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LEVELS, TRENDS AND DETERMINANTS OF FAMILY STRUCTURE IN MALAWI



A research report submitted to the Faculties of Health Sciences and Humanities, Schools of Public Health and Social Sciences, University of Witwatersrand, Johannesburg in partial fulfilment of the requirements for the degree of Master of Arts in the field of Demography and Population Studies

By

Sadson Harawa (903005)

UNIVERSITY OF WITWATERSRAND, JOHANNESBURG, FACULTIES OF HEALTH SCIENCES AND HUMANITIES, SCHOOLS OF PUBLIC HEALTH AND SOCIAL SCIENCES

March, 2016

Supervisor: Dr. Nicole De Wet

DECLARATION

I, **Sadson Harawa** hereby declare that this research report is my personal own work. It is being submitted to the Faculty of Humanities, School of Social Sciences and Public Health, University of the Witwatersrand, Johannesburg, in partial fulfilment of the requirements for the Master of Arts degree in Demography and Population Studies. I hereby declare that this report has not been submitted previously, in part or in full, for any other degree or examination in this or any other university.

……. (Signature)

…….. day of ……. 20……

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The success of this research report would not have been possible without the light that each one of you shed in my life.

DEDICATION

I am dedicating this research report to the Almighty God, my late dad and mum and the entire family.

Table of Contents **Pages**

Declaration…….....i
Acknowledgements…….....ii
Dedication…….....……iii
Table of Content…….....….....iv-v
List of Tables…….....…….vi
List of Figures…….....……..vii
List of Acronyms…….....……viii
Abstract…….....….....ix-x

CHAPTER 1: INTRODUCTION 1
1.0 Introduction 1
1.1 Background 1
1.2 Problem Statement 6
1.3 Research Question 7
1.3.1 General Objective 7
1.3.2 Specific Objectives 7
1.4 Justification 8

CHAPTER 2: LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK 12
2.0 Introduction 12
2.1 Literature review 12
2.1.1 Changing family structures from a global perspective……..... 12
2.1.2 Changing family structures from a perspective of Sub-Saharan Africa ..…… 13
2.1.3 Changing family structures from a Malawian perspective ……..…….. 14
2.1.4 Demographic factors 14
2.1.5 Socioeconomic factors 17
2.1.6 Cultural factors 19
2.2 Conceptual and Theoretical Framework 20
2.3 Research Hypothesis 23
2..3.1 Justification of hypotheses …….....… 23

CHAPTER 3: METHODOLOGY 24
3.0 Introduction 24
3.1 Study Design 24
3.2 Study Population 24
3.3 Sample Size 24
3.4 Variables and their definitions 25
3.4.1 Outcome variable 25
3.4.2 Explanatory variables 25
3.5 Data Analysis 27
3.6 Calculation of Rates 28
3.7 Ethical issues 29

CHAPTER 4: RESULTS 31
4.0 Introduction 31
4.1 Descriptive Results 31
4.1.1 Univariate results 31
4.1.2 Bivariate results 37
4.2 Multinomial logistic regression 48

CHAPTER 5: DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS 57
5.0 Introduction 57
5.1 Discussion 57
5.2 Conclusions 63
5.3 Recommendations 67
5.4 Study limitations 68

REFERENCES 69

List of Tables

Pages

Table 1: Dependent variables..... 25
Table 2: Independent variables..... 25
Table 3.1: Univariate analysis results..... 32
Table 3.2(a) Bivariate analysis results (2000) 37
Table 3.2(b): Bivariate analysis results (2000) 38
Table 3.3(a): Multinomial logistic regression results (2000) 48
Table 3.3(b): Multinomial logistic regression results (2010)..... 50

List of Figures **Pages**

Figure 1: Conceptual framework; Intergenerational Wealth Flow Theory adapted from Caldwell (1982) 21

Figure 2: Conceptual framework; adapted from Caldwell (1982) 22

Figure 3: Univariate characteristics results 31

Bivariate relationship between demographic factors and family structure

Figure 4 (a): Family Structure and women's age at first sex 34

Figure 4 (b): Family Structure and sex of household 34

Figure 4 (c): Family Structure and religion 35

Figure 4 (d): Family Structure and women's level of education 37

Figure 4 (e): Family Structure and place of residence 37

Figure 4 (f): Family Structure and women's wealth status 38

Figure 4 (g): Family Structure and women's employment status 38

Figure 4 (h): Family Structure and total children ever born 39

Figure 4 (i): Family Structure and women's ethnicity 40

Figure 4 (j): Family Structure and justification of wife beating 40

LIST OF ACRONYMS

AIDS	- Acquired Immunodeficiency Syndrome
CI	- Confidence Interval
DHS	- Demographic and Health Survey
HIV	- Human Immunodeficiency Virus
IRB	- Institutional Review Board
IWFT	- Intergenerational Wealth Flow Theory
MDHS	- Malawi Demographic Health Survey
MLR	- Multinomial Logistic Regression
NSO	- National Statistical Office
UNESCO	- United Nations Educational Scientific and Cultural Organization
UNICEF	- United Nation's Children and Emergency Fund
WHO	- World Health Organization

ABSTRACT

Abstract: Nowhere has the family's important role in ensuring optimal development of people been seriously put into disrepute. Since time immemorial, the family has endured the impact of socioeconomic and political challenges and it is still regarded as pivotal in the development of cultures and nations (Emran, 2009). Apart from reproduction, socialization, production, consumption, accumulation and social networking, and care for vulnerable groups, families are important in intergenerational transfers such as material, cultural values and social capital. In spite of these notable values, modernization and industrialization continue to alter the traditional systems leading to emergence of new family forms. Malawi has one of the highest rates of single families, within the Sub-Saharan Africa region, especially among women, with a rate as high as 61% by the time a woman reaches 45 years of age. Further, about 56% of children under the age of 15 were not co-resident with both parents. Unstable families are associated with several wider negative outcomes such as poor economic and health outcomes to individual, communities and nations at large. Despite such challenges, it is surprising that little attention has been paid to fully analyse factors that are causing such changes in the family. Thus, the aim of this paper was to identify the levels and trends and assesses the demographic, socioeconomic and cultural factors associated with family structure in Malawi between 2000 and 2010. The study was motivated by inadequate literature and scientific knowledge on the scope of the impacts of different factors which have caused changes to family arrangements over time.

Study Method: Two data sets were employed in this study. These data sets were extracted from the Malawi Demographic Heath Survey for the year 2000 and 2010. The unit of analysis was women aged 15-49 years of age from different households. In order to identify trends, the Chi2 square test was used. As for measuring the association between the various demographic and socioeconomic factors and family structure, the Multinomial Logistic Regression model was used.

Results: The study reveals that there was a 2.5% increase in the rate of single families between 2000 and 2010. Further, the inferential results shows that age of household head is statistically associated with changing family structure in Malawi in the year(s) 2000 and 2010 for both the nuclear and extended family categories (p-value 0.000). In addition, being in the age bracket (25-39) has a higher statistical association with changing family structure in both

2000 and 2010 (p-value 0.000). Further, belonging to households headed by a female is statistcially associted with family structure in 2000 and 2010 for both nuclear and extended family (p-value 0.000).

The results also show that being a Muslim woman is statistically associated with family structure in 2010 (p-value 0.039) but not in 2000. In terms of education, having primary and secondary education is statiscally asocited with family strcuture [primary: 2000 and 2010 (p-value 0.000 for both) secondary: 2000 and 2010 (p-value 0.001 for both). As for residence, residing in rural area is statistically associated with family structure in Malawi (2000 (nuclear: p-value 0.000; extended: p-value 0.028) and 2010 (nuclear: p-value 0.006; extended: 0.013).

As for wealth, the results show that having middle and richer wealth quintile is statistically associated with family structure in 2010 for both nuclear and extended families (p-value 0.000) but not in 2000. Similarly, women in employment is statistcially associated with family strcuture for nuclear and extended family categories (p-value 0.000 for both 2000 and 2010). Lastly, the results also show that having few children (1-2), average number of children (3-4) and many children (5 and above) is statistically associated with family structure in the extended family category only (p-value 0.000).

Conclusions: The study reveals that single families are on the increase while nuclear and extended families are decreasing. Policy and programmes to the wider sectors such as; HIV/AIDS, gender, reproductive health and education should be directed to the family if Malawi is to achieve health, and socioeconomic grown which are some of the key areas of interest in achieving the sustainable development goals.

Keywords: Family structure, single family, nuclear family, extended family

CHAPTER 1: INTRODUCTION

1.0 Introduction

This chapter gives a full background of the study; it highlights family structure in a broader perspective by focusing on family change in the different demographic transitions in the developed world, then sub-Saharan Africa and lastly the Malawi situation. This history provides detailed information about how the family unit has transitioned in the different regions of the world and its implications to society and development of countries. It ends with an argument on the reason why the study is necessary and why a two point comparison between the two years has been considered. Other areas considered in this chapter include; the problem statement, objectives, and justification of the study.

1.1 Background

Nowhere has the family's important role in ensuring optimal development of people been seriously put into disrepute. Since time immemorial, the family has endured the impact of socioeconomic and political challenges and it is still regarded as pivotal in the development of cultures and nations (Emran, 2009). Families provide a nest for important processes like; reproduction, socialization, production, consumption, accumulation and social networking and care for vulnerable groups, such as, children and the elderly takes place (Wyn, Lantz and Harris, 2011; Bigombe and Khadiagala, 2003). It is through the family that important intergenerational transfers such as material, cultural values and social capital takes place (Richter et al., 2010). Despite these notable values, the demographic transitions which have been characterised by modernization and industrialization have altered the traditional family forms leading to emergence of new ones (Murray, 2012; Lesthaeghe, 2010).

In the Malawian context, a household is not synonymous to a family. A household, locally called '*nyumba' (in Tumbuka)* or *'khomo' (in Chewa)* is a physical structure accommodating a family while a family is a social structure within a household (Chimbiri, 2006). In this particular research study, the focus is on the family, and changing family structure has been used to capture residential patterns, changes and transitions in the year 2000 and 2010. Specifically, the definition of the family will be restricted to relationships through blood, marriage or adoption or through sexual unions that have been approved (Makiwane and Chimere-Dan, 2010). Of particular interest is investigating the complexities that characterize women's place during family transitions over time. To be specific, family structure has been

categorised into; single, nuclear ad extended. A single family refers to an unmarried woman living alone or with her child/children, nuclear family refers to a married woman living with husband with or without a child/children and lastly, extended family means a single or married woman living with a child/children, parents, uncles, aunties, cousins and or other extended members.

There is no doubt that modernization and industrialization have brought about opportunities in education, health care, and employment. However, these have also caused forces such as; economic instability, devastating levels of poverty, poor systems of governance, internal conflicts, migration and HIV/AIDS in most African countries, which have created pressure to the family unit causing challenges for members to sustain it.

For instance in Malawi, such pressure has had a negative impact to the family, especially to women and children. Evidence shows that Malawi has one of the highest rates of single parents with rates as high as 61% by the time an individual reaches the age of 45 years (Clark and Hamplova, 2013). In addition, only 44% of the children below the age of 15 years were co-resident with both parents (NSO and ICF Macro, 2011). Unstable families are associated with several negative outcomes such as behavioural problems among adolescents and poor health outcomes among women (Waller, Gardner and Hyde, 2013; Al-Krenawi and Graham, 2006). For instance, the rate of mortality among children below the age of 5 years from single mothers if compared to those in union is relatively high (Clark and Hamplová, 2013). The impact of such challenges is that it may propagate economic hardships in families for future generations (McLanahan and Percheski, 2008; Al-Krenawi and Graham, 2006). In light of the notable benefits of the family as noted above and the impact of the transitions that are taking place, it is surprising that in Malawi little has been done to research this area. Empirical evidence provides a platform to guide policy and programming.

Available evidence shows that in developed countries, the family has been changing over time (Lesthaeghe, 2010; Sobotka and Toulemon, 2008). This has been characterized by delaying marriage and child bearing, cohabitation, increasing instability among couples and marriage breakdown (Bianchi, 2014; Kuperberg, 2014; Prioux, 2006). For example in Finland, there was a reduction in nuclear families from 79% to 70% between 1990 and 2010; while single families remarkably increased by about 50% from 14% to 21% (Ikaheimo et al., 2013). Changes in family arrangement have also been observed between 1960 and 2008 in

the United States, where the rate of children residing in single families increased from 6% to 50% (McLanahan and Percheski, 2008). In Japan, single men and women aged 25 to 29 years accounted for 25% and 8% in 1985 respectively while in 2010, the rate was 26% and 17%, (Raymo, 2015). This means that there was a higher increase in rate among single females. An analysis in Korea and Taiwan shows that in 1960, the rate of single women aged 25 to 34 was 1% and below; but the rate increased to 10% in 2010 (Park and Choi, 2013). Such patterns of change have also been observed in Muslim countries where religion is said to be playing a major role in sustaining marriage. For instance in Iran, by the year 2011, the rate of divorce was higher if compared to some western countries, such as, Italy, Spain and Ireland. By the year 2004 close to 54% of women in Iran divorced within 5 years of marriage, and by the end of 10 years the rate was almost 75% (Aghajanian and Thompson, 2013).

Within Sub-Saharan Africa, trends seem to show that the family is also changing as observed by the increasing rates of cohabitation and a reduction in marriage rates (Kuperberg, 2014). Between 2000 and 20005 in South Africa, the rate of children aged 17 years and below who were residing in single mother headed households rose from 38% to 40%, and those residing with both mother and father decreased from 38 % to 34 % between 2000 and 2005 (Hill et al., 2008). In 2006, 60% of children aged 14 years and below were reported to be co-residing with their fathers (Posel and Devey, 2006). This has been attributed to unemployment and the practice of *lobola* especially among blacks (Posel, Rudwick, and Casale, 2011). Further, men and women in formal marriages by 40 years accounted for only 50% in Kwazulu-Natal (Hosegood et al., 2009). Recent reports shows that 48% of women within the age range 15 to 44 years are in cohabiting partnerships; of which by the age of 25 years almost half had spent some time in cohabiting unions (Copen, Daniels, and Mosher, 2013; Payne, 2011).

Specific to sub-Saharan Africa, studies have limited their interest to divorce, marriage formations, early marriage, childlessness, and socioeconomic autonomy of women (Grant and Soler-Hampejsek 2014, Takyi and Gyimah 2007). Recently, another study on family structure focussed on nutritional outcomes of children (Ntoimo and Odimegwu, 2014). However, most of the studies above did not pay much attention to the changing context of the family over time. One study that particular focussed on changing family environment was conducted in Cameroon; but still, the focus was on dynamics related to timing of first sex among women aged 21-24 years (Defo and Dimbuene, 2012).

In Malawi, there are a number of observations which as well show that the family is changing in its structure. The 2000 Demographic and Health Survey (DHS) data shows that there was little observable change in rates for male headed households between the year 2000 and 2010 (73% in 2000 and 72% in 2010) (NSO and ICF Macro, 2011). On the other hand, if aggregated by place of residence, female headed households increased between 2000 and 2010, from 16% to 21% for urban, and then 28% to 30% for rural (NSO, 2000; 2010). In 2011, children 15 years and below living with single mothers accounted for 31% (NSO and ICF Macro, 2011).

For a long time now, a number of researchers have been investigating the changing context of the family and its implications to individuals, society and the nations at large. However, such studies have particularly been concentrated in the Europe, Asia, the United States and few other sub-Saharan countries (Cooper et al., 2009; Waldfogel, 2008; McLanahan and Percheski, 2008; Burstein, 2007; Dintwat, 2010). Findings from some of these studies reported an association between lower household economic level and union dissolution (Burstein, 2007). Others reported the negative impact of low wages on the family unit (Joshi and Bogen, 2007). Most of these economic impacts have been linked with globalization and modernization (Amoateng, 2007). Other studies have mostly focussed on fertility, parental union transitions and on consequences of family structure to child development and adolescent behavioural outcomes (Yuan, 2009; Brown, 2010; Gennetian, 2005; Cooke and Baxter, 2010; Tillman, 2008; Pettit and Hook, 2009; Halpern-Meekin and Tach, 2008).

In Malawi, an attempt has been made to study the family since the colonial period. One of the early attempts to study the family concentrated on ethnicity, particularly on history of Chewa kinship since the nineteenth century (Phiri, 1983). Thus far, few or none of the studies paid attention to the family, especially the economic impacts. An interest to examine the impact of wealth status of the family and community contexts was initiated in early 2000 (Bolstad and Manda, 2001). But still, the study used Bayesian model and its outcome was on child mortality and not determinants of family structure. Since then, scanty literature sprouted concentrating on the family. For instance, other studies were interested on the family as central in decision making regarding family planning use (Crampin et al., 2003). With the emergence of HIV/AIDS, attention shifted and most of the researchers were more interested

in examining the role of families on child care and orphan welfare and support (Grant and Yeatman, 2014; Chirwa, 2002; Mtika, 2003).

Thus, despite this vast literature, the 'family' as a dynamic system within a changing context has been neglected. Only recently, one study attempted to examine the family as a dynamic system. However, emphasis was on how family dynamics influences development policies, and not factors that determine family structure (Chimbiri, 2006). To date, studies on determinants of family structure in changing contexts in Malawi are almost non-existent. Another key weakness in studies on family structure is failure to untangle factors that are essential in explaining the transitions. Such key factors if well analysed can provide empirical ground to guide policy makers. This study has tried to unpack such vital factors and it is envisaged that from the results, interventions will be guided by such. Furthermore, most of the previous studies conducted did not include a well defined family-oriented theory with a clearly adapted conceptual framework that depicts how demographic, socioeconomic and cultural factors influence changing family structure.

With regard to family changes and women's well-being and outcomes in other parts of the world, scholarly work suggests that changes in family situations produces stress (Burstein, 2007; Fomby and Cherlin, 2007; Cavanagh and Huston, 2006; Brown, 2010). However, since societies differ in the way they perceive things, a given individual or household attribute can have diverse effects across societies and countries, even if it can be defined similarly (Cooke and Baxter, 2010). Extending the study of changing family structure in the African context requires taking into cognisance the different contextual influences that markedly are different from the West. This is so due to the volatile socioeconomic and environmental afflictions which are characterised by increasing levels of diseases and deaths. The current analysis as presented in this study captures the multiple demographic, socioeconomic and contextual factors that coexist with local circumstances. This means that various broad measures have been incorporated other than focussing on particular issues like migration, fertility, mortality or partnership change. Further, when analysing families, it is imperative to study the family as evolving or cycling and not as stationary unit (Osborne et al., 2012). This paper therefore has attempted to examine these factors on the changing family structure in Malawi through a 10 years trend in the years 2000 and 2010. This study is also part of a continued effort to unravel the role of changing environmental contexts currently taking place in Africa. This is

important more especially due to limited literature on changing family structure over time in sub-Saharan Africa (Takyi, 2007).

1.2 Problem Statement

Disruptions in the family have adverse negative effects to individuals, families, communities and nations. This is mostly common in vulnerable groups like single headed households, especially those headed by women. Evidence shows that single motherhood has an increased risk of under-five mortality, gravely affects school enrolment and engagement, and leads to poor nutrition among children (Brown, 2006; Moyi, 2010; Ntoimo and Odimegwu, 2014). Further adolescents growing up in single families have an increased rate of juvenile delinquency as compared to their counterparts (Jablonska and Lindberg, 2007; Schroeder et al., 2010). With the high rates of single headed households in Malawi, this is a reason for concern. Recent evidence indicates that Malawi has one of the highest rates of single parents within sub-Saharan. By the time a woman reaches the age of 45 years, about 61% of the women have at least been single at some point in her life (Clark and Hamplova, 2013).

The large child and youth population are important to Malawi's future and its economic development. Children in Malawi account for 51% of the country's population (UNICEF, 2015). Investing in education is widely acknowledged to be associated with the economic development of a country. Unfortunately, it is worrisome that only 27% of Malawian girls enrol in secondary school, and 13% finish secondary school (World Bank, 2014). This might be as a result of transitions in the family unit. In fact, changes in family structure have been found to be associated with school dropout especially among girls (Eneji et al., 2013).

Malawi has one of the highest adolescent pregnancy rates in sub-Saharan Africa, of which in 2010 it was at 26% (NSO and ICF Macro, 2011). In 2012, adolescent pregnancies accounted for 34.7% of all births (UNICEF, 2012). Studies have found an positive relationship between single parenthood and early relationship formation, premature sexual initiation, and substance use among adolescent girls (Cavanagh, 2008; Defo and Dimbuene, 2012; Brauner-Otto and Axinn, 2010; Hofferth and Goldscheider, 2010). Unfortunately, early age at birth has grave consequences to the health of an adolescent (Hillis et al., 2016). It is believed that to protect adolescent pregnancy, it is necessary to strengthen childhood family ties (Hillis et al., 2016).

Marriage formation and dissolution is another factor that has been observed to be impacting on family arrangements in Malawi. Divorce within sub-Saharan Africa, evidence from isolated 13 counties shows that divorce is on the rise with more than 20% of women aged 14 to 49 years having experience union dissolution (de Walque and Kline, 2012). Divorce induces stress especially among women which may reduce mother-child attachment and consistent parenting (Copper et al., 2009). This is so because divorced women experience emotional problems, have low self-esteem and poor health outcomes (Meadows at al., 2008; Lorenz et al., 2006; Lee et al., 2005). Studies conducted in the West also reported an association between divorce and increased economic challenges, schooling and behavioural problems among children (Rushton and McLanahan, 2004; McLanahan and Percheski, 2008; Sigle). More recent evidence has found that divorce significantly increases the probability of a child dying especially if the support is poor (Clark and Hamplova, 2013). Despite this challenge, there are reports of increasing level of divorce in Malawi. In 2008, the possibility of first time marriages ending in divorce within 20 years after marriage was 60% (Reniers, 2008). A recent study found that about one-half of all first marriages in Malawi end in divorce (Clark and Hamplova, 2013). In addition to divorce, 14% of married women were in polygamous unions (NSO and ICF Macro, 2011). Such polygamous unions have negative impacts on children's and wives' health which may result in interpersonal sensitivity, obsessive compulsive disorder and depression (Al-Krenawi and Graham, 2006; Omariba and Boyle, 2007).

Mobility of Malawian populations has been reported throughout its history. It has been reported that between the year 1981 and 1991, the percentage of Malawian immigrants in Botswana increased by 300% (Oucho, 2007). Further, between 1997 and 2004, the rate of Malawians migrating increased from 44% to 58% (NSO, 2005). The recent Malawi Integrated Household Survey of 2011 showed that 10% of the people were migrated (NSO, 2011). Migration basically involves the movement of independent male or female for economic opportunities which may negatively affect bonds in a family unit (Grillo and Mazzucato, 2008).

1.3 Research Question

Do the demographic, socioeconomic and cultural factors have an influence in determining changing family structure in Malawi in the year 2000 and 2010?

1.3.1 General Objective

To examine factors associated with changing family structure in Malawi in 2000 and 2010

1.3.2 Specific Objectives

1. To assess levels and trends associated with family structure in Malawi in 2000 and 2010.
2. To examine the demographic, socioeconomic factors associated with family structure in Malawi in 2000 and 2010.

1.4 Justification

Focusing research on the family is important in order to generate new empirical evidence on how best to tackle its determinants. Efforts have been made in Malawi to tackle the family in Malawi (Clark and Hamplova, 2013; Phiri, 1983; Chirwa, 2002; Defo and Dimbuene, 2012; Bolstad and Manda, 2001; Mtika, 2003; Crampin et al., 2003; Yeatman and Trinitapoli, 2008; Chimbiri, 2007). However, these studies did not come closer to examining the determinants of family structure; let alone the changing context of the family environment. An attempt to examine the changing context of the family was made in a study of which its outcome was to examine the role of family dynamics in influencing development policies (Chimbiri, 2006). However, the study was descriptive and did not isolate the factors that determine changing family structure. Further, most of these studies conducted relied on a snapshot of family circumstances in a particular time; and more especially during the time when data collection and interviews were conducted. The challenge with this is that one point cross-sectional studies cannot depict the factors that are consistent over time and those that are not, in order to guide policy and development planning. After all, a family is dynamic and cycling and not a static unit (Osborne et al., 2012).

Explanation of change in the family requires a description of essential characteristics of historical family patterns, the identification of the forces of change, and the delineation of how these forces affect specific aspects of social life through scientific and well-grounded theories. However, the full scope of these changes over time with well-grounded theories in Malawi has not been clearly defined and presented anywhere in much detail. Already, it is an established fact that research on family structure in sub-Saharan Africa is limited (Defo and Dimbuene, 2012). Hence, the need for this kind of a study that fully examines factors

associated with family structure within a complex environment that characterizes women's place during family transitions over time.

Drawing on the intergenerational wealth flow theory, this study pursues the importance of wealth in the dynamic nature of the family especially among women. I build on existing scholarly work on family transitions and instability within dynamic environmental context that have been conducted somewhere else such as Western and Asian countries, and sub-Saharan Africa and including Malawi (Defo and Dimbuene, 2012; Dintwat, 2010, Chimbiri, 2006). This will also contribute to policy and programming by providing empirical evidence.

Almost all of the country's policy decisions have an implication to the family either directly or indirectly. It is believed that family policies cross-cut almost each sphere of the state welfare undertakings and almost any social policy has an effect on it (Bothfeld and Rouault, 2015). This possibly explains why most of the existing literature on family research has paid much attention on outcomes of social policies (Pettit and Hook, 2009; Cooke and Baxter, 2010). Such policies for instance, can help ease the difficulties that women experience when promoting gender equality especially in the area of employment and family responsibilities (Charles and Cech, 2010). However, the family is not directly and explicitly addressed in policies, programmes and interventions in Malawi. Worse still, Malawi does not have a National Family Policy like other sub-Saharan countries such as South Africa.

To fill this gap, the Malawi government introduced the Malawi National Population Policy (2012). The policy aims at creating favourable environments that prioritise and coordinate implementation of population and development programmes at district and national level. Further, the policy contributed to the attainment of various other sectoral policies such as, the Malawi National Gender Policy (2008), the Malawi Education Policy (2004), the Malawi HIV/AIDS Policy (2003), and the Malawi Sexual and Reproductive Health Policy (2010).

For instance, the Malawi Sexual and Reproductive Health Policy (2010) has a goal to improve sexual and reproductive health for all; men, women and young people. The targeted interventions and activities related to the policy mainly focus on reducing fertility through contraceptive interventions, reducing maternal and child deaths and encouraging men's involvement in family planning measures. Even though strides have been made, there are concerns about high rates of fertility especially among adolescent girls, with rates as high as

34.7% of all births recorded (UNICEF, 2012). Unfortunately early age at birth has long term negative effects for generations in terms of gender disparity, and economic hardships (McLanahan and Percheski, 2008). Apart from parental arrangements of marriage, single parenthood increases premature sexual initiation of adolescent females (Defo and Dimbuene, 2012). Understanding the factors that mediate such processes within the Sexual and Reproductive Health Policy is thus necessary when identifying amenable interventions.

The Malawi National Gender Policy (2008) provides a framework with guidelines on how to facilitate meaningful achievement of gender equality and women empowerment. Actually, it has been reported that recent advancement in gender equality has increased men's involvement in household chores (Aassve, Fuochi, and Mencarini, 2014). At the same time, as reported earlier, the possibility of first time marriages ending in divorce within 20 years after marriage was 60% (Reniers, 2008). This might be related to decision making power among couples. Already, it has been observed that community members in Malawi do not really understand gender and hence there challenges in its acceptance (Mbilizi, 2013). Such redefinitions therefore require full analysis of the audience in the family.

Another issue of interest which is also related to gender is the HIV and AIDS. Evidence shows that a number of HIV infections occur between couples within the matrimonial home (Anglewicz and Clark, 2013; Maleta and Bowie 2010). Other researchers have attributed the transmission of HIV among marriage partners to cultural factors. For instance, it has been found that the use of condoms within the family even for discordant couples is seen as an intruder (Chimbiri, 2007). It has also been reported that the rate of HIV infections is higher among women, especially among the youth. This can be attributed to the risk of forced marriages among young people under the age of 18 years which are mostly arranged by parents (Hester et al. 2007). Thus, even though the Malawi HIV and AIDS Policy (2003) has a role to advocate for mainstreaming of HIV/AIDS programming in all development areas, there are still some challenges which need further analysis of the family unit for it to be multidisciplinary responsive.

The Malawi Education Policy (2004) has a goal to promote school enrolment and progression and ensuring the overall quality of education. However, the large school dropout shows that there are gaps which need further critical analysis. The family provides a base through which the individuals socialize and develop personality and behaviour which in turn influences and

is influenced by schooling. As such, integrating the family in policy development is necessary. Already, changing family structure has been found to be correlated with girl's school dropout, and policy interventions at family level can address this problem (Eneji et al., 2013). Such policies must be able to respond to the complexity of changes taking place in new family arrangements (Cancian and Reed, 2010).

CHAPTER 2: LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

2.0 Introduction

The chapter provides pertinent literature on demographic, socioeconomic and cultural factors and its relation with changing family structure in Malawi. In addition, the chapter provides the Theoretical and Conceptual Framework. The study hypothesis is also included.

2.1 Literature Review

2.1.1 Changing family structures from a global perspective

Globally, a number of family researchers keep on examining the changing context of the family and its implications to individuals, society and the nations at large. Such studies have reported a positive association between various demographic, socioeconomic and community factors and changing family structure.

Evidence shows that a woman's age at marriage has an influence in changing family structure. Since age at marriage is related to educational and socioeconomic prospects, women pursuing education have a higher likelihood of marrying later or even less likely to marry (Raymo et al. 2013; Park et al., 2013; Yeung and Hu 2013a). Despite this positive relationship between education and economic opportunities and changing family structure, evidence in Japan shows that educated women and those with higher earnings have a higher likelihood of getting married (Fukuda, 2013). Further, in Korea, there is evidence that marriage among women with low educational levels is declining (Park et al., 2013). It has also been reported that low economic levels at household level significantly increases the risk of union dissolution (Burstein, 2007). Other studies have also shown that age difference between partners influences divorce. For instance in United Kingdom, evidence has shown that a big difference in age between partners increased the risk of conflicts and divorce (Chan and Halpin, 2003).

Apart from educational and economic prospects, another widely cited explanation why women remain single is the absence of a suitable dating partner. Traditionally, it is well acknowledged that parents used to arrange marriages for their sons and daughters (Chien and Yi, 2012). However, this practice is changing, and in some parts of the world it has completely changed (Jones, 2010; Retherford and Ogawa, 2006). This leaves a challenge on available alternatives. In Japan for instance, it has been reported that almost half of single

men and women reported lack of a suitable partner as the reason for not marrying (Retherford and Ogawa, 2006). This is mainly common among women with higher level of education (Raymo and Iwasawa, 2005)

In some countries like China, Korea and Taiwan, son preference is said to have contributed to an increased sex rations at birth causing surplus of men with no partner for marriage (Chen and Li, 2014; Chu and Yu, 2010; Chung and Das Gupta, 2007; Huang, 2014; Tsay and Chu, 2005; Wei and Zhang, 2011). For instance in China, men lacking partners for marriage increased from 34.6 million in the year 1990 to 40.9 million in 2000 (Klasen and Wilk, 2002). Despite the male preference, there is a growing trend in some countries like Japan for daughter preference. Whereas in 1982 men (20%) and women (40%) preferred a daughter as per the one child policy, the rate increased by (53%) for men and (73%) for females by the year 2003 (Fuse, 2013). It is believed that the daughter preference is on the increased because daughters are easier and safer to raise (Fuse, 2013). If nature does not take control, there is likelihood that there will be more females than males in future in those countries, thereby retaining the status quo of increasing levels of single families.

Another striking feature contributing to family instability is gender, especially women empowerment. Evidence from cross-sectional and longitudinal studies in the United States of America indicates that women's autonomy is significantly associated with family instability (Cherlin, 1999). These findings are consistent with the results of a study that was conducted in Ghana (Takyi and Broughton, 2006).

2.1.2 Changing family structures from a of Sub-Saharan Africa perspective

Traditionally, similar to some of the societies in Asian countries and Europe of the past, the role of women in Africa was confined to the home. However, with the new age of globalization and change, women are increasingly participating in the labour force, thereby narrowing the gap with men. Family responsibilities and expectations that place women in the home have increasingly become unappealing to most women as a result of increasing options and opportunities (Bumpass et al., 2009). It is possibly due to the same reason that the landscape of most African families is equally changing.

One such factor is urbanization. It is believed that urbanization and migration have significantly contributed to changing patterns in family arrangements (Cheng and Siankam,

2009; Hosegood et al. 2007; Madhavan, 2004). This is so due to the need for economic independence among family members. For instance, in a study in Botswana that compared Census data and Demographic Health Survey in some Southern African countries, reported an association between economic status and family structure in almost all the regions (Dintwat, 2010). Further, demographic events, such as, divorce or the death of a bread winner has an effect on family instability (Neckermann, and Muller, 2005; Thurman et al., 2006).

Race has also been reported to be playing a role in changing family arrangements in sub-Saharan Africa. For instance in South Africa, it has been found that being a Black South African, and with high education is associated with a higher risk of remaining single (Moore and Go vender, 2013).

2.1.3 Changing family structures from a Malawian perspective

The landscape of most sub-Saharan families has been affected by the impact of HIV/AIDS. HIV/AIDS not only takes away guardians leaving widows and children alone, but is also a direct and indirect cause of marriage dissolution. Learning from experiences in Zambia and Rwanda, between 55.1% and 92.7% of new infections took place in marital or cohabiting unions respectively (Dunkle et al., 2008). Similarly, evidence from some studies in Malawi indicates that some men and women are turning to divorce as a way of avoiding the risk of HIV (Reniers, 2008). In one study in rural communities of Malawi in 1998, about 32% of the women and 14% of the men were concerned with their partner regarding HIV infection risk, and the figures rose to 52% and 23% respectively three years later (Watkins, 2004). Separation and divorce is also higher among partners who have problems in negotiating for condom use; particularly among those where infidelity has been observed and negotiations about condom use are being compromised (Tavory and Swidler, 2009; Reniers, 2008).

It has also been established that family instability in Malawi is associated with ethnicity. More especially, marriage instability is high among the Matrilineal Yao grouping (Kaler, 2001; Tawfik, 2003). Among the Yao ethnic group, about 60% of first marriages end in divorce within 20 years after marriage; and 50% of the women who divorce, remarry within 2 years, whilst 90% remarry within 10 years (Reniers, 2003). On the other hand, among the Tumbuka from the Northern part of Malawi, marriage is more stable even though 35% of the partners divorce within 20 years of their first marriage while 78% of them remarry within 10 years (Reniers, 2003). With the rise in economic agriculture, more labour supply is required.

The movement of people for labour and employment has also increased the levels of intermarriages between people of differing cultural and ethnic groups. Such intermarriages, especially those between people from patrilineal and matrilineal cultural groupings increase the risk of family instability (Takane, 2008). Some of these women who marry enter polygamous unions thereby causing extended family networks (Reniers, 2003).

2.1.4 Demographic Factors

Age of household head is an important factor in defining family structure. In Tanzania, it was found that when a male head dies, 43% of the homes dissolved or migrated within a 12 months period, especially when the head was below the age of 60 years (43 %) as compared to when the head was more than 60 years of age (28 %) (Urassa et al., 2001). In contrast, other studies have found that households have managed to maintain sizes and dependency ratios following the death of the prime-age adult. For example in Uganda, household size decline was only about one person after the death of a prime-adult; and families actually attracted new members (Hosegood, 2009).

Family structute is also influenced by age at first marriage. With globalization and gender equality campaigns, women are increasingly taking part in education and employment opportunities and marrying late, thereby increasing the rates of single families (Krogstad, 2014). In Korea, Taiwan and Japan, by the year 2010, the average age at first marriage among men had increased to above 30 years and for women it increased to above 28 years (Jones and Yeung, 2014). Early marriage (below 20 years) exposes women to early childbearing and stress which increases the risk of divorce (Amato, 2010; DeGenova et al., 2011).

Recent studies have reported the increasing importance of the economy which has an impact on marriage formation. For instance, it has been found that higher remunerations are linked with higher odds for marriage in Japan (Fukuda, 2013). In the United States, women who enter the first marriage in their late 20s and early 30s report that they have higher income both at personal and household level than those who marry early (Hymowitz et al., 2013). This emphasizes the strong link between economic needs and pursuits for marriage and the eventual child care costs. This possibly explains why women who marry at a young age have increased prospects for divorce which may collapse the family unit (Amato, 2010; Kuperberg, 2014; Raley and Bumpass, 2003). Even though, other studies have found this

association to be rather complex due to the possibility of the influence of other factors (Manning and Cohen, 2015).

Numerous factors have been reported to be contributing to an increase in age at first marriage or never marrying. This have been attributed to increasing education and earning potentials of women (Yeung and Hu, 2013a; Yang et. al., 2006; Park et al. 2013). Prospects for marriage have been found to be poor among low educated men and highly educated women (Raymo et al., 2015). In constrast, other studies have also found that women with low educational levels are marrying late (Park et al., 2013). Other researchers have attributed it to challenges with identifying a suitable partner for marriage (Raymo and Iwasawa, 2005). In the past, parents used play a role by selecting a partner, and even though this is still taking place in some societies, the practice seems to be shrinking (Jones, 2010; Retherford and Ogawa, 2006).

Sex of household head is another factor that has an impact on family structure. Growing up in a family that is headed by a single mother increases the risk of early sexual debut (Pilgrim et al., 2014). Further, the absence of a father figure is associated with earlier menarche in girls (Neberich et al., 2010). In contrast, other studies have however found a contrary relationship (Defo and Dimbuene, 2012). This is so because it is assumed that single mothers exert more control on parental roles through supervision and setting rules (Demuth and Brown, 2004). Such paternal co-residences have been found to be associated with family instability among their siblings who take marriage as a short-term goal (Ellison et al., 2011).

Household headed by females have been reported to be associated with low socioeconomic status (Chant, 2007). Divorced women and those who have never been married experience intermittent stress both, at short term and long term (Osborne and McLanahan, 2007; Fomby and Cherlin, 2007). Worse still, children fom such female headed households have poor performance at school and report increasingly poor self-worth especially when among the opposite sex (Carslon, 2006; Richter et al., 2011). On the other hand, women in nuclear families suffer less stress and derive more happiness when rearing children (Richter et al., 2011). But still, nuclear families are not always free of challenges. In South Africa there has been high incidences of abuse towards their female partners which is also contributing to family instability (Morrell and Jewkes, 2011).

Over the years, religious beliefs and practices have changed in most parts of sub-Saharan Africa. This is evidenced by new forms of Christian and Islamic practices that have caused

changed practices of religion in form of Pentecostalism and Arabicized Islam (Meyer, 2004). It is believed that religion has an influence in decision making in a number of important areas of life such as; work, occupation, marriage, where to reside and number of children among others (Ammons and Edgell, 2007; Sigalow, Shain, and Bergey, 2012). Aside from that, religion is also taken as a platform for conservative behaviours and attitudes which may strengthen the bonds of a family (Pearce and Thornton, 2007). Thus, religion may avert early family disruptions since it helps in preventing teenage cohabitation and early pregnancies (Meier and Allen, 2008). Other studies have however reported that religion actually promotes early marriage (Ellison et al., 2011; Uecker and Stokes, 2008). For instance, it has been found that being a Christian and having a strong conviction to the religious values is associated with early marriage among women (Ellison, Burdette, and Glenn, 2011). This is so because religion, stresses the importance of marriage as an ultimate goal for most young people (Ellison et al., 2011). This association is higher among individuals with higher level of education as compared to those with lower level (Sigalow et al., 2012). This evidence expands on previous studies which also found that people with higher religiosity enter marriage early as compared to those who are non-religious (Uecker and Stokes, 2008).

The above findings show that religion may have an influence on marital timing (Carroll, Hill, Vitas, and Willoughby, 2012). It goes without saying that despite this assertion, other findings indicate that educational levels and the type of structure of the family may moderate the role of religion on timing of first marriage. In particular, women from nuclear families are more likely to take marriage as a short-term goal due to strong religious beliefs (Ellison et al., 2011). This is common especially among educated women from to nuclear families (Ellison et al., 2011).

2.1.5 Socio-economic Factors

Education is said to be associated with family structure. Education increases the age at marriage through pursuing career opportunities (Arnett, 2007). Other studies have however found that women with higher levels of education have an increased probability of getting married if compared to their counterparts (Hymowitz et al., 2013). Higher level of education has been reported to be associated with divorce (Frank and Wildsmith, 2005). Other studies have however found a contrasting association and report that higher level of education actually decreases the risk of divorce (Boyle et al., 2008). In other studies, the impact of education on family structure has been correlated with economic prospects, where high

educational levels and increased wealth is associated with women's single family status (Raymo, 2005).

The gender revolution has gone through different phases. The current phase, even though it is still underway in most countries, involves increasing men's role in the family and home environment. Improving women's economic status encourages gender equality in division of labour in the home (Knudsen and Waerness, 2008; Breen and Cooke, 2005). It is probably due to the same reason that men are increasingly getting involved in household chores (Aassve, Fuochi, and Mencarini, 2014). This has been attributed to the support in social policies that encourage and lessening the challenges associated with combining women's labour force participation and family roles (Charles and Cech, 2010). Through this, women are significantly contributing to household income. Moreover, studies in the past have shown that higher pluralisation in terms of gender equality, has led to increased women's income levels and reduced likelihood of marriage (Kalmijn, 2013; Ono, 2003). Further, unfavourable employment conditions like low wages and long hours of work causes stress and have negative effects on the family unit (Joshi and Bogen, 2007). Even if family and work are important in fulfilling and or self-actualization, the intersections of the two can lead to conflicts, which may cause the family unit to crumble (Bolton and Houlihan, 2009). This ranges from resistance from men to parental conflicts especially in child care roles (Gerson, 2010; Hofferth and Pleck, 2008). This is mostly common within the African communities. Already as reported before, people in most of the communities in Malawi have challenges in understanding gender equality which is increasing family conflicts (Mbilizi, 2013).

Place of residence correlates with vicinity and economic opportunities. A higher population of the people in Malawi are however concentrated in rural areas where extended families are more prevalent. In addition, rural livelihoods in Malawi are associated with higher levels of poverty which impacts significantly to family arrangement causing some family member to relocate to urban areas for work or marriage. Remittances from these are important because they act as a buffer in times of economic shock especially among rural dwellers (Schatz and Ogunmefun, 2007). These grants can also improve the wellbeing of women (Case and Menendez, 2007).

Evidence from a bulk of literature indicates that individual and family economic resources have a link directly and indirectly with family instability. For instance, couples with low

income status and educational levels have higher odds of divorce than their counterparts (Burstein, 2007). Low levels of income in the family increases the risk of stress in the family which may cause conflict, strained relationships and chaos (Dearing, 2014). The traditional set-up of most Africa families are characterised by extended family units. The higher rates of orphans and vulnerable children that has been absorbed in most extended families in sub-Saharan Africa is causing wealth stress leading to poverty and family instability (Ssewamala and Ismayilova, 2009). Such families are characterised by a higher number of household size including the aged. Having extended families members; especially older parents, is associated with greater parental expenditures which may strain the family (Henretta et al., 2012). Such kin related stress may collapse the family unit (Conger and Donnellan, 2007).

The global position about the centrality of children among married couples and within communities has for long remained conservative, even though the situation seem to be changing (Choe et al., 2014; Wu and Xie, 2013). In most African families, preference for many children is higher as compared to the international norm. The challenges with having many children include financial liabilities, education, discipline and illness among others. Even though women view marriage as something of a luxury, motherhood is still valued (Edin and Kefalas, 2005). For instance, in some countries in Asia, most unmarried men and women show interest of getting married and very few have a desire to remain childless, but prefer to have children (Retherford and Ogawa, 2006; Yang and Rosenblatt, 2008). Among others, motherhood has psychological benefits. In other countries however, motherhood is not viewed as a necessity especially among women with high skills and education achievement. For instance, in the United States, women have other means which act as a source of happiness and fulfilment which makes them to live childless (Abma and Martinez, 2006). Another salient feature in most families is the son preference. This is especially common among women with no or little education (Lin, 2009). Improving educational levels has an influence in dissipating this case (Chung and Das Gupta, 2007).

2.1.6 Cultural Factors

When focusing on women's individual actions and agency, there is need to root these in the context of the society and community they live in. In fact, the few empirical studies that have tried to examine the impact of community contexts on individual outcomes have found that the contextual factors are far more important than the individual factors (Jejeebhoy and

Sathar, 2001; Mason and Smith, 2003). Evidence shows that the Southern region of Malawi has high divorce rates as a result of its matrilineal ethnic group (Grant and Yeatman 2014; Reniers 2003; Chimbiri, 2006).

Culturally, Malawi as a country is not homogenous; its population is divided into three regions with belonging to either a patrilineal society in the north and centre or matrilineal society in the south. These dividing cultural lines define a woman's place after a marriage contract and after the death of one of the couples. For instance, in patrilineal societies, the woman moves and relocates to the man's place and in the matrilineal society the woman stays at her home and it is the man who relocates. This has implications to the family structure especially following the husband's death. When this happens, the widow is anticipated to marry the brother to her late husband; if not, she has to live the household. In some cases the woman is asked to leave the home if it has been observed that the husband's death was caused by AIDS related infections. And in this case she does not inherit anything from whatsoever wealth that is there.

From a gender perspective, it is necessary to understand how decisions at family level are made which may also influence instability of a family unit. Women with low earning potential and those with low levels of education have a higher risk of abuse (Baffour, 2012). In Ghana, it was reported that women in high poverty bracket and those illiterate have a higher risk of abuse (Mann and Takyi, 2009; Tenkorang et al., 2013).

2.2 Theoretical and Conceptual Framework

The bonds in a family make it possible for the family to adjust in times of challenges. However, in some cases the challenges become so intense that the family fails to cope. In most cases, a combination of social and economic changes plays a major role in changing family structures. The industrial-capitalist revolution steered a shift in theorising about the family from the traditional and philosophical approaches to more scientific methodological methods (Amoateng, 2007). Thus, to better understand family in the modern world, it is necessary to analyse the family from an economic perspective. This is so because the family provides a nest through which investments in human and social capital are safeguarded, and support for dependents is provided. For this very reason, the Intergenerational Wealth Flow Theory (IWFT) by John Caldwell developed in 1982 has been used. Analysing the family using the wealth flows perspective is important across time and space (Caldwell, 1989).

Figure 1: The Intergenerational Wealth Flow Theory by Caldwell (1982)

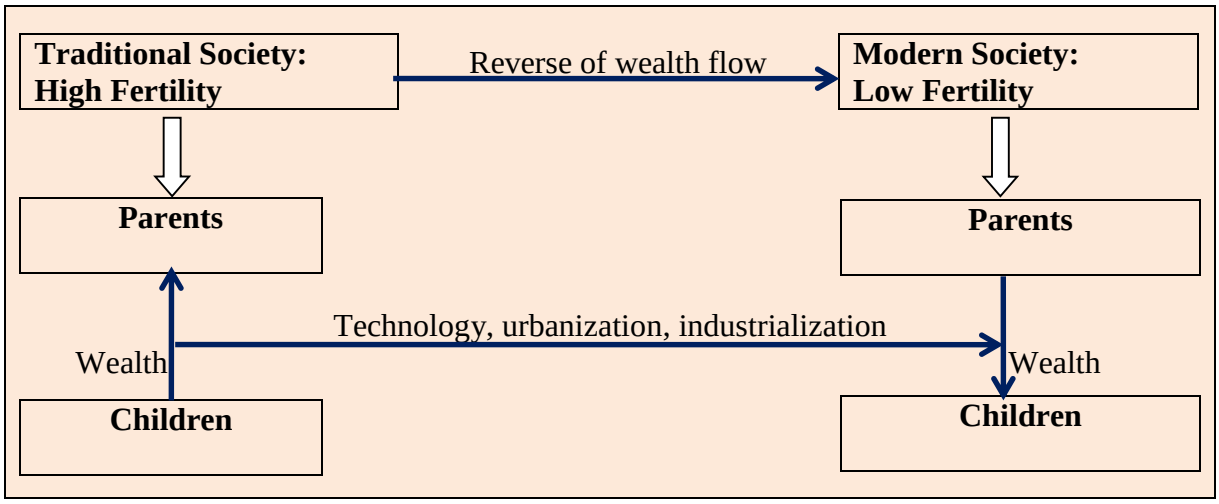
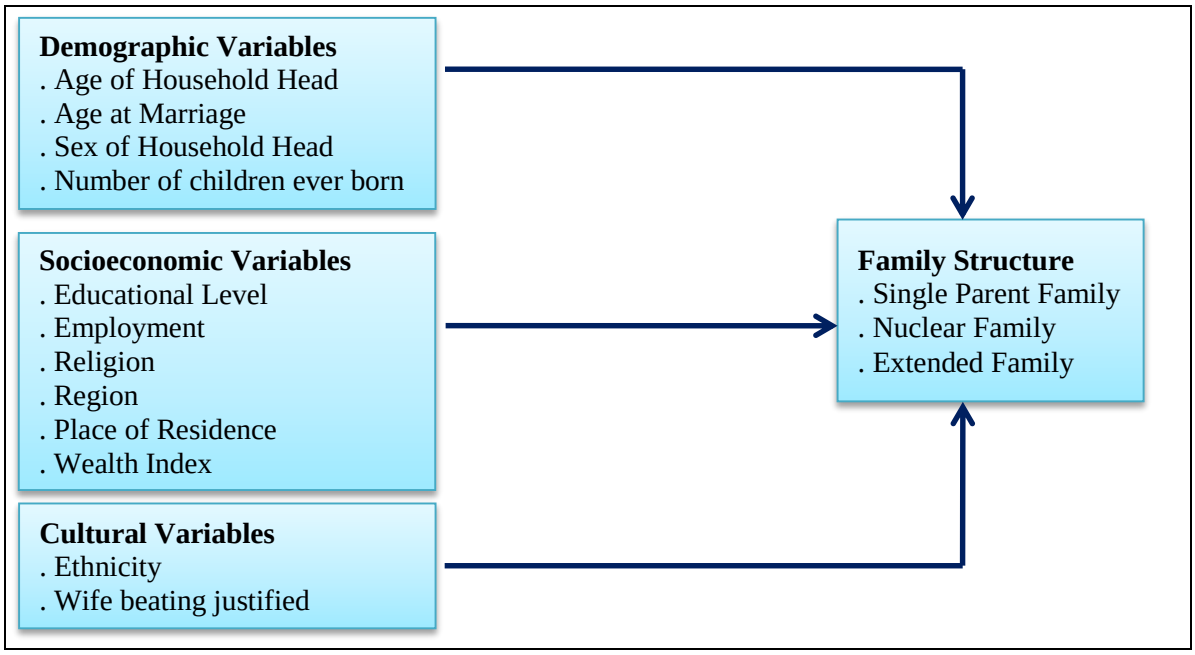


Figure 1 above is an illustration of Caldwell's wealth flow theory. According to Caldwell, 'wealth flows' can be transfers in the form of money, goods, services, and other related guarantees that one individual provides to another (Caldwell, 1989). This theory will therefore define how such transfers of material resources, cultural and social capital occurs through family relationships (Makiwane et al., 2012).

Caldwell proposes that the nature of the economy of a family may condition the direction of the flow of income between parents and children and may cause changes in family arrangements. For instance, high fertility is more likely advantageous to families for economic gains from children. Thus, in traditional extended families, wealth tends to flow from children to the older generation. On the other hand, due to the economic burden of children to parents and families as a result of technological advancement, urbanization, and industrialization, most families favour low fertility. This is a characteristic of modern nuclearized families (Theerawanviwat, 2014).

Conceptual Framework

Figure 2: Conceptual framework; adapted from Caldwell (1982)



While Caldwell's theory seeks to explain change in fertility due to change in family structure, an unexplained feature in the framework are the determinants of changing family structure. For this study, the conceptual framework is an adaptation of Caldwell's Intergenerational Wealth Flow Theory, by focusing on family structure as the outcome as opposed to fertility. This conceptual framework shows how the demographic and socioeconomic factors are associated with change in family structure through the intergenerational wealth flow perspective. From this perspective, nuclear families and other kin members in the extended family structure turn to be the main providers of income and support. However, the intergenerational transfer flows and behaviours are constrained by demographic and socioeconomic factors like; mortality and migration which in turn shape household structure (Kohler et al., 2012). Such factors are also shaped by underlying social, economic, cultural, normative and political context in which such transfers occur (Zagheni, 2011).

The demographic transitions are interrelated not only to changes in values but also to the dynamic socio-economic sphere which in turn affects relationships and family structure. Whereas changes in production may be the main underlying cause for family change, Caldwell assigned some other direct and indirect causes, such as, change in education, literacy and urbanization and occupational status. In this conceptual model, the demographic factors (age at marriage, sex of household head, total children ever born and region),

socioeconomic factors (education, employment, religion, region, place of residence, and wealth) and cultural factors (ethnicity and justification for wife beating); are assumed to be associated with changing family structure in Malawi. Even though wife beating is a gender and social issue, in this study it has been explored as a cultural factor because it has been aligned with cultural drivers of gender based violence.

2.3 Research Hypothesis

In this study I hypothesize that:

1. Women who enter their marriage at an early age have an increased risk of influencing changes in the structure of the family.
2. Households headed by women have a higher likelihood of causing changes in the structure of the family.
3. Having lower educational levels among women increases the risk of causing changes in family structure.
4. Women in employment have a lower risk of influencing changes in the family unit.
5. Residing in rural areas is significantly associated with higher risks of changing family structure of the family.
6. Lower wealth quantiles among women are significantly associated with changing family structure.
7. Poor wealth quantiles are significantly associated with changing family structure
8. Having a higher number of total children ever born reduces the risk of causing changes to the family unit.

2.3.1 Justification of the hypotheses

Coupled with the theoretical and conceptual framework, the hypotheses as stated above have been drown basing on past literature that has been reviewed. From previous studies, evidence shows that age at marriage, sex of head of household, level of education, employment and wealth status, and total children ever born have been found to be associated with changing family structure.

CHAPTER 3: METHODOLOGY

3.0 Introduction

This chapter provides details on the methodology that has been employed including detailed information on how the objectives of the study have been achieved. In addition, the chapter also included information about the study design, population of interest, sample size and variables that have been used. Statistical techniques, procedures on data management and analysis have also been included. Lastly, the chapter highlights the study limitations.

3.1 Study Design

The study utilised the Malawi Demographic Health Survey for the year 2000 and 2010. From each of the two data sets, the individual recode (women file) and the household member recode (household member file), were merged. A 'recode' is a standardised DHS dataset for each country, which contains the country's standard and specific variables (Measure DHS, 2013). The unit of analysis was the family. The reason for the merging was to identify women aged 15-49 within the households who had the same characteristics with those in the individual women recode.

3.2 Study Population

The population of interest in this study were women within the reproductive age, that is, between 15 and 49 years who were interviewed in the last five years preceding the surveys in Malawi. Even though in Malawi single families in which men are heads exist, this study only focussed on women because they are the most vulnerable in most communities.

3.3 Sample Size

During the initial phase of the analysis, the household member recode was merged with the individual recode for both the year 2000 and 2010. The idea was to isolate women with similar characteristics as in the individual recode. The MDHS (2000) shows that there 14,213 households clusters. Out of this total, 13,538 were identified and 13.220 interviewed. Thus, the total sample of interest in this study, in the year 2000 was 13.220 women. As for the year 2010, a total sample of 23,020 was used.

3.4 Variables used in the study and their definitions

3.4.1 Outcome variable

The outcome variable is "family structure" which has been categorized as

- Single family (unmarried woman living alone or with child/children)
- Nuclear family (married woman living with husband with or without child/children
- Extended family (single or married woman living with children, parents, uncles, aunties, cousins etc.)

Table 3.1: Dependent Variables

Variable category outcome	Coded
Single parent	1
Nuclear family	2
Extended family	3

3.4.2 Explanatory variables

The main explanatory variable was 'woman's wealth status' which was grouped into Poor (0), middle (1), rich (2). This was a created variable from the original poorest (1), poorer (2), middle (3), richer (4) and richest (5). Thus the categories poorer, middle and richer were combined. The other explanatory variables have been shown in the table 3 below. The idea was to measure how a woman's wealth status operates through the various demographic, socioeconomic and cultural variables in determining family structure in Malawi.

Table: 3.2: Independent Variables

Code	Name of Variable	Original Codes	How coded in this study
Demographic Variables			
v152	Age of household head	Age in single years: 1, 2, 3, 4, 5, 6, 7...++	Age in single years: 1, 2, 3, 4, 5, 6, 7...++
v511	Age at first marriage	Age in single years: 1, 2, 3, 4, 5, 6, 7...++	Younger (15-19), Youth (20-24), Adult (25-39), and then Older (40-49)
v151	Sex of household head	Male (1), Female (2)	Male (1), Female (2)
v130	Religion	Catholic (1), CCAP (2), Anglican (3), Seventhday/Baptist (4), Other Christian (5), Muslim (6), No	Christian (1), Muslim (2), Other religion (3)

		religion (7), Other (99)	
Socio-economic Variables			
v106	Highest educational level	No education (0), primary (1), secondary (2), higher (3)	No education (0), primary (1), secondary (2), higher (3)
v024	Region	North (1), Central (2), South (3)	North (1), Central (2), South (3)
v025	Type of place of residence	Urban (1) or Rural (0)	Urban (1) or Rural (0)
v190	Quintile of wealth index	poorest (1), poorer (2), middle (3), richer (4) and richest (5)	Poor (0), middle (1), rich (2)
v714	Respondent currently working	Employed (1), Not employed (0)	Employed (1), Not employed (0)
v201	Total children ever born	Number in single years: 1, 2, 3, 4, 5, 6 ...++...17	None (0), Few (1-2), Average (3-4), Many (5 above)
Cultural Variables			
v131	Ethnicity	Chewa (1), Tumbuka (2), Lomwe (3), Tonga (4), Yao (5), Sena (6), Nkhonde (7), Ngoni (8), Other Mang'anja (9), Other Lambya (10) Other Ndali (11), Other Nyanja (12), Other (96)	Chewa (1), Tumbuka (2), Lomwe (3), Yao (4), Ngoni (5), Other (6)
v744c	Wife beating justified if she argues with him	Not justified (0), justified (1)	Not justified (0), justified (1)

Table 3 illustrates the various types of explanatory variables that were used in the study which have been grouped into demographic, socioeconomic and cultural factors. Among the demographic variables, the following have been included; Age of household head (categorised as age in single years from 1 and above), Age at first marriage [categorised: marriage at younger age (8-19), Youth (20-24), Adult (25-39), and then Older (40-49)], Sex of household head [categorised as Male (1), Female (2)] and Religion [categorised as Christian (1), Muslim (2), Other religion (3)].

The socioeconomic variables included are; educational level [categorised as; no education (0), primary (1), secondary (2), higher (3)], region [categorised as; north (1), central (2), south (3)], type of place of residence [categorised as; urban (1) or rural (0)], wealth status [categorised as; poor (0), middle (1), rich (2)], employment status [categorised as; employed (1), not employed (0)], and lastly total children ever born [categorised as; no children (0), few (1-2), average (3-4), many (5 above)].

Lastly, the cultural variables, which included; ethnicity [categorized as; Chewa (1), Tumbuka (2), Lomwe (3), Yao (4), Ngoni (5), other (6)], and wife beating justified if she argues with him as husband [categorized as; not justified (0), justified (1)].

3.5 Data Analysis

In this study, I analyzed two (2) data sets namely; the Malawi Demographic Health Survey for the year 2000 and the Malawi Demographic Health Survey for the year 2010. The Malawi Demographic Health Surveys are national cross-sectional surveys in which different indicators related to fertility, mortality, health, nutrition and HIV/AIDS are collected and made available for research purposes. Further, the data set disaggregates issues related to families. The surveys provide information related to individuals and communities at large. During data collection, Macro International Agency (MIA) collaborated with the Malawi National Statistics Office (NSO) in consultation with other institutions who developed the questionnaire. Pre-testing and post-testing was done before the actual process of data collection and revisions were being made according in the process. Actual collection of data was done by trained remunerators from the different districts involved. Since the unit of analysis is the family, efforts have been made to isolate women (the population of interest) from families. This was done by merging the individual recode file and the household member recode file for each of the two data sets, that is, for 2000 and 2010. Analysis was done at different levels whilst being mindful of the study objectives. Version 13 of Stata was used when analysing data.

It is also important to note that two data sets, that is, MDHS (2000) and MDHS (2010) are sample surveys from two samples that may be mutually exclusive. Even if slight overlap may occur in the samples, it may be not significant, thereby causing a challenge to generalise the results. However, to address this challenge, weighing of the data at both time points was done so as to ensure national representativeness.

Objective 1: To assess the levels and trends associated with family structure in Malawi between 2000 and 2010: For this objective, the Pearson Chi-squared test for trend was used. This test suits well for testing trends over time. The test was applied to both data sets, that is, Malawi DHS 2000 and 2010.

Formulae for Chi-squared test for trend: $$X^2 = \sum \frac{(obs - \exp)^2}{\exp}$$ (Pearson, 1900)

Where:

Obs **-** means the observed value

Exp **-** means the expected value

x^2 **-** means the sum of squared difference between the *'**Obs**'* and *'**Exp**'* divided by the expected data in all the possible categories.

Objective 2: To examine factors associated with family structure in Malawi between 2000 and 2010: To measure this association, the Multinomial Logistic Regression (MLR) model was used for both data sets and the results were analyzed and compared. The Multinomial Logistic Regression (MLR) is a statistical method that utilises a number of explanatory variables in order to forecast a response at outcome level. This technique aims at modelling a relationship that is predicted to exist between predictors and outcome variables.

All the assumptions of the model like; independence of irreverent alternatives and ensuring that the dependent variable categories should be mutually exclusive and exhaustive were met before running the model. This model was necessary due to the fact that the odds of each of the outcomes of the dependent variable family structure, that is, single, nuclear and extended are nominal (multiple unordered outcomes) and independent of other alternatives. In addition, the MLR model suited well because there are three (3) categories at outcome level. The level of significance was restricted to 0.5 and 0.001.

$$P(Y) = \frac{1}{1 + e^{-(b_0 + b_1X_1 + b_2X_2 + \cdots + b_nX_n + \varepsilon_i)}}$$ (Kohler and Kreuter, 2005)

Where:

p - is the probability

y - is the predicted or expected value of the dependent variable (family structure)

x_1 *to* x_n - are the distinct demographic, socioeconomic and cultural predictor variables

$\mathbf{b_0}$ – is the values of *y* when all the independent variables (x_1 to x_n) are equal to zero.

$\mathbf{b_1}$ to $\mathbf{b_n}$ - are the estimated regression coefficients that quantify the association between the risk factor and the outcome

E = error term

3.6 Calculation of Rates

From the sample, especially in comparison between the two points, that is 2000 and 2010, the sample size is different in these two surveys. Calculating rates will help in defining the

population at risk, who in this case are women. This will also help in taking account of the variations between these two populations.

3.6.1 Rates for the year 2000

Rate = Family Structure (single/nuclear/extended)/Total of females*1000

Rate = (1119/8393/3708)/13220*(100) = 2.72 females per 1000

3.6.2 Rates for the year 2010

Rates = Family Structure (single/nuclear/extended)/Total of females*1000

Rates = (2522/14144/6354)/23020*(1000) = 8.55 females per 1000

3.7 Ethical Issues

The study employed DHS which is secondary data. DHS is an open data collection activity. Its aims and goals are clear to the government that requests the survey and to all stakeholders participating in its contents and design. The data collection instruments are, to large extent, standardized and are widely accepted. The broad goals of the exercise are explained to the respondents by fieldworkers during their introduction in the household.

There is no deception of respondents. According to the DHS data, identifiers of the individual woman from whom information was collected is removed as a way of ensuring confidentiality. This is one of the rules set for all Demographic Health Surveys. In addition, it is envisaged that all the women from whom information was collected from gave consent as a DHS protocol. This means that the rights of the women were upheld. No attempt is made to cajole respondents into agreeing to something to which they may not have otherwise agreed. Moreover, information that may compromise anonymity of respondents is not retained on record.

Data collected are coded and analyzed, and the final report of survey findings is released for dissemination only after it has been approved by the host-country government. Further, as one of the recommendations of data collection for all DHS data in different countries, working with existing institutions like the ministries is paramount. Within these existing ministries, there are Ethical committees which in collaboration with the Institutional Review Board (IRB) and Macro International, guide the process. All this is done in order to ensure that ethical procedures are properly followed and adhered to. With the consent of the host-country government, standard recode data files for these data are made publicly available to

researchers free of charge. The instruments used for data collection are made publicly available at no charge. Since these surveys have the backing of host-country governments, the results are used for program and policy development, which ultimately benefits the citizens of participating countries.

CHAPTER 4: RESULTS

4.0 Introduction

In this chapter, all the results of the study have been presented. The results have been presented according to the objectives of the study. First to be presented are results pertaining to objective one (1) for univariate and bivariate analysis. At univariate level and trends of family structure for the two point in time for years 2000 and 2010 have been presented.

For objective two (2), inferential results basing on the outcome of the multinomial logistic regression have been presented. The outcome shows the association of the demographic, socioeconomic and cultural factors and family structure in Malawi. During the multinomial logistic regression analysis, 'single family' was used as the base outcome. Single family was used as a base outcome because, it is an emerging and the most vulnerable family type, hence it was compared with the other two family types namely; nuclear and extended.

4.1 Descriptive Results

Objective one (1) of this study was to assess levels and trends associated with family structure in Malawi in 2000 and 2010. Below are the results and interpretations of the results.

4.1.1 Univariate Results

Figure 4.1.1.1: Univariate analysis results showing characteristics for family structures (single, nuclear and extended), comparing the MDHS for the years 2000 and 2010.

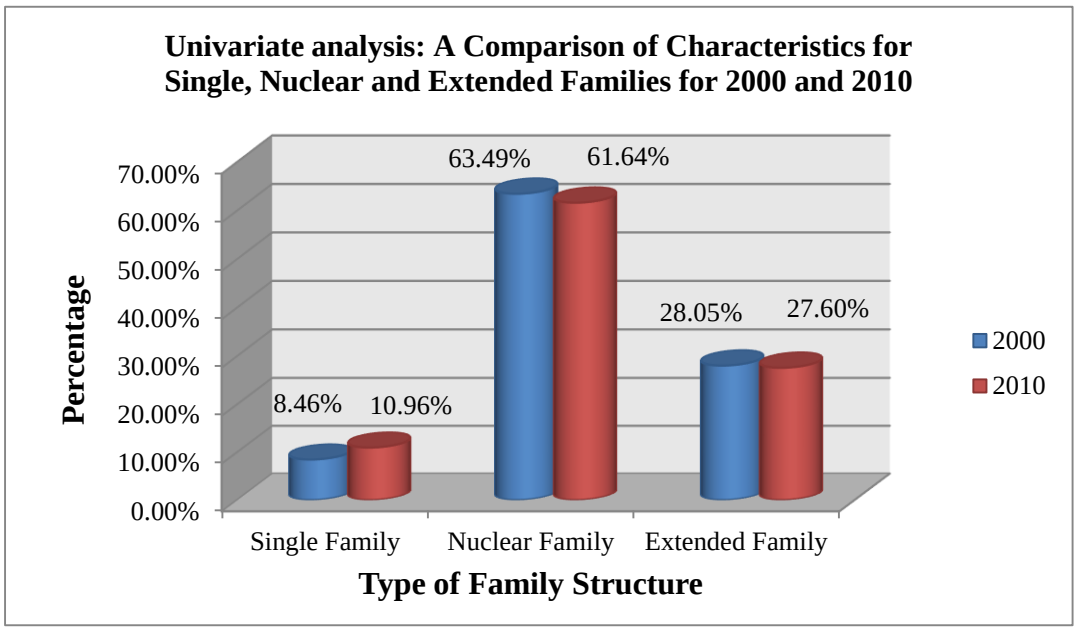


Table 4a: Univariate analysis results comparing Family Structures (Single, Nuclear and Extended) for MDHS for the years 2000 and 2010.

	MALAWI (DHS 2000)		MALAWI DHS (2010)	
	Number	**Percent**	**Number**	**Percent**
Explanatory Variables				
Age at first marriage				
Younger (15-19)	8,771	66.35	14,940	64.90
Youth (20-24)	1,829	13.84	2,997	13.02
Adult (25-39)	334	2.53	544	2.36
Older (40-49)	2,286	17.29	4,539	19.72
Total	**13,220**	**100.00**	**23,020**	**100.00**
Sex of household head				
Male	9,738	73.66	16,770	72.85
Female	3,482	26.34	6,250	27.15
Total	**13,220**	**100**	**23,020**	**100.00**
Total children ever born				
None	2,883	21.81	4,979	21.63
Few (1-2)	3,958	29.94	5,936	25.79
Average (3-4)	3,710	28.06	7,509	32.62
Many (5 above)	2,669	20.19	4,596	19.97
Total	**13,220**	**100.00**	**23,020**	**100.00**
Highest educational level				
No education	3,372	25.51	3,390	14.73
Primary	8,219	62.17	15,339	66.63
Secondary	1,608	12.16	3,970	17.25
Higher	21.000	0.16	321	1.39
Total	**13,220**	**100.000**	**23,020**	**100.00**
Region				
North	2,187	16.54	4,189	18.20
Central	4,508	34.10	7,862	34.15
South	6,525	49.36	10,969	47.65
Total	**13,220**	**100**	**23,020**	**100.00**
Type of place of residence				
Urban	2,871	21.72	3,068	13.33
Rural	10,349	78.28	19,952	86.67
Total	**13,220**	**100.00**	**23,020**	**100.00**
Quintile of wealth index				
Poorer	4,895	37.03	9,045	39.29
Middle	2,825	21.37	4,721	20.51
Richer	5,500	41.60	9,254	40.2
Total	**13,220**	**100.00**	**23,020**	**100.00**
Employment				

Not employed	5,708	43.18	9,970	43.31
Employed	7,512	56.82	13,050	56.69
Total	**13,220**	**100.00**	**23,020**	**100.00**
Religion				
Christian	11,147	84.32	20,284	88.11
Muslim	1,888	14.28	2,530	10.99
Other	185	1.4	206.000	0.89
Total	**13,220**	**100**	**23,020**	**100.00**
Ethnicity				
Chewa	3,536	26.75	6,780	29.45
Tumbuka	1,291	9.77	2,497	10.85
Lomwe	2,589	19.58	3,731	16.21
Yao	1,928	14.58	2,424	10.53
Ngoni	1,462	11.06	3,145	13.66
Other	2,414	18.26	4,443	19.30
Total	**13,220**	**100.00**	**23,020**	**100.00**
Justification of wife beating				
Not justified	10,629	80.40	21,742	94.450
Justified	2,591	19.60	1,278	5.550
Total	**13,220**	**100.00**	**23,020**	**100.00**

Table 4a above is a summary of univariate results which summarizes a comparison of the MDHS for two (2) points in time, that is, 2000 and 2010.

The univariate results show that in the year 2000, 8.46% of the women reported that they belonged to single families, 63.49% to nuclear families and 28.05% to extended families. If compared to the year 2010, women who reported to belong to single families were 10.96%, nuclear families (61.44%), and extended families (27.60%). This means that there was an increase by 2.5% for women who reported to belong to single families in the two points, that is, 2000 and 2010. As for women who reported to belong to nuclear families, the rate was lower by 2.05% between the years 2000 and 2010 while the percentage of women who reported to belong to the extended family reduced by 0.45%. It can be concluded therefore that in Malawi, the percentage of women reporting to belong to single families had increased while those in nuclear and extended families had reduced.

4.1.1.0 Demographic Level Characteristics

For demographic factors, the variable characteristics that have been included are: age of household head, age at first sex, sex of household head and total children ever born.

For age at first marriage, in the year 2000, women who reported to have had age at first marriage at younger age (15-19 years) were 66.35%, at youthful age (20-24 years) were 13.84%, at adult age (25-39 years) were 2.53% and at an older age (40-49 years) were 17.29%. In the year 2010, women who reported of having had age at first marriage at a younger age (15-19 years) were 64.90%, at youthful age (20-24 years) were 13.02%, at adult age (25-39 years) were 2.36% and at an older age (40-49 years) were 19.72%. This change shows that women who reported of having had a first marriage at a younger age (15-19 years) were lower in 2000 if compared with 2010 by 1.45%. Similarly, women who reported that they had age at first marriage at youthful age (20-24 years) and adults (25-39 years) were less in 2000 than in 2010) by 0.82% and 0.17% respectively. As for women who reported their age at first marriage at an older age (40-49 years) the rate was higher in 2010 by 2.43% if compared with the year 2000.

Women who in the year 2000 reported to be living in households headed by males were 73.66% while those who reported to be living in households headed by women were 26.34%. As for the year 2010, women who reported to be living in households headed by males were 72.85% while those who reported to be living in households headed by women were 27.15%.

As for total children ever born, in 2000, women who reported to have no children were 21.81% while those who reported to have few children (about 1-2 children) were 29.94%. Those who reported to have an average number of children (about 3-4 children) were 28.06% and those with many children (5 and above) were 20.19%. As for the year 2010, women who reported to have no children were 21.63% while those who reported to have few children (about 1-2 children) were 25.79%, those who reported to have an average number of children (about 3-4 children) were 32.62% and those with many children (5 and above) were 19.97%. Thus, women with no children and those with few children (1-2) reduced by 0.18 and 4.15% respectively between the two points in time (2000 and 2010). Further, women with many children (5 and above) reduced by 0.22%. However, women with an average number of children (3-4) increased by 4.56%.

4.1.1.2 Socioeconomic Level Characteristics

As for socioeconomic, characteristics of the following factors have been included: level of education, region, place of residence, wealth status and religion.

For education, in 2000, women with no education were 25.51%, those with primary education were 62.17%, those with secondary education were 12.16% and those with higher (tertiary) education were 0.16%. In the year 2010, women with no education were 14.73%, with primary education were 66.63%, those with secondary education were 17.25% and those with higher (tertiary) education were 1.39%. This means that between the two time points (2000 and 2010), the percentage of women with no education reduced by 10.78%, those with primary education increased by 4.46%, those with secondary level of education also increased by 5.09% and those with higher educational level increased by 1.23%.

In the year 2000, women who were residing in the northern part of Malawi were 16.54%, those in the central region were 34.10% and those in the southern region were 49.36%. In 2010, women who reported to be residing in the northern region were 18.20%, those in the central region were 34.15% and those in the southern region were 47.65%. This shows that women who reported to be living in the northern region increased by 1.66% while those in the southern region reduced by 1.71%.

In 2000, women who reported to be residing in urban area were 21.72% while those who reported to be residing in rural area were 78.28%. In 2010, women who reported to be residing in urban area were 13.33% while those who reported to be residing in rural area were 86.67%.

In terms of wealth status, in 2000, women who were poorer were 37.03%, those with middle income were 21.37% while those richer were 41.60%. In 2010, women who were poorer were 39.29%, those with middle income were 20.51% while those richer were 40.20%. This shows that women with poorer wealth status increased between the two point in time (2000 and 2010) by 2.26% while those with middle and richer wealth status reduced by 0.86% and 1.4% respectively.

In 2000, women who reported to be unemployed were 43.18% while those employed were 56.82%. In the year 2010, women who reported to be unemployed were 43.31% while those employed were 56.69%.

As for religion, in 2000, women who reported to belong to Christianity were 84.32%, Muslims were 14.28% and those from other religions were 1.4%. In 2010, women who reported to belong to Christianity were 88.11%, Muslims were 10.99% and those from other

religions were 0.89% indicating an increase for women who reported to be Christians by 3.79% between these two point in time (2000 and 2010). On the other hand women who reported to be Muslims and from other religion reduced by 3.29% and 0.51% respectively.

4.1.1.3 Cultural Level Characteristics

At cultural level, the following characteristics have been explained: ethnicity and justification of wife beating.

In terms of ethnicity, in 2000, women who reported to belong to Chewa were 26.75%, Tumbuka were 9.77%, Lomwe (19.58%), Yao (14.58%), Ngoni (11.06%) and those from other ethnic groups were 18.26%. As for the year 2010, women who reported to belong to Chewa were 29.45%, Tumbuka were 10.85%, Lomwe (16.21%), Yao (10.53%), Ngoni (13.66%) and those from other ethnic groups were 19.30%.

As for justification of wife beating, in 2000, women who reported that wife beating in not justified were 80.40% while those who reported that wife beating is justified were 19.60%. As for 2010, women who reported that wife beating in not justified were 94.45% while those who reported that wife beating is justified were 5.55% indicating a reduced rate for women not justifying wife beating between the two time points (2000 and 2010) by 14.05%.

4.1.2 Summary of the Univariate Analysis Results

As presented above, the results show that the percentage of women reporting to belong to single families had increased while those in nuclear and extended families had reduced with a notable increase in households being headed by women. In addition, the results also show that the rate for women aged (40-49 years) reporting age at first marriage had increased in the year 2010 as compared to the year 2000. Further, the results also show that the rate of women who reported having had a first marriage at a younger age (15-19 years) was lower in 2010 as compared to the year 2000.

It has also been observed that the rate for women reporting to have had no education was lower in 2010 if compared with the year 2000, while the rates for women with primary, secondary and higher level of education increased. This might be as a result of the policy on free primary education introduced in the mid nineties in Malawi

The results also show that the rate for women with poorer wealth status was higher in 2010 than 2000, while those with middle and richer wealth status was lower in 2010 than in the year 2000. In terms of fertility, the rate for women with no children, those with few children (1-2) and those with many children (5 and above) was lower in 2010 that in the year 2000.

4.1.2 Bivariate Analysis Results

The results of the bivariate analysis show the Chi2 test of association between the outcome variable 'family structure' and each of the explanatory variables.

Table 4.1(a): Summary of the bivariate results for MDHS for the year 2000

	MALAWI DHS 2000				
	Single	**Nuclear**	**Extended**	**Total Sample**	**P-value**
Age at first marriage					**0.000**
Younger (15-19)	776 (69.35%)	6,730 (80.19%)	1,265 (34.12%)	8,771 (66.35%)	
Youth (20-24)	156 (13.94%)	1,406 (16.75%)	267 (7.20%)	1,829 (13.84%)	
Adult (25-39)	41 (3.66%)	255 (3.04%)	38 (1.02%)	334 (2.53%)	
Older (40-49)	146 (13.05%)	2 (0.02%)	2,138 (57.66%)	2,286 (17.29%)	
Total	**1,119 (100%)**	**8,393 (100%)**	**3,708 (100%)**	**13,220 (100%)**	
Sex of house head					**0.000**
Male	32 (2.86%)	7,454 (88.81%)	2,252 (60.73%)	9,738 (73.66%)	
Female	1,087 (97.14%)	939 (11.19%)	1,456 (39.27%)	3,482 (26.34%)	
Total	**1,119 (100%)**	**8,393 (100%)**	**3,708 (100%)**	**13,220 (100%)**	
Child ever born					**0.000**
None	142 (12.69%)	551 (6.56%)	2,190 (59.06%)	2,883 (21.81%)	
Few (1-2)	250 (22.34%)	2,686 (32.00%)	1,022 (27.56%)	3,958 (29.94%)	
Average (3-4)	371 (33.15%)	2,962 (35.29%)	377 (10.17%)	3,710 (28.06%)	
Many (5 above)	356 (31.81%)	2,194 (26.14%)	119 (3.21%)	2,669 (20.19%)	
Total	**1,119 (100%)**	**8,393 (100%)**	**3,708 (100%)**	**13,220 (100%)**	
Education					**0.000**
No education	358 (31.99%)	2,632 (31.36%)	382 (10.30%)	3,372 (25.51)	
Primary	594 (53.08%)	5,083 (60.56)	2,542 (68.55%)	8,219 (62.17%)	
Secondary	159 (14.21%)	668 (7.96%)	781 (21.06%)	1,608 (12.16%)	
Higher	8 (0.71%)	10 (0.12%)	3 (0.08%)	21 (0.16%)	
Total	**1,119 (100%)**	**8,393 (100%)**	**3,708 (100%)**	**13,220 (100%)**	
Region					**0.000**
North	133 (11.89%)	1,388 (16.54%)	666 (17.96%)	2,187 (16.54%)	
Central	290 (25.92%)	2,986 (35.58%)	1,232 (33.23%)	4,508 (34.10%)	
South	696 (62.20%)	4,019 (47.89%)	1,810 (48.81%)	6,525 (49.36%)	
Total	**1,119 (100%)**	**8,393 (100%)**	**3,708 (100%)**	**13,220 (100%)**	
Residence					**0.000**
Urban	255 (22.79%)	1,703 (20.29%)	913 (24.62)	2,871 (21.72%)	
Rural	864 (77.21%)	6,690 (79.71%)	2,795 (75.38%)	10,349 (78.28%)	

Total	**1,119 (100%)**	**8,393 (100%)**	**3,708 (100%)**	**13,220 (100%)**	
Wealth					**0.200**
Poorer	393 (35.12%)	3,082 (36.72%)	1,420 (38.30%)	4,895 (37.03%)	
Middle	240 (21.45%)	1,787 (21.29%)	798 (21.52%)	2,825 (21.37%)	
Richer	486 (43.43%)	3,524 (41.99%)	1,490 (40.18%)	5,500 (41.60%)	
Total	**1,119 (100%)**	**8,393 (100%)**	**3,708 (100%)**	**13,220 (100%)**	
Employment					**0.000**
Not employed	283 (25.29%)	3,393 (40.43%)	2,032 (54.80%)	5,708 (43.18%)	
Employed	836 (74.71%)	5,000 (59.57%)	1,676 (45.20%)	7,512 (56.82%)	
Total	**1,119 (100%)**	**8,393 (100%)**	**3,708 (100%)**	**13,220 (100%)**	
Religion					**0.000**
Christian	949 (84.81%)	6,976 (83.12%)	3,222 (86.89%)	11,147 (84.32%)	
Muslim	150 (13.40%)	1,282 (15.27%)	456 (12.30%)	1,888 (14.28%)	
Other	20 (1.79%)	135 (1.61%)	30 (0.81%)	185 (1.40%)	
Total	**1,119 (100%)**	**8,393 (100%)**	**3,708 (100%)**	**13,220 (100%)**	
Ethnicity					**0.000**
Chewa	216 (19.30%)	2,317 (27.61%)	1,003 (27.05%)	3,536 (26.75%)	
Tumbuka	84 (7.51%)	794 (9.46%)	413 (11.14%)	1,291 (9.77%)	
Lomwe	335 (29.94%)	1,562 (18.61%)	692 (18.66%)	2,589 (19.58%)	
Yao	186 (16.62%)	1,252 (14.92%)	490 (13.21%)	1,928 (14.58%)	
Ngoni	131 (11.71%)	898 (10.70%)	433 (11.68%)	1,462 (11.06%)	
Other	167 (14.92%)	1,570 (18.71%)	677 (18.26%)	2,414 (18.26%)	
Total	**1,119 (100%)**	**8,393 (100%)**	**3,708 (100%)**	**13,220 (100%)**	
Wife beating					**0.123**
Not justified	925 (82.66%)	6,740 (80.31%)	2,964 (79.94%)	10,629 (80.40%)	
Justified	194 (17.34%)	1,653 (19.69%)	744 (20.06%)	2,591 (19.60%)	
Total	**1,119 (100%)**	**8,393 (100%)**	**3,708 (100%)**	**13,220 (100%)**	

Table 4.1(b): Summary of the bivariate results for MDHS for the year 2010

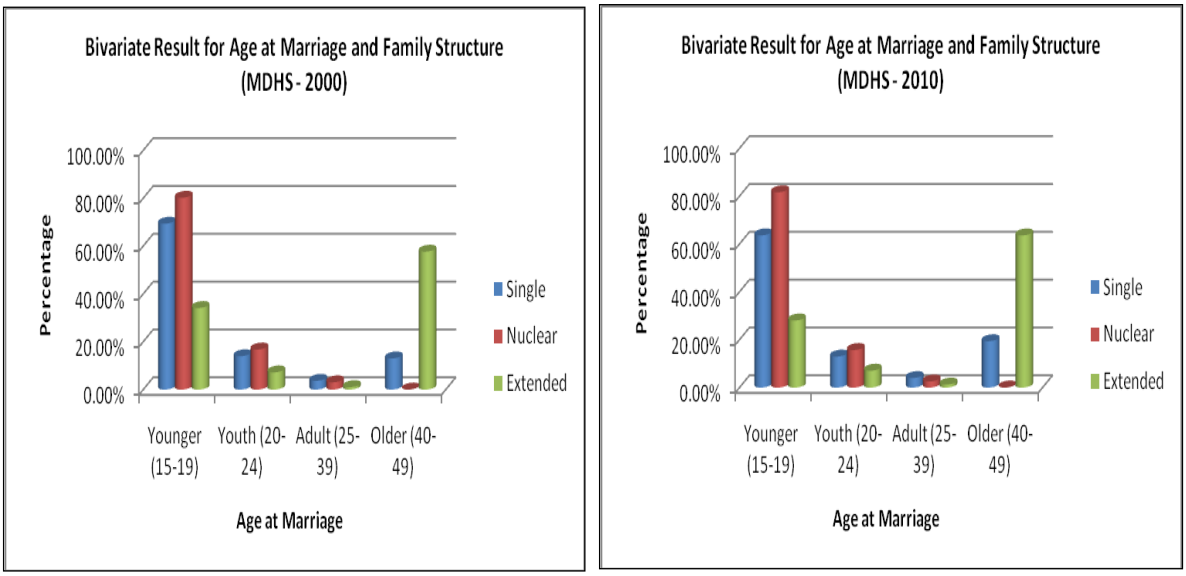
	MALAWI DHS 2010				
	Single	**Nuclear**	**Extended**	**Total Sample**	**P-value**
Age at first marriage					**0.000**
Younger (15-19)	1,605 (63.64%)	11,552 (81.67%)	1,783 (28.06%)	14,940 (64.90%)	
Youth (20-24)	327 (12.97%)	2,221 (15.70%)	449 (7.07%)	2,997 (13.02%)	
Adult (25-39)	101 (4.00%)	363 (2.57%)	80 (1.26%)	544 (2.36%)	
Older (40-49)	489 (19.39%)	8 (0.06%)	4,042 (63.61%)	4,539 (19.72%)	
Total	**2,522 (100%)**	**14,144 (100%)**	**6,354 (100%)**	**23,020 (100%)**	
Sex house head					**0.000**
Male	208 (8.25%)	12,633 (89.32%)	3,929 (61.84%)	16,770 (72.85%)	
Female	2,314 (91.75%)	1,511 (10.68%)	2,425 (38.16%)	6,250 (27.15%)	
Total	**2,522 (100%)**	**14,144 (100%)**	6,354 (100%)	**23,020 (100%)**	
Child ever born					**0.000**
None	444 (17.61%)	397 (2.81%)	4,138 (65.12%)	4,979 (21.63%)	
Few (1-2)	496 (19.67%)	4,045 (28.60%)	1,395 (21.95%)	5,936 (25.79%)	

Average (3-4)	961 (38.10%)	5,881 (41.58%)	667 (10.50%)	7,509 (32.62%)	
Many (5 above)	621 (24.62%)	3,821 (27.01%)	154 (2.42%)	4,596 (19.97%)	
Total	**2,522 (100%)**	**14,144 (100%)**	**6,354 (100%)**	**23,020 (100%)**	
Education					**0.000**
No education	472 (18.72%)	2,637 (18.64%)	281 (4.42%)	3,390 (14.73%)	
Primary	1,550 (61.46%)	9,579 (67.72%)	4,210 (66.26%)	15,339 (66.63%)	
Secondary	414 (16.42%)	1,794 (12.68%)	1,762 (27.73%)	3,970 (17.25%)	
Higher	86 (3.41%)	134 (0.95%)	101 (1.59%)	321 (1.39%)	
Total	**2,522 (100%)**	**14,144 (100%)**	**6,354 (100%)**	**23,020 (100%)**	
Region					**0.000**
North	329 (13.05%)	2,519 (17.81%)	1,341 (21.10%)	4,189 (18.20%)	
Central	747 (29.62%)	4,973 (35.16%)	2,142 (33.71%)	7,862 (34.15%)	
South	1,446 (57.34%)	6,652 (47.03%)	2,871 (45.18%)	10,969 (47.65%)	
Total	**2,522 (100%)**	**14,144 (100%)**	6,354 (100%)	**23,020 (100%)**	
Residence					**0.000**
Urban	419 (16.61%)	1,693 (11.97%)	956 (15.05%)	3,068 (13.33%)	
Rural	2,103 (83.39%)	12,451 (88.03%	5,398 (84.95%)	19,952 (86.67%)	
Total	**2,522 (100%)**	**14,144 (100%)**	**6,354 (100%)**	**23,020 (100%)**	
Wealth					**0.000**
Poorer	1,299 (51.51%)	5,653 (39.97%)	2,093 (32.94%)	9,045 (39.29%)	
Middle	353 (14.00%)	3,154 (22.30%)	1,214 (19.11%)	4,721 (20.51%)	
Richer	870 (34.50%)	5,337 (37.73%)	3,047 (47.95%)	9,254 (40.20%)	
Total	**2,522 (100%)**	**14,144 (100%)**	**6,354 (100%)**	**23,020 (100%)**	
Employment				**P-value = 0.000**	**0.000**
Not employed	786 (31.17%)	5,662 (40.03%)	3,522 (55.43%)	9,970 (43.31%)	
Employed	1,736 (68.83%)	8,482 (59.97%)	2,832 (44.57%)	13,050 (56.69%)	
Total	**2,522 (100%)**	**14,144 (100%)**	**6,354 (100%)**	**23,020 (100%)**	
Religion					**0.000**
Christian	2,202 (87.31%)	12,385 (87.56%)	5,697 (89.66%)	20,284 (88.11%)	
Muslim	290 (11.50%)	1,615 (11.42%)	625 (9.84%)	2,530 (10.99%)	
Other	30 (1.19%)	144 (1.02%)	32 (0.50%)	206 (0.89%)	
Total	**2,522 (100%)**	**14,144 (100%)**	**6,354 (100%)**	**23,020 (100%)**	
Ethnicity					**0.000**
Chewa	621 (24.62%)	4,342 (30.70%)	1,817 (28.60%)	6,780 (29.45%)	
Tumbuka	216 (8.56%)	1,510 (10.68%)	771 (12.13%)	2,497 (10.85%)	
Lomwe	513 (20.34%)	2,250 (15.91%)	968 (15.23%)	3,731 (16.21%)	
Yao	326 (12.93%)	1,482 (10.48%)	616 (9.69%)	2,424 (10.53%)	
Ngoni	407 (16.14%)	1,856 (13.12%)	882 (13.88%)	3,145 (13.66%)	
Other	439 (17.41%)	2,704 (19.12%)	1,300 (20.46%)	4,443 (19.30%)	
Total	**2,522 (100%)**	**14,144 (100%)**	**6,354 (100%)**	**23,020 (100%)**	
Wife beating					0.003
Not justified	2,401 (95.20%)	13,390 (94.67%)	5,951 (93.66%)	21,742 (94.45%)	
Justified	121 (4.80%)	754 (5.33%)	403 (6.34%)	1,278 (5.55%)	
Total	**2,522 (100%)**	**14,144 (100%)**	**6,354 (100%)**	**23,020 (100%)**	

Table 3.2(a) and 3.2(b) above is a summary of the chi2 results comparing the results of the MDHS for the year 2000 and 2010. The results summarize the bivariate association between the various demographic, socioeconomic and cultural factors and family structure in Malawi.

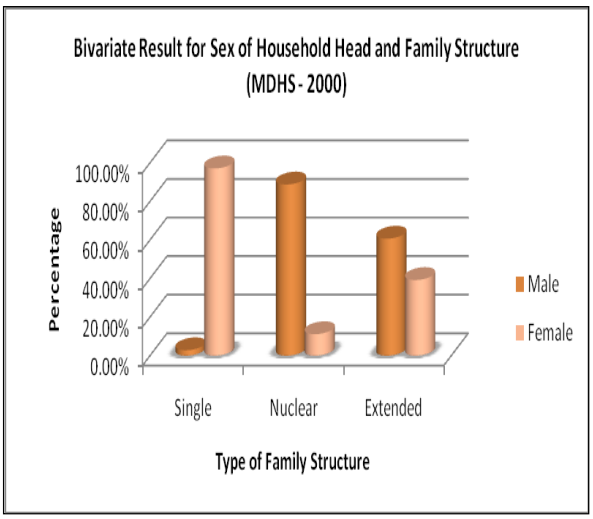
Bivariate relationship between demographic factors and family structure

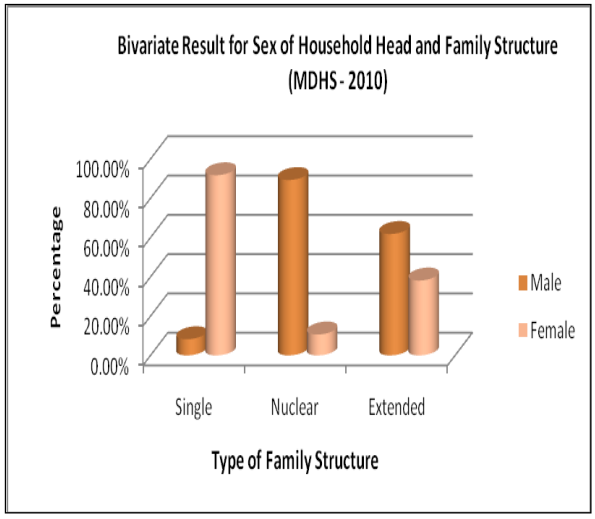
4(a) Age at Marriage and Family Structure comparing years 2000 and 2010



The results shows that, for single families, a highest proportion of women who reported to have had age at first marriage were younger (15-19 years) (2000: 69.35%; 2010: 63.64%) and the lowest was for (25-39) (2000:3.66%; 2010:4.00%). In terms of the nuclear family, .the highest proportion was for women who reported to have had age at first marriage at a younger age (15-19 years) (2000: 80.19%; 2010: 81.67% and the lowest were those within the age bracket (40-49) (2000: 0.02%; 2010: 0.06%). For the extended family, the highest proportion were women who were of older age (40-49) (2000: 57.66%; 2010: 63.61%) while the lerast were those aged (25-39) (2000: 1.02%; 2010: 1.26%). The Chi2 test of association shows that the relationship is significant for both 2000 and 2010 (p-value 0.000).

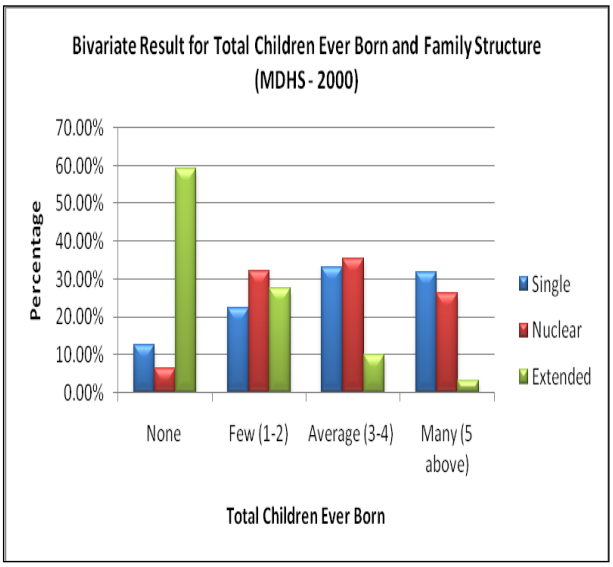
4(b) Sex of Household Head and Family Structure comparing years 2000 and 2010

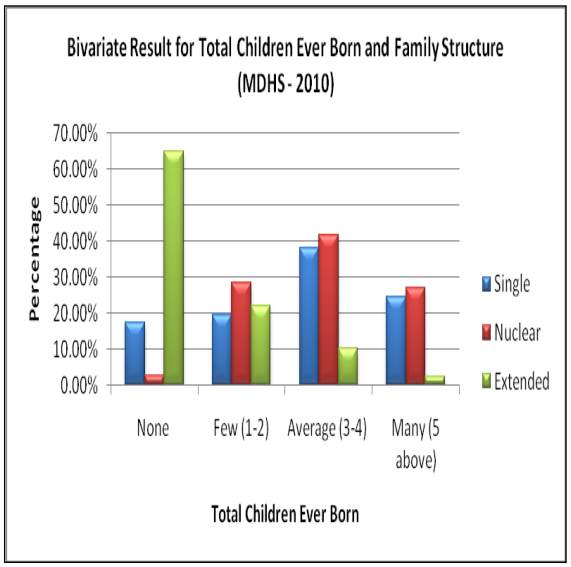




For sex of household head for single families, the highest proportion were women who reported to be living in households headed by females (2000: 97.14%; 2010: 91.75%). The rate for households headed by males was very low (2000: 2.86%; 2010: 8.25%). As for nuclear families, the highest proportion were households headed by males (2000: 88.81%; 2010:89.32%). Lastly for the extended family, the highest proportion was for women who reported to be residing in households headed by males (2000: 60.73%; 2010: 61.84%). In addition, the Chi2 test of association shows that the relationship is significant for both 2000 and 2010 (p-value 0.000).

4(c) Total Children Ever born and Family Structure comparing years 2000 and 2010

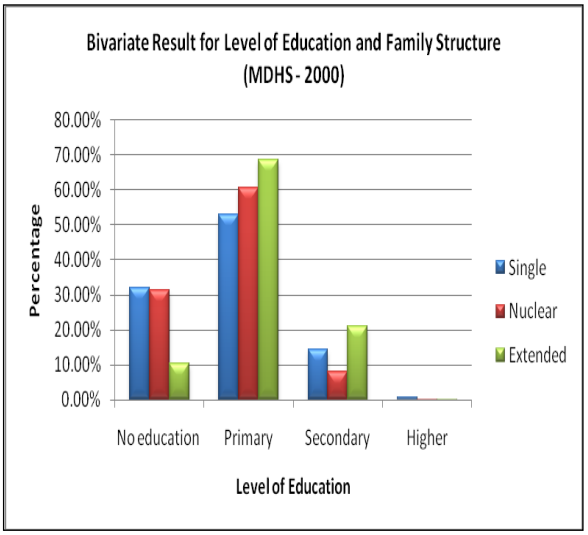


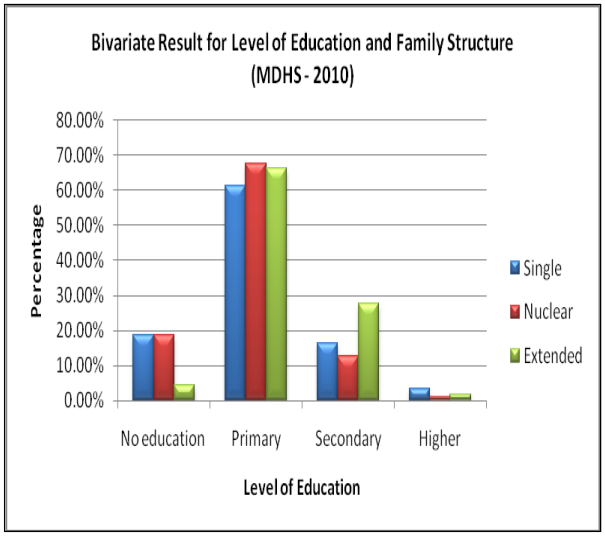


In terms of single family for total children ever born, a higher proportion were women who reported that they had an average number of children (3-4) (2000: 33.15%; 2010: 38.10%) followed by those with many children (5 and above) (2000: 31.81%; 2010: 24.62%) and lastly, those with no children (2000: 12.69%; 2010: 17.61%). For the nuclear family, the highest were those who reported to have an average number of children (3-4) (2000: 35.29%; 2010: 41.58%) and the least were for those with no children (2000: 6.56%; 2010: 2.81%). On the other hand for the extended family, a higher proportion were those who reported to have no (2000: 59.06%; 2010: 65.12) while the least were those with many children (5 and above) (2000: 3.21%; 2010: 2.42%). The Chi2 test of association shows that the relationship is significant for both 2000 and 2010 (p-value 0.000).

Bivariate relationship between socioeconomic factors and family structure

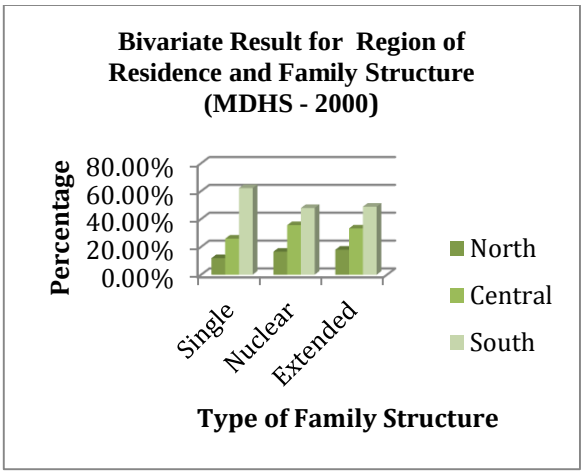
4(d) Level of Education and Family Structure for the years 2000 and 2010

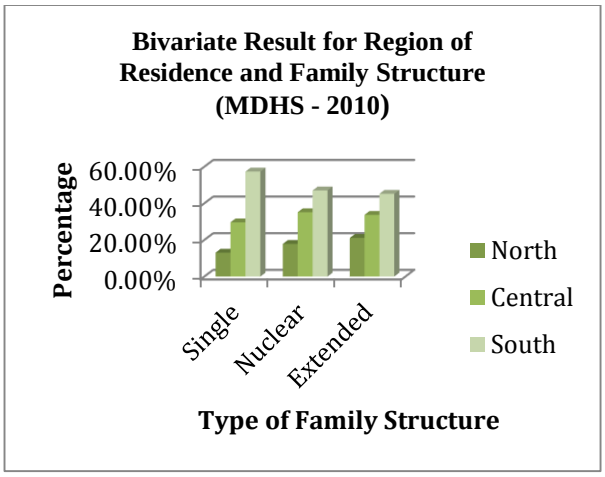




The bivariate analysis result for level of education and family structure show that for single families a higher proportion of women had primary education (2000: 53.08%; 2010: 61.46%), and the least were those with higher level of education (2000: 0.71%; 2010: 3.41%). Similarly for the nuclear family, the highest proportion had primary education (2000: 60.56%; 2010: 67.72%) and the least had higher level (2000: 0.12%; 2010: 0.95%). On the other hand for the extended family, a higher proportion had primary education (2000: 68.55%; 2010: 66.26%) while the least were those with higher educational level (2000: 0.08%; 2010 1.59%). The Chi2 test of association shows that the relationship is significant for both 2000 and 2010 (p-value 0.000).

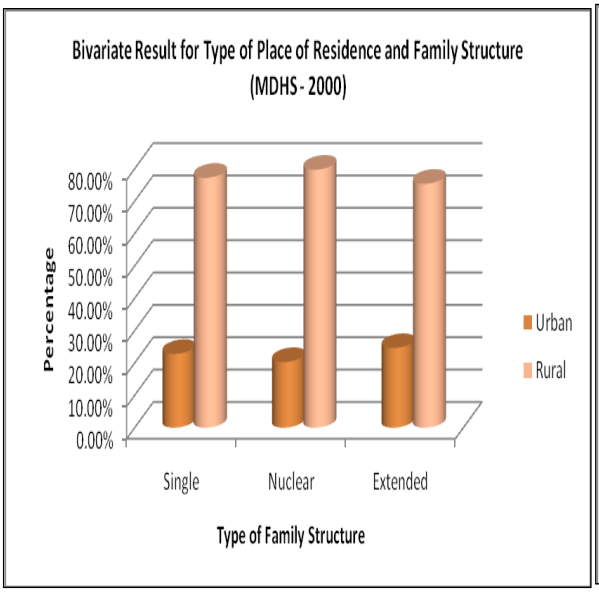
4(e) Region of Residence and Family Structure comparing years 2000 and 2010

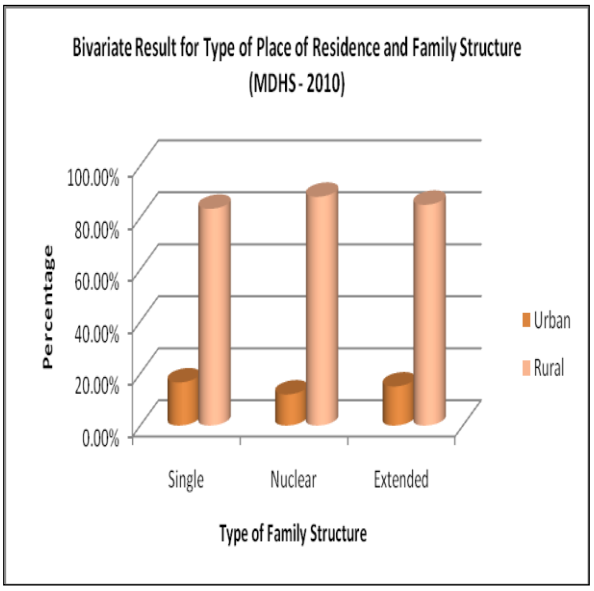




For single families, a higher proportion of women were living in the southern region of Malawi (2000: 62.20%; 2010: 57.34%). The pattern is the same for the nuclear family (2000:47.89%; 2010: 47.03%) and the extended family (2000:48.81%; 2010: 45.18%). The least were women who reported to belong in the northern region for all the family types.

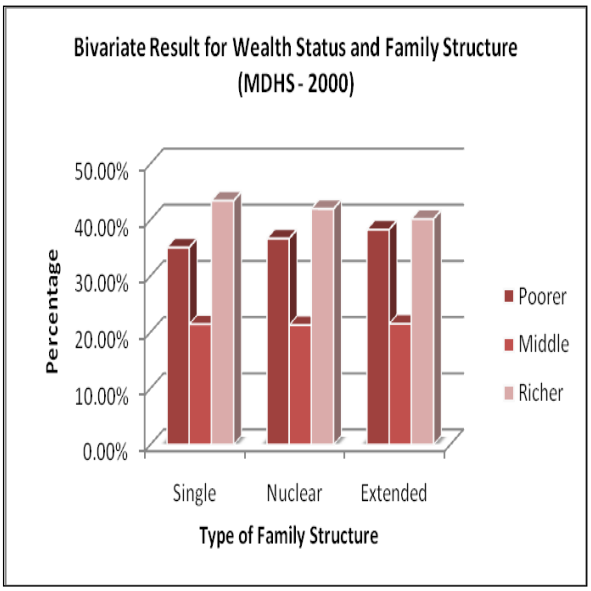
4(f) Type of Place of Residence and Family Structure for the years 2000 and 2010

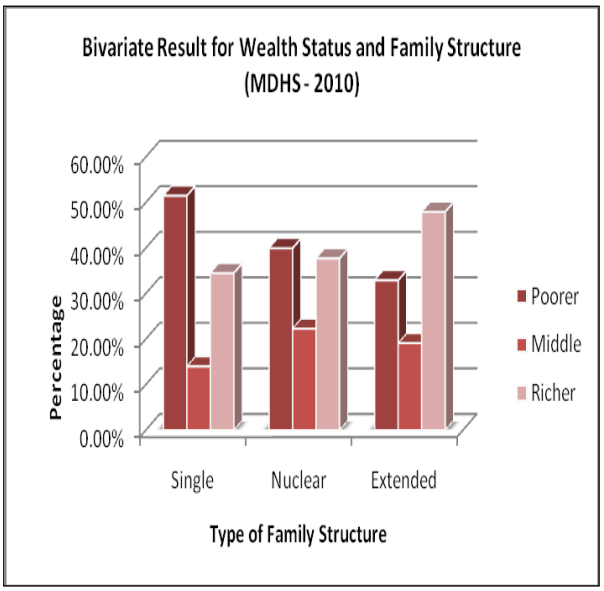




As for place of residence, for single families, a higher proportion of women were residing in rural areas (2000: 77.21%; 2010: 83.39%). The pattern is same for nuclear (2000: 79.71%; 2010: 88.03%) and extended family (2000: 75.38%; 2010: 84.95%). The Chi2 test of association shows that the relationship is not significant for 2000 (p-value 0.2000) but significant for 2010 (p-value 0.000).

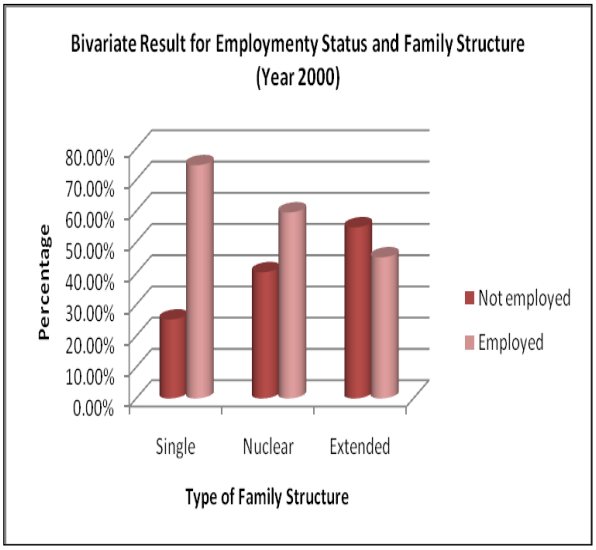
4(g) Wealth Status and Family Structure for the years 2000 and 2010

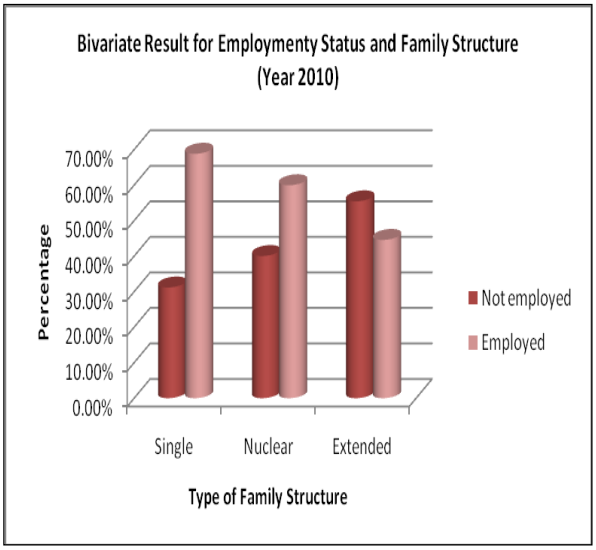




In terms of wealth status for single families, in 2000, a higher proportion were women who reported to be richer (43.43%), and the least were those with middle wealth status (21.45%). On the other hand in 2010, the highest were those with poorer wealth quintile (51.51%) while the least were those with middle wealth status (14.00%). For the nuclear family in 2000, the highest were richer (41.99%) while in 2010 the highest were women with poorer worth status and the least were middle income status (22.30%). And for extended family the highest proportion were those richer (2000: 40.18%; 2010: 47.95%) whilst the least were those with middle income levels (2000: 21.52%; 2010: 19.11%). The Chi2 test is significant for both 2000 and 2010 (p-value 0.000).

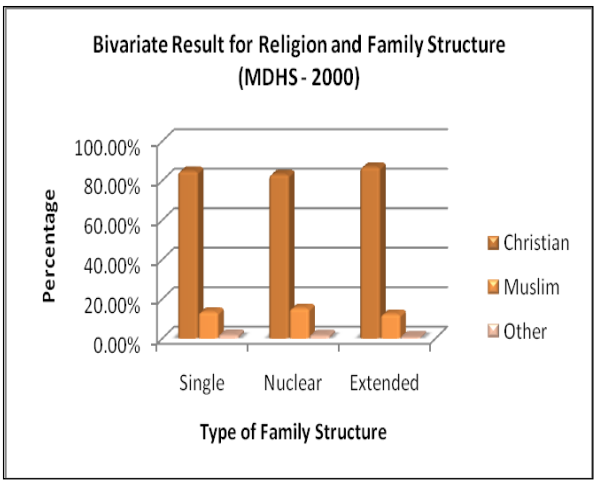
4(h) Employment Status and Family Structure for the years 2000 and 2010

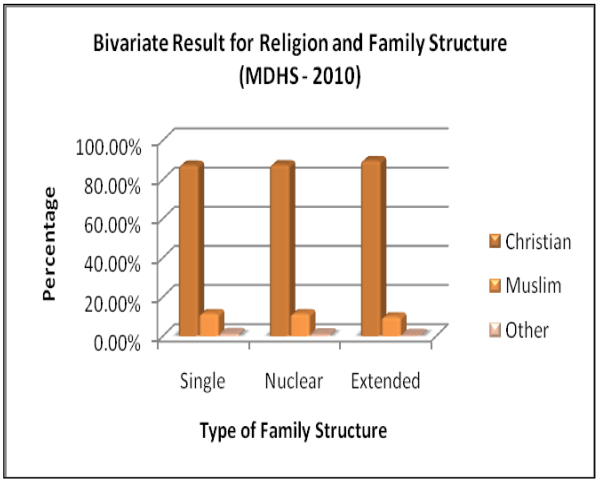




As for employment, for single families, the highest proportion were women who reported that they were employed (2000: 74.71%; 2010: 68.83%). The pattern is the same for the nuclear (2000: 59.57%; 2010: 59.97%) while for the and extended family the highest propoprtion were women who reported to be unemployed (2000: 54.80%; 2010: 55.43%) The Chi2 test of association shows that the relationship is significant for both 2000 and 2010 (p-value 0.000).

4(i) Religion and Family Structure for the years 2000 and 2010

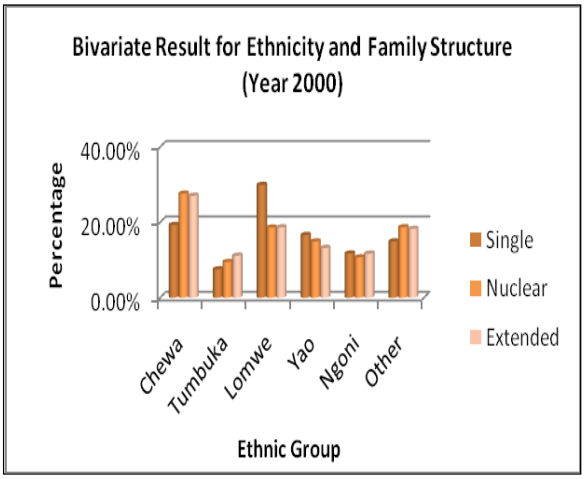


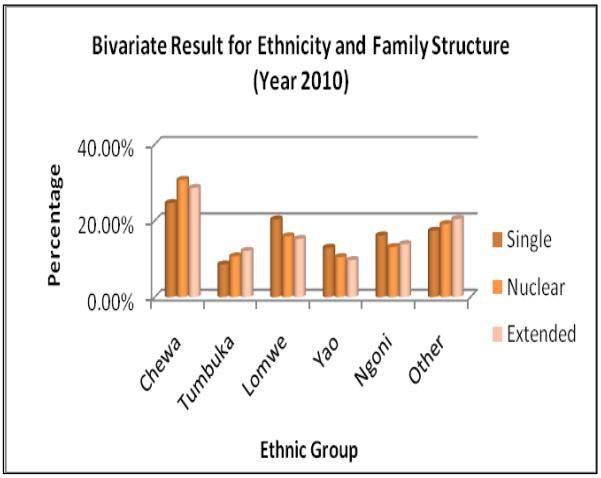


As for religion for single families the highest proportions of women were Christians (2000: 84.81%; 2010: 87.31%). The pattern is the same for nuclear (2000: 83.12%; 2010: 87:56%) and extended families (2000: 86.89%; 2010: 89.68%). The Chi2 test of association shows that the relationship is significant for both 2000 and 2010 (p-value 0.000).

Bivariate relationship between cultural factors and family structure

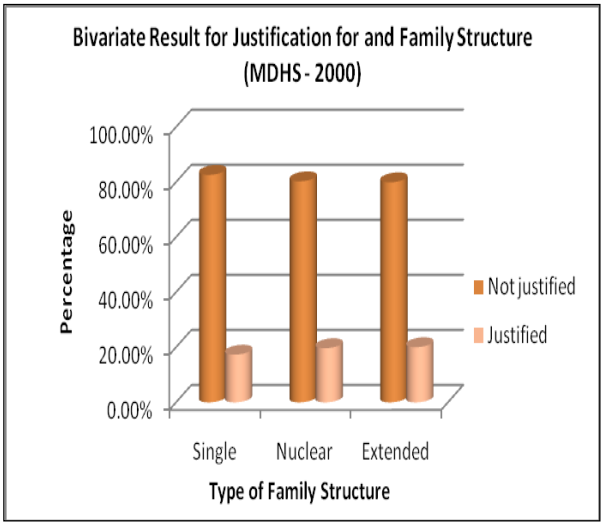
4(j) Ethnicity and Family Structure for the years 2000 and 2010

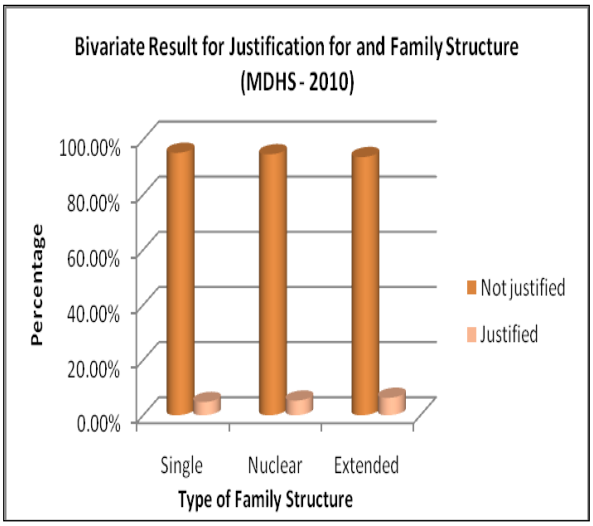




In terms of ethnicity for single family in 2000, higher proportions were women who belonged to Lomwe (29.94%) followed by Chewa (19.30%) and the least were Tumbuka (7.51%). On the other hand, in 2010, the highest were women who belonged to Chewa (24.62%), followed by Lomwe (20.34) and the least were Tumbuka (8.56). In terms of nuclear family in 2000, a higher proportion were Chewa (27.61%) followed by those from other ethnic groups (18.71%) and the least belonged to Tumbuka (9.46%). As for 2010, most of them were from Chewa (30.70%), followed by those from other ethnic group (19.12%) and the least belonged to Yao (10.48%). For extended family, in 2000, most of the women belonged to Chewa (27.05%) followed by Lomwe (18.66%) and the least belonged to Tumbuka (11.14%). On the other hand, in 2010, the highest were those who belonged to Chewa (28.60%) followed by those from other ethnic group (20.46%) and the least was Yao (9.69%). The Chi2 test is not significant for 2000 (p_0.123) but significant for 2010 (p-value 0.003).

4(k) Justification for Wife Beating and Family Structure for the years 2000 and 2010





In terms of justification for wife beating, the highest proportion were women who reported that wife beating was not justified (2000: 82.66%; 2010: 95.20%). The trend is the same for the nuclear (2000: 80.31%; 2010: 94.67%) and extended family (2000: 79.94%; 2010: 93.66%).

4.4 Summary of the Bivariate Analysis Results

In summary, the bivariate analysis patterns and differentials show that the proportion of women entering their first marriage within the age bracket 15-19 and 20-24 and belonging to single family were less in the year 2010 as compared to the year 2000, while those aged 40-49 increased. For sex of household head, the proportion of women belonging to single, nuclear and extended families in male headed households was higher in 2010 than 2000, while for women it was lower. Similar for Religion, the proportion of women who reported to be Christians and belonging to single, nuclear and extended families was higher in 2010 than in the year 2000.

As for education, the proportion of women who reported to belong to single, nuclear and extended families and with no education was lower in 2010 than in 2000 those with primary, secondary and higher education increased. In terms of residence, the proportion of women who reported that they were residing in urban areas and belonging to single, nuclear and extended families was lower in 2010 than 2000 while those reporting to be residing in rural areas was higher.

The bivariate pattern of wealth quintile shows that the proportion of women who were poorer and belonging to single, nuclear and extended families was higher in 2010 than the year 2000 while those with middle wealth and belonging to single and extended families was lower. As for the richer category, the rates for those in single and nuclear families reduced, but it was higher for the extended family between these two time points.

For total children ever born, the proportion of women with no children and belonging to single and extended families was higher in 2010 than in the year 2000. However, the rate decreased for those in nuclear families. The proportion for women with few children (1-2) was lower in 2010 in all the family structure categories (single, nuclear and extended) if compared to the year 2000. For women with average number of children (3-4), the rate for those in single and nuclear families increased but remained relatively the same for the extended family. Lastly, women with many children (5 and above) reduced for single and extended families but increased for nuclear family. In terms of justification for wife beating, women who reported that wife beating is not justified was higher in 2010 than in the year 2000 in all the family structure categories (single, nuclear and extended) while those justifying wife beating was lower. -

4.2 Inferential Results

4.2.1 Multinomial Logistic Regression Results

The second objective was to examine the demographic, socioeconomic and cultural factors associated with family structure in Malawi in 2000 and 2010. The results of the multinomial regression analysis have been summarised below in two (2) tables for the years compared, that is, 2000 and 2010.

Table: 4.2 (a): Summary of the multinomial logistic regression for the year 2000

	MALAWI DHS 2000			
Base Outcome:	**Nuclear Family**		**Extended Family**	
Single Family	RRR	P-Value (Conf. Interval)	RRR	P-Value (Conf. Interval)
Age household head	0.962	0.000(CI: 0.950-0.976)	1.138	0.000(CI: 1.122-1.154)
Age first marriage				
Younger (15-19) (RC)				
Youth (20-24)	1.269	0.081(CI: 0.971-1.660)	0.696	0.024(CI: 0.509-0.952)
Adult (25-39)	1.332	0.305(CI: 0.769-2.309)	0.230	0.000(CI: 0.108-0.489)
Older (40-49)	0.000	0.000(CI: 0.000-0.002)	0.928	0.754(CI: 0.579-1.486)
Sex household head				

Male (RC)				
Female	0.002	0.000(CI: 0.001-0.003)	0.036	0.000(CI: 0.022-0.058)
Child ever born				
None (RC)				
Few (1-2)	0.674	0.070(CI: 0.439-1.033)	0.358	0.000(CI: 0.234-0.548)
Average (3-4)	0.694	0.112(CI: 0.441-1.090)	0.058	0.000(CI: 0.034-0.097)
Many (5 above)	0.651	0.116(CI: 0.381-1.112)	0.009	0.000(CI: 0.005-0.016)
Education				
No education (RC)				
Primary	1.131	0.251 (CI: 0.916-1.397)	2.537	0.000(CI: 1.972-3.265)
Secondary	0.732	0.141(CI: 0.484-1.109)	2.307	0.001(CI: 1.425-3.737)
Higher	0.412	0.224(CI: 0.099-1.724)	0.939	0.936(CI: 0.198-4.460)
Region				
North (RC)				
Central	0.838	0.351(CI: 0.577-1.216)	0.910	0.679(CI: 0.581-1.425)
South	0.720	0.083(CI: 0.498-1.044)	0.844	0.439(CI: 0.548-1.299)
Residence				
Urban (RC)				
Rural	1.825	0.000(CI: 1.307-2.548)	1.652	0.028(CI: 1.056-2.583)
Wealth				
Poorer (RC)				
Middle	1.062	0.681(CI: 0.796-1.419)	0.963	0.803(CI: 0.713-1.300)
Richer	0.984	0.889(CI: 0.783-1.236)	0.853	0.227(CI: 0.660-1.104)
Employment				
Not employed (RC)				
Employed	0.562	0.000(CI: 0.459-0.688)	0.445	0.000(CI: 0.353-0.562)
Religion				
Christian (RC)				
Muslim	1.216	0.317(CI: 0.829-1.786)	1.063	0.785(CI: 0.683-1.655)
Other	0.953	0.881(CI: 0.505-1.798)	1.128	0.763(CI: 0.514-2.478)
Ethnicity				
Chewa (RC)				
Tumbuka	1.208	0.405(CI: 0.773-1.889)	1.222	0.491(CI: 0.690-2.167)
Lomwe	0.605	0.006(CI: 0.422-0.868)	0.629	0.025(CI: 0.420-0.943)
Yao	0.704	0.119(CI: 0.453-1.095)	0.710	0.155(CI: 0.442-1.140)
Ngoni	0.980	0.919(CI: 0.664-1.446)	1.106	0.613(CI: 0.749-1.633)
Other	1.252	0.239(CI: 0.861-1.823)	1.085	0.715(CI: 0.701-1.679)
Wife beating				
Not justified (RC)				
Justified	1.126	0.347(CI: 0.879-1.443)	1.249	0.104(CI: 0.955-1.633)

Table 4.2(b): Summary of the multinomial logistic regression for the year 2010

	MALAWI DHS 2010			
Base Outcome	**Nuclear Family**		**Extended Family**	
Single Family	RRR	P-Value (Conf. Interval)	RRR	P-Value (Conf. Interval)
Age household head	0.940	0.000 (CI: 0.931-0.950)	1.114	0.000(CI: 1.102-1.123)
Age first marriage				
Younger (15-19) (RC)				
Youth (20-24)	1.295	0.022(CI: 1.038-1.614)	0.974	0.836(CI: 0.762-1.247)
Adult (25-39)	0.990	0.959(CI: 0.676-1.451)	0.360	0.000(CI: 0.216-0.601)
Older (40-49)	0.001	0.000(CI: 0.000-0.003)	0.705	0.027(CI: 0.517-0.960)
Sex household head				
Male (RC)				
Female	0.006	0.000(CI: 0.001-0.008)	0.148	0.000(CI: 0.118-0.186)
Child ever born				
None (RC)				
Few (1-2)	2.934	0.000(CI: 1.919-4.488)	0.461	0.000(CI: 0.341-0.622)
Average (3-4)	3.069	0.000(CI: 1.963-4.798)	0.072	0.000(CI: 0.051-0.101)
Many (5 above)	4.708	0.000(CI: 2.932-7.562)	0.016	0.000(CI: 0.010-0.024)
Education				
No education (RC)				
Primary	0.841	0.061(CI: 0.702-1.008)	2.219	0.000(CI: 1.663-2.962)
Secondary	0.641	0.004(CI: 0.475-0.867)	1.867	0.001(CI: 1.313-2.655)
Higher	0.909	0.774(CI: 0.475-1.740)	0.731	0.350(CI: 0.379-1.410)
Region				
North (RC)				
Central	0.744	0.171 (CI: 0.488-1.136)	0.563	0.008(CI: 0.368-0.860)
South	0.689	0.052(CI: 0.473-1.003)	0.438	0.000(CI: 0.300-0.640)
Residence				
Urban (RC)				
Rural	1.486	0.006(CI: 1.121-1.969)	1.420	0.013(CI: 1.076-1.874)
Wealth				
Poorer (RC)				
Middle	1.929	0.000(CI: 1.600-2.325)	1.606	0.000(CI: 1.300-1.985)
Richer	1.808	0.000(CI: 1.489-2.195)	1.373	0.004(CI: 1.107-1.703)
Employment				
Not employed (RC)				
Employed	0.748	0.000(CI:0.638-0.877)	0.519	0.000(CI: 0.429-0.629)
Religion				
Christian (RC)				
Muslim	1.383	0.039(CI: 1.016-1.882)	1.162	0.413(CI: 0.811-1.666)
Other	0.997	0.991(CI:0.556-1.789)	0.630	0.113(CI: 0.356-1.116)
Ethnicity				
Chewa (RC)				
Tumbuka	1.177	0.452(CI: 0.769-1.801)	0.632	0.025 (CI: 0.424-0.944)
Lomwe	0.942	0.688(CI: 0.702-1.264)	0.874	0.396(CI: 0.640-1.193)
Yao	1.060	0.735(CI: 0.755-1.488)	1.200	0.318(CI: 0.839-1.716)

Ngoni	1.374	0.025(CI: 1.042-1.811)	0.944	0.716(CI: 0.692-1.287)
Other	0.931	0.651(CI: 0.684-1.269)	0.873	0.416(CI: 0.629-1.211)
Wife beating				
Not justified (RC)				
Justified	0.935	0.671(CI: 0.683-1.278)	0.935	0.731(CI: 0.638-1.371)

Tables 4.2 (a) and 4.2 (b) above shows the results of the multinomial logistic regression analysis which have been compared for the years 2000 and 2010. The reference category is 'single family' and has been compared with nuclear and extended family. Single family has been chosen as a reference category because in as much as the nuclear and extended families have their own challenges, it is the single family that is most affected, and hence its comparison with the other family types.

The results show that in the year 2000, the relative risk of belonging to a nuclear family as compared to a single family decreased by 3.8% (RRR=0.962; 95% CI: 0.950-0.976) with each additional year of age controlling for other factors in the model, while in 2010, it decreased by 6% (RRR=0.940; 95% CI: 0.931-0.950). As for the extended family in 2000, the relative risk of belonging to the extended family compared to single family increased by 13.8% (RRR=1.138; 95% CI: 1.122-1.154) with each additional year of age controlling for other factors in the model. In 2010 it increased by 11.4% (RRR=1.114; 95% CI: 1.102-1.123).

For age at first marriage in 2000, the relative risk of belonging to a nuclear family versus belonging to a single family was 1.269 times (RRR=1.269; 95% CI: 0.971-1.660) greater for women whose age at first marriage was 20-24 relative to women whose age at first marriage was 15-19 years, given that all other predictor variables in the model are held constant, while 2010 it was 1.295 times (RRR=1.295; 95% CI: 1.038-1.614). For the extended family, the relative risk was lower for both the year 2000 (RRR=0.696; 95% CI: 0.509-0.952) and in 2010 (RRR=0.974; 95% CI: 0.762-1.247). The risk was even lower for those aged 40-49 in the nuclear family in 2000 (RRR=0.000; 95% CI: 0.579-1.486) and in 2010 (RRR=0.001; 95% CI: 0.000-0.003).

For sex of household head in 2000, the relative risk of belonging to a nuclear family versus belonging to a single family was 0.002 times (RRR=0.002; 95% CI: 0.001-0.003) lower for women in females headed households relative to women in male headed households, given that all other predictor variables in the model are held constant, and in 2010 it was 0.006

(RRR=0.006; 95% CI: 0.001-0.008) times lower. Similarly for the extended family category, the risk was lower in both 2000 by 0.036 times (RRR=0.036; 95% CI: 0.022-0.058) and 2010 by 0.148 (RRR=0.148; 95% CI: 0.118-0.186).

As for level of education in the year 2000, The relative risk of belonging to a nuclear family versus belonging to a single family was 1.131 times (RRR=1.131; 95% CI: 0.916-1.397) greater for women with primary education relative to women with no education, given that all other predictor variables in the model are held constant. In 2010, the risk was lower for the nuclear family by 0.841 (RRR=0.841; 95% CI: 0.702-1.008) times but greater for the extended family by 2.219 times (RRR=2.219; 95% CI: 1.663-2.962). For women with higher level of education in 2000, the risk was lower for both the nuclear by 0.412 (RRR=0.412; 95% CI: 0.099-1.724) times and extended family by 0.939 (RRR=0.939; 95% CI: 0.198-4.460) times. The risk was also lower in the year 2010 in both the nuclear by 0.909 (RRR=0.909; 95% CI: 0.475-1.740) times and extended family by 0.731 (RRR=0.731; 95% CI: 0.350-1.410) times.

In the year 2000, the relative risk of belonging to a nuclear family versus belonging to a single family was 1.825 times (RRR=1.825; 95% CI: 1.307-2.548) greater for women residing in rural area relative to women who reported to be residing in urban area, given that all other predictor variables in the model are held constant. In 2010, the risk was 1.486 (RRR=1.486; 95% CI: 1.121-1.969) times greater. As for the extended family, the risk was also higher for the both 2000 by 1.652 (RRR=1.652; 95% CI: 1.056-2.583) times and 2010 by 1.420 (RRR=1.420; 95% CI: 1.076-1.874) times.

In terms of wealth quintile in the year 2000, the relative risk of belonging to a nuclear family versus belonging to a single family was 1.062 times (RRR=1.062; 95% CI: 0.796-1.419) greater for women with middle income relative to women with poorer income, given that all other predictor variables in the model are held constant. Under this category in the year 2010, the risk was also higher by 1.929 times (RRR=1.929; 95% CI: 1.600-2.325). For the extended family in 2000, the risk was 0.963 times (RRR=0.963; 95% CI: 0.713-1.300) lower while in 2010 it was 1.606 times (RRR=1.606; 95% CI: 1.300-1.985) greater. Among the richer, the risk was lower in 2000 [Nuclear: 0.984 times (RRR=0.984; 95% CI: 0.783-1.236 and extended: 0.853 times (RRR=0.853; 95% CI: 0.660-1.104), while in 2010 the risk was greater

[Nuclear: 1.808 times (RRR=1.808; 95% CI: 1.489-2.195) and extended: 1.373 times (RRR=1.373; 95% CI: 1.107-1.703).

In the year 2000, the relative risk of belonging to a nuclear family versus belonging to a single family was 0.562 times (RRR=0.562; 95% CI: 0.459-0.688) lower for women in employment relative to women who reported to be unemployed, given that all other predictor variables in the model are held constant. In 2010 the risk was 0.748 times (RRR=0.748; 95% CI: 0.638-0.877) lower. As for the extended family category, the risk was also lower in both 2000 and 2010 (2000: RRR=0.445; 95% CI: 0.353-0.562 and in 2010: RRR=0.519; 95% CI: 0.429-0.629).

For the variable total children ever born, in the year 2000, the relative risk of belonging to a nuclear family versus belonging to a single family was 0.674 times (RRR=0.674; 95% CI: 0.439-1.033) lower for women with few (1-2) children relative to women who reported to have no children, given that all other predictor variables in the model are held constant. In 2010, the risk was 2.934 times (RRR=2.934; 95% CI: 1.919-4.488) greater. For the extended family category, the risk was lower in both 2000 (RRR=0.58; 95% CI: 0.234-0.548) and 2010 (RRR=0.461; 95% CI: 0.341-0.622). The pattern was the same for women with average (3-4) number of children and those with many (5 above) children with lower odds within the nuclear and extended family categories in 2000 and in 2010 for the extended alone. However the risk was cumulatively higher among the nuclear category for the year 2010 as follows: [average (2-4): (RRR=3.069; 95% CI: 1.963-4.798) and many (5 above): (RRR=4.708; 95% CI: 2.932-7.562).

In terms of religion in the year 2000, the relative risk of belonging to a nuclear family versus to a single family was 1.216 times (RRR=1.216; 95% CI: 0.829-1.786) higher for Muslim women relative to Christian women holding other variables in the model constant. In 2010, it was also higher (RRR=1.383; 95% CI: 1.016-1.882). As for the extended family the risk was higher for both, the year 2000, (RRR=1.063; 95% CI: 0.683-1.655) and in 2010 (RRR=1.162; 95% CI: 0.811-1.666).

As for ethnicity, the relative risk of belonging to a nuclear family versus belonging to a single family was 1.208 times (RRR=1.208; 95% CI: 0.773-1.889) higher for women who reported to Tumbuka relative to Chewa, given that all other predictor variables in the model are held constant. In 2010, the risk was also higher (RRR=1.177; 95% CI: 0.769-1.801) but lower for

the extended family in 2010 (RRR=0.632; 95% CI: 0.424-0.944). As for the women reporting to belong to Yao relative to Chewa, the risk was higher in 2010 (Nuclear: RRR=1.060; 95% CI: 0.755-1.488, Extended: RRR=1.200; 95% CI: 0.839-1.716) but lower in 2000 (Nuclear: RRR=0.704; 95% CI: 0.453-1.095, Extended: RRR=0.710; 95% CI: 0.442-1.140).

For justification of wife beating, the relative risk of belonging to a nuclear family versus belonging to a single family was 1.126 times (RRR=1.126; 95% CI: 0.879-1.443) higher for women who reported that wife beating was justified relative to women who reported that wife beating was not justified, given that all other predictor variables in the model are held constant. In 2010, the risk was 0.935 times (RRR=0.935; 95% CI: 0.683-1.278) lower. Similarly for the extended family, the risk was higher in 2000 (RRR=1.249; 95% CI: 0.955-1.633) and lower in 2010 (RRR=0.935; 95% CI: 0.638-1.371).

Summary of the Multinomial Logistic Regression Results

For multinomial logistic regression, the base category selected is the 'single family' of which when examining demographic, socioeconomic and cultural factors has been compared with nuclear and extended family categories. Inferential results shows that age of household head is statistically associated with family structure in Malawi in 2000 and 2010 for both the nuclear and extended family categories (p-value 0.000) with a higher likelihood of belonging to the extended family as compared to single family in both 2000 (RRR=1.138) and 2010 (RRR=1.114) but lower for the nuclear family in both 2000 (RRR=0.962) and 2010 (RRR=0.940).

Being a younger woman (20-24) and living in an extended family is statistically associated with family structure in the year 2000 (0.000) but not in 2010; and also on the nuclear family in 2010 (p-value 0.022) and not in 2000. Among women aged (25-39), there is a statistical association for women in the extended family category in both 2000 (p-value 0.000) and 2010 (p-value 0.000) but not in 2000 with a lower likelihood of belonging to the extended family as compared to single family in both 2000 (RRR=0.230) and 2010 (RRR=0.360). Women are however more likely to belong to a nuclear as compared to single family in 2000 (RRR=1.332) than in 2010 (RRR=0.990). For women aged (40-49), there is a statistical association but for the nuclear family category only in 2000 and 2010 (p-value 0.000) and the likelihood of belonging to nuclear as compared to single family is lower in both 2000 (RRR=0.000) and 2010 (RRR=0.001). These low figures can be attributed to the large

variance in rates of women belonging to the nuclear family as indicated in the bivariate analysis above which shows (0.02%).

Households headed by females is statistically associated with family structure in 2000 and 2010 for both nuclear and extended family (p-value 0.000). The likelihood of belonging to female headed households as compared to male headed is is however lower in 2000 (nuclear: RRR=0.002; extended: RRR=0.036) and 2010 (nuclear: 0.0.006; extended: 0.148).

Being a Muslim woman and belonging to nuclear family as compared to single family is statistically associated with family structure in Malawi in 2010 (p-value 0.039) with a higher likelihood of belonging to nuclear and extended families as compared to single family in both 2000 (nuclear: RRR=1.216; extended: RRR=1.063) and 2010 (nuclear: RRR=1.383; extended: RRR=1.162).

Having primary level of education and belonging to the extended family is statistically associated with family structure in Malawi in both 2000 and 2010 (p-value 0.000). Similary, having secondary level education is statistically associated with family struture in Malawi in 2000 and 2010 (p-value 0.001). Further, the likelihood of a woman with primary and secondary education to belong to the extended family other than single family is high in both 2000 (primary: RRR=2.537; secondary: RRR=2.307) and 2010 (primary: RRR=2.219; secondary: RRR=1.867). For women with higher education, there is no statistical association and and the relative risks are low for nuclear and extended families in both 2000 and 2010.

Residing in rural area is statistically associated with family structure in the nuclear and extended family in both 2000 (nuclear: p-value 0.000; extended: p-value 0.028) and 2010 (nuclear: p-value 0.006; extended: 0.013). Women are also more likely to belong to rural than urban in both 2000 (nuclear: RRR=1.825; extended: RRR=1.652) and 2010 (nuclear: RRR=1.486; extended: RRR=1.420).

Differentials in women's economic status shows that having a middle and richer wealth quintile is statistically associated with family structure in 2010 for both nuclear and extended families (p-value 0.000). However, in the year 2000, there is no statistical association. Further, the likelihhod of belonging to nuclear and extended families as compared to single family for women with middle and richer wealth quintiles are higher in 2010 (middle – nuclear: RRR=1.929, extended RRR=1.606; richer - nuclear: RRR=1.808, extended

RRR=1.373) and not in 2000 where the risks are lower (middle – nuclear: RRR=1.062, extended RRR=0.963; richer - nuclear: RRR=0.984, extended RRR=0.853).

Being employed is statistically associated with family structure for nuclear and extended family categories (p-value 0.000) and the likelihood of belonging to the nuclear family or extended family as compared to single family is lower in both 2000 (nuclear: RRR=0.562, extended: RRR=0.445) and 2010 (nuclear: RRR=0.748, extended: RRR=0.519).

Having few (1-2), average (3-4) and many (5 and above) children is statistically associated with family structure in the extended family category only (p-value 0.000) in 2000. As for the year 2010, having few children (1-2), average children (3-4) and many children (5 and above) is statistically associated with family structure in both nculear and extended family (p-value 0.000). As for relative risks, the results shows that there is a higher likelihood for few (1-2), average (3-4) and many (5 and above) children for the nuclear family in 2010 only [(few children (1-2): RRR=2.934, average children (3-4): RRR=3.069 and many children (5 and above): RRR=4.708)].

Belonging to Tumbuka clan is statatistically associated with family structure for the extended family category in 2010 (p-value 0.025) and not all other categories. Further, being a Lomwe is statistially associated with family structure in 2000 for both nuclear and extended family categories (nuclear: p-value 0.006; extended: p-value 0.025) and not in 2010. And lastly, being a Ngoni is statsistcially associted with family structure for the nuclear family category in 2010 (p-value 0.025).

Justification for wife beating if a woman argues with her husband is not statsistically associated with family structure for both nuclear and extended family in Malawi in both 2000 and 2010 and the likelihood of a woman to belong to the nuclear and extended family as comapared to single family is higher in 2000 (nuclear: RRR=1.126; extended: RRR=1.249), while in 2010 it is lower (RRR=0.935 times for both nuclear and extended).

CHAPTER 5: DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

This chapter presents a full discussion of the results which are based on specific objectives of the study and intergrated with findings from existing literature. The purpose is thus to help provide meaning of the results and how demoographc, socioeconomic and cultural factors that have been examined, explain changing family structure in Malawi. The results are based on the descriptive and inferential analysis as presented above by comparing the results for the years 2000 and 2010. The chapter also draws pertinent conclusions that have been drawn from the study findings. Policy and research recommendations have also been highlighted.

The organization of this chapter is as follows: 5.1.1 is a discussion of the demographic factors, followed by socioeconomic factors in section 5.1.2 and lastly, section 5.1.3 which gives a discussion of the cultural factors.

5.1 Discussion

Mainly, the study aimed at examining factors associated with family structure in Malawi by comparing the results for the year 2000 and 2010. Apart from the Univariate and Bivariate analysis, the study employed Multinomial logistic regression to examine the relationship between the various demographic, socioeconomic and cultural factors and family structure in Malawi in the year 2000 and 2010. The unit of analysis were women aged 15 to 49 years of age from all the regions of the country. Some few hypotheses specific to the different predictors were tested in this study. Caldwell's Intergenerational Wealth Flow Theory (1982) was adapted and employed to guide the study.

It has been argued that a flow of resources from prime parents to children is a characteristic of most modern societies (Caldwell, 1982). However, parents in modern societies do not commonly expect to receive financial contributions from children, except perhaps at a much later stage of their life cycle. This economic flow from parents to children has become central in the stratification system, as it impacts significantly to changing family structures through economic transfers in generations to come. The inferential results indicate that through the intergenerational wealth flow theory, some demographic, socioeconomic and cultural factors were significantly associated with changing family structure in Malawi for the two years compared, that is, 2000 and 2010. As a main variable, the results shows that wealth is not significantly associated with family structure in Malawi in the year 2000 but it is significant

in the year 2010. This shows that as compared to the past, recent economic transitions are having significant impacts to the family. This is also consistent with a recent study which found that low levels of income in the family increases the risk of stress which may cause conflict, strained relationships and chaos (Dearing, 2014).

5.1.1 Demographic factors

The results shows that a woman's age as head of the household head is statistically associated with family structure for the nuclear and extended family in both the year 2000 and 2010 (p-value 0.000) with a higher likelihood of belonging to the extended family as compared to single family as age of household head increases [RRR=1.138 times (2000) and RRR=1.114 times (2010)]. Other studies have also reported that with an increase in age adolescent girls from single families, have a higher likelihood of becoming heads are high (McLanahan, 1988).

Age at marriage not only marks the transition to adulthood; but also an additional exposure to child bearing which may cause economic stress. The results show that as compared to younger women (15-19), the likelihood of marrying as a youth (20-24) and as an adult (25-39) and belonging to the nuclear family as compared to single family was higher in both the year 2000 (RRR=1.269) and 2010 (RRR=1.295). Other studies have also found an increase in age at marriage among women (Jones and Yeung, 2014; Krogstad, 2014). However, the likelihood of marrying at an older age (40-49) as compared to younger (15-19) was lower in both 2000 and 2010 and the relationship is statistically significant. Several factors explain this pattern by emphasising a link with other social and economic needs (Hertog, 2009). For instance, women's earnings and education have been reported to be positively correlated with age at first marriage, and not getting married at all (Park et al., 2013; Yeung and Hu 2013a; Yang et al., 2006). In Japan, evidence shows that higher earnings among women are positively associated with marriage for women (Fukuda, 2013). On the other hand in Korea there is evidence of a relatively rapid decline in marriage for the least-educated women (Park et al. 2013). Another well cited explanation why women remain single or in single families is the absence of a matching partner. Consistent with this argument, recent data from the National Fertility Surveys shows that in Japan, lack of marriage is linked with lack of suitable partners (Retherford and Ogawa, 2006; NIPSSR, 2012a). It is for this reason that in some societies including Malawi, parents continue to play a role directly or indirectly in arranging or facilitating marriages for their children (Renniers, 2003). Nevertheless, early age at

marriage has implications to women's health. One study conducted in Malawi found that in areas where maternal mortality was high, age at first marriage was lower in those areas (Ueyama and Yamauchi, 2009).

Economic safety of individuals and households usually is linked with many choices to handle tension. This is usually the responsibility of the head of the household. The presence of men as head in a household provides a buffer for financial security (Desmond and Desmond, 2006). This is so because in addition to money, men usually have access to other resource available in the community which are rarely available to women like; loans, mutual support and influence. From the results, a household headed by a female is statistically associated with family structure both in the years 2000 and 2010 (p-value 0.000). Consistent with this finding, previous studies have also reported that female headed households have been on the rise which increases the risk of poverty and has an impact to the family (Schatz et al., 2010).

Although most people continue to believe that marriage is the best context for childrearing, fewer say that non-marital childbearing is immoral. Having many children has its own disadvantages like; financial costs, education, discipline, sickness and or death of children, and concerns about the future. From the results, compared with women with no children, having with few (1-2), average (3-4) and many (above 5) children ever born are statistically associated with family structure in 2000 (extended family only p-value 0.000) and 2010 (nuclear and extended p-value 0.000). The risks are however relatively lower in 2000 and but higher among women in the nuclear family in 2010 (Few: RRR=2.934, Average: RRR=3.069 and Many: RRR=4.708). This means that as compared to the year 2000, women with either few, average or many children in the year 2010, are likely to belong to the nuclear family. Further, the higher the number of children, the higher the likelihood of belonging to the nuclear family than single family. This possibly shows that having children increases bonds in a family. Previous studies have also reported a similar association (Manning, 2004; Chan and Halpin's, 2003). The findings of the study are significant from a policy perspective. Thus, attempts to address fertility and gender issues at national level will have to take into account factors that have emerged in this study, concerning women's preference for marriage as the total number of children ever born increases.

It is also believed that religion influences marital timing (Carroll et al., 2012). Despite this assertion, other findings indicate that educational levels and the type of structure of the

family may moderate he role of religion on timing of first marriage. Women from nuclear families have higher odds of taking marriage as a short term goal due to strong religious beliefs (Ellison et al., 2011). Moreover, women with higher level of education from nuclear families have twice the likelihood of taking marriage as a short term goal as compared to those from other family structures (Ellison et al., 2011).

5.1.2 Socioeconomic factors

A womans level of education is not only a measure of the countries development, but also for family change. The results shows that having primary and secondary level of education is statistically associated with family structure in both 2000 and 2010 at primary level (p-value 0.000) and secondary level (p-value 0.001). In addition, as compared to having no education, the likelihood of having primary and secondary educational level and to belong to the extended family other than single family is higher both in 2000 (Primary: RRR=2.537; Secondary: RRR=2.219) and in 2010 (Primary: RRR=2.307; Secondary: RRR=1.867). Education has the ability to reduce the poverty gradient. It has long been stated that in order to empower women, there is need to improve their earning potential, promote their health and creating a competitive economy (Hanushek and Wossmann, 2007). The traditional set-up of most Africa families including Malawi are characterised by extended family units. Such families are characterised by a higher number of household size including the aged. It has een documented that an increased number of kins in an extended family has an impact on household wealth leading to poverty (Ssewamala and Ismayilova, 2009). Considering the challenges with resources in an extended family, it is challenging to improve educational standards of children especially young women. This is made worse with the existence of elderly parents, which increases parental costs thereby straining the family and causing poverty (Henretta et al., 2012; Ssewamala and Ismayilova, 2009). Such stress may break the family unit (Conger and Donnellan, 2007).

Education also increases age at first marriage thereby increasing the likelihood of a woman to remain single, since young people are more concerned with their education and career goals (Arnett, 2007). Other studies have however found that a woman with higher education has a higher chance of getting married than one with no education (Hymowitz et al., 2013). Comparing education and divorce, studies have reported an association between higher level of education (Frank and Wildsmith, 2005). In contrast, other studies have reported a

contrasting association and have found that higher levels of education decrease the risk of divorce (Boyle et al., 2008).

Where one lives, whether, rural or urban explains the differences in financial abilities, and in attitudes towards cohabitation, marriage and family arrangements. From the results, residing in rural area is statistically associated with family structure in Malawi [Nuclear: (p-value 0.000 for 2000 and p-value 0.006 for 2010); Extended: (p-value 0.028 for 2000 and p-value 0.013 for 2010]. Further, the likelihood of residing in rural other than urban and elonging to nuclear and extended familes is also relatively higher for both 2000 (Nuclear: RRR=1.825 for 2000 and RRR=1.486 for 2010; Exended: RRR=1.652 for 2000 and RRR=1.420 for 2010). In rural Malawi, extended families are more evident than urban where nuclear and single are more prevalent. Rural livelihoods are associated with higher levels of poverty which impacts significantly to family arrangements causing some family member to relocate to urban areas for work or marriage, of which some of them form single families of their own. Nevertheless, remittances from urban to rural can help to reduce poverty at household level which in turn may strengthen family bonds (Schatz and Ogunmefun, 2007; Case and Menendez, 2007).

The intergenerational wealth flow theory asserts that the flow of resources from parents to children is a characteristic of modern societies (Caldwell, 1982). Women's wealth status has a significant impact to their lives and to members in the family. As compared to the year 2000, the results for the year 2010 shows a statistically significant relationship for women with middle wealth and those richer in the nuclear and extended family [Middle: (nuclear and extended p-value 0.000; Richer: (nuclear p-value 0.000 and extended p-value 0.004). Further, the likelohood are also higher in the year 2010 (Middle: RRR=1.929 and for nuclear and RRR=1.606 for extended; Richer: RRR=1.808 for nuclear and RRR=1.373 for extended) as compared to 2000 where the risks are relatively lower. This means that compared to the year 2000, families in 2010 are experiencing significant economic challenges in Malawi. When income levels in a family are low, there is an increased risk of conflict which can break the family unit (Dearing, 2014).

One of the socio-economic and demographic transitions affecting sub-Saharan Africa is the increasing labour force participation of women (Mokomane, 2014). This can be a source of physical maintenance and support for the family. The results show that a woman in employment is statistically associated with family structure for both 2000 and 2010 (p-value

0.000). However the relative risks are lower if compared to those unemployed in both 2000 (Nuclear: RRR=0.562; Extended: RRR=0.445) and 2010 (Nuclear: RRR=0.748; Extended: RRR=0.519). Traditionally, the role of women has been confined to the house; with caring roles for children and the elderly. However, in this age of globalisation, women are also increasingly becoming career oriented thereby narrowing the gap between male and female in the labour force. Family responsibilities and work demands, especially among women often leads to considerable stress leading to conflict and collision (Bolton and Houlihan, 2009).

The importance of children in the lives of Africans among others relate to matters of lineage, the supply of labour and support. Motherhood is an essential part of some women and not a luxury as others may view it (Edin and Kefalas, 2005). This is so for labour assistance, financial support, old-age help, affection and companionship, lineage and posterity, pride and self-affirmation; thereby supporting Caldwell's argument (Caldwell, 1982). It is possibly due to the same reason why most women and or families in Africa have many children as compared to international norm. In some cases however, women with higher education have higher opportunities and hobbies from which they create an identity and find meaning. This possibly explains why most of them have no children (Abma and Martinez, 2006).

Religion is another factor used in the analysis, and had a varying effect on family structure. As a platform for conservative behaviours and attitudes, religion may strengthen the bonds of a family (Pearce and Thornton, 2007). Religion may also avert early family disruptions since it helps in preventing teenage cohabitation and early pregnancies (Meier and Allen, 2008). From the results, being a Muslim woman other than Christian and belonging to the nuclear family as compared to single family is statatistically associated with family structure only in 2010 (p-value 0.039). Further, the risk is relatively also higher for Muslims than Christians in 2000 and 2010 for the nuclear family and the extended family. As for women from other religion, the risk is lower as compared to belonging to Christianity in 2000 and 2010. Muslim religion mostly stresses the importance of marriage as an ultimate goal and hence promotes conservative behaviour and attitudes (Ellison et al., 2011).

5.1.3 Cultural factors

Evidence shows that ethnicity strongly influences intergenerational financial flows (Goldscheider, 1989). It is also probable that the structure of the parental family may influence parental contributions to their children. In Malawi, Tumbuka and Ngoni represent

patrilineal societies; while Chewa, Yao and Lomwe represent matrilineal societies. A family structure is said to be matrilineal where membership, succession and inheritance follow in the maternal line and vice versa. From the results, as compared to the year 2000 where only Lomwe (matrilineal society) is significant (Nuclear: p-value 0.006 in 2000 and extended: p-value 0.025), in the year 2010, a woman being a Tumbuka (extended: p-value 0.025 in 2010), and Ngoni (nuclear: p-value 0.025) which are patrilineal societies were statistically associated with family structure in Malawi. Evidence shows that, in response to social changes in sub-Saharan Africa, such as; urbanization, the customary patrilineal care for orphaned children has been replaced by matrilineal and grandparental care (Oleke et al., 2005). Further, the extended family continues to be used as a safety net (Lund and Agyei-Mensah, 2008). Other studies have reported the deterioration of patrilineal kinship systems (Oleke et al., 2005).

To a large extent, the degree to which partners make and influence decisions at household level is based on values and beliefs from their cultural circles. Indications suggest that it is these beliefs that influence inequality in families and communities between men and women (McLanahan and Percheski, 2008). From the results, the likelihood of a woman justifying wife beating if she argues with her husband was higher in 2000 for both nuclear and extended family (Nuclear: RRR=1.126, Extended: RRR=1.249), as compared to 2010 (Nuclear: RRR=0.935, Extended: RRR=0.935). This means that as compared to the year 2000, women justifying wife beating if she argues with her husband reduced in the year 2010. This can be attributed to campains, policy and programmes on women empowerment that has been taking place in Malawi over the years. The association was not significant in both 2000 and 2010.

5.2 Conclusion

Basing on the results, there is no doubt that Malawian families are changing, indicating a continuing revolution in the social lives of people similar to the one that took place in Western and Asian countries many years ago. However, what is markedly different is the terrain or landscape in which such changes are taking place. For this reason, it is likely that patterns of change in family structure may not uniformly follow the same pattern as that of the West and Asia. With other family forms such as cohabitation and same sex marriages not very prominent in Malawi, it is likely that family transition in Malawi may not be complete yet; even though measuring "completeness" is also challenging. Nevertheless, the adaptation process for families from traditional to modern is causing changes to the family unit leading to the emergence of new family forms like increased rates of single families especially among

women. The high fertility rates, increasing rates of divorce, entry of women into the labour force, increasing rates of single families and reducing rates of nuclear and extended families among others, means that the old policies and systems related to families need redress. It goes without saying that family transitions in Malawi are taking place as a fast and continually changing environmental context. Thus, without carefully analysing the different aspects that determine family structure there is a risk of making erroneous conclusions which may have grave implications to society. This study has increased an insight to the factors that are contributing to this change. At another angle, this study also attempts to bring population change especially changes at family level to political agenda for policy direction.

One argument I want to put across here is that from the results, it is apparent that none of the family structure categories that have been measured (i.e. single, nuclear and extended) is best. This is so because each family category has its own challenges if considered separately. For instance, even though the nuclear family is recommended, evidence shows that issues related to abuse and HIV infection takes place within matrimonial homes. Nevertheless, it is the single family structures that have far fetching negative consequences to individuals and communities at large. Since family structure cannot be directly changed, interventions should be directed towards the drivers of the risk.

It is evident from the result that if interventions are to be effective and sustainable, there is need for wider and multi-disciplinary approach which among others should involve improving education and economic empowerment of women. The widespread unemployment levels and deteriorating resource prospects among men in Malawi has redefined men's traditional role as breadwinners through women's involvement in labour market which has implications to the family unit (van der Lippe and Peters, 2007). The dwindling power of men may lead to feelings of failure, resulting in alcohol abuse, extramarital sex activities and gender violence among others (Bigombe and Khadiagala, 2003). Other studies have also reported that such family change is initiated by woman if empowered, and has the autonomy, through divorce (Takyi, 2006).

From the results, it is evident that having primary and secondary level of education is statistically associated with family structure in both 2000 and 2010 at primary level and secondary level and the likelohood of woman to belong to the extended family is higher. Since extended families are associated with challenging economic opportunities, efforts

should be made to economically empower families with many kins members in order to improve educational opportunities for women especially young girls. Consistent from these findings, the results have also shown that residing in rural area is statistically associated with family structure, which supports the need to target rural areas with empowerment initiatives. Actually based on the results, having middle and richer income is statistically associated with family structure in 2010 and not in 2000, indicating that with changes in time, women are experiencing increasing economic hardships. It is therefore necessary to strengthen policies that empower women directly and indirectly economically which should be in line with changing contexts in time Adequate resources have social benefits which among others reduce strain, and act as a buffer against strenuous and turbulent economic environments (Goodwin, 2003).

One challenge is the socio-cultural landscape that has been shaped by men's dominance in communities. Men feel threatened by societal changes and try to nullify women's economic contributions to the family. In particular, the Malawi National Gender Policy should respond to this challenge by reconciling employment and family responsibilities and increasing labour flexibility in the market that is male dominated. Through this, communities may start to appreciate that when women are educated and increasingly involved in labour force, it increases economic power in the home and protects the family from economic shocks which may result in stress; and not taken as a threat to men (Esping-Andersen, 2009; Luci, 2009).

In addition, as a way to empower women in patriarchal societies, the Malawi National Gender Policy should incorporate systems that encourage women to get more opportunities for property ownership. This can be achieved addressing challenges associated with accessing legal representation and resources. Such endeavours should incorporate men and community leadership because women empowerment initiatives should be taken as a growth and rewarding process that recognises contributions of both, respects the dignity of people and ensures a fair distribution of benefits (Eyben,et al, 2008). After all, women are now increasingly taking a role in the care of extended members including the elderly (Cho, 2006).

From the results, it is evident that single families have increased in Malawi between 2000 and 2010. Even though some sectors of society scorn women who are 30 years and above for being single at that age, current trends reveal an efforts by women to adapt to such changes in education and economic opportunities, and the decline in marriageable men (Bigombe and

Khadiagala, 2003). This has an advantage because in the long run women will gain economic impetus which may cushion economic shocks that may impact on the family nest. With these changes, it is important that the government should incorporate programmes that enhance economic opportunities for such single families in the national plans.

About 27% of Malawian girls enrol in secondary school, and 13% finish secondary school thereby showing gaps in the free primary education programme (World Bank, 2014). From the results, having primary and secondary education is statistically associated with family structure in Malawi in both 2000 and 2010. This shows that apart from the gains in free primary education introduced during multiparty democracy in 1994, a number of girls do not finish secondary education; let alone attend tertiary education. Learning from other countries such as Kenya and Uganda, the similar trends have been also observed whereby large enrolments are concentrated in lower grades with high rates of school drop-outs (Somerset, 2009; Lewin, 2009). Evidence shows that changes in family structure contribute to school dropout especially among girls (Eneji et al., 2013). This shows that there is need to fully analyse the family for effective interventions. Since the likelihood of a woman with primary and secondary education to belong to the extended family other than single family is higher in both 2000 and 2010, it can be assumed that such type of families are playing a role in school dropout. From an African perspective, traditional extended networks have had an impact in arranging marriages for young girls thereby reducing their chances of contnuing with education by promoting early and or forced marriage for economic gains through *lobola*. Despite a law that prosecutes marriage before a girls reaches 18, the law gives room for such marriages to take place if parents approve. The Malawi National Education Policy should therefore incorporate the role of the family in challenges related to girl's dropout by among others enacting policies against forced marriage. If the family is not incorporated, it may lead to challenging outcomes which may further compound family instability.

HIV/AIDS has an impact to instability of the family causing disintegration and economic downturns. A lot has been done in Malawi and other countries to respond to the effects associated with HIV/AIDS. However, such policies have been directed towards prevention of infection to an individual through promotion of circumcision among others. Even though HIV infection is said to be high among the most poor, there is also evidence that a higher proportion of infections are taking place in matrimonial homes (Anglewicz and Clark, 2013). From the results, the likelihood of women justifying wife beating are lower in 2010 than in

2000 indicating that with time, perception about gender based vioelnce among women are changing for the better. From this perspective, policies that are firmly grounded in realities of women's lives are needed. In this context, the Malawi HIVand AIDS Sector Plan should incorporate the mulitifaceted family environments in which women are placed. This among other should include the role of culture and promotion of income generating activities that scales down poverty and not accelerate debts. Such debts create more stress and may cycle the nature of poverty.

From the results of this study, it is evident that the higher the total number of children ever born, the higher the odds of remaining in the nuclear family, indicating that an increase in the number of total children ever born is a proxy to remain in marriage. It can therefore be assumed that some women remain in marriage becauae of children especially if the number of children is high. With the increase in levels of gender based violence it is necessary that policies should consider fertility when addressing the problem of gender based violence. The Malawi Sexual and Reproductive Health Policy should therefore strengthen its stance in enhancing the importance of women in reducing fertility. In order to reduce the economic stress associated with family stress, the policy should also advocate for support to children; especially, single mothers who spend little time at home breastfeeding which may lead to poor child nutritional outcomes (Oya and Sender, 2009; Ntoimo and Odimegwu, 2014).

Evidence shows that family processes and transitions greatly influence adolescent sexual risky behaviour especially among single families (Defo and Dimbuene, 2012). With the increase in rate of single families, it is necessary to create opportunities that can reduce the development of such type of families. Further, from the results, belonging to households headed by a female is statistically associated with family structure in 2000 and 2010 for both nuclear and extended family. This is a conclusive fact that there is need for interventions at family level which among others may include reducing the number of female headed households and or increasing the economic potential of such families.

5.3 Recommendations and Implications for Researchers

The family is critical in all processes of demographic change and the development of societies and nations. This study which is one of the first on changing family structure in Malawi has unravelled many issues that need further analysis and recommendations. Policies and programmes can well be incorporated if there was a Family policy in Malawi. It is an

established fact that family policies cross-cut almost each spheres of the state welfare undertakings and almost any social policy has an effect on it (Bothfeld and Rouault, 2015). Thus it is being recommended that Malawi should develop a practical and culturally appropriate Family Policy to guide the process of policy and programme development and interventions (Eaton, 2003; Blair-Loy and Wharton, 2002).

Within the Malawian context, religion plays an important role in the lives of people. It not only influences the decision to get married but also entering marriage at a younger age (Carroll et al., 2012; Ellison et al., 2011). Through religion, individuals and families create meaning and symbols which guide them in decision making regarding different aspects of health and social life such as, gender and family planning (Edgell, 2005). It is therefore important to involve religious leaders when making important policies and programmes for increased participation and uptake among community members. It would also be of value if future frontiers of research on families can explore this further.

5.4 Study Limitations

1. Due to the cross-sectional nature of the Malawi Demographic and Health Survey data for the years 2000 and 2010 causality cannot be established. Therefore the socioeconomic and demographic characteristics of respondents that directly cause changes in family structure cannot be determined. For this longitudinal data would be needed. As such, this study can only identify factors associated with family change which in turn could inform longitudinal studies on causes of family change.
2. The data being examined are from 2000 and 2010, and changes that may have occurred during that period are not examined. From the literature, family change at a population level happens slowly over time therefore it is not anticipated that many changes would have occurred during this period.

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