nations Children Fund (UNICEF) as one of seven strategies

for child survival. Family planning allows families to have increased control of their fertility; it helps them to have their preferred family size, and one for which they can provide all social and economic needs. This promotes the social and economic wellbeing of the family and enhances optimum utilization of resources (WHO, 2014).

- ***Overall disadvantages of family planning***

Family planning is considered distasteful or offensive to some individuals and communities. Family planning has potential side effects such as delay in return of fertility, and some methods are associated with cost. Some methods require monitoring or prescription by medical personnel which add to the cost of the method itself.

2.3 Empirical Literature Review

2.3.1 Studies about factors which determine preferred family size

Thomson (2004) understands desired family size as 'the number of children wanted in one's lifetime'. It can be viewed as the demand for children within the context of a particular number of total children desired; parents may desire at least one child of each sex, a minimum number of children of a particular sex, or an equal number of sons and daughters. These preferences have a direct impact on the size of the family; various studies have explored factors determining family size.

2.3.1.1 Developing countries

Bongaarts (2001) used data from household surveys in 43 developing countries to describe the main dimensions of household size and composition in the developing world. He noted that average household size varies only modestly among regions at that time, ranging from 5.6 in the Near East/North Africa to 4.8 in Latin America. Household size is found to be positively associated with the level of fertility and the mean age at marriage, and inversely associated with the level of marital disruption.

Atiqual Had, Vanwing and Hens (2010) used secondary sources of information to explore how people in developing countries of Asia, Africa and Latin America perceive family size and environmental degradation. Those who preferred a big family size comment that children help them during their old age and they are currently helping them to take care of domestic duties like cooking and fetching water. Factors like low education level, women's inability to participate in reproductive decisions and poor access to contraception are suggested to have a positive correlation on big family size. Participants of the study who do not like a big family size referred to scarcity of land for production, low ability of parents to provide their children with various services like education, food and good health care.

2.3.1.2 Asia

Khongji (2013) conducted a study in India which employs data collected at the National Family Health Survey (NFHS), compiled using the Integrated System for Survey Analysis (ISSA) software to investigate the determinants and trends of the ideal number of children per women in a matrilineal state of Meghalaya. The study suggests that a number of factors such as social, economic, cultural, demographic, environmental, place of residence, religion, highest educational level, working status, and standard of living index and age of respondents in the survey are influencing family size. Khongji concluded that women in a matrilineal state of Meghalaya have a strong cultural value attached to their reproductive decisions, especially the decision to have a large family.

Pandey, Thakkar, Rawat, Jha, and Awash (2012) in India explored the relationship of family size with socio-economic factors and the effect of contraceptives. They used a cross-sectional survey to explore data from 429 households where a group of married women of reproductive age from 15 - 49 years were included. The findings suggest that factors including age, education, occupation and sex preference have an association with family size. Those with a high level of education and have formal jobs were seen to have a preference for a small family size compared to those with low level of education. Sex preference is influenced by level of education.

Uddin, Yano and Murakami (2011) employed data from the 2007 Bangladesh Demographic and Health Survey (BDHS) with the use of a stratified multistage cluster sample consisting of 495 households in the urban area and 227 households in the rural area to study the determinants of desired family size and children ever born in Bangladesh. The study findings suggest that family size was affected by socio-psychological and economic variables. The study indicates that desired number of children increases with a decrease in the level of education and family size increases with the increase in age of respondents. As expected, both the desired family size and the average number of children ever born decreases with increased age at marriage.

Dhillon and Singh (2010) of India, while studying the determinants of desired family size, found that women's parity is positively associated with desired family size in their sample of 382. The actual number of children is a good predictor of the desired number of children. The authors showed that sex composition of children surviving influences the desired family size. They found that education, exposure to mass media, reproductive and child health service utilization from public or private sources, contact with a family planning health worker and high living standards are negatively associated with large desired family size.

2.3.1.3 Africa

Odu, Jadunola and Parakoyi (2005) conducted a study in Nigeria. The study employed a cross-sectional descriptive design and a semi-structured

questionnaire to interview 360 men above the age of 15 years in the households. The Mean Number of Children Ever-Fathered (MNCEF), Mean Number of Living children (MNLC) and Mean Ideal Family Size (MIFS) for the men were 5.2, 4.2 and 5.8, respectively. For men above 50 years old who may be considered to have completed their families, these indicators were 9.3, 7.3 and 5.8 respectively. The study findings show that factors associated with high fertility among the men were low education, being a Muslim and having more than one wife. Men reproduced mainly because they wanted children that will carry on the family name and for economic support in old age. The study concluded that men at Ganmo still have a preference for large family sizes and an intensive drive at adult education was advocated among other recommendations.

Okogu (2011) in Nigeria assessed the basic factors responsible for choice of family size and the socio-economic implications of such choices. The study employed secondary data through literature review. The review indicated that family size is related to family income, cost of children and wages. It was found that most people have large families as a result of factors such as ignorance, culture and demographic factors. Low family sizes in some categories of families have been influenced by high level of education, health, income, better accommodation, and access to capital and potable water.

2.3.1.4 East Africa

Muhoza, Broekhuis and Hooimeijer (2014) conducted a study entitled “variations in desired family size and excess fertility in East Africa”. Data were drawn from the Kenya 2008/9, Tanzania 2005, Rwanda 2010, and Uganda 2011Demographic and Health Survey data sets. The analysis included 4,356 women from Kenya, 6,022 from Tanzania, 6,337 from Rwanda, and 4,868 from Uganda. Findings suggested that the differences are largest in Kenya and smallest in Rwanda, while Tanzania and Uganda occupy intermediate positions. In Kenya, Muslims desire nearly twice the number of children desired by Christians (6.7 versus 3.8) whereas in Rwanda they desire slightly less than Christians, but the difference is small (3.4 versus 3.6). The homogeneity between religious communities is also a feature of Uganda, yet with higher preferences than in Rwanda: 5.2 children for Muslims and 5.3 for Christians. Tanzania occupies an intermediate position: Muslims prefer one more child than Christians, respectively, 6 and 5 children. With regard to education, irrespective of religion, the differences are clear and straightforward in all countries; the desired fertility decreases progressively with the level of education.

2.3.1.5 Comparison of data in different regions

Studies in developing countries, Asia, Africa and East Africa have provided congruent data indicating that family size has been influenced by a number of factors for instance age, education, occupation, sex preference, strong cultural

values and religion (Khongji, 2013; Bongaarts, 2001; Rawat, Jha, & Awash, 2012; Uddin et al. 2011; Dhillon & Singh; 2010, Odu, Jadunola & Parakoyi; 2005; Okogu, 2011; Muhoza at el.2014).

However the impact of these factors differs from one region to another for instance in Africa many families are large for economic reasons. Many heads of families in Africa use their children as a source of labour in agriculture and pastoralism, and rely on their children for support in their old age since there is limited provision of old age pensions compared to developed countries such as the United Kingdom. Cultural factors including the prestige of having many children is influencing large family size in Africa compared to regions like Europe. A man who does not have children in African societies is considered to be impotent which is embarrassing compared to Europe where having no children is an acceptable option (Odu, Jadunola & Parakoyi 2005; Muhoza, Broekhuis & Hooimeijer, 2014; Okogu, 2011).

2.3.2 Studies about knowledge, practice and attitude toward family planning

Many studies have been done worldwide to explore beliefs, attitudes, behaviour, practice and the viewpoints of the public regarding reproduction which are major issues to take into account while addressing population control and family planning.

2.3.2.1 Studies in Europe

In Europe, a study was carried out in Spain to determine the existence of differences and possible sources of inequity in the use of family planning methods among health service users in Catalonia by sex, health status, place of birth and socioeconomic condition. Data were taken from questionnaires which were administered to 1094 Catalan. It was found that the use of family planning methods is positively related to a higher level of education and having children over 14 years of age. Factors such as sex, age, income and self-perceived health do not appear to influence their use. Furthermore, being a native of the country, the European Union or Central/South America represents a greater likelihood of use than being African or Asian (Saurina, Vall-llosera & Saez, 2012).

A study conducted in Mus, Turkey, aimed at determining the attitudes and behaviour of married men with regard to family planning. It included 317 married men aged 20–56 who worked in an institution. Questionnaires were distributed to the participants to collect data. However the results showed that the use of family planning was approved of by 79% of the men, but a contraceptive method was actually used by only 66%. While 28% of the high school and university graduates had five or more children, as many as 67% of the men with a lesser educational level had such a large family size. In this sample, education had a

great impact on influence on usage, knowledge and attitudes about family planning (Pirinçci & Oguzöncül, 2008).

2.3.2.2 Studies in Asia

In Asia, a study to assess knowledge attitude and practice (KAP) related to family planning was done at Manipur, India, among the Meitei women. Data was collected from 50 married women in a random sample with the use of an interview schedule. The knowledge of condom and intra urine device was higher in the age groups of 31-35 years (35%) and 20-25 years (32%) compared to the respondents in other age groups. Most of the women (73%) acknowledged that they are not free to use contraceptives due to the negative attitude of their husbands, and 53% are concerned that contraceptives have a lot of side effects (Mao, 2007).

In India, Dhingra, Manhas, Kohli, and Mushtaq, (2010) conducted a study with the aim of assessing knowledge, understanding and attitude of couples towards family planning across the two ecological settings of Jammu district. The study employed 200 married couples drawn from Jammu district through stratified random sampling technique. An interview schedule and questionnaire with a rating scale were used to collect data. The majority of rural respondents especially women (51%) were unaware of concepts related to family planning. Condoms were by far the most favoured contraceptive measure across both settings (81% males and 77.5% females) followed by birth spacing pills (39%).

The appropriate knowledge regarding other measures like Copper-T intrauterine device (13.5%) and male sterilization was lacking. Further, urban respondents entrusted the contraceptive responsibility to their respective partners (43% males, 44% females), while rural couples (74% females and 64% males) followed the traditional concept of male dominance and superiority. Television and magazines were found to be the major accessible sources of information.

2.3.2.3 Studies in Africa

Adeyinka, Asabi and Adedotun (2012) conducted a study in Nigeria to assess the knowledge and practice of contraceptives among women of reproductive age in the south west of Nigeria. The findings revealed that more than four in every 10 respondents had the intention of using contraception in the future, while more than three in every 10 respondents do not intend to use it in the future. Also the majority of respondents were found to have knowledge on contraceptives and the side effects of contraception. It was observed that the respondents' source of knowledge of any family planning methods were service providers and others who are using contraceptives in south west, Nigeria. This shows that what is known to the communities is what determines usage of family planning.

A study conducted in Nigeria, assessed the level of practice and misconceptions of modern family planning methods in Abraka communities. Questionnaire method was used to gather the required information from 657 respondents

randomly chosen from eight communities in Abraka Kingdom. 75% of respondents were aware of modern family planning but only 43% were using it to plan their families. Those using condom, safe periods and withdrawal constituted 33% of the 43% figure. The data indicate a fairly high degree of awareness. The authors suggest that research efforts should be intensified on how to take advantage of the traditional methods of family planning such as withdrawal and sterilization to systematically introduce the modern methods, so as to gradually eliminate the associated bias and misconceptions associated with modern methods of family planning (Aninyei et al, 2008).

In Uganda, East Africa, a cross sectional survey employed semi-structured questionnaires provided to 360 participants suggests that misconceptions, fears and safety concerns about contraceptives were common both among young people and among health care providers. Gender inequity in society leads men to make fertility decisions, and socio-cultural contradictions such as cultural and religious practices influence contraceptive use negatively (Nalwadda, 2012).

2.3.2.4 Studies in Tanzania

The Tanzania Demographic and Health Survey (TDHS) (2010) is a nationally representative survey of 10,300 households selected from 475 sample points throughout Tanzania. The TDHS data suggest that knowledge of contraception is almost universal in Tanzania and the most commonly known methods among both men and women are the birth control pill, injectables, and male condoms.

34% of currently married women are using a method of contraception, including 27% who are using a modern method. However the survey reveals that current contraceptive use is higher among sexually active unmarried women than among married women (51% and 34%, respectively). There was a shift from traditional to modern methods noted between 1990 and 2010. Modern method use increased from 7% in 1991-92 to 27% in 2010. The most notable change in the mix of modern methods used by married women has been a gradual increase in the proportion using injectables (less than 1% in 1991-92 compared with 6% in 1999 and 11% in 2010. There are significant variations in contraceptive use by background characteristics. Married women in urban areas are much more likely than their rural counterparts to use a family planning method (46% and 31%, respectively). Current use of any method increases greatly with education, from 22% of married women with no education to 52% of married women with at least secondary education. Women in the Lake and Western zones are least likely to use contraception (18 and 20%, respectively). From this study it appears that a minority of Tanzanians (34%) use any method for family planning (National Bureau of Statistics (NBS) [Tanzania] and ICF Macro, 2011), in spite of good levels of knowledge.

Mosha and Ruben (2013) carried out a study which used a cross sectional design to examine family planning use and socio demographic variables, social networks, knowledge and communication among the couples in Mwanza.

Structured questionnaires were used to gather data from a stratified sample of 440 women of reproductive age (18-49). The majority (73 %) of respondents have not used family planning. Usage of family planning is influenced by education, geographical settings, wealth, religion and access to information.

A study was conducted in Hai District of Kilimanjaro Region by Dangat and Njau (2013) to assess knowledge, attitudes and practices on family planning services among adolescents in secondary schools in Hai District in northern Tanzania. It used a cross sectional design among 316 randomly selected students in 10 secondary schools while using a self-administered questionnaire to collect data. Two-thirds (67%) of the respondents had an adequate level of knowledge on family planning services (FPS) however most respondents (71%) reported that FPS should not be used by adolescents and mentioned several reasons against its use. In line with the results, most secondary school students in Hai District do not utilize family planning services despite an adequate level of knowledge on FPS.

In Dodoma, a study carried out by Lwelamira at el., (2012) in Mpwapwa District suggests that women participants are knowledgeable on modern contraceptives (99%), 80% used at least three methods, men seem to have a negative attitude and are reluctant on the usage of the contraceptives (66%). However the study reports that the one who has the final decision on fertility in a household (when

to have next birth and number of children in a family) is the husband (71%) which is likely to lead to low usage of family planning.

2.3.2.5 Comparison of data in different regions

The literature discussed and analysed above, has explored the knowledge, usage and perceptions regarding family planning while acknowledging that most people, both male and female, are aware of different family planning methods.

It has been observed that in Europe there is high usage of family planning methods compared to other continents. This appears to be related to educational, cultural and economic factors. Other regions like Africa and Asia have been observed to have a variety of knowledge levels of modern contraceptives. Existence of low and average awareness on modern family planning might be caused by a lack of sensitization programs and lack of access to family planning services. Where this is a good level of awareness on modern family planning methods in Asia and Africa, there is still low usage due a variety of factors including religious and cultural opposition, low levels of education, early marriages, economic status and the lack of social security in old age. It is also possible that some rural dwellers still lack choices of family planning and may not have easy access to family planning facilities.

2.3.3 The impact of rapid population growth

Different studies have explored various views and opinions on rapid population growth. The impacts of population growth have been identified as shortage of land, change in environment and resource shortage (Heisler, 2011). Taking example from studies in developing countries, Agarwal (2014) explored how human resources make an impact on the economic development of the country. He contended that overpopulation and rapid population growth leads to overuse of natural resources, and emphasizes that lack of resources may lead households to serious poverty. There is a risk of inadequate provision of social services and housing, lack of employment opportunities and environmental damage.

2.3.3.1Studies in Africa

Imoisi, Olatunji and Ubi-Abai (2013) in their literature based study in Nigeria highlighted the impact of population in the economy with reference to the level of unemployment. Imoisi at el observed that the problem of unemployment in Nigeria is mostly related to the rapid population growth which has not been well recognised as an economic threat. For instance at least 71% of Nigerian youths are unemployed and the rate of unemployment increased from 5% in 2006, to 21% in 2010 and 24%in 2011.

Omofonmwan and Osa-Edoh (2009) in their study in Nigeria which was literature based study have acknowledged that interaction of millions of people with their environment has left indelible mark on the landscape. Hence Omofonmwan at el, have discussed Urbanization, deforestation, desertification, and all kinds of pollution are some of the resultant effects of man's interaction with his environment. These changes occur as the people attempt to acquire their needs for food, shelter, recreation and infrastructural facilities, however these interactions increases by the increases of population.

2.3.3.2 Studies in East Africa

Thuku, Gachanja and Almadi (2013) in their study of the impact of population change on economic growth in Kenya employed a vector auto regression estimation technique on annual time series' data for the period 1963 to 2009. The results from their study indicated that population growth and economic growth are both positively correlated and acknowledge that an increase in population will impact positively on the economic growth of a country.

Muyanga and Jayne (2012) studied the effects of population density on smallholder agricultural production and commercialization in rural Kenya. Using data from five panel surveys on 1,146 small-scale farms over the 1997-2010 periods, econometric techniques were used to determine the impact of increasing rural population density. The findings show that farm productivity and incomes tend to rise with population density up to 600-650 persons per km2;

beyond this threshold, rising population density is associated with sharp declines in farm productivity. Currently 14% of Kenya's rural population resides in areas exceeding this population density.

Still in Kenya, Osborne (2012) has also explored communities' views on changes brought by rapid population in different aspects like agriculture, social welfare, economic and environment. Communities' views observed were increase in land shortage, overcrowded, environmental pollution, and increases of family dependants, unemployment, and increasing strain on staff, space, and shortage of funding for social services delivery.

2.3.3.3 *Studies in Tanzania*

In Tanzania a study done by Madulu (2005) to assess the impacts of population pressure and poverty alleviation strategies on common property resource availability in rural Tanzania specifically Mabuki and Maganzo villages in Mwanza and Shinyanga regions. It has demonstrated various changes occurred due to demographic changes and its implication to the lives of local people in the usage of common resources. Madulu found out increased environmental degradation, accelerated food insecurity, increased poverty, diminishing common property resources, increased land use conflicts, and creation of a landless class at the village level have been boosted by increase of population pressure.

Oucho and Mtatifikolo (2009) conducted a comprehensive analysis of population dynamics and poverty reduction in the United Republic of Tanzania in the context of MKUZA and MKUKUTA The study employed various methods and suggested that population density is not a serious problem in Tanzania main land (except for some pockets of “overpopulation” and “extreme under-population”) but is evidently a problem in Zanzibar. In cities on both sides of the Union, population density is in crisis proportions relative to service capacities in health, education, sewerage and water, transport and general congestion.

2.3.3.4 Comparison of data in different regions

The literature discussed and analysed above, has explored various impacts of population growth in different context and in different regions. In general impact like food insecurity, increased poverty, diminishing common property resources, increased land use conflicts, and creation of a landless class, unemployment (Agarwal, 2014; Imoisi, Olatunji & Ubi-Abai, 2013; Madulu, 2005;Muyanga & Jayne, 2012; Omofonmwan & Osa-Edoh, 2009; Osborne, 2012; Oucho & Mtatifikolo, 2009; Thuku, Gachanja & Almadi, 2013)

It has been observed that across all regions there are congruent impacts observed but in a place like Kenya some scholars’ findings are different from one another for instance Thuku at el and Muyanga at el. Thuku at el, noted that increase in population will impact positively on the economic growth which it is country to Muyanga at el whom confirmed that productivity and incomes tend to

rise with population density but rising of population density is associated with sharp declines in farm productivity. The differences of findings are might be due to differences in the contexts of the studies for instance Muyanga at el study focus only in Agriculture which mostly practiced in rural areas while Thuku at el, focus on economic context which cut across various sectors and which acknowledge population growth to be among factors of economic growth because, population growth provides market, and labour.

2.4 Research gap

Various studies have been carried out related to population growth like impacts of rapid population growth, population control and issues relating to family planning. Knowledge attitude and practice related to population growth has not yet been touched especially in Tanzania. So this study is going to explore more about knowledge attitude and practice relate to issues of population growth in Dodoma in particular.

2.5 Chapter summary

Theoretical perspectives included theories of population and theoretical issues related to family planning. Empirical literature review included discussion and analysis of studies on family size preference, knowledge, attitude and practice relating to family planning as well as issues in population growth. This study has

identified a gap in the literature relating to population growth in Central Tanzania, Dodoma in particular.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The study aimed to investigate knowledge, attitude and practice related to issues concerning population growth in Chang'ombe Street in Dodoma Municipal, Central Tanzania.

This chapter presents the overall research design, location of the study and sample of the study, sample size, sampling techniques which were used to select participants, methods for ensuring validity and reliability, data collection technique used to collect relevant information and data analysis methods and plan.

3.2 Research design and approach

3.2.1 Research design

This study employed a survey research design. A survey is a method of collecting data in a consistent way. It is useful for documenting existing community conditions, characteristics of a population, and community opinion (Collie & Collie, 2009). The design involved the researcher in collecting data directly from participants using an interview method. This survey was non-experimental because variables were not manipulated (Belli, 2008).

This study can be considered to be a descriptive study because it is concerned with conditions, practices, structures, differences or relationships that exist, opinions held, processes that are going on or trends that are evident in a particular area (Kothari, 2004).This survey was cross-sectional because data were gathered once from each participant within a limited time period (Kothari, 2004).

3.2.2 Research approach

This study employed both qualitative and quantitative research approaches. Qualitative research approaches was used to explore and understanding the meaning that individuals or groups ascribe to a social or human problem. The process of research involves data typically collected in the participant's setting, data analysis inductively building from particulars to general themes, and the researcher making interpretations of the meaning of the data (Mason, 2002). In this approach, the researcher was able to capture the community's opinions and views through the use of open-ended questions in an interview method.

A quantitative research approach is used for testing objective theories by examining the relationship among variables. These variables, in turn, can be measured, typically on instruments, so that numbered data can be analyzed

using statistical procedures. In this study relationship among variables was examined through Chi square analysis (Neumann, 2009).

3.2.3 Data type and source

In this study primary data was involved. Kothari (2004) understands primary data as “those data which are collected afresh and for the first time, and thus happen to be original in character’’ pg 95. Primary data was obtained from the participants of the study through the use of interview schedules.

3.2.4 Study area

This study was carried out in Dodoma Municipality at Chang’ombe Street. Dodoma is the capital city of Tanzania. According to the 2012 national census, the region had a population of 2,083,588 and a 3.4% annual population growth rate. The region lies in the eastern central part of the country; it is primarily semi-arid and covers an area of 41,311square kilometres. The region is bordered by Manyara region to the north, The Singida region to the west, the Iringa region to the south and Morogoro region to the south-east. However Chang’ombe Street in Dodoma Municipality was identified as the study area. Chang’ombe Street was selected because it has a 5.7% annual population growth rate and population density of 60.7 per 1 square kilometre compared to the national average population density of 50.62 per 1 square kilometre and 52. 07 regionally.

3.2.4 Study population

Mugenda and Mugenda (2003) understand population as an entire group of individuals, events or objectives having common observable characteristics. It is the aggregate of all that conforms to a given specification. The target population of this study were all men and women of reproductive age in a range of 20-34, 35-49 and 50-54 and above 65 years living in Chang'ombe Street in Dodoma Municipality. Other demographic data considered were sex, education level, marital status, religion and occupation.

3.3 Sampling

3.3.1Sampling procedure

This research employed non-probability sampling to identify Chang'ombe district within Dodoma Region. Probability sampling is understood as a sampling procedure which every element in the population has an equal chance to be selected in the study (Kothari, 2004). In this study probability sampling was used to identify the participants. The researcher firstly listed all hamlets of the street and then randomly chose four hamlets. In these hamlets households were randomly chosen and participants were identified from the respective households by regarding the inclusion criteria.

3.3.2 Sample size

Recommended sample size in mixed methods studies varies from 15 to 60 (Bernad, 2000; Creswell, 1998; Morse, 1994). This study has employed 40 participants who are both men and women in the age range of 20-34, 35-49 and 50-54 and above 65 years. Hence this size of sample allowed statistical testing of the quantitative data and effective collection of qualitative data which is more effective in the small size of sample.

3.3.3 Sample inclusion criteria

Criteria used to recruit sample were including: participants who were willing to participate in the study and being able to give informed consent; all participants with age 20 and above male and female.

3.4 Study Procedures

The researcher first sought permission to collect data from director of postgraduate SJUT and then Chang'ombe Street office. The study involved one enumerator and the researcher himself. The enumerator was responsible to conduct Data collection tools were prepared in English language and translated into Swahili language. This is because Swahili is the commonly used language in the study area. Before collecting data required for the study, the researcher briefed the enumerator on the ethical considerations to be observed during data collection and on content of data collection methods. Before collecting data

required for the study, the researcher carried out a pre-test to check whether the research tools were well understood. The pre-test involved three respondents randomly selected from the study area. Those who involved in the pre-test did not participate in the main study. The collection of data took 8 days. The participants for the interview were obtained from their households, and informed consent was obtained before beginning the interview. Then data was processed before analysis.

3.5 Data collection tool: semi-structured Interview

The interview method of collecting data involves presentation of oral-verbal stimuli and reply in terms of oral-verbal responses (Kombo & Tromp, 2006). In this study the researcher used the interview schedule shown in appendix B which has 35 questions and is divided into four parts. Part one questions are about demographic data, part two enquire about family size, part three inquire about knowledge, attitude and practice of family planning finally party four inquire about perception of population growth.

3.6 Validity and reliability of research instruments

3.6.1 Validity

Kombo and Tromp (2006) defined validity as ‘a measure of how well a test measures what it is supposed to measure’. In order to ensure the tools provide right answers in this study, content validity was addressed by careful inclusion of

key issues identified in the literature review, with input from experts in the field, while adhering to the needs of objectives. Pretesting of the tools was done to check that it is understandable to participants.

3.6.2 Reliability

Reliability has to do with the accuracy and precision of a measurement procedure (Kothari, 2004) the researcher involved the enumerator whom was trained and understand the objectives of the study hence he was able to focus on the major themes needed by the study. Furthermore the researcher used a sample size which enables to collect relevant information which was mainly qualitative and few quantitative data.

3.7 Data Analysis

Thematic analysis was done while analysing qualitative data. Several steps were undertaken including identifying and coding concepts and grouping of concepts into themes and sub-themes. Data were reported using multiple responses while quantitative data analysis used simple statistics including percentages, mean and statistical measurement like chi square to explore relationship between variables.

3.7 Ethical considerations

3.7.1 Clearance

Research work needs to be done with particular attention to ethical issues (Cohen *et al,* 2001). Ethical clearance for this research was requested and provided by St John's University of Tanzania (SJUT) ethical committee. Permission for collecting data was obtained from the relevant authorities including the Municipal Council and District Council. These letters are shown in appendices A.

3.7.2 Informed consent

Informed consent involves the procedure by which an individual may choose whether or not to participate in a study (Best & Kahn, 2006; Jones &Kottler, 2006). Participants should understand the subject matter of the study, the risk and the benefit of the study and why he or she should participate in the study. Voluntariness is concerned with each individual's ability to exercise the free power of choice without the intervention of force, fraud, deceit, duress, or other forms of constraint or coercion. Here participants were having the freedom to join the study or not to do so without any influence from the researcher, and be free to withdraw at any stage of the study. An example of the informed consent form is shown in appendix 'A'

3.7.3 Confidentiality

Data provided by participants should be held in strict confidence (Drew & Hardman, 2007). In this study no names were referred to in the text, codes were used, and data was stored carefully in a password protected computer.

3.7.4 Privacy

Privacy involves a state of being removed from public view or knowledge (Drew & Hardman, 2007). Participants were protected from being viewed or overheard by the public. In this study interviews were done away from the public, which was at participants' homes.

3.7.5 Risk/benefit analysis

This involves a comparison of the potential benefits of a given study with the potential risks to the participants. A potential risk of the study was the use of time while a potential benefit was raising awareness to the participants with regard to issues of population growth. Time used was about 30 minutes for interviews, and this was by appointment to reduce disturbance.

3.8 Dissemination of findings

A summary of the study findings will be provided to the community leaders, and the full report will be made available in the University library.

3.9 Study limitations

The findings are not generalizable because a small simple was used in a limited geographical area, and the study population was not typical of Tanzanian society.

3.10 Chapter summary

The research methodology covered the research design, the study site, the study population, the methods of data collection, the method of ensuring validity and reliability, the data analysis method and plan, and the ethical consideration. The study was conducted at Chang'ombe Street in Dodoma region and survey research design was used. Both qualitative and quantitative data was collected from men and women with reproductive age selected through randomly sampling. Data collection method was semi-structured interview method.

CHAPTER FOUR

RESULTS AND DISCUSION

4.1 Overview

The study aimed to investigate knowledge, attitude and practice related to issues concerning population growth in highly populated areas of Dodoma, Central Tanzania. This chapter presents the data collected from the field in line with the research questions.

4.2 Demographic data

Demographic characteristics of the respondents in this study include sex, age, marital status, education levels, and religion of respondents as well as occupation of respondents, as shown in Table 4.1. The quota sampling ensured that there was equal gender and age level representation. The religious affiliation of participants is atypical of the Tanzanian population as a whole, but appears to be representative of this study population. Other demographic features also appear to be representative of this community.

TABLE 4.1 DEMOGRAPHIC DATA OF PARTICIPANTS (N = 40)

Demographic information		Frequency	Percentage (%)
Sex	Male	20	50
	Female	20	50
Age categories	20-34	10	25
	35-49	10	25
	50-54	10	25
	Above 65 years	10	25
Education Level	Not attended school	6	15
	Primary level	24	60
	Secondary level	8	20
	College/university	2	5
Marital status	Married	30	75
	Single	7	18
	Separated	2	5
	Divorced	1	2
	Widowed	0	0
Religion	Muslims	31	78
	Roman Catholics	8	20
	Protestant	1	2
Occupation	Employed	4	10
	Retired	1	2
	Doing small business	15	38
	Labourers	20	50

4.3 Research Data

4.3.1 Importance of having children

The responses to an open ended question "what does having children mean to you" were analysed according to themes and are presented in Table 4.2. The most frequently reported answers were that children help in old age and that children are a sign of God's blessing. Currently, there is no population wide old age pension scheme in Tanzania, so it is understandable that children are important for support in old age (Muhoza et al.2014). The child as a blessing from God is congruent with the Muslim Scriptures “Children are blessings not possessions” (Quran 5:2) and that of Christians “Behold, children are a heritage from the Lord, the fruit of the womb a reward” (Psalm 127:3). These findings align with the findings of Atiqual Had, Vanwing and Hens, (2010) in India who observed that children help their parents during their old age and they are currently helping them to take care of domestic duties like cooking and fetching water. These are important factors in large family size in many developing countries (Muhoza et al.2014). On the other hand in African, Tanzanian and in the study area, children are considered to have a great value in the families. Children are helpful in helping their parents in their old age and in performing home domestic activities. Further more children dignify both women and men in the society hence families with no children are considered as non sacred. This

implies that most families in the study area are having children because they want to meet social, economical, cultural and spiritual aspiration.

TABLE4.2 MULTIPLE RESPONSE OF PARTICIPANTS ON THE IMPORTANCE OF HAVING CHILDREN (N=82)

Importance of having children	Responses	
	Frequency	Percent
Children helps during old age	34	41
Children are a sign of God's blessing.	30	37
It is the prestigious thing	13	16
Obeying God's command to have children and fill the world	5	6

4.3.2 Participants' preference on number of children

The analysis of a closed ended question "how many children do you wish to have?'' shows that some of the participants preferred three or four children while 32% others preferred to have five up to six children and a few preferred to have one up to two children and seven children and above, as shown in Table 4.3. These findings suggest that community members in Chang'ombe Street have a variety of family size preferences. These findings correspond with those of Muhoza, Broekhuis and Hooimeijer (2014) whom conducted a study in East Africa and found some families preferred three or four children and those

parents who had completed their reproduction had five children up to six children. However the differences in the preferences of number children in the study area imply that those whom choose one to four children have fair knowledge on issues of population control hence are likely to use different population control measures like family planning compare to those whom prefer five to more than seven children in the study area.

TABLE 4.3 NUMBER OF CHILDREN PREFERRED BY PARTICIPANTS (N=40)

Number of children preferred	Responses	
	Frequency	Percent
1-2 children	6	15
3-4 children	19	48
5-6 children	13	31
7 children and above	2	5
Total	40	100

4.3.3 Participants' reasons for the option of the number of children

Findings on the open ended question "what are the reasons for the option of the number of children?" As shown in Table 4.4, it was found that the preference of number of children is influenced by parents' ability to take care of their children and also the influence of religious belief that it is the God will to bare such number of children. Generally these findings reveal that participants choose

certain number of children because they accept children as the gift from God and of regard their ability to take care of the children. These findings correspond with findings of Atiqual Had et al (2010) in India who observed that low ability of parents to provide their children with various services like education, food and good health care made some of parents to choose small number of children. They also observed that scarcity of land for production was important, but this was not mentioned by the participants in this study, presumably because the area under study is urban. The findings imply that option of the number of children is different in the families hence some families choose number of children by regarding their ability of taking care of them while others are regarding its God's will to have certain number of children. However option of the number of children of the family by regarding its ability of taking care of them it's conform to Malthus theory.

TABLE 4.4 MULTIPLE RESPONSES OF PARTICIPANTS ON THE REASON FOR FAMILY SIZE PREFERENCE (N = 44)

Reason for number of children	Responses	
	Frequency	Percent
God's will	19	43
Ability to take care of the children	25	57
Total	44	100

4.3.4 Participants' responses on sex preference of children

It was noted that the most frequently reported participant response was to have one or two male children as shown in Table 4.5. Hence the findings correspond to Odu et al (2005) of Nigeria who observed that, men prefer male children rather than female children. These findings imply that both men and women will have option to add number of children so as to acquire a child with the sex preferred by either husband or wife, hence this will lead for a family to have no specific planned number of children to have in their life time.

TABLE4.5 PARTICIPANTS RESPONSES ON SEX PREFERENCES OF CHILDREN

Number of children preferred	preferred sex	
	Male	Female
0 number of children	4 (10%)	1 (3%)
1-2 children	29 (72%)	20 (50%)
3-4 children	7 (17%)	17 (42%)
5 and above	0 (0%)	2 (5%)

4.3.5 Reason for sex preference

As presented in table 4.6, it is the discussion for the open ended question "what are the reasons for preferring such sex?" The results show that, some participants' comment that all children are given by God as gift, while others

comment that male children will inherit their clan names and female children are helpful to their mothers. With these reasons imply that majority of participants are satisfied to have children of any sex because (46%) observed that all children are given by God. These reasons are alike to reasons provided by Odu et al (2005) of Nigeria who observed that men wish to reproduce male children mainly because they wanted children that will carry on the family name. These findings are similar because most of African societies are patriarchies hence most men wish to have male children whom will inherit clan names.

TABLE4.6 MULTIPLE RESPONSES OF PARTICIPANTS ON REASONS FOR SEX PREFERENCE

Reported reason for sex prefers by the community members	**preferred sex**	
	Frequency	Percent
All children are coming from God as a gift	28	50
Male children will inherit clan names	18	26
Female children will help their mother to carry domestic duties	15	25

4.3.6 Factors influencing preferred family size in the study area

A numbers of factors have been hypothesized to have an influence on the family size including sex of participants, age of participants, and marital status of the participants, level of education, religion of the participants, as well as occupation

of respondents. The following are analyzed factors for preferences on number of children.

4.3.6.1 Age of participants and preferred number of children

Age is the key demographic variable which was observed to have a strong association with the preferred number of children in the community of enquiry (X^2=22.735, p=0.007). A younger age of adult correlates with a lower number of children preferred, and older age correlates with a larger number of children preferred. This difference matches with the findings of Uddin, Yano and Murakami (2011) of Bangladesh who observed that family size increases with the increase in age of respondents. This implies that in the study are those with young age of adult preferred small size of children compare to those with old age adults.

4.3.6.2 Sex of the participants and preferred number of children

The analysis show that there is no statistically significant association between sex of the participants and preferred number of children (X^2*=2.035, p=0.565).* Further analysis indicates that, similar proportions of male and female participants preferred five to six children hence some of participants children either male or female are given by God. These findings differ from those of Dhillon and Singh (2010) of India who observed that male parents usually prefer male children rather than female children, hence those who prefer male children

and they don't have one, will try to find one until they get one without regarding the family size. In the study area, sex have not been able to justify association with preferred number of children, this imply that family have other option which dictate them to choose number of children such as God blesses and family ability to take care of the children.

4.3.6.3 Marital status of the participants and preferred number of children

The findings show that there is association between marital status and the preference of number of children by (X^2= 17.009, p=0.049) participants who are married were reported to prefer more children than those who are single, divorced and separated. These findings align with findings of Uddin et al (2011) who observed that the desired family size and the average number of children increases with increased age at marriage. Those who are single may opt even not to bear children. This implies that participants whom are married are in chance to have more children if they are not yet planed how many children to have in their life time, however those whom are not married may not have children because of social and economical reasons for instance one whom having children out of the marriage considered as unfaithful.

4.3.6.4 Level of education of the participants and preferred number of children

The findings show that there is strong association between the number of children preferred by participants and their level of education (X^2=31.678, p=0.000). These findings imply that an increase of the levels of education of participants decreases the preferred number of children. These findings align with those of Uddin, Yano and Murakami (2011); Muhoza, Broekhuis and Hooimeijer (2014) who indicate that desired number of children increases with a decrease in the level of education.

4.3.6.5 Religion of the participants and preferred number of children

The sample did not allow a meaningful analysis on the basis of religion because 98% of the participants were Muslim or Roman Catholic and these groups are known to favour large families, and there were not enough Protestants to be able to statistically test differences.

4.3.6.6 Occupation of the participants and preferred number of children

An analysis of the findings show that there is significant association between occupation of the participants and the preferred number of children by (X^2=16424, p=0.059). The majority of the participants who are labourers preferred five or six children (25%), those who are doing small business preferred three or four children (23%) compared to those who are employed who

preferred one to two children. These results imply that majority who are not employed have high chances of having many children compared to those who are employed. These findings match with those of Pandey et al (2012) of India who observed that people with a high level of education and have formal jobs were seen to have a preference for a small family size compared to those with low level of education.

4.4 Knowledge attitude and practices of community members on family planning methods in Chang'ombe Street.

Different closed and open ended questions were asked to the participant so as to understand knowledge attitude and practices of community members on family planning methods in Chang'ombe Street. Questions were concerning the meaning of family planning, awareness of different family planning methods, community opinions on the effect of different family planning methods attitude of family planning methods and general approve or disapprove of family planning.

4.4.1 Knowledge of the community regarding the meaning of family planning

An opened question "What do you understand by the term family planning?" was asked to the participants. Analysis was done through sorting major themes which have described by participants as shown in Table 4.7, the majority are aware that family planning is the act of deciding how many children one wishes

to have in his or her life time and when to have them. The findings are congruent with those of Lwelamira et al., (2012) who conducted a study in Mpwapwa district, Tanzania comment that 80% of participants have knowledge of the family planning.

TABLE4.7 KNOWLEDGE OF THE COMMUNITY REGARDING FAMILY PLANNING (N=40)

Knowledge about meaning of Family planning	Responses	
	Frequency	Percent
Bearing children by interval which allow a child to grow healthy	19	48
Is planning of when to have children and how many children	15	37
Is planning of number of children one wish to have	4	10
Don't know	2	5
Total	40	100

4.4.2 Awareness of different family planning methods

Participants were asked to name FP methods that they know, without any information being provided to them. The answers were analysed and shown in Table 4.8. Birth control pills and injection method were commonly known while methods like emergency contraceptive pills and IUD were less well known. These findings are similar to NBS Tanzania and ICF Macro (2011), Dhingra,

Manhas, Kohli, and Mushtaq, (2010) and Aninyei et al, (2008). These findings imply that there are methods which are well known because of its availability and accessibility however methods like emergency contraceptive pills and IUD were not well known because they are not available and not accessible.

TABLE4.8: AWARENESS OF DIFFERENT FAMILY PLANNING METHODS (N=40)

Method of Family planning	Responses	
	Yes	Percentage
Birth control pills	40	100
Injection method	40	100
Male condom	38	95
Female condom	38	95
Natural methods	29	73
Implant	21	53
IUD	8	20
Emergency Contraceptives pills	7	18

4.4.3 Community opinions on the effect of different family planning methods.

A multiple response analysis shown in Table 4.9 indicates that 31% of participants are not aware of any side effects of the family planning methods. Different side effects were mentioned which occur with the use of some methods. However the mentioned side effects by participants were not specified to specific methods hence participants understanding on these effects clear. Awareness of the different sided effects of the family planning methods might increase fear of these methods; Lwelamira at el (2012) found that most people do not use family planning because of their perceptions of the side effects. However, findings imply that some participants in the study area have no adequate understanding on the side effects of various family planning methods; hence what is known is miss conception.

TABLE4.9: MULTIPLE RESPONSES ON COMMUNITY OPINIONS ON THE EFFECT OF DIFFERENT FAMILY PLANNING METHODS.

effect of different family Planning methods	Responses	
	Frequency	Percent
Cause's prolonged menstruation periods	24	37
Change in morphology	16	25
Stomach and head aching	1	1
Triggers cervical cancer	4	6
Don't know	20	31

4.4.5 Attitude to family planning

Here participants were asked a close ended question "In general do you approve or disapprove family planning?" Findings regarding the question are described in Table 4.12. The majority of participants approved of the use of family planning. These results align with those of Aninyei et al, (2008) who observed that more than 75% of respondents approved of family planning methods. These findings imply that participants have positive minds toward usage of family planning, this means that if participants will opt to use family planning they will have ability to control their number of children hence this increase ability to control population.

TABLE4.11: ATTITUDE TO FAMILY PLANNING

Approve or disapprove of family planning	Responses	
	Frequency	Percent
Approve	23	57
Disapprove	15	38
Don't know	2	5
Total	40	100.0

4.4.5.1 Reason for disapproving and approving usage of family planning

As indicated in Table 4.13 the majority of the participants' disapproval of usage of family planning methods relates to religious beliefs or fear of the side effects. These findings are congruent with those of Broekhuis and Hooimeijer (2014) who observed that religious views of respondents prevent them from using modern family planning methods .Mao (2007) found that 53% participants were concerned that contraceptives have a lot of side effects. On the other hand, reasons like to stop having children after couples has the number of children they want , to space children were the motives for approving usage of family planning as shown in the table 4.13.

TABLE 4.12: PARTICIPANTS REASONS FOR DISAPPROVING OF FAMILY PLANNING METHODS (N=15)

Reasons	Responses	
	Frequency	Percent
because of side effects	12	80
Because of my religion does not approve	15	100

TABLE 4.13: PARTICIPANTS REASONS FOR APPROVING OF FAMILY PLANNING METHODS

Reason for approval	Responses	
	Frequency	Percent
To stop having children after a couple has the number of children they want	23	100
To space children	17	74
To have sexual pleasure and avoid unwanted children	14	60

4.4.5.2 Community attitude towards the use of family planning methods

The close ended question "Do you approve of the use of family planning methods in the following situation?" Followed by five fixed options as shown in table 4.14. The most accepted reason for the use of family planning was "To

stop having children after a couple has the number of children they want?"These findings are not congruent with those of Lwelamira et al, (2012) who observed that men had a negative attitude towards family planning methods which impacted to the low usage of modern contraceptives in Mpwapwa district in Dodoma. The divergence of the findings might by influenced by level of knowledge, geographical location of the study areas, occupation, age and culture.

TABLE4.14: COMMUNITY ATTITUDE TOWARDS THE USE OF FAMILY PLANNING METHODS FOR SPECIFIC REASONS

Attitude of family planning methods	Responses		
	Approve		
	Female	Male	Percent
To stop having children after a couple has the number of children they want	16	14	75
To stop having children after a couple has the number of children they can support	13	12	62
If the wife has health problem	9	16	62
To space children	12	12	60
For any other reason	15	8	57

4.4.6 Practices of family planning methods

4.4.6.1 Types of family planning methods used by community members in Chang'ombe Street

Basing on the open ended question "Which contraceptive methods or family planning methods do you normally use?" analysis was done and presented in table 4.15. Data indicate that, most people are using male condom, natural methods and few used injection method, and implant, while methods like birth control pills, emergency contraceptive pills, IUD and female condoms were not used by the participants. These findings imply that community members despite their knowledge and attitude they have towards family planning most prefer to use male condoms hence usage of other methods is very low (only 24% of participants are using FPM). These findings alike to Dhingra, et al (2010) of India whom comments that male condoms were most favoured contraceptive across rural and urban settings (81% males and 77.5% females). But these findings were not congruent with Mosha and Ruben (2013) of Tanzania who observed that 73 % of the community had not used family planning while few are using condoms and natural methods. The differences between these findings might be influenced by geographical disparities and even availability of different contraceptive methods in the given area.

TABLE4.15: FAMILY PLANNING METHODS CURRENTLY USED BY COMMUNITY MEMBERS IN CHANG'OMBE STREET.

Method of Family planning	Responses	
	Frequency	Percent
Birth control pills	0	0
Injection method	6	15
Implant	4	10
Emergency Contraceptive pills	0	0
IUD	0	0
Male condom	38	95
Female condom	0	0
Natural methods	29	73

4.4.6.2 Reason for usage of particular methods of Family planning

The responses to the open ended question "Why do you prefer to use these contraceptive methods or family planning methods?" are shown in the table 4.16. Its shows that participants decide to use some methods because they expect no side effects, other reasons were "some methods are easy to use" and some methods are "affordable and available". With this picture it implies that, most of participants choose such methods because they have no side

effects observed, also it is affordable and available. These findings are supported by Dhingra et al (2010) of India who observed that about 81%of males and 78% of females use condoms because are most favoured contraceptive across both settings of rural and urban. And Tanzanian studies (Mosha& Ruben, 2013; TDHS, 2010) found birth control pills, injectables, and male condoms are mostly used in Tanzania for family planning. These findings differ because of differences in availability, accessibility, attitude and level of knowledge of communities towards family planning. However these findings imply that some participants in the study area are likely to use family planning methods which are available and affordable in the study area and which are easy to use, hence this make most of family planning methods which are not available in the study area not to be known and used by the majority participants.

TABLE4.16: PARTICIPANT'S REASONS FOR USAGE OF PARTICULAR METHODS OF FAMILY PLANNING

Reason for using FPM	Responses	
	Frequency	Percent
Easy to use	23	31
No side effects observed	30	41
It is affordable and available	21	28

4.4.6.2 Most used methods in family planning by couples in the study area

The findings show that natural methods are the most used methods of family planning among participants followed by male condoms, injections and implants. The findings are comparable with Aninyei et al, (2008) of Nigeria who observed more than 43% of respondents are practicing natural methods including safe periods and withdrawal. These findings imply that modern contraceptives are rarely used compare to natural methods hence this leads to minimal exercised of modern contraception.

TABLE 4.17: MOST USED METHODS IN FAMILY PLANNING (N=40)

Most family planning method used by the couples	Responses	
	Frequency	Percent
Natural methods	22	55
Male condom	9	23
Injection	6	15
Implant	3	7
Total	40	100.0

4.4.6.3 Plans on using different family planning methods in future

Participants were asked an open ended question “Do you plan to use a different

family planning method in future? Why?" the question aimed to determine the pool of future demand for the service. Those who expect to use family planning in the future range between 20 to 50 years. This implies that young adults are more likely to use family planning lather than older adults.

4.4.7 Perspectives of community members on population growth in Chang'ombe Street

4.4.7.1 Community understanding on meaning of population growth

The responses to the open ended question "What do you understand by the term "population growth?" produced a variety of responses that fell into 4 categories, as shown in table 4.18. The responses indicated that the majority of participants have a correct understanding of the term. This implies that participants have had some formal or informal education on the topic.

TABLE4.18: PARTICIPANTS' UNDERSTANDING OF THE MEANING OF POPULATION GROWTH.

Meaning of population growth	Responses	
	Frequency	Percent
Bearing children without good plans which lead to rapid increase of people	12	32
Rapid increase of number of people in a given area at certain period of time	12	32
Increase of number of people in an area	10	27
Don't know	3	8
Total	40	100

4.4.7.2 Awareness of areas which are most affected by population growth in the world

Various countries were mentioned by participants as the most affected by population growth in the world where China was mostly mentioned to be impacted by population growth followed by India and Nigeria, and other participants were not aware. However the findings are supported by the United Nations (UN) (2015) which highlighted China with 1,357,380,000 people and India with 1,213,370,000 people as most the most populous areas in the world.

This understanding of the participants on which areas are most populated in the world it implies that participants in the study area are update on issues of population growth and they have attention on the issue.

TABLE4.19: PARTICIPANTS' RESPONSES IN RELATION TO AREAS MOST AFFECTED BY POPULATION GROWTH

Areas which are most affected with population growth	Responses	
	Frequency	Percent
China	30	42
India	23	32
Nigeria	11	15
Don't know	8	11

4.4.7.3 Impact of population growth in the world / Africa / Tanzania

In response to the open ended question "What is the impact of population growth in the world / Africa / Tanzania?" Participants responded in various ways that were grouped in four themes, as shown in Table 4.20. Three of these impacts were negative impacts and one was positive. The responses are congruent with the findings and opinions of scholars such as Imoisi, Olatunji and Ubi-Abai (2013) and Deshmukh (2012) and suggest that the participants have

some understanding of the impact of population growth. However these findings implies that issues of population growth is well known and its impact have been noted, hence the government have to prepare strong policy which reflects measure of control population growth in the country and in the study area in particular.

TABLE 4.20: IMPACT OF POPULATION GROWTH IN THE WORLD / AFRICA / TANZANIA

Impact of population growth	Responses	
	Frequency	Percent
Increase of family dependants	31	78
Reduced living standard	24	60
Increase of trade	13	33
Lack of employment	10	25

4.4.7.4 Participant's opinions on whether population growth is a problem in Chang'ombe

Participants in this study agree that there is a problem of population growth in their locality. The majority of all participants suggested that there is a problem, as shown in Table 4.21. These findings are similar to findings in Kenya

(Osborne, 2012) in overpopulated areas of Nairobi and Kisumu. These findings imply that people knows what population growth is and knows how it is likely to have overpopulation as the result that participants in the study have understand what is happen in their locality and will have to take action to address the situation.

TABLE4.21 PARTICIPANT'S OPINIONS ON WHETHER POPULATION GROWTH IS THE PROBLEM IN CHANG'OMBE

Opinions on whether population growth is the problem in Chang'ombe	Responses	
	Frequency	Percent
Yes	38	95.0
No	2	5.0
Total	40	100.0

4.4.7.5 Impact of population growth in Chang'ombe Street

Basing on the open ended question "What makes you think that population growth is a problem in Chang'ombe Street in Dodoma?" Participants responded in various ways that were grouped in six themes, as shown in table 4.22. Five of

these impacts were negative impacts and one was positive. The responses are congruent with the findings and opinions of scholars such as Osborne (2012) of Kenya who observed similar problems caused by population growth. This implies that participants have some understanding of the local impact of population growth. The findings imply that participants have adequate understanding on the issues of population growth because their analysis about the impact of population growth reflects their understanding.

TABLE4.22: PARTICIPANTS OPINIONS ON IMPACT OF POPULATION GROWTH IN CHANG'OMBE STREET

Impact of population growth	Responses	
	Frequency	Percent
There is unplanned settlement	26	13.7
Inadequate provision social services	38	20.0
Increase of business opportunities	17	8.9
Increase of number of dependants in the families	32	16.8
Increase of immoral practices like robbery, rapes and drug abuse	30	15.8
Increases of environment pollution	22	11.6

4.4.7.6 Impact of population growth on individuals in Chang'ombe Street

The lives of the people in Chang'ombe are reported to have changed in different aspects because of population growth, as shown in table 4.23. This suggests that the issue of population growth has impacted individuals in a negative way while there are a few benefits such as growth of trade. These findings implies that there are families in the study area which have been affected by population growth because those big families involve increase of dependency ratio to the family heads, also leads individuals to lack jobs which reduce national productivity.

TABLE4.23: PARTICIPANT'S OPINIONS ON IMPACT OF POPULATION GROWTH TO INDIVIDUALS IN CHANG'OMBE STREET

Impact of population growth	Responses	
	Frequency	Percent
Increases of homeless and jobless people	10	9.3
Increase of family dependants	31	28.7
increase of trade	13	12.1
Increases of moral decay	30	27.7
Increase of poor living standard	24	22.2

4.4.7.7 Opinions on whether Chang'ombe is a good place to stay

A majority of the participants observed that Chang'ombe is not a good place to stay, as shown in Table 4.24. These findings imply that participants in the study area have feeling to live in the place which is not conducive for their well being and this is because of the severe impacts of population growth.

TABLE4.14: PARTICIPANT'S OPINIONS ON WHETHER CHANG'OMBE IS A GOOD PLACE TO STAY

Opinions on whether Chang'ombe is the good place to stay	Responses	
	Frequency	Percent
Yes	6	15.0
No	32	80.0
Don't know	2	5.0
Total	40	100.0

4.4.7.8 Reasons for opinion that Chang'ombe is not a good place to stay

In order to understand why participants have negative views about Chang'ombe participants were asked to provide reasons for their opinions. A multiple response analysis was made, and participants talked about congestion of people, existence of unplanned settlement and the existence of antisocial behaviour in the study area. Data on this issue is shown in table 4.25; these

findings align with those of Osborne (2012) in Kenya. Participants opinions on reasons for Chang'ombe to be not a good place to stay imply that people have already been tortured by the population growth and they need new action to be put in place to acquiescent the situation .

TABLE4.25: PARTICIPANT 'S REASONS ON WHY CHANG'OMBE IS NOT A GOOD PLACE TO STAY

Reasons for opinion that Chang'ombe is not a good place to stay	Responses	
	Frequency	Percent
There is the congestion of people	32	36.0%
There is unplanned settlement	31	34.8%
Existence of antisocial behaviours	26	29.2%

4.5 Summary

The main objective of the study was to investigate knowledge, attitude and practice related to issues concerning population growth in community members of densely populated areas of Dodoma, Central Tanzania.

Demographic data suggest that the sample appears to be representative of the Chang'ombe population in some respects, but is not typical of region in respect to religious affiliation of Islam. Other findings reveal that age, education level,

marital status and occupation are statistically significant ($p<0.05$) associated preferred number of children. However number of children has increased as the age of participant increased while it reduced as the level of education of participant increase. On the other hand 41.5% of participants commented that they want to have children that they can help them in their old ages. In addition, 95% of participants were aware of meaning of family planning although not all methods were known by participants and side effects. Most known family planning methods were short term methods like male and female condoms natural methods, injections and birth control pills, but the permanent methods were little known for instance implant, IUD and emergence contraceptives. Hence, (65%) of participants observed to have a positive attitude towards family planning, but only 24% report current use of family planning.

In the enquiry of perceptions on population growth the majority of participants (92%) were observed to have fair understanding of meaning of population growth and its impact while areas like China, India and Nigeria were mentioned to be most populated areas in the world. Problem like increase of environment pollution, existence of unplanned settlement, Inadequate provision social services, increase of number of dependants in the families, increase of ant-social practices like robbery, rapes and drug abuse were impacts of population growth were observed to exist in Chang'ombe ward. Despite of the challenges

of the population growth in Chang'ombe Street still it was observed to some individuals as a business opportunity 16.7 %.

CHAPTER FIVE

CONCLUSION AND RECOMMENDATIONS

5.1 Overview

This chapter summarizes main findings of the study and draws major conclusions based on the main findings of the study. The chapter also provides recommendations for action and for further research.

5.2 Conclusion

5.2.1 Factors which determine preferred family size in community members in Chang'ombe Street in Dodoma region.

Some participants comment that children are important because they help their parents during old age and children are a sign of God's blessing.

Ability to take care of their children and also the influence of religious belief that it is the God will to bare such number of children were reasons for the option of the certain number of children.

The conclusion from these findings is that socio-cultural and religious factors appear to be the dominant factors affecting family size, and individual considerations override any sense of concern for the environment or greater community in respect to family size preference.

Variables like age, education level, marital status and occupation are statistically significantly ($p<0.05$) associated with preferred number of children. The conclusion from this finding is that the population here is in a state of demographic change that is impacted by societal changes and that education is a major factor in changing behaviour.

5.2.2 Knowledge, attitude and practice of community members in Chang'ombe Street in Dodoma region on family planning methods.

Most participants were found to be aware of the meaning of family planning but had little depth of knowledge and some 'knowledge' was inaccurate. There was concern about side effects of family planning methods. Generally, in this study participants observed to have positive attitude toward family planning but have low response on the usage of family planning. The conclusion from this is that there is a lack of good education on these issues, and there may also be a lack of services in some areas, or a lack of variety of choice of methods. However this shows that the guiding policies regarding promotion of usage of family planning are not well implemented or are having shortcoming which leads communities to have inadequate information, and limits supply of contraceptives.

5.2.3 Perspectives of community members in Chang'ombe Street in Dodoma region on population growth.

Participants were found to have knowledge on the meaning of population growth, most areas affected by population growth and the impacts of population growth. Hence most participants commented that Chang'ombe is not a good place to live.

The conclusion here is that while the participants understand the general concept of population growth they have not seen their own role in creating the problem, and see it as an 'external' or 'uncontrollable' phenomenon. So efforts should be increased by both government and non government organisation to enlighten communities about issues of population growth and what is their role in controlling the situation.

5.4 Recommendations

The following recommendations are put forward in order to widen better understanding of population issues in the region and for more appropriate targeted strategies to be planned and implemented that will help to reduce rapid population growth:-

- The government and nongovernmental organization should ensure that family planning promotion programmes concentrate on the use of

contraceptives and promote changing perceptions of communities towards a small family norm.

- The government through ministry of education should ensure sensitization of the importance of individual behaviour in respect to long term caring for the population control. This should begin early in secondary school with family life education and responsible parenthood seminars. It is important to sensitise religious and community leaders on these issues, and ensuring that they teach on this.
- Government should promote pension, mortgage and savings schemes, and education on financial management that would help to lessen elderly people's dependence on their young relatives.
- Also the government should promote quality educational opportunities for all children and increase uptake of secondary education of which all members of the societies will be exposed to issues regarding family planning and population control which have direct impact on their lives.
- The government and nongovernmental organizations should insure accurate information about advantages and disadvantages of family planning, including action and side effects should be enlightened to the communities. This could be by teaching in sec schools, community groups, and provision of posters, leaflets, health education at clinics, radio programmes, individual and group sessions, social media.

- The government and nongovernmental organizations should ensure high quality services with a variety of family planning methods are available in this population group so as to widen options and access of such methods.
- The government and nongovernmental organizations should ensure promotion of sense of personal responsibility on issues of population growth because everyone is responsible on the expense of mortality and fertility, culture and religious beliefs which promote large families hence population growth.
- Although knowledge of family planning is high in the population but knowledge of specific methods is very low - particularly of long-term and permanent methods of contraception. Therefore, The government and nongovernmental organizations is needed to broaden the knowledge and availability of such methods of family planning of which will increase consumption.
- The government and nongovernmental organizations should ensure further sensitization programmes to sensitize the communities about the consequences of population growth and appropriate measures to be taken to control population. Curriculum change for secondary schools which should encompasses issues of population growth in the broad sense and training secondary teachers in more depth in population

growth and its impact hence they can descend appropriate information to pupils.

5.6 Recommendations for further research

The current study based on small sample size taken from only a ward of Dodoma municipal Council. Therefore, the results cannot be generalized to other district of Tanzania especially in the analytical terms. Therefore, the following areas are recommended for further research;

1. Bigger scale with large sample size should be done on knowledge, attitude and practice related to issues concerning population growth in community members of densely populated areas.

2. Another area that has not been investigated is that contribution of availability of family planning methods in controlling population growth in Tanzania.

3. The other recommended area of research is on influence of social - cultural practices in population growth.

4. Action / intervention studies in which specific recommendations are carried out to assess which recommendations are most effective, example long-term effectiveness of family life education on adolescent sexual behaviour, long-term effectiveness of community education

comparing different methods and media, impact of improved Family Planning services, impact of education on sense of social responsibility.

5.7 Chapter summary

The chapter has summarized main findings of the study and draws major conclusion based on the main findings of the study. The chapter also provides recommendations for action and for further research of which will provide more information in areas and concepts which have not yet touched.

APPENDIX A: INFORMED CONSENT FORM

Request for participation in a research project named *"*Knowledge, attitude and practices related to issues concerning population growth in community members of Chang'ombe Street in Dodoma, central Tanzania"

This is a request for you to participate in this research study that intends to investigate knowledge, attitude and practice related to issues of population growth in highly populated areas in Dodoma region, central Tanzania.

The information which you provide will improve planning of population control strategies in highly populated areas especially in Dodoma region. In the study, your information will be kept safe, and no names will be used in the report.

Participation in the study is voluntary; the interview will take 30 minutes hence you can withdraw at any stage as you will find you're not comfortable.

Consent for participation in the study

I am willing to participate in the study. ---------- ---------- (Signed by the project participant, date)

Participant code [ ]

Witness name ----------

Witness sign ----------

APPENDIX B: INTERVIEW SCHEDULE

SECTION A: DEMOGRAPHIC DATA

1. Sex : Female ☐ Male ☐
2. Age group

- 20-34 ☐
- 35-49 ☐
- 50-54 ☐
- Above 65 years ☐

3. Marital status: Are you currently :

1 Married ☐
2 Single ☐
3 Separated ☐
4 Divorced ☐
5 Widowed ☐

4. Level of education

I. Not attended school ☐

II. Primary level ☐

III. Secondary level ☐

IV. College/university ☐

V. Graduate level ☐

5. What religion do you practice?

I. Roman Catholic ☐

II. other Christian denominations(protestants) ☐

III. Muslim ☐

IV. Traditional ☐

6. Occupation of participants

I. Employed

II. Retired

III. Doing small business

IV. labours

SECTION B: FACTORS WHICH DETERMINE PREFERRED FAMILY SIZE

1. What does having children mean in your life?

(Probing question) What do you think is the importance of having children?

2. How many children do you want to have / would you like to have had?

☐ (Any number)

Why do you / did you want that number of children?

.....

.....

3. Of these children, how many boys and girls would you prefer / would you have preferred?

Boys ☐ (Any number)

Girls ☐ (Any number)

4. Why do you / did you prefer this balance of gender of children?)

.....

.....

5. What will / did influence your decision about when to have the first child,

SECTION C

KNOWLEDGE, ATTITUDE AND PRACTICE ON "FAMILY PLANNING METHODS"

C1 - KNOWLEDGE

1	What do you understand by the term family planning?	
Which ways or methods have heard about? (Enumerator tick in the column below any that they mention, then ask them about main problem with all of the methods)		

				In your opinion, what is the main problem (if any) with Using these methods?
		YES	NO	
	Birth control pills			
	Injection method			
	Implant			
	Emergency Contraceptives pills			
	IUD			
	Male condom			
	Female condom			
	Natural methods			
4	Can you tell me where you can go if you want to obtain these methods?	....		

C2 – ATTITUDE TOWARD FAMILY PLANNING

C2 – ATTITUDE TOWARD FAMILY PLANNING				
S/N	QUESTION	YES	NO	S/N
1	Do you approve of the use of family planning methods?			1
1a.	To stop having children after a couple has the number of children they can support?			1a.
1b.	To stop having children after a couple has the number of children they want?			1b.

1c.	To space children			1c.
1d.	If the wife has health problem			1d.
1e.	for any other reason			1e.
		APP	DIS	
2a.	In general do you approve or disapprove family planning?			2a.
			CODE	
2b.	If you "Disapprove," why do you disapprove of family planning?	Side effects	1	2b.
		religion	2	2b.

C3 – PRACTICE OF FAMILY PLANNING

1. Do you and your partner discuss about using family planning?

Regularly ☐ Rarely ☐ Never ☐ Option ☐

2. Which contraceptive methods or family planning methods do you normally use?

Method	
Birth control pills	
Injected method	
Implant	
Emergency Contraceptives pills	

Hormone impregnated IUD	
Male condom	
Female condom	
Natural methods	
Specific.....	

3. Why do you prefer to use these contraceptive methods or family planning methods?
4. Is there a method that you once used and have now given up using? (Probing question: If so why?)
5. Do you plan on use a different family planning method in future? Why?
6. Which method would you use?

SECTI ON D: PERSPECTIVES ON POPULATION GROWTH.

1. What do you understand by the term “population growth”?
2. (Probing questions: what parts of the world / Africa/ Tanzania are most affected by population growth?
3. What is the impact of population growth in the world / Africa / Tanzania?
4. Do you think that population growth is an issue / problem in Chang’ombe Street in Dodoma?

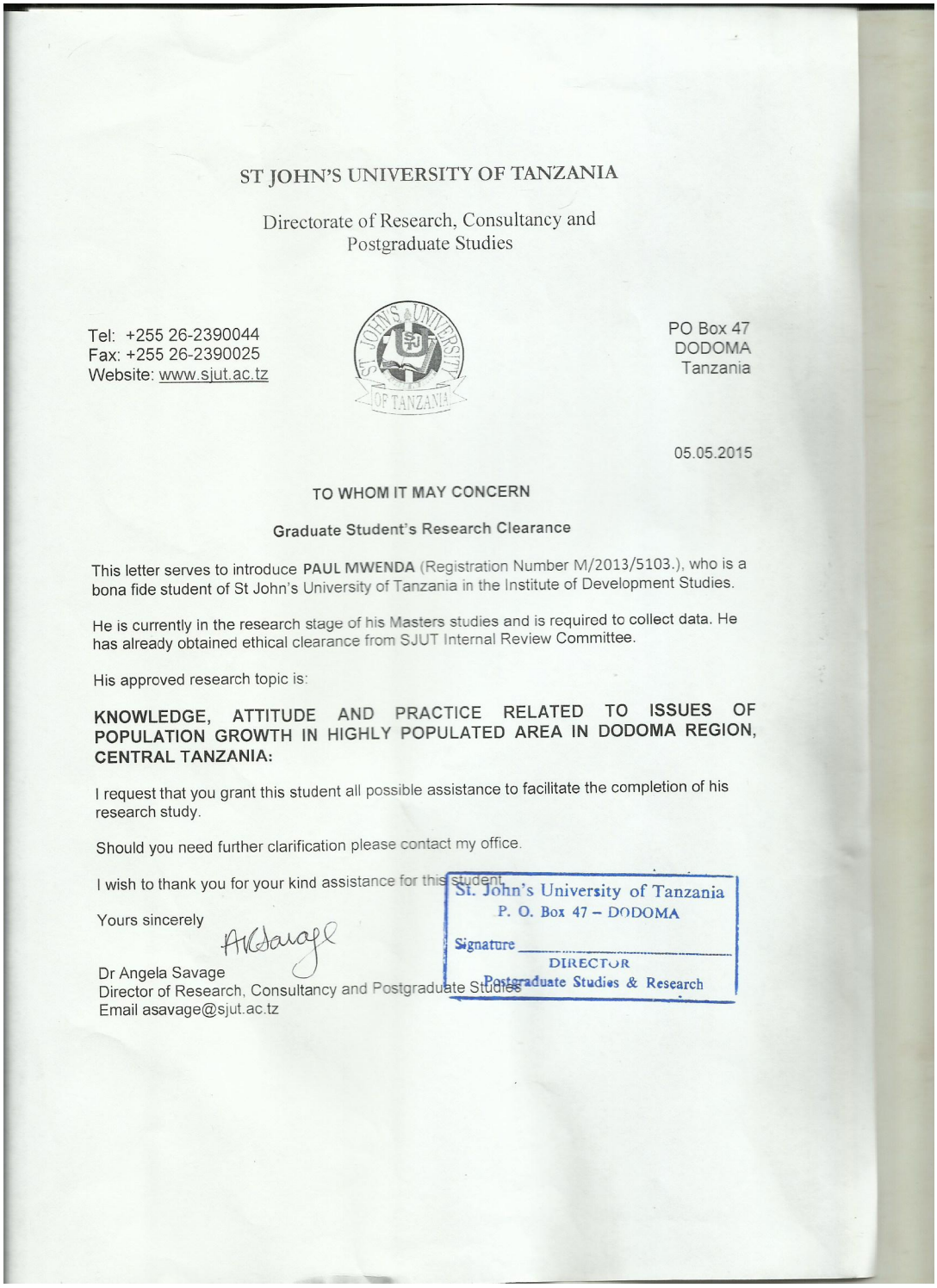
5. (probing questions) What makes you think that population growth is a problem in Chang'ombe Street in Dodoma?

6. How has population growth affected your life personally? -

7. What are any impacts of population growth in your locality?

8. Is Chang'ombe a good place to live? Please explain ….

APPENDIX C: INTRODUCTION LETTER



ST JOHN'S UNIVERSITY OF TANZANIA

Directorate of Research, Consultancy and
Postgraduate Studies

Tel: +255 26-2390044
Fax: +255 26-2390025
Website: www.sjut.ac.tz

PO Box 47
DODOMA
Tanzania

05.05.2015

TO WHOM IT MAY CONCERN

Graduate Student's Research Clearance

This letter serves to introduce **PAUL MWENDA** (Registration Number M/2013/5103.), who is a bona fide student of St John's University of Tanzania in the Institute of Development Studies.

He is currently in the research stage of his Masters studies and is required to collect data. He has already obtained ethical clearance from SJUT Internal Review Committee.

His approved research topic is:

KNOWLEDGE, ATTITUDE AND PRACTICE RELATED TO ISSUES OF POPULATION GROWTH IN HIGHLY POPULATED AREA IN DODOMA REGION, CENTRAL TANZANIA:

I request that you grant this student all possible assistance to facilitate the completion of his research study.

Should you need further clarification please contact my office.

I wish to thank you for your kind assistance for this student.

Yours sincerely

St. John's University of Tanzania
P. O. Box 47 – DODOMA
Signature _____
DIRECTOR
Postgraduate Studies & Research

Dr Angela Savage
Director of Research, Consultancy and Postgraduate Studies
Email asavage@sjut.ac.tz

REFERENCES

Adeyinka R. A., Asabi, O. & Adedotun, O. O.(2012) Knowledge and Practice of Contraception among Women of Reproductive Ages in South West, Nigeria The International Journal of Engineering And Science (IJES) Volume 1: 2 : 70-76 : 2319 – 1813

Agarwal. S. (2014) Impact of India's Population Growth on Economic Development. *International Journal of Sustainable Development, 10:98-112*

Agricultural production and commercialization in Rural Kenya. *Department of Agriculture, Food and Resource Economics Agriculture Hall, Michigan State University, East Lansing, MI, 48824*

Al Riyami, A., Afifi, M., & Mabry, R. M. (2004). Women's autonomy, education and employment in Oman and their influence on contraceptive use. *Reproductive Health Matters*, *12(23), 144-154.*

Aninyei, I. R., Onyesom, I., Ukuhor, H. O., Uzuegbu, U. E., Ofili, M. I., & Anyanwu, E. B. (2008). Knowledge attitude to modern family planning methods in Abraka communities, Delta State, *Nigeria. East African Journal of Public Health 5(1)10 -12*

Astede, D. (2007). Emergency Contraceptive Knowledge, Attitude and Practice among Bahir Dar University Female Students. *Addis Ababa University.*

Atiqul Haq, S. M., Vanwing, T., Hens, L., Hussain, A. H., Akhtaruzzaman, M., Chowdhury, T., & Hossain, M. A. (2010). Perception of Environmental Degradation and Family Size: A Comparative Study on Married Man and Women (Indigenous People) in Bangladesh. *OIDA International Journal of Sustainable Development*, *1(6), 33-41.*

Basu AM (1984). Ignorance of family planning methods in India: an important constraint on use. *Students Family Planning*, 15(3): 136-42.

Belli, G. (2008). *Nonexperimental quantitative research*. na.

Bernard, H. R., & Bernard, H. R. (2012). *Social research methods: Qualitative and quantitative approaches*. Sage.

Bertaux, D (1981). From the life-history approach to the transformation of sociological practice. In Daniel Bertaux (Ed.), *Biography and society: The life history approach in the social sciences*(pp.29-45). London: Sage

Bongaarts, J. (2010). The causes of educational differences in fertility in Sub-Saharan Africa. *Vienna Yearbook of Population Research, 8: 31-50.*

Cambridge Dictionary,(2015). Cambridge Advanced Learner's Dictionary retrieved from http://dictionary.cambridge.org/dictionary/british/ on 13th February 2015 on 12:47 pm

Creswell, J. W. (1998). Qualitative inquiry and research design: Choosing among five designs.

Dangat, C, M. and Njau, B (2013) Knowledge, attitude and practices on family planning services among adolescents in secondary schools in Hai District, northern Tanzania *Tanzania Journal of Health Research 15(1).*

Dhingra, R., Manhas, S., Kohli, N., & Mushtaq, A. (2010). Attitude of couples towards family planning. *Journal of Human Ecology*, *30(1), 63-70.*

Edwards, S. R. (1994). The role of men in contraceptive decision-making: current knowledge and future implications. *Family Planning Perspectives*, 77-82.

Heisler. E.J. (2011) The Changing Demographic Profile of the United States. *Congressional Research Service 7-5700*

Imoisi, A.I. & Olatunji, L.M. & Ubi-Abai, I.P. (2013). Population and its impact on level of unemployment in least developed countries: An appraisal of the Nigerian economy, *European Social Sciences Research Journal, 1(4), 277-291.*

Kamal, N. (2000). The influence of husbands on contraceptive use by Bangladeshi women. *Health Policy and Planning, 15(1), 43-51.*

Kamala, B.A. & Aboud, S. (2006) Knowledge, attitudes and practices on HIV Prevention among.

Kaur G, & Singh TR (1982). Acceptance of family planning practice among rural women clientele. *Indian Journal of Public Health*, 26(3): *194-199*

Khongji, P. (2013). Determinants and Trends of Ideal Family Size in a Matrilineal Set-up. *e NEHU Journal*, 37.

Kombo, D. K., & Tromp, D. L. (2006). Proposal and thesis writing: An introduction. *Nairobi: Paulines Publications Africa*, 10-45.

Kothari, C. R. (2004). *Research methodology: Methods and techniques*. New Age International.

Lwelamira, J., Mnyamagola, G., and Msaki, M.M., (2012) Knowledge, Attitude and Practice (KAP) Towards Modern Contraceptives among Married Women of Reproductive Age in Mpwapwa District, Central Tanzania. *Current Research Journal of Social Sciences 4(3): 235-245, 2012*

Madulu.N.F. (2005) Impacts of Population Pressure and Poverty Alleviation Strategies on Common Property Resource Availability in Rural Tanzania. *AJEAM-RAGEE Vol 10: 26-49*

Mao J (2006). Knowledge, Attitude and Practice of Family Planning: A Study of Tezu Village, Manipur (India).*The Internet Journal of Biological Anthropology*. *1:1*

Marquette, C. (1997). Turning but not toppling Malthus: Boserupian theory on population and the environment relationships.

Martin .P (2009) "Demographic and Economic Trends: Implications for International Mobility" United Nations Development Programme Human Development Reports. Research Paper 2009/17

Mason, J. (2002). *Qualitative researching*. Sage.

McGoldrick, M., Marsh Schlesinger, J., Hines, P., Lee, E., Chan, J., Almeida, R., et al. (2004). Mourning in different cultures: English, Irish, African American, Chinese, Asian Indian, Jewish, Latino, and Brazilian. In F. Walsh & M. McGoldrick (Eds.), Living beyond loss (2nd ed.). New York: Norton.

Milline, C. (2007). *Attitudes of nursing staff in a long term care facility regarding sexual expression in the elderly*. ProQuest.

Morse J.M. (1994) Critical Issues in Qualitative Research Methods. Sage Publications, London.

Mosha, I. H., & Ruben, R. (2013). Communication, knowledge, social network and family planning utilization among couples in Mwanza, Tanzania. *African journal of reproductive health*, *17*(3), 57-69.

Mugenda, O. M. Mugenda. AG (2003). *Research Methods, Qualitative and Quantitative Approaches*.

Muhoza, D. N., Broekhuis, A., & Hooimeijer, P. (2014). Variations in Desired Family Size and Excess Fertility in East Africa. *International Journal of Population Research*, *2014*.

Mung'ong'o. S. G., Mugoyela. V. And Kimaro. G. (2010) Knowledge, Attitude and Practice on Contraceptive Use among Secondary School Students inDar es Salaam, Tanzania. East and Central African Journal of Pharmaceutical Sciences Vol. 13 (2010) 43-49

Muyanga. M. and Jayne T.S. (2012) Effects of population density on smallholder

Nalwadda, G., Mirembe, F., Byamugisha, J., and Faxelid, E. (2012) Persistent high fertility in Uganda: young people recount obstacles and enabling factors to use of contraceptives*. BMC Public Health* 2010, 10:530.

National Bureau of Statistics (NBS) [Tanzania] and ICF Macro. (2011) Tanzania Demographic and Health Survey 2010. Dar es Salaam, Tanzania: NBS and ICF Macro.

National Bureau of Statistics (NBS) [Tanzania] and ICF Macro. (2011).Tanzania Demographic and Health Survey 2010. Dar es Salaam, Tanzania: NBS and ICF Macro.

Neuman, W.L. (2009). *Social Research Methods 5th Ed.Boston*: Allyn and Bacon.

Nsekela, C. M. (1978) Tanzania affairs: Family planning in Tanzania [cited 2014 25th August]; Available fromhttp://www.tzaffairs.org/1978/07/family-planning-in-tanzania/

O'Neill, D. A., McVicar, C. M., McClure, N., Clements, B., McCullough, S., & Lewis, S. E. M. (2005). Effects of vasectomy on spermatogenesis and fertility outcome after testicular sperm extraction combined with ICSI. *Human Reproduction*, *20*(10), 2795-2800.

Ochimegwu, C,O. (1999) family planning Attitude and use in Nigeria: a factor analysis" international Family Planning perspectives 25(2):86-91

Odu, O. O., Jadunola, K. T. I., & Parakoyi, D. B. (2005). Reproductive behaviour and determinants of fertility among men in a semi-urban Nigerian community. *Journal of Community Medicine and Primary Health Care*, *17*(1), 13-19.

Omofonmwan. S.I. and Osa-Edoh G.I. (2009) The Challenges of Environmental Problems in Nigeria. *J. Hum. Ecol.,* 23(1): 53-57

Osborne, T. (2012) "Local Perceptions of Population Growth: The Causes and Effects of Local and National Population Changes on the People of Kenya". *Independent Study Project (ISP) Collection.* Paper 1244.

Oucho J. O and Mtatifikolo F.P (2009) Analysis of population dynamics and poverty reduction in the united republic of Tanzania in the context of MKUKUTA and MKUZA

Pandey,S., Thakkar, H.K., Rawat, C.M.S., Jha, S.K. & Awash, S., (2012) Social demographical factors influencing family size among rural population of district Nainital Uttarakhand. *Indian journal of community health* 24/2:291-296

Pirinçci, E., & Oguzöncül, A. F. (2008). Knowledge and attitude of married Turkish men regarding family planning. *European J. of Contraception and Reproductive Healthcare*, *13*(1), 97-102.

princeton.edu/download.aspx?submissionId=101274

Ramchandani, P., Stein, A., Evans, J., O'Connor, T. G., & ALSPAC Study Team. (2005). Paternal depression in the postnatal period and child development: a prospective population study. *The Lancet*, *365*(9478), 2201-2205.

Romero-Gutiérrez, G., Garcia-Vazquez, M. G., Huerta-Vargas, L. F., & Ponce-Ponce de Leon, A. L. (2003). Postpartum contraceptive acceptance in León, Mexico: a multivariate analysis. *European J. of Contraception and Reproductive Healthcare*, *8*(4), 210-216.

Rustagi, N., Taneja, D. K., Kaur, R., & Ingle, G. K. (2010). Factors affecting contraception among women in a minority community in Delhi: a qualitative study. *Role of medical personnel in promoting appropriate infant and young child feeding*, *33(1), 10-15.*

Schwarz EB, Lohr PA, Gold MA, Gerbert B. (2007) Prevalence and correlates of ambivalence towards pregnancy among non pregnant women. *Contraception.* 75:305–310.

Sharma, R. S., Rajalakshmi, M. and jeyaraj, D. A. (2001) Current status of fertility control methods in India. *J. Biosci.* 26 : 4 : 391–405

The Population Reference Bureau (2014) 2014 WORLD POPULATION DATA SHEETretrieved from http://www.prb.org/pdf14/2014-world-population-data-sheet_eng.pdf.on 7/9/2014 at 02:45 pm

Thomson, E. (1997),"Couple Childbearing Desires, Intentions, and Births," *Demography*, 34(3), 343-354.

Thuku.G.K. , Gachanja .P., and Almadi.O. (2013) The impact of population change on economic growth in Kenya. *International Journal of Economics and Management Sciences* Vol. 2: 6:43-60

Uganda Bureau of Statistics (2011) Uganda Demographic and Health Survey 2011; 2011. [cited 2014 25th August]; Available from: http://www.ubos.org/onlinefiles/uploads/ubos/UDHS/ UDHS2011.pdf.

United Nations Population Projection, (2012) *World Population 2012*. Department of Economics and social affair. Population Division

United Nations, (2014) *Population and vital statistics report.* Statistical paper series A.LXVII

United Nation Population fund (2014a). Population Trend http://www.unfpa.org/pds/trends.htm (2014 October 5th)

United Nation Population Fund (2014b). Population and Poverty http://www.unfpa.org/pds/poverty.html (2014 October 5th)

United Republic of Tanzania (2013). *Population Distribution by Age and Sex*. National Bureau of Statistics Ministry of Finance Dar es Salaam

Wang, W., Wang, S., Pullum, T., and Ametepl, P. (2012) *how family planning supply and the service environment affects contraceptives use:* finding from four East African countries

WHO(2015).Familyplanning.Obtainedfromhttp://www.who.int/topics/family_planning/en/ on 17/2/2015 at 3:07pm

World Bank, (2015) Population Growth Rate Teaching Activities (with Answers) cited from http://www.worldbank.org/depweb/english/teach/pgr.html at 20/2/2015 at 4:40 pm

Zeteroglu, S., Sahin, G., Sahin, H. A., & Bolluk, G. (2004). Knowledge and attitudes towards emergency contraception of health-care providers in a region with a high birth rate. *European Journal of Contraception and Reproductive Healthcare*, *9*(2), 102-106