

**HEALTH ADVOCACY AND PRACTICE: EXPLORING THE INFLUENCE OF
SOCIAL STRUCTURES ON THE HEALTH RELATED LIFESTYLES OF ADULTS
IN THE ASOKWA COMMUNITY IN KUMASI, GHANA.**



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Spring, 2014

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BY

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DEDICATION

To my parents and siblings for their care and support

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ABSTRACT

The increasing prevalence of non-communicable diseases (CNCDS) in Ghana has necessitated a shift in the health recovery paradigm from a curative to a preventive one (Ministry of Health [MOH], 2008). Currently CNCDS are set to overtake communicable disease in terms of morbidity and mortality rates (MOH, 2008) and in 2008 alone, 86,200 persons lost their lives as a result of ailments from this disease in Ghana (WHO, 2012). The Regenerative Health and Nutrition Program (RHNP) was adopted in 2005 and piloted in 2006 by Ghana's MOH with the aim of promoting healthy lifestyles, dietary practices, mother and child care practices that would help eliminate and prevent prospective diseases that impact on the health and general well-being of Ghanaians (Tagoe and Dake, 2011: 2).

In spite of the usefulness of such a health program, the focus on what is described as 'healthy' or 'unhealthy' lifestyles assume primacy of individuals agency to prevent or reduce prevalence rates of non-communicable diseases with a limited focus on socio-cultural structures and practices as well as social statuses that shape lifestyle behaviours. This study therefore explores and examines overall predisposing or risk-reducing factors that influence health-related lifestyles of men and women in the Asokwa community in Ghana. The main objective is to find out how gender roles intersect with other social statuses in influencing an individual's health related lifestyles. The specific objectives are to examine the intersecting relationship between gender roles and other social statuses such as level of education, occupation, marital status, age and religion in their influence on awareness and practice of healthy lifestyle messages. In addition, this study examines the influence of the RHNP as a healthy advocacy program on residents in the Asokwa community.

To address these research objectives, the feminist theories of intersectionality and gender (Crenshaw, 1991 in Staunces & Sondergaard, 2001), structuration theory (Giddens, 1976 in Dyck & Kearns, 2006) and the time-space constraint approach (Kwan 1999a) are used. The theory of intersectionality and gender roles helped in explaining how the gendered expectations of behaviour of men and women intersect with other statuses as they influence health behaviour. The time-space constraint approach provided guidelines to the analysis of the time use and mobility in space of informants. In addition, the structuration theory helped explain the relationship that exists between an individual and the structures that form the society within which he or she finds himself.

A sample of 100 informants was surveyed including 16 case studies. From the study it was found that the RHNP through its advocacy program has increased the awareness of healthy living among the people. The receipt and application of messages from these health campaigns was indeed influenced partly by the availability of facilities as well as individual statuses. The study finds that although gender roles and marital status seem to be important, they mutually intersect with other statuses in influencing the diet and physical activity of informants.

Table of Contents

DEDICATION	i
ACKNOWLEDGEMENT	ii
ABSTRACT	iii
LIST OF MAPS	vii
LIST OF DIAGRAMS	viii
LIST OF PLATES	viii
LIST OF TABLES	viii
ABBREVIATIONS	ix
CHAPTER ONE: Introduction.....	1
1.1 Introduction	1
1.2 The Regenerative Health and Nutrition Program in Ghana	4
1.3 Problem Overview	6
1.4 Research Objectives	8
1.5 The Study Area	9
1.6 Time Frame.....	13
1.7 Structure of Thesis.....	13
CHAPTER TWO: Theoretical Framework.....	14
2.1 Feminist theories.....	14
2.1.1 Intersectionality.....	19
2.2 Space-Time Constraints.....	22
2.3 Structuration Theory	25
2.4 Combination of theoretical ideas	28

CHAPTER THREE: Methodology	31
3.1 Preparing the grounds	32
3.2 Status and Role Expectations in the Field	33
3.3 Survey	35
3.4 Case study interviews	37
3.5 Key informant Interviews	41
3.6 Secondary data.....	42
3.7 Data analysis	42
3.8 Research ethics	43
3.9 Validity and reliability of data.....	44
CHAPTER FOUR: Findings	47
4.1 Advocacy in Asokwa community.....	47
4.2 Healthy diet advocacy and street food in Asokwa	51
4.3 Local perception of what is physical exercise in Asokwa.....	54
4.4 Gap in practice of healthy lifestyle messages by individuals in Old and New Asokwa	57
4.5 Influence of social statuses on the lives of individuals in Old and New Asokwa, Kumasi.....	62
4.5.1 Influence of formal education on healthy living in Asokwa.....	62
4.5.2 Gender roles and marriage in Asokwa, Kumasi	65
4.5.3 Influence of gender roles at home on healthy living in Asokwa	67
4.5.4 Influence of marriage on healthy living in Asokwa.....	71
4.5.5 Influence of occupation on healthy living in Asokwa	75
4.6 Time use by case study informants.....	79
4.7 Conclusion of findings.....	81
CHAPTER FIVE: Discussion of Findings.....	83

5.1 Advocacy of public health advice	83
5.1.1 RHNP advocacy: constitutive and constituted by the lifestyle of residents	83
5.2 Practicing healthy living in Asokwa.....	89
5.2.1 Healthy living as an outcome of the influence of social statuses.....	89
5.2.2 The conditions of the married life and its influence on healthy living	91
5.2.3 Constraints experienced by all: Educated and Non-Educated	94
5.2.4 Occupational influence on the practice of healthy living	95
CHAPTER SIX: Conclusions	98
References	102
APPENDIX I.....	109
APPENDIX II	115
APPENDIX III:	116

LIST OF MAPS

Map 1: Location of Old and New Asokwa in Kumasi and case study informants.....	12
Map 2: Gaps in awareness and practice of standardized messages of healthy living in Old and New Asokwa.....	60
Map 3: Activity budgets of case study informants interviewed in Old and New Asokwa.....	70
Map 4: Time and activity budget of two male informants in Old Asokwa.....	78

LIST OF DIAGRAMS

Diagram 1. Intersecting relationship of social statuses (structures) and their influence on the human agent.....	29
Diagram 2. Time use in hours by a case study informant in Asokwa.....	68
Diagram 3. Time use in hours by a case study informant in Asokwa.....	69
Diagram 4: Journey from Advocacy to Practice of health advice.....	82

LIST OF PLATES

Plate 1. Informant and I engaging in an interview in Old Asokwa.....	40
Plate 2. Training section for Municipal Assembly in Kumasi.....	48
Plate 3. Community durbar in Asokwa.....	51

LIST OF TABLES

Table 1: Gender and location of informant in Old and New Asokwa.....	36
Table 2: Statuses of case study informants according to residential location.....	38
Table 3: Relationship between practice and religious group advocacy.....	48
Table 4: Places where informants buy food outside their homes.....	53
Table 5: Practice and awareness of standardized messages	58
Table 6: Influence of advocacy on diet and physical activity.....	61
Table 7: Time spent on childcare.....	66

Table 8: Marital categories and its influence on healthy lifestyle.....	72
Table 9: The mentioned impacts of marriage on an individual’s life.....	73
Table 10: Informants’ occupations.....	75
Table 11: Informants physical activity at work and during the free.....	76
Table 12: Time use by 16 case study informants.....	79
Table 13: Standardized Messages.....	84

ABBREVIATIONS

WHO: World Health Organization

KMA: Kumasi Metropolitan Assembly

KMC: Kumasi Municipal Council

CNCD: Chronic Non-Communicable Disease

GPS: Global Positioning System

RHNP: Regenerative Health and Nutrition Program

SPSS: Statistical Package for Social Sciences

MOH: Ministry of Health

IBM: International Business Machines

CHAPTER ONE

INTRODUCTION

1.1 Introduction

Studies have shown that lifestyle behaviours are the root cause of chronic non-communicable diseases (CNCDs) in the world today (Aulikki et al, 2001). Chronic non-communicable diseases are ‘degenerative diseases that persist for a long time...involving the biological deterioration of the body’ (McCracken and Phillips (2009). They are often caused by a ‘combination of health-damaging behaviours’ which include smoking, drinking, unhealthy diet and physical inactivity (Robinson & Elliott, 2009: 92). The World Health Organization (WHO) has identified four main types of CNCDs which include cardiovascular diseases, chronic respiratory diseases and cancers and diabetes (Ibid.). Globally, CNCDs account for ‘60% of the 58 million deaths annually, meaning that 35 million people died from these diseases in 2005’ (WHO, 2006: 5). Three of every four deaths in developed countries are caused by diseases including cardiovascular diseases, and cancers (Aulikki et al, 2001). In developing countries most causes of death already have their roots in these diseases, as of now, 66% of these deaths are estimated to occur in these countries (Ministry of Health, (MOH), 2010). This can be attributed to rapid demographic transitions and changing lifestyles (unhealthy lifestyles) among the people (Aulikki et al, 2001).

Ghana, like many other African countries, faces a ‘double burden of disease’ as a result of already existing communicable diseases and increasing prevalence of chronic non-communicable diseases (MOH, 2008: 3). ‘Currently, evidence suggests that CNCDs, especially hypertension, stroke and diabetes are set to overtake communicable diseases (malaria and tuberculosis) in terms of impact on morbidity and mortality across Ghana (Ibid.: 3). Non-communicable diseases are now among the top ten in-patient causes of death in Ghana (Bosu, 2007 in Tagoe & Dake, 2011). In addition, 86,200 persons lost their lives from these CNCDs in Ghana alone in 2008 (WHO, 2010). This is a major challenge to global and national public health because these rates are expected to go up due to rapid changes in diets and increasing physical inactivity accompanying rapid urbanization (WHO, 2004).

For developing countries like Ghana, the economic theory according to Popkin (2003) explains the rationality of this changing lifestyle to result from a need to obtain more varied and tasteful diet and a less burdensome job or sedentary job. Thus a person, according to this theory upon increasing his economic gains would now prefer a change in his lifestyle to suit his current economic level. This need is satisfied by the Ghanaian open market system (trade liberalization policies) which allows the importation of foreign processed foods mostly low in fibre compared to the traditional Ghanaian foods (Robinson et al, 2012). This is a convenient option for Ghanaians as they become rich and urbanized (Ibid).

According to the 2002 world health report, the most important risks for chronic non-communicable diseases included high blood pressure, high concentrations of cholesterol in the blood, inadequate intake of fruits and vegetables, overweight or obesity, physical inactivity and tobacco use (WHO, 2004). Five of these risk factors are related to the consumption of an unhealthy diet and physical inactivity which are the two most important risk factors in tracing the origin of the disease (WHO, 2006). Nevertheless, there is strong scientific evidence that by changing to a healthier diet and engaging in sufficient physical activity, most of the CNCDS can be avoided (WHO, 2005 in Aikins, 2008). Physical activity and a healthy diet play an important role in the prevention of CNCDS (WHO, 2003 in WHO, 2006) Addressing issues related with CNCDS would be of great health benefit to the world (Aulikki et al, 2001) There is therefore a way out of this menace and reducing the number of deaths that are caused by CNCDS.

Upon recognizing the possibility of change in this trend of disease burden, the World Health Organization (WHO) on request from member states developed a global strategy on diet and physical activity (WHO, 2004). The main objective of this strategy is to promote health by facilitating the development of an enabling environment for physical activity and the provision of healthy diets in a sustainable manner (Ibid.). With the help of this strategy, diseases and deaths resulting from unhealthy diets and physical inactivity can be reduced (Ibid.). Member states were then charged with the responsibility of developing policy and guidelines on diet and physical activity that correspond to their local content, all with the aim of promoting healthy living.

Ghana in 2005 through the Ministry of Health (MOH) adopted the “Regenerative Health and Nutrition Program (RHNP)”, this is a public health program that aims at transforming the

lives, health and development of Ghanaians in similar ways as the WHO recommends (MOH, 2008). Years later, the Ministry with directives from the WHO developed the country's guidelines on diet and physical activity aimed at creating that enabling environment targeted by the WHO (MOH, 2010). This was developed based on the current nutritional and physical exercise status of Ghanaians and its long term effect can bring about a reduction in the prevalence and cost of lifestyle diseases (Ibid.). The RHNP together with the national strategy on diet and physical activities guide the Ministry of Health in Ghana to facilitate the goals of WHO global strategy (MOH, 2008). The global and national programs have a common agenda of improving the health-related lifestyle of Ghanaians.

Tagoe & Dake (2011) undertook a study of the state of healthy living before (2003) and after (2008) the introduction of the Regenerative Health and Nutrition Program (RHNP) to ascertain the existence of lifestyle change among adults in Ghana. Their results showed that unhealthy lifestyle was more common among urban dwellers than among rural dwellers, both men and women alike. Significant among the findings was a gendered difference in healthy lifestyles among adults in Ghana. After the introduction of the health program, 7.0% of the women lived healthier lifestyles as compared to men before the policy, whereas 9.0% of the men were living riskier lifestyles than they were before the introduction of the policy. Consequently this would reduce rates of obesity among women but on the other hand increase the risk of CNCDS among men, leading to a poverty burden on families. These discoveries were based on a quantitative analysis of health data but the causes for this gendered difference in healthy living and the general trend of health behaviour were not provided in this study.

The question here is whether the introduction of these programs and guidelines (i.e. the regenerative health and nutrition program and the guidelines on diet and physical activity) have any influence on the lives of people at the local level, in this case in a community called Asokwa in Kumasi and also which factors actually influence health related behaviour of men and women in this community. Research into these factors would provide information that would strengthen and direct measures geared at health promotion and death reduction caused by CNCDS.

1.2 The Regenerative Health and Nutrition Program in Ghana

This section provides detailed information on the efforts made by government in transforming Ghana's health system from a curative to a preventive one thus promoting healthy living among nationals. This section is a summary of background information given by the personnel in charge of lifestyle related issues under the Regenerative Health and Nutrition Program, Accra.

Overview of the Program

The Ministry of Health in Ghana in 2005 adopted the regenerative health and nutrition program for health promotion and maintenance in Ghana (MOH, 2008). It is a health program adopted from the African Hebrew Israelites community (MOH, 2012). It is called the Dimona model (MOH, 2008). This model contained health practices that conform to the application of the principles of nature to ensure a long and healthy life (MOH, 2012). Over fifty years the Hebrew people have been a living example of the benefits of following this health model (Ibid.). It is now a complete structure defining their way of life. The main principles of this model focus on peaceful living with man and the environment. To the Hebrews, man can enjoy a long and health life if we pay careful attention to our way of life in terms of our diet and also physical activity. The personnel added that this lifestyle is not spontaneous but requires a conscious effort for change.

After Ghana's adoption of this model, it developed a training manual to guide the comprehensive utilization of the Dimona model. The training manual contains instructions and recommendations for healthy living. This manual is used in training 'change agents' who serve as advocates in the various communities by living an exemplary life and also by spreading the message of healthy living (MOH, 2012). The Regenerative Health and Nutrition program has been integrated into the national health policy and directives on diet and physical activities in Ghana (which is a national version of WHO global strategy on diet and physical activity in Ghana).

A pilot training program for change agents was organized in 14 districts in 2006. These change agents are opinion leaders like chiefs, traditional leaders, pastors and imams as well as ordinary people who received adequate knowledge concerning healthy living from the Ministry. A positive feedback was recorded upon review of the pilot study and this project

was scaled up to the national level by training more change agents. Based on reports from this, a five year strategic plan for implementation of the program was drawn. This is currently the plan used in implementing the RHNP in Ghana.

The RHNP is basically about restoring and rejuvenating lost health capacity of Ghanaians. By encouraging people to live healthy, the program aims at improving the human capital and also reducing the cost incurred in the treatment of preventable diseases (i.e. communicable such as malaria and non-communicable diseases such as hypertension). It also looks specifically at the measures that can be put in place to prevent the occurrence of diseases, especially non-communicable diseases.

The program implements this objective by formulating policies that promote actions aimed at changing Ghana's health paradigm from curative to preventive health thus encouraging people to live healthy. The Ministry also oversees implementation of these policies by working together with other government and private companies like food manufacturing companies whose aim is to promote health. Also they seek legal backing to pass bills on banning the sale of certain unhealthy products. The program aims at encouraging the addition of healthy lifestyle as a subject in the basic school because they believe that by informing children at an early stage on how to live healthy, it is more likely to become part of their lives when they grow. One key area they intend to focus is educating little children teachers to provide children with less sugary foods and rather feed them more fruits and vegetables.

The program runs three modules which cut across issues related to maternal health, water and nutrition as one module and healthy lifestyles as the final module. The section of the RHNP that focuses on healthy lifestyle has four main key interventions which include healthy diet, exercise, rest and hygiene (MOH, 2008). These have been used in drafting five standardized messages used in advocacy. These messages include water is medicine, exercise is medicine, fruits and vegetables is medicine, rest is medicine and cleanliness is medicine. These messages except for the message on cleanliness is used in this study, this is because the study is an assessment of diet and physical activity. The message on fruits and vegetables is accessed as two different messages making five messages in total for this study. The program in addition provides facilities in the communities like parks, thus creating an enabling environment for healthy living.

So far the program has embarked on six years (2005-2011) of advocacy. Studies conducted by the Ministry of Health (2008) have shown an increase in the level of awareness of healthy practices in schools, homes and also at the community level. They believe this would be translated into practice. By this they mean that when policies are formulated, advocacy made, human capacities built and an enabling environment created, individual lives will in one way or the other be influenced positively towards healthy living.

With respect to gender, the program does not specifically address the different reactions to health messages as well as practice of healthy living by different gender groups. Nevertheless, the program covers issues related to maternal health. This section provides information on how pregnant women are supposed to eat and cater for themselves from pregnancy to the delivery stage. It seldom considers men's health as a specialty but has made certain observations on the different lifestyles of men and women. These observations include the risky lifestyle of men and the obesity issues of women but their different health related lifestyles have not been considered or documented.

1.3 Problem Overview

Studies have shown that there has been a change in the dietary pattern of Ghanaians over the past fifty years (Aikins, 2007 in MOH, 2008). The lifestyle related risk factors have been a result of several transitions in the diet and physical activity of Ghanaians (Ibid.). Local nutritious foods rich in fibre and less carbohydrate have been replaced by the consumption of refined or processed foods like polished rice which is rich in carbohydrates; this transition is mostly common in the urban settlements (MOH, 2010). An increase in the consumption of these carbohydrates combined with less physical exercise has resulted in the increasing prevalence of obesity (Ibid.), which is one of the major risk factors to CNCs in Ghana (Biritwum et al, 2005). A study conducted in seven African countries (Nigeria, Congo Brazzaville, Liberia, Senegal, Sierra Leone, Niger and Ghana) placed Ghana on the lead in obesity rates (MOH, 2010). The introduction of the RHNP together with the guidelines on diet and physical activity are important steps in addressing the case of unhealthy lifestyles among residents in Ghana and also in Kumasi. This is evident in the increasing concern of the Ministry of Health to the changing life situations of the populace. Health is at the centre of the Ghana's national development goals (MOH, 2008: 3).

According to the Ministry of Health in Ghana (2008), 22.4% of households' monthly expenditure is used in the purchase of out-of-home foods, especially lunch. Ghanaians spend less amount their time than before on preparing home cooked meals, most people prefer to purchase already prepared meals outside the home (Mensah et al, 2002). This is a result several socio-economic factors such as the cheap and ready-made nature of out-of-home foods that make it more convenient. Street food vending was found by Amoah et al (2004) to be an integral and well accepted entrepreneurial activity in Kumasi. These meals tend to be fat-rich fast food variety thus increasing the risk of obesity (Agyei-Mensah & Aikins, 2007 in MOH, 2008.). Physical inactivity and sedentary lifestyle of most Ghanaians is a major contributor to this CNCD burden (Amoah, 2003 in MOH, 2008). This is a common lifestyle in urban areas where the use of vehicles and office jobs prevail (Greater Accra Annual Report. 2006 in Ibid.). Even though facilities for exercise such as work place and public gyms exist, they are limited in number and often cater to particular groups of people in the society, such as middle to high income urban middle class (Dzogbenuku, 2007 in MOH, 2008).

Kumasi like most urban areas in the country has experienced this increasing prevalence in non-communicable diseases (KMA, 2006). Unfortunately studies regarding causes and prevention of non-communicable diseases have been centered in the capital city, Accra. Most of these studies like that of Biritwum et al, (2005), Agyei-Mensah & De-Graft Aikins (2010) focus on the burden, prevalence and risk factors of CNCDs. Some researchers like Tagoe & Dake (2011) even go further to state the presence of some socio-economic factors influencing this current unhealthy lifestyle. All these are quantitative studies which finally make recommendations towards the promotion of healthy lifestyle behaviours but have not gone further to research into the specific impact and extent of influence of these social factors on healthy living.

The health of people living in urban areas like Kumasi is not only affected by individual decisions but also by the political, social and economic environment the surrounds them (Weeks et al, 2012). This study first of all seeks to examine the level of awareness of this RHNP in Asokwa, Kumasi and the factors influencing this awareness. It also seeks to study how statuses like gender, education, religion, age, marital status and occupation intersect in their influence on the diet and physical activity of men and women living in Kumasi. These other factors are taken from WHO's global strategy (2004) in which it advices members states to consider the influence of these factors when drawing their national strategies.

It is important to note that gendered influence on diet and physical activity has been singled out as an important factor, intersecting with other social statuses. This is because gender is a primary status common to all and also because of the gendered difference in healthy lifestyle behaviours observed by other researchers in Ghana. As gender roles of men and women intersect with other statuses such as age education, occupation, age, marital status, religion and education, different social persons and behaviours are formed (Valentine, 2007).

Men's health behaviour has been found to be different from women. Men by not paying attention to their health needs and engaging in certain 'socially sanctioned risky behaviour' have demonstrated masculinity at the expense of their health (Courtenay, 2000 in Thien & Del Casino, 2012:1147). Women on the other hand, according to Dyck & Dossa (2007 in Thien & Del Casino, 2012:1148) are thought to 'construct healthy spaces for themselves and their families via everyday activities of food preparation and religious practices'. The different social statuses that intersect with gender (for example, education, marital status etc.) influence the (health) behaviour of men and women assuming these statuses (Shields, 2008).

Public perceptions are important in assessing the efficiency of health promotion messages in changing health behaviour (Paquette, 2005). A greater understanding of the public's perceptions and awareness of healthy eating and physical exercise is essential to assess how these health promotion messages are received, interpreted and put into practice in daily life in order to develop successful healthy living. Thus by studying the level of awareness of RHNP health messages and social factors (education, marital status, religion, age, gender and occupation) factors that influence this awareness and consequently practice of these health advice, specific measures can thus be taken to address the increasing prevalence of unhealthy living and its effect on CNCDs in Ghana.

In light of the background information given above, the following objectives have been formulated.

1.4 Research Objectives

The main objective of this study is to examine the following:

How do social statuses influence the level of awareness and the possibility of practice public health advice in Asokwa community of Kumasi, Ghana?

- How does the intersection of gender with other statuses influence awareness and practice of consuming a healthy diet and engaging in physical exercise?
- In what way does the national policy and recommendations influence the health related lifestyles of men and women differently?

1.5 The Study Area

The study is carried out in the Asokwa community in Kumasi. With a population of over two million people (1,062,806 women and 972,258 men) Kumasi remains the second largest city in Ghana (Ghana Statistical Service, 2010). Asokwa is a very large settlement in the Kumasi metropolis. The Asokwa community according to the 2010 population report has a population of 140,161 persons accounting for 2.9% of the total population of persons in Kumasi (Ghana Statistical Service, 2012). This community is selected because its location in the urban area and also its subdivisions according to poverty profiles. The choice of an urban area is because, issues related to unhealthy lifestyle and chronic non-communicable diseases are urban related.

The community is divided into Old and New Asokwa based on their poverty profile. The rich neighbourhood is referred to as "New Asokwa" and the poor neighbourhood is called "Old Asokwa". Poverty is high in the Old Asokwa and low in New Asokwa. A community according to the poverty report written by Kumasi Metropolitan Assembly (KMA) (2004) is classified as poor or rich based on their level of individual poverty and community poverty. Community poverty is defined based on the number of social amenities or infrastructure in the area while individual poverty is based on an individual's ability to afford basic needs like water and food (KMA, 2004). The people living at Old Asokwa are relatively poor and have very few social amenities which include bad roads and two public toilets serving the whole neighbourhood. Residents in New Asokwa, on the other hand are relatively rich, with good roads and better social amenities including private toilets in each home (KMA, 2004). This was the available criteria for poverty classification in Asokwa, Kumasi.

The people living in Old and New Asokwa are mostly Ashanti who work mainly in the commerce and service sector. The Asokwa community in Kumasi is predominantly an Ashanti community and has a strong matrilineal inheritance system (inheritance is through the woman's family line). Children in this inheritance system do not inherit the property of their deceased fathers as this goes to their father's maternal nephew (Clark, 2000).

Even though Old Asokwa is located in the city, it has remained a poor area since 1954. The Kumasi Municipal Council (KMC) at the time marked out the area for demolition but decided to allow residents enough time to resettle to the new area which is New Asokwa before the process could begin (KMC, 1954). Unfortunately, this resettlement has not yet taken place and the area has turned into a 'village' in a city. This 'village' (Old Asokwa) is made up of single compound houses with about 5 rooms per house. Houses in New Asokwa on the other hand are mostly storey buildings. The level of sanitation and drainage system was also very poor in Old Asokwa compared to New Asokwa.

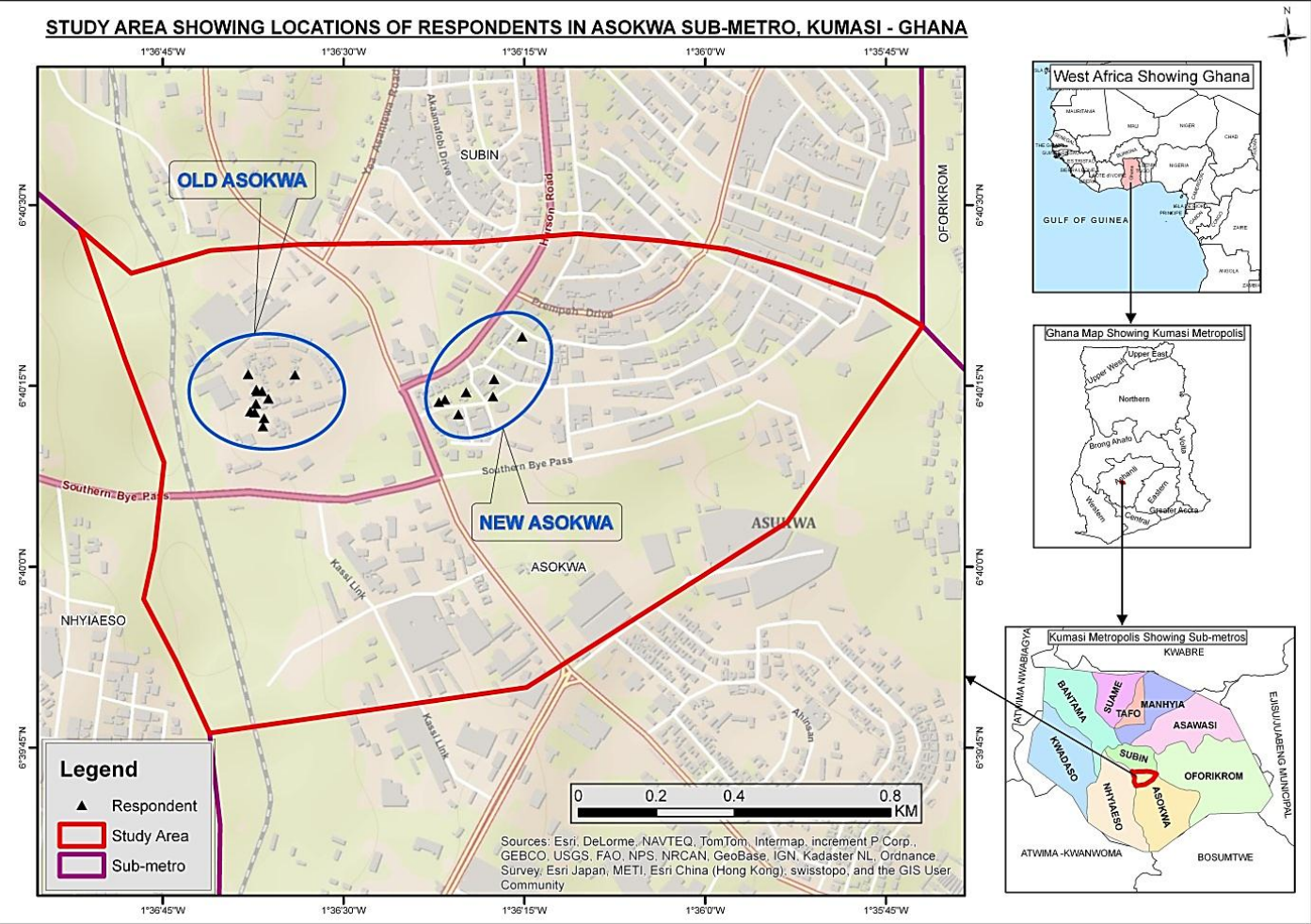
Concerning their health profile, Kumasi in general, corresponds with figures at the national level with regards to non-communicable diseases and obesity. Urban areas like Kumasi are increasingly becoming unhealthy environments in terms of lifestyle behaviours compared to rural areas (Tagoe & Dake, 2011). Kumasi has a high prevalence of chronic non-communicable diseases as well as other communicable diseases like malaria (Ghana District, 2006). The entire city recorded an obesity rate of 5.4% which is second to the capital city with 6.7% and slightly below the national rate of 5.5% (Biritwum et al, 2005).

According to Clark (1994), there has been a transition in diet content among the people in Kumasi. For example, some people by the 1980s and 1990s perceived pounded fufu (a commonly consumed nutritious meal of pounded cassava and plantain with soup) as time consuming and expensive. She adds that, this has been replaced by cornmeal based starchy lumps (powder fufu) or rice which is quicker to prepare. Consumption of partly processed foods is also very high. This transition in diet to processed and more refined foods, according to Popkin (2003) is one of the major causes of the increasing prevalence of obesity and non-communicable diseases in the world today. Very little is known about the physical activity of the people living in Kumasi. Diet and physical activity are important parameters in explaining the level of obesity and consequently the prevalence non-communicable diseases in Kumasi.

Despite the fact that these two neighbourhoods have similar health related issues with reference to Kumasi health profile, it is important to study the influence of their social location as one of the possible factors influencing their health and lifestyles. Also it is important to find out how other factors like education, marital status, religion, age and occupation of individuals in the two communities affect their diet and physical activity. These two neighbourhoods thus provide a platform for exploring the influence of all these factors on the health related lifestyles of individuals in the community.

Below is a map showing the location of New and Old Asokwa community and also the location of informants selected as case studies during the study. The locations of informants were taken as coordinates with a Global Positioning System (GPS). In the map, the sizes and number of houses in each community give an indication of the poverty level of individual living there. Old Asokwa has very small and scattered settlements. The large settlements in the area are abounded factories in the community. New Asokwa on the other hand has relatively clustered and large sized settlements.

Map 1. Location of Old and New Asokwa in Kumasi as well as location of case study informants.



Source: Geographic Information System Laboratory, University of Ghana 2013.

1.6 Time Frame

The study involves a field visit to Asokwa (the study area) for three months from June 2013 to August 2013. Analysis, interpretation and writing of the thesis were completed between August 2013 and May 2014.

1.7 Structure of Thesis

The dissertation has the following order. Chapter two provides an outline of the various theories and approaches to be used in answering the research questions. It also provides information on the historical development of the theories and how they can be used in this study. Chapter three outlines the steps and procedures used in the collection and analysis of data. It includes information on the various statuses assumed in the field as well as challenges encountered during the field work. Chapter four addresses issues related informants choice of diet and physical exercise and the influence of their socio-economic statuses. Chapter five uses the various theories selected to discuss the relationship between an individual's health behaviour and his or her socio-economic statuses. Chapter six summarizes the various findings and conclusions made from the study.

CHAPTER TWO

THEORETICAL FRAMEWORK

This study draws on the structuration theory, feminist theory of gender and intersectionality and time-space constraint approaches in answering the research questions. Clarifying which type of theory to use in any social research is very important because it provides a rationale and a setting within which the research is conducted (Bryman, 2012). In addition, it helps in providing a framework within which research findings are analysed and interpreted (Ibid.). I have chosen the following theories because they provide tools to analyse lifestyle behaviours related to health among adults in the Asokwa community of Kumasi in Southern Ghana. This would be done by taking into consideration gender roles and their intersection with other social statuses and how this influences health related lifestyle behaviours.

2.1 Feminist theories

Feminist theory is important for this study because it provides a basis for explaining the variations in health behaviour between men and women of different statuses. ‘Feminist theorists over the years have put a great deal of energy into trying to challenge traditional gender ideologies and have overcome claims of women’s inferiority to men or female irrationality’ (Chanter, 2006: 8). By the beginning of the new millennium, feminist philosophy could boast of a generation of mature thinkers and references in the field (Alcoff, 2000 in Braidotti, 2003). ‘Feminism emerged in academia in conjunction with other social movements wanting to change inequalities of power resulting from racism, patriarchy, and class exploitation’ (Valentine, 2007: 11). The scholarly field of women’s studies dates as far back as the 1970s, when feminist activists in the United States of America and Northern and Western Europe brought their academic activities to bear on their campaigning (Van der Tuin, 2011).

Even though the early feminist contributions focused on the unfairness of women’s exclusion from certain vital activities in social practice, in recent times, modern feminists engage in movements that try to establish equality with men (Chanter, 2006). Establishing parity with men according to Chanter (2006) was a biased definition right from the on-set because of the need to define with whom this parity had to be established. She then encourages the use of

Bell Hooks' (1984) understanding of feminism which states that 'feminism should be defined not as a movement for equality but as a struggle against oppression, one which acknowledges that oppression is not confined to sexism but also expressed in classism, racism and heterosexism' (Ibid.: 9). This understanding of the feminist argument brings the light the inclusion of multiple forms of oppression among people of different race, genders, cultures etc. This is in line with recent feminist ideas of intersectionality which argue for the study of the complex relationship that exist among the various identities that define social action (Dixon & Jones III, 2006). This study of the intersection of gender with race, class and so on has contributed to the diversity of research field in the discipline (Valentine, 2007). The space and time within which gender relations occur also bring to light the differences between and among gender relations from one cultural setting to the other (Moore, 1988).

Feminist researchers have made every effort to challenge conventional ways of doing scientific research (Buikema et al, 2011). Though there have been various criticisms levelled against the early philosophies of gender relations, the discipline has been replaced by 'creative alternatives' and the discovery of new methods and theoretical tools in research (Braidotti, 2003: 211). They have thus redefined the orthodox positivistic way of doing research and have developed a new understanding of what counts as data (England, 2006). For example, in feminist research, the views and statuses of the researchers cannot be separated from the research but have to be considered as part of the research process and its impact on the research analysed (Ibid.). The subjective nature of research is thus emphasized alongside concepts of positionality and reflexivity which are discussed in the methodology section of this study. This is an approach different from the objective way of research proposed by positivists (England, 2006).

In geography, feminist do not all agree on one best way of understanding the world but issues related to the complexities of power, privilege, oppression etc. with gender as a foreground is central to feminism in geography (England, 2006). Recognition was given to feminist activists after several criticisms were levelled against the male-dominated nature of the geographic studies (Valentine, 2007). The discrimination comprised 'institutional arrangements, substantive oversights and masculinist ways of geographic writing' (Dixon & Jones III, 2006: 43). According to these researchers, very few women were academically involved in the discipline because of the conception that they were intellectually and physically incapable of any contribution. This in their view, until the 1970s led to the very small number of women

scholars and women's studies included in the discipline (Dixon & Jones III, 2006). The introduction of feminist geographies brought to bear the importance of including a gendered perspective to geographic enquiries and this gradually reduced the domineering masculinist thinking that operated at the time (Valentine, 2007).

The focus of analysis in feminist geography is the study of gender (Dixon and Jones III, 2006). Gender, according to McDowell (1999), describes socially constructed characteristics of men and women. The distinction of gender from sex 'which depicts biological differences of men and women' (McDowell, 1999), has served the feminist movement well in its campaign (Chanter, 2006: 8). Each society has its own values and expectations of behaviour as well as duties which define the roles of men and women (Moore, 1988). In order to facilitate discovery into feminist geography, Dixon & Jones III (2006) draw out three main lines of research. These include *gender as difference*, *gender as social relation* and *gender as social construction* (Ibid.: 42).

According to Dixon & Jones III (2006: 42), *gender as difference* is the 'spatial dimensions of different life experiences of men and women across a host of cultural, political and environmental arenas'. It is an area of research that looks at the place context (i.e. cultural and environmental conditions) and the 'sense' of place, (i.e. the kind of perceptions people have of certain places) (Dixon & Jones III (2006). The variations of lived experiences are considered in relation to the different expectations each society has of gender (Ibid.).

Debates concerning the differences between men's and women's roles have long been ongoing. Women's roles in Ortner's view (1974), are considered closer to nature and that of men closer to culture (Moore, 1988). This in the 1970s was because of women's involvement in reproduction and other activities confined to the domestic domain, but this dichotomy has been criticized on several grounds (Ibid.). Women are predominantly in charge of domestic household activities and also engaged in paid work outside the home (Kwan, 1999 a). Records on the gendered division of labour over the years show increased participation of women in the western world in the labour market (McDowell, 2001). In some African countries like Ghana women have always been engaged in the public domain mostly the informal sector and also in charge of domestic activities (Clark, 1994). The combination of these two responsibilities increases the total work load of women both at home and at work and thus they have little time for leisure and other out of home activities (Van der Lippe, 2001).

Roles and expectations vary over space and socio-cultural settings, and these ultimately influence the difference in the lived experiences of men and women found all over the world (Moore, 1988). Studies among African and South American States revealed that their ideologies of appropriate behaviour of men and women contrasted that of European and North American expectations of men and women's behaviour (Ibid.). These differences have been a result of the different combinations of cultural, economic, political and environmental processes that influence behaviour (Dixon & Jones III, 2006:46).

Men and women in African countries like Ghana have a clear idea of what their responsibilities are in relation to family life. Women are the ones who are primarily responsible for cooking and childcare and also need to work in order to contribute financially to childcare and cooking at home (Clark, 1994). Men on the other hand, are in charge of paying for formal school and other apprenticeships (Ibid.). The context in which explanations are made concerning gender variations is of great importance to this study, since the differences in roles of men and women as defined by the Asokwa community can help to explain the difference in health behaviour in relation to diet and physical activity among men and women in the community.

Gender as social relation

According to Dixon & Jones III (2006:47), feminist geographers added to their primary focus of gender as difference, the study of the social relation between men and women. *Gender as social relation* is a field of research that studies the patriarchal relationship that exists between men and women (Ibid.). Patriarchy is one of the important tenets of this area of study. This is a term that defines the relation that exists between men and women where men dominate women and children (Dixon & Jones III, 2006). This domination according to these researchers is defined by the set of rules and standards of behaviour which expect women to be placed under the authority of men. Such relationships occur in the family, school and other social places. For example, in the family, women are supposed to assume responsibility of childcare and housekeeping. This relationship, like that of gender as difference is also cultural and place specific and varies over time. Each society has a set of norms that define the kind of patriarchal relationship that exists there (Dixon & Jones III, 2006). The social relationship among men and women in a Ghanaian community like Kumasi is as we shall see, patriarchal but here both men and women dominate different aspects of life situations. It is the sole

responsibility of a woman to feed children, bath them and prepare them for school as well as any other form of care.

Gender as social construction

The third field of enquiry as defined by Dixon & Jones III (2006) is gender as social construction. It looks at the various discursive categories used in defining the relationship between men and women. One of the main principles in this field is that nothing is formed in 'space' everything is socially constructed (Dixon & Jones III, 2006). Everything is defined by social categories both gender as difference and social relation. This field studies how language is used in framing discourses of social practices. Gender coding like the use of 'male' and 'female' are used to include and exclude categories. These coded categories persist over time and then become institutionalized. As the categories become institutionalized, the roles and expectations that come with them also follow suit thus defining the codes of conduct (Dixon & Jones III, 2006). Feminist theories also look at how the coded categories of 'male' and 'female' intersect with other social categories as race, class, ethnicity and so on.

Situations that illustrate *gender as difference*, *gender as social relation* and *gender as social construction* are experienced in the day to day interaction among people. Of importance is the fact that in the study of gender as difference, there are reflections of the social relation that defines this difference and also the discourses that have normalized these differences. They are all intertwined.

So-called third world Feminists complain of the exclusion of race and colonial relations from feminist definition of patriarchy and difference (Valentine, 2007). In their view, women in different parts of world are faced with different forms of exclusion. In effect the other social categories as race, class and ethnicity, should be included in the study of gender to have a holistic approach to women's studies (Valentine, 2007). This brought to light the theory of intersectionality that it is how gender mutually intersects with other statuses in defining a person (Shields, 2008) this will be discussed in the next section.

2.1.1 Intersectionality

The theory of intersectionality provides guidelines to the study of how various social statuses like race, ethnicity, religion, occupation and education intersect with gender. Statuses in this study are in line with definitions provided by Linton (1936:113) as ‘an individual’s position in relation to the society’. The use of position here brings to mind the set of statuses that combine in the formation of a social being. He adds that these statuses are either achieved or ascribed but both come with expectations of appropriate behaviour in the society (Linton, 1936). This is important for this study because the statuses that are likely to influence health related behaviour do not operate independent of each other but rather intersect as they influence the behaviour of individuals.

‘Intersectionality has become an essential theory in understanding intersectional relations among socio-cultural categories’ (Staunces & Sondergaard, 2011:45). Authors like McCall (2005) consider intersectionality to be one of the most important theoretical contributions of feminist theorists to our understanding of gender relations. The term intersectionality is credited to the black feminist movement in North America and was launched by Kimberle Crenshaw in an assessment of the invisibility of black women in the American legal system (Crenshaw 1991 in Collins 1998 in Lykke, 2003 in Staunces & Sondergaard, 2011). This interest arose out of the ‘critique of the gender-based and race-based research that failed to take into account the lived experiences of persons at the neglected point of intersection - ones that tended to reflect multiple subordinate locations as opposed to dominant or mixed locations.’(McCall, 2005:1780). The concept of intersectionality is being used within the social sciences by feminists to theorize the relationship between different social statuses: gender, race, sexuality, and so forth (Valentine 2007).

It is a term developed by Crenshaw et al (1995) ‘to describe the interconnections and interdependence of race with other categories’ (Valentine, 2007:12). It refers to the ‘mutually constitutive relations between social statuses’ (Shields, 2008: 301). These social statuses must be defined in relation to each other (Ibid.). Thus instead of ‘reducing’ people to one category, the theory points out the need for multiple ways of viewing a person in order to make visible the diverse positions that make up the everyday life of an individual (Phoenix & Pattynama, 2011:117).

‘The theory is popular because it provides concise shorthand for describing ideas that have, through political struggle, come to be accepted in feminist thinking and women’s studies’ (Phoenix & Pattynama, 2011). According to Staunces & Sondergaard (2011), the theory has developed from its emergent political and judicial context and is now used in other humanistic fields such as education, psychology and geography research. These researchers used the theory in explaining the flexibility and variability of individual statuses in the working field (Ibid.: 53). Also, researchers like Hankivsky & Christoffersen (2008) used the theory of intersectionality as a guideline to the study how the various determinants of health including gender, intersect and mutually reinforce each other. They believed it “has great potential to provide new knowledge that can more efficiently guide actions toward eliminating health disparities” (Weber and Parra-Medina, 2003: 183 in Ibid.: 275).

Intersectionality according to Lykke (2003, 2010) functions as a conceptual meeting point for many disciplines who want to decipher the complex relationship that exist among various social statuses (Staunces & Sondergaard, 2011). The concept of intersectionality is most often adjusted to suit the objective of many fields of enquiry; they do not necessarily follow the ‘classical’ version of the concept which studies women’s inferiority and discrimination but endeavour to maintain the central tenets which analyse intersecting statuses (Ibid.). Therefore other studies, such as this study of healthy lifestyle behaviours do not focus on oppression of women and women’s inferiority but rather applies the theory in the understanding of how it explains the intersecting nature of the various statuses that influence an individual’s behaviour.

Ideas from the theory will be used in trying to understand the health behaviour of adults in the face of an existing health program in Ghana. This theory will guide the research in discovering how various statuses of an individual interplay in influencing his/her health behaviour. It will help explain how an individual’s lifestyle is not only determined by his/her gender but how different categories like marital status, occupation, education, religion and age influence his/her behaviour as a social being. Focusing on how these six statuses intersect in various ways will contribute to the understanding of the differences in health behaviour. These selected statuses are from the WHO global strategy on diet and physical activity, as they advised Member states to pay particular attention to these statuses in order to design a comprehensive national strategy (WHO, 2004).

The idea here is that for example, females of different age groups with vary occupations as well as different marital statuses are most likely to make different choices in relation to diet and physical activity. Also a man may decide to eat certain foods not just because he is a man, but other factors such as his work drive his decisions and this is likely to be different from what drives women in decisions concerning health behaviours. Thus people of the same gender are likely to behave differently because of the other statuses like education and marital status that intersect to create differences among in behaviour. This is probably the reason behind the gendered difference in healthy lifestyle among adults in Ghana.

By just looking at for example the education of an individual, information gained on health behaviour will be partial. This is because daily activities such as eating and physical exercise by a person are not determined by just education but also by other statuses. It is therefore important to consider the influence of other statuses.

To implement this theory methodologically, McCall (2005) has developed three approaches to the study of the complex relationship that exists among multiple intersecting categories. These include the *anti-categorical complexity*, *intra-categorical complexity* and the *inter-categorical complexity* (Ibid.). The *anti- categorical* approach is based on a methodology that seeks to deconstruct analytical categories. This method is used to reject categories and ‘simplify social fiction that produces inequalities in the process of producing differences’ (McCall, 2005:1773). It therefore deconstructs categories in order to remove demarcations that define their relation. Individuals according to this approach cannot be put into one ‘master’ category (Ibid.).

The second approach, the *intra-categorical complexity* according to McCall (2005) forms part of the early studies of intersectionality. This approach does not entirely reject categories as the former but defines the boundaries within which they exist (McCall, 2005:1774). It focuses on specific social groups at ‘neglected points of intersection’ (Ibid.). Here it critically studies the defining relationship that exists among intersecting categories.

The third approach, the *inter-categorical complexity* accepts, adopts and strategically uses social categories in studying this complex relationship that exist among them (McCall, 2005). The focus of analysis for this third approach is the complexity of the relationships that exist between social identities: the process of intersection (McCall, 2005: 1786).

This third approach, the *inter-categorizing complexity* approach by McCall (2005) will be used to study the relationship that exists between social statuses and their influence on health behaviour. In order to reduce the complexity that is likely to arise as a result of studying multiple groups or categories, it takes one category or group at a time. This is called the *reductionist process* (McCall, 2005). With reference to this approach the intersection of these social statuses is studied by analysing the relationship that exists among one category at a time. For example in studying the relationship between ethnicity, gender and class, this approach first studies the relationship that exists among people with different genders, and then follows up with individuals of different marital statuses and so forth.

Based on this, my study of healthy lifestyle behaviours will first study the differences in health related lifestyles among people of different genders, followed by those of different marital statuses, then followed by occupation, education etc. By studying the variation that exists between these single categories, there will be an understanding of how these categories influence healthy living in the community of Asokwa. Finally all the categories will be taken as a whole to see how they intersect in their influence of the health behaviour of adults in Asokwa in relation to diet and physical activity. This final process is important because it buttresses one of the main features of intersectionality that seeks not to reduce people to one category but appreciates the fact that individuals are made up of several intersecting categories.

2.2 Space-Time Constraints

The space-time constraint approach of Kwan (1999a) is of relevance to this study because it helps in the understanding of the daily activity schedule of informants and how this influence's their health related behaviour. It also helps in estimating the proportion of time spent on several activities in a day and if these include time for physical exercise and eating from home. Furthermore, the mode of travelling and time spent on travelling to and from work and their implication on the daily activity budget is also studied using this approach.

Time geography, from which the concept of space–time constraint was developed, is intimately connected to the world view of Torsten Hagertstrand (Lenntorp, 1999). His time geography framework provides a means for understanding how humans are constrained in their activities in space and time (Miller, 2005) ‘Time geography ‘represents a new structure

of thought under development, which attempts to consolidate the spatial and temporal perspectives of different disciplines on a more solid basis than has thus far taken place' (Lenntorp, 1999: 155). Hagerstrand developed the time geographic system in order to have a means of tracking both the spatial and temporal aspects of human actions simultaneously (Lenntorp, 1999: 156). 'Geographers have always considered space and time to be fundamental attributes of reality' (Janelle, 2001:15746). 'The inseparability of space and time is embraced in the concept of time-space as a single definable dimension of reality, where space cannot exist without time and vice versa' (Ibid.). The conceptual background of time geography has developed and been enriched by much more integrative concepts and is now an established approach in geography and other disciplines (Lenntorp, 1999). Now most geography researchers consider the idea of a singular time and space concept to be ideal in theory and practice (Janelle, 2001).

'Time geography is a powerful conceptual framework for understanding human spatial behaviour, in particular, constraints and trade-offs in the allocation of limited time among activities in space' (Hagerstrand 1970 in Miller, 2005: 17). Kwan (1999 a) uses notions from time geography as a concise framework for analysing activity travel patterns in space and time. She used this framework in understanding gender differences in respect to space-time constraints and their impact on activity-travel patterns. This framework can be adopted in this study of healthy lifestyles in Asokwa, since her methodologies provide guidelines for measuring the space-time constraints faced by people living in urban areas like Asokwa, Kumasi.

The following paragraphs outlines the ideas used in developing Kwan's (1999a) framework. To analyse the space-time constraint she formulated two types of constraints; time budget constraint and the fixity constraint using data collected in a travel diary survey in Columbus, Ohio in the USA (Kwan, 1999a). She uses this approach in measuring the gendered difference in accessibility of urban opportunities. This was done using detailed travel itineraries, time budget data, expertise in geo-processing, location of all fixed activities engaged in by individuals, transport networks, speed variations and finally the distribution of urban opportunities (Kwan, 1999 b). This she used in constructing space-time prism of informants in her study. This study employs the concept of the time budget data analysis in calculating the amount of time individuals set aside for cooking or eating at home and physical exercise aside work, and make conscious use of the impact of space and fixity constraints on an individual's

daily activities. A space time prism will not be drawn in this study but analysis of the implication of space and time constraints as formulated in Kwan's (1999a) approach will be used.

According to her study, time budget constraints arise when there is limited time available for an individual after allowing for the essential maintenance activities (e.g. sleeping) of the day. One way of knowing how men and women use their time in a day or two is the use of the where direct questions are asked of the usual time spent on activities in a day (Van der Lippe, 2001:15749). This study however collected primary data on how a typical 24 hour day is used by informants. The second mode of measurement is the fixity-constraint which occurs as a result of space time rigidity: which means a person's ability to change the location and time of an activity. A person may be space constrained, time constrained or both space and time constrained.

Kwan (1999a) concluded that if an individual has a high fixity of activities (that is he or she can hardly change the time and location of activities) and also has very little time after work and maintenance activities, then the person is space-time constrained. Even though Kwan's study focused on out-of-home activities, this study will use her framework as an analytical tool in studying the impact of fixity constraints on both in-house and out-of-house activities.

For this study, we assume that if an individual is time and space constrained then it means he or she has little time for other out-of-house activities which may include physical exercise and also little time for in-house activities which include cooking and eating at home. Also his or her space constraints arise from the ability to mediate journeys between work and home considering the mode of transport and the level of traffic on the roads. This study on health related lifestyles intends to find out how individuals in the Asokwa community make use of the hours remaining after sleep and also how their mobility influences behaviour. In addition the study seeks to find out if these remaining activities include cooking and eating at home and also engaging in physical activity aside work.

The study also asks whether the selected individuals spend most of their time at work with little time for other in house and out of home activities. This approach provides a guideline into the study of the gendered difference in these constraints and how they influence health related behaviour. The constraints experienced by individuals will be analysed in respect to

their various social statuses. This will be done to know how these statuses together have an effect on the constraints of time and space and how these consequently influence health behaviour.

2.3 Structuration Theory

This section explains the structuration theory by Giddens (1984) as presented by Dyck and Kearns (2006). It also outlines how Giddens' theory about the relationship between the structure and the agent provide guidelines to this study of the factors influencing healthy behaviour of individuals in the Asokwa community in Kumasi.

The structuration theory was developed by Giddens in 1984 to provide his contribution to the understanding of the relationship between the individual and the society. His theory provided a bridge between ongoing debates concerning the primacy of either the agent (Humanism) or the society (Marxism) in social change (Dyck & Kearns, 2006). Common to researchers related to humanism was a focus on the human-authored world where 'meanings' lied with human (Tuan, 1976 in Entrikin & Tepple, 2006: 30). Marxists were also of the opinion that humans were never the perpetrators of their action but were controlled by the structure or society within which he or she found himself (Henderson & Sheppard, 2006). Thus 'meanings' did not lie with humans but rather within the society or social structure within which they found themselves. Giddens developed the structuration theory in 1984 to offer his contribution to the short- comings of these earlier ontologies of the society and the individual (Bryant & Jary, 2001: 9).

Giddens' theory of structuration was neither in favour of the society nor the individual but emphasized the interrelated nature of their interactions giving neither of them primacy (Dyck & Kearns, 2006). The structuration theory provides insightful concepts to the study of the complex relationship between human agency and society not as separate entities but as two co-existing entities (Bryant & Jary, 2001). This focus on the human agent and the society provides a common ground for the theory and human geographic enquiries (Dyck & Kearns, 2006). Human geography like the theory also focuses on how space influences the everyday lives of individuals (Ibid.)

The term structuration according to Cohen (1989: 41) refers to the 'reproduction of social relations across time and space as transacted in the duality of structure'. The theory shows 'how social institutions are both constituted by human agency and yet at the same time are the very medium of such constitution' Bryant & Jary, 2001:11); this is called the duality of structure (Giddens, 1976a in Bryant & Jary, 2001:11) The duality of the structure is one of the principal tenets of Giddens structuration theory (Ibid.). Here, the unintended as well as the intended consequences of human agents according to his theory feed back into the structure and then tend to constrain or enable the day to day activities of human action (Dyck & Kearns, 2006). In effect the structure is formed by the activities of the human agent and at the same time controls these activities.

The social structure according to Giddens (1984) refers to the institutions in society which are made up of rules and resources (Dyck & Kearns, 2006). These rules are 'techniques and procedures applied in the enactment of social practices' (Giddens, 1984a: 21 in Bryant & Jary, 2001:13). Resources on the other hand refer to the 'social relations' and 'physical environment' within which human actions occur (Dyck & Kearns, 2006:87). These rules and resources exist only when they are drawn upon in the day to day activities of humans (Ibid.). Therefore, there are no rules and resources without the existence or utilization of it by humans.

'The structuration theory emphasizes the ways in which actions and practices of the human agent interact with structural constraints to both transform and reproduce social structures' (Entrikin & Tepple, 2006). The human agent according to Giddens (1984) is 'competent and knowledgeable' (Dyck and Kearns, 2006:47). The intended and unintended consequence of his/her actions and practices is what contributes to the formation of social relations and the structure (Dyck & Kearns, 2006). Human are agents because they have the power to choose to act differently and their practices and actions have the ability to transform the social structure (Ibid.).

Even though humans to some extent are the perpetrator of their own actions and have the power to act differently, the routinized unintended consequence of these very actions over time tend to control or constrain further action (Dyck & Kearns, 2006). The extent of control of these actions varies over time and in space (Ibid.). Thus in order to explain human practices or action, it is important to explain the space and time context in which those actions occur

(Dyck & Kearns, 2006). This is because the context and dynamics of space and time play a vital role in determining and explaining human action.

One of Giddens' main concerns was how social systems (i.e. routine human actions) are built in space and time (Dyck & Kearns, 2006). The human agent through the reproduction of social practices aids in the building and transformation of the social system (Ibid.: 88). As human practices are routinely reproduced in different times and in different spaces they tend to regularize the social systems found in those particular places. In effect, human actions and practices vary from place to place and over time because each localized or regionalized social system will have different sets of rules and resources that guide human action (Dyck and Kearns, 2006).

The theory of structuration according to Giddens is not one to be applied but rather to serve as a guideline to inform research (Dyck & Kearns, 2006). Several notions from Giddens work have been used in numerous empirical studies. For example, in the study of the relationship between health, place and care, Kearns (1982) use notions from structuration theory in studying the fragmented lives of psychiatric patients whose worlds had become the supposed 'boarding house ghetto'(Dyck & Kearns, 2006). He explains how too much of humanistic thinking threatened to unrealistically detached human from the society (Ibid.).

Notions from the structuration theory will serve as guidelines to the study of the relationship between individuals and the social structure and how this relationship in turn influences their health related behaviour. With reference to the theory, the structure in this study refers to the rules and resources provided by the social institutions within which everyday lives are lived. These institutions include marriage, education, gender, occupation, age as well as the health information provided by the Ministry of Health concerning ways to live a healthy life. These are institutions because they have been formed out of the routinized social practices of the human agents and have over time become structures that govern the actions of these agents. The rules are the various expectations (techniques and procedures) that come with the day to day interactions with these social structures. For example the marriage institution comes with expectations of childcare and housekeeping that are to be met by women. These expectations vary from society to society and their level of influence on health behaviour varies from one individual to the other.

The resources refer in this study to the expectations of behaviour that positively enable healthy living. It also refers to the conducive environment for physical exercise projected by the Ministry of Health. For example, a married man is expected to eat home cooked food prepared by his wife. This is a condition that comes with being married and provides a resource which enables married men to eat healthy meals at home. Health information and activities of the Ministry of Health also provides guidelines and conditions that influence health behaviour. The health information as well the other six social relations together contribute to the formation of the healthy or unhealthy human agent.

The idea here is that awareness and practice of healthy lifestyle and is not solely determined by an individual's choices but are either constrained or enabled by the social environment or institutions in which he or she finds him or herself. As Robbins (2010) puts it, the social, economic and political context within which food choices and in this case physical exercise are made represent a significant influence that cannot be ignored. In order to understand the practices or behaviour of people in this case on healthy lifestyle, it is important to study the space (i.e. social environment) and time in which their practices occur (Giddens 1984 in Dyck & Kearns, 2006). This is because each social environment presents different expectations that come with different social statuses like marital status, level of education, age, religious affiliation, occupation and gender. Health information by Regenerative Health and Nutrition Program (RHNP) in this case also forms an environment or framework providing the necessary information needed for healthy living. These social environments consequently have varying effect on the health and lifestyle of individual living in the community.

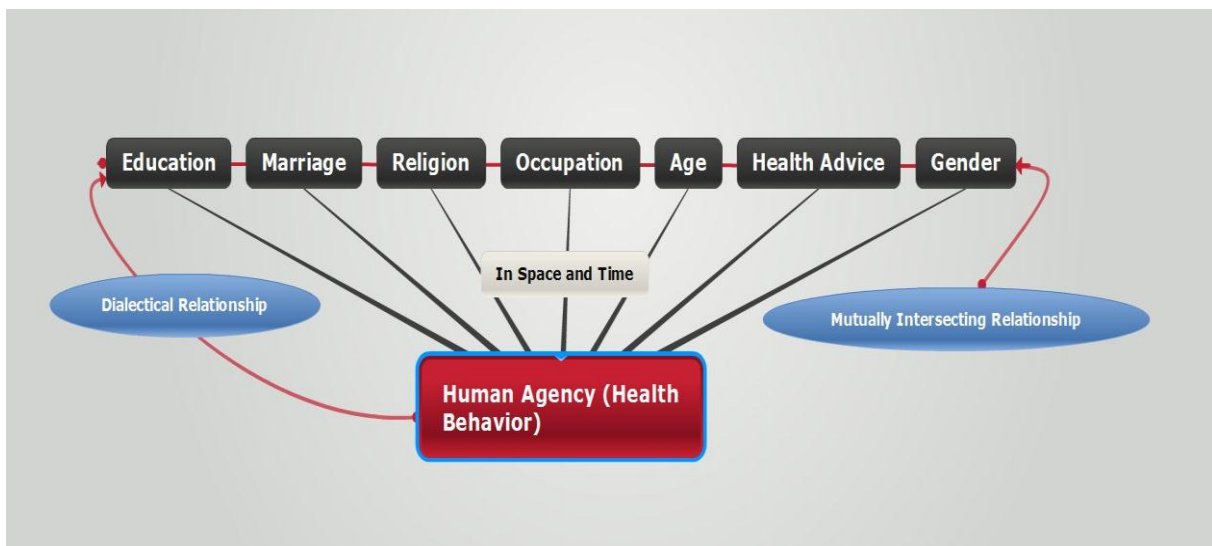
This theory provides a setting in which the concept of gender roles, intersectionality and time-space constraints operate. This is because gender roles and time-space constraints all operate in a structure. In other words our actions as individuals as they intersect with our social statuses as well as our time constraints are all enabled or constrained by a certain structure. Giddens' ideas from the structuration theory together with these other theories will provide a holistic view into the individual lives of people living in Asokwa.

2.4 Combination of theoretical ideas

The diagram below is an illustration of the relationship that exists between selected theories in explaining the health behaviour of residents in the Asokwa community. The structures are the

social statuses and health advice (in black), in blue are illustrations of the relation that exist among the structures and also between the structure and the human agency. The relationship that exists between the social structures and the human agent is a dialectical relationship as shown in the diagram below. This is an on-going process where social action by the human agent is influenced by the rules and resources provided by the structure, these rules and resources are also an outcome of human action (Dyck & Kearns, 2006). The intended and unintended consequence of his/her actions and practices is what contributes to the formation of social relations and the structure (Dyck & Kearns, 2006). Neither of them exists independent of the other. Both influence each other in an ongoing process to form the health behaviour of the human agent.

Diagram 1. Intersecting relationship of social statuses (structures) and their influence on the human agent.



Source: Author's Construct 2013.

These relationships do not take place in a vacuum but within time and space. The space and time constraint of individual also influence the outcome of these relationship. Structures provide a framework within which healthy living occurs and the relationship between these structures and their effect on informants is an intersectional relation which occurs in space and time. Minow (1997: 38) defines intersectionality as 'the way in which any particular individual stands at the crossroads of multiple groups.' (Valentine, 2007:12). The resultant health behaviour or position at the 'crossroad' as shown in the diagram 1 is influenced by the

combination of statuses that together form his behaviour. Thus different forms of behaviour are created as a result of the different combinations of statuses that influence behaviour (Valentine, 2007). Using this framework as a guideline, explanations can be provided on the variations in health behaviour among men and women of different statuses.

CHAPTER THREE

METHODOLOGY

This chapter outlines the various procedures, research techniques and methods used to provide answers to the objectives of this study. These include methods used to produce the data, statuses I assumed during the fieldwork, strategies adopted to overcome fieldwork challenges as well as the methods used in the analysis and interpretation of the data.

Both primary and secondary data were obtained during the field study. The primary data were collected using the mixed method. This is a method applied by using both quantitative and qualitative methods of data collection and analysis (Sandelowski, 2000). The quantitative method most often emphasizes numbers and frequencies in the collection and analysis of data, whereas the qualitative method provides explanations to these numbers and trends using most often oral data (Bryman, 2012). By using this method it bridges the somewhat false divide between the qualitative and quantitative approaches (Green & Thorogood, 2009:5).

This method is used in exploring the scope of, and deepening insights on awareness and practice of healthy lifestyles in Asokwa, Kumasi. For this study, the quantitative method provided an overview of the level of awareness and practice of healthy lifestyles in the community, while the qualitative method provides information on the reasons behind the variations in lifestyles among different groups of people in the community. In addition to the primary data, secondary data collected in the field comprised documents from various government institutions such as maps, poverty reports, training manuals and other policy documents.

In sampling informants for this study, the stratified purposive sampling method was mainly used. This is a sampling technique used in mixed method research (Sandelowski, 2000). Researchers using this technique aim at ensuring that informants varying on preselected factors are included in a sample; each informant selected represents a pre-specified combination of variables (Ibid.). 100 informants were selected and surveyed using a questionnaire. An additional 16 case study interviews were conducted after the survey. Observations of the interview environment and other occurrences relevant to the study were made during the 16 interviews. The research also included key informant interviews with personnel at the Ministry of Health in Accra and Kumasi, Ghana. All these interviews were

conducted without an interpreter because I could speak English and "Twi"¹, which are the languages spoken by the selected sample.

A 3-month long fieldwork (May to June, 2013) was undertaken in Asokwa sub-metropolitan area in Kumasi of Southern Ghana. This study took place among residents in the "rich" and "poor" neighbourhoods of Asokwa.

3.1 Preparing the grounds

Prior to my first visit to Asokwa, I contacted a friend who works in the Town and Planning Council² of Kumasi. He provided a map showing the various sub metropolitan areas in Kumasi (Owusu-Sekyere, 2008) and a poverty report on Kumasi (Kumasi Metropolitan Assembly, 2004). Asokwa sub metropolitan area was selected based on its poverty profile outlined in the poverty report obtained. It is a community located in the city centre and has two distinct neighbourhoods; a rich and poor neighbourhood as already stated.

Upon attaining this information, I made contact with the *Assembly man*³ of Asokwa who became a gatekeeper and also a key informant in this study. As a gate keeper, he served as an intermediary between research informants and me (Keesling, 2008). He is well known in the community for his work and friendly relationship with the people. I took advantage of this in order to have easy access to the community and to the research informants. He led me through the community and introduced me to a couple of residents. As a key informant, he provided additional background information to the secondary data already obtained.

I hired a research assistant who helped me to collect data during the first phase of survey. The first phase is the section of the survey we conducted together and the second refers to the section I conducted alone. He is a university student who was on vacation. He lives in Kumasi and speaks the local language fluently. He was introduced to me by a friend who previously employed his expertise during a similar survey. I took him through one day training, outlining the objectives of the research. After this training, we pre-tested the questions and made a few

¹ 'Twi' is the Ashanti language largely spoke in southern Ghana.

² 'The Town & Country Council does the planning of schemes for public and stool lands and the formulation of policies to direct and guide the spatial growth and physical development of Kumasi Metropolis' (KMA. 2014).

³ An Assembly man is a term used in Ghanaian local politics to refer to a person who represents the local people at the District Assembly (GhanaWeb, 2013).

amendments to it. I briefed him on what to look out for in finding informants for the study. We then went through the various ways to translate the English questions to the *Twi* language without compromising the meaning.

3.2 Status and Role Expectations in the Field

An individual's status set refers to the 'combination of all the statuses that he or she occupies; his position in relation to the whole society' (Linton, 1936: 113). Each status comes with its expectations, these are rights and duties that have to be acted out in a socially acceptable manner (Ibid.: 114). During my fieldwork, my status as a student from an European University, a young woman and brought up in Kumasi, came with different expectations to meet. For example, as a person brought up in Kumasi, it was expected of me to speak the native language fluently and greet the elderly by bending my waist when greeting them. This in the Ghanaian context is a socially acceptable practice and a sign of respect. It was therefore a necessary gesture to begin with. I was also assigned new statuses at certain times during the field work.

Throughout the interviews I tried to create what Mullings (1999) calls "positional spaces", where my position as well as that of the informant to some degree complemented each other. This makes data collection more flexible by creating a level of trust and cooperation between the researched and the researcher (Ibid.). In order to reduce the distance between myself and the researched, I tried to build on our commonalities, worked together and shared knowledge thus creating a 'symmetrical position' between the informants and myself (England, 2006). In practice, I was flexible in asking the questions and allowed informants to an extent direct the flow of our discussion. This according to England (2006) helps to provide a deeper understanding into the factors that shape the everyday lives of informants. During the interview, when talking to a fellow student, I projected my status as a student, by first introducing myself in such manner and also delving deeper into our lives as student before the interview started. Also, when talking to government officials, I introduced myself as a student from Norway as this helped in acquiring data and interviews from authorities. By this action, I engaged in what Mullings (1999:340) calls the 'politics of self-representation'. I projected the status that will be most favourable at that point in the collection of data.

At different times in the field, informants assigned me the status of an insider or an outsider to their lives and the community in general. An insider is a researcher who studies a group of people to which he or she belongs while the outsider does not belong to that group he or she is studying (Mullings, 1999). I accepted statuses when I considered them favourable to the research process and immediately rejected statuses that will not facilitate the process. This I knew because of the amount of information they were willing to provide based on their assumption of my position.

My status as an indigene and my ability to speak to informant in the Twi language enabled me gain the trust of informants to a certain extent. Informants were more comfortable discussing issues related to their personal life with me because they considered me a part of them. Also when relating to people of similar gender, I tried to feed on our commonalities. For example, when discussing gender roles at home with a fellow woman, I gave them examples of my responsibilities at home, so as to enable them talk freely as they outlined the many responsibilities they have to take care of.

My young age also enhanced my conversation with other young people. The tone of our conversations changed from formal, as with government officials, to a very casual one. With my position as an indigene, I used my foreknowledge of the common activities, food habits and cooking arrangement of the people (even though these were not common to all) to gain a deeper understanding of the factors that influenced their diet and physical exercise. As I projected myself as an insider to their lives, informants also considered me as what I projected; I accepted it and it helped in the collection of data.

I was also assigned the status of an outsider at certain times during the fieldwork, most of which I rejected. For instance, during an interview with an informant, he gave me so much information about his private life, allowed me into his home and even offered me food, just because I spoke a common language as him. Nevertheless, he refused to give me his phone number for follow up, because he said he did not know me that well, even though I explained to him my reason for collecting his phone number. At this point I realized that despite the fact that we shared a common language, certain parts of his private life like having access to his personal contact were reserved for those he knew very well.

In another instance in the field, being considered an outsider, it took days before an interview was granted me by the nutritionist at the Metropolitan Health Clinic in Kumasi. This was because he considered me to be a journalist, who had come in to report on their activities. He was as such not willing to grant me an interview for fear of losing his job even though I had shown him my introductory letter. Luckily for me he mentioned the fact that he was also a researcher working on his project. I built on that point and tried to explain the nature of my research and the contribution his interview will make to it. He then agreed to be interviewed. At that point he had ignored all my other status as an indigene of the area and a Ghanaian student researcher from Norway and rather projected the fact that I could be an outsider (a journalist).

As I played these roles out I also had in mind the objectives of the fieldwork, so that our conversations did not move completely out of line. Nevertheless I allowed informants to express themselves in every way possible so as to provide me with the information I needed.

3.3 Survey

Fifty (50) informants each from Old and New Asokwa neighbourhoods were purposively sampled for the survey. This was a stratified purposive sampling method. The aim of this method is to have a high degree of variation among pre-specified factors with each factor having two or three sub factors (Sandelowski, 2000). The pre-specified factors used in this study for the selection of informants were based on age, gender, marital status, location, occupation, religion and education. These were further divided into sub-factors. Marital status for example was further divided into single, married, divorced, separated and widowed.

This sampling method made it possible to also select an equal number of male and female informants with a mixed combination of these statuses for the survey. This would not have been possible if a random method of sampling was used. These statuses are parameters specified in the World Health Organization's (WHO) (2004) global strategy on diet and physical activity. This method was important because it provided the required informants whose lifestyles served as samples for exploring how and why different people with a variety of statuses have different health-related lifestyles, specifically choice of diet and physical activity.

The first parameter used in selection was age. All the 100 informants had to be between the ages of 18 and 49 years. This age group was chosen in order to build on a quantitative study of healthy lifestyle behaviours among adults of this particular age group in Ghana by Tagoe & Dake (2011).

The second criterion used was a combination of the remaining parameters including level of education, marital status, occupation, gender and religion of informant within this age group. For example if the first informant selected was a married Muslim female teacher, with a bachelor degree, the next informant had to vary either in terms of education, gender, educational level or religion. In effect, the possible next informant could be a single Christian female/male trader, with a secondary education. Though it was difficult to get a vast variety, at least two or three statuses had to be different for a person to qualify as an informant. Though the data received from these informants do not statistically represent the views of the entire population, they are representative of the views of the various groups of people in the population.

Table 1. Gender and location of informant in Old and New Asokwa.

Gender of informants	Location of informants		Total
	Old Asokwa	New Asokwa	
Men	25	25	50
Women	25	25	50
Total	50	50	100

Source: Fieldwork data 2013.

The field work began in Old Asokwa. From my observation most of the houses were not walled and as such could easily be accessed. This made it easy as compared to my observation in New Asokwa where most houses were walled and gated. Upon entering the community, I first went to see two potential informants who had earlier been introduced to me by the Assembly man. I outlined details of my study and the kind of informants I sort after. Both of them qualified and were surveyed. I then asked of other individuals who were within the required sample. This technique is called snow ball sampling. This technique is used by first making initial contact with a small set of informants relevant to a study and using these to

establish contact with others (Bryman, 2012:202). This technique in sampling informants was easier to use in the old area as compared to the new area because of the close knit nature of the old Asokwa community.

Upon entering a house, I introduced myself and asked if an individual with a particular set of statuses between the ages of 18-49 lived there. Houses without persons with the age group sought after were exempted. On the first day of the survey, I interviewed everyone I met who was between 18-49 years. After this I sat down to go through the statuses of the various informants I had found. This was done in order to have an idea of the required combination of statuses of informants to look for on my next visit.

Semi-structured questionnaire was used during this survey. The questionnaires contained both open and closed ended questions. Open ended questions according to McLafferty (2010:77) allow the participants to produce their own responses while the closed ended questions offer a limited set of answers. The questionnaire was used to collect data on the demographic characteristics (for example age and gender) of informants, their social statuses; their daily activities and level of awareness of the health messages advocated by the government (see Appendix I). This method also enabled me gain information about perceptions, attitudes, experiences, behaviours in relation to diet and physical activity in Asokwa, Kumasi.

The informants decided whether they wanted to answer the questions in 'Twi' or in English. Most of the informants preferred to speak their local dialect 'Twi' because that enabled them to express themselves better. Out of the 100 questionnaires, my assistant and I conducted 10 together, to give him an idea of what to look out for and how to ask the questions. He then conducted 15 on his own. I continued with the remaining 75 questionnaires and followed up with the case study interviews.

3.4 Case study interviews

The case study interviews were conducted among 16 informants purposively selected from the 100 informants surveyed. Case studies aim at generating extensive examination of a single case (Bryman, 2012). In examining the case of healthy living among adults, Asokwa community specific individuals living in it were selected as cases. The cases selected in this study are exemplifying because they provide a suitable context for my specific research

objectives to be answered (Ibid.). The Asokwa community was selected as a case to illustrate how socio-economic statuses of the two neighbourhoods affect their health related lifestyles.

Table 2. Statuses of case study informants according to residential location (all names are pseudonyms).

Name	Location	Gender	Age	Marital Status	Religious Affiliation	Education	Type of Work
Alex	NA	M	22	Single	Christian	Middle School	Trader
Rockson	NA	M	31	Single	No Religion	Middle School	Carpenter
Foli	NA	M	29	Married	Christian	Middle School	Welder
Eva	NA	F	40	Married	Christian	Higher	Teacher
Linda	NA	F	32	Married	Christian	Middle School	Security Officer
Attaa	NA	F	31	Married	Christian	Middle School	Trader
Widow	NA	F	45	Widow	Christian	Secondary	Trader
Osei	OA	M	47	Married	Christian	Middle School	Driver
Salama	OA	F	49	Married	Muslim	Middle School	Seamstress
James	OA	M	23	Single	Christian	Middle School	Mechanic
Esther	OA	F	43	Married	Christian	Middle School	Trader
Portia	OA	F	22	Single	Christian	Secondary	Trader
Boat	OA	M	40	Married	Christian	Tertiary	Supervisor
Asante	OA	M	30	Married	Christian	Primary	Driver
Ishmael	OA	M	25	Single	Christian	Tertiary	Drug Seller
Dorcas	OA	F	31	Married	Christian	Secondary	Nurse

Source: Fieldwork data 2013. NA=New Asokwa, OA= Old Asokwa

Sub cases of individuals from the community were selected because conditions of their everyday lives provide suitable explanations to the research questions at hand. These individual cases were selected based on their responses during the survey, their statuses, and my appraisal of how illustrative (typical or rare) their cases were. For example, some informants were selected based on how typical their cases were of the everyday life (work and health) of a working male or female, and how they were able to manage their work schedules to include physical activity and eating of healthy meals. Another, a pregnant woman, was selected to illustrate how her status as a mother, wife and trader as well as her temporary status of being pregnant had influenced her health related lifestyle.

All the informants selected as case studies were people I personally interviewed during the survey. These were individuals of a combination of different statuses as shown in table 3. They provided their contact address during the survey and this was used to contact them and follow up on an agreed day for the case study interviews. A list of themes was outlined for discussion during these interviews (see Appendix II). Table 2 shows the various statuses occupied by the 16 informants selected. These 16 cases provide insight into on how factors like education, religion, marital status, age and gender collectively or singularly influenced an individual's diet and ability to engage in physical activity during their free time. Physical activity is considered in relation to the kind of work informants engage in.

Some of the informants I initially wanted to add to this study did not have time to sit for the interview. Efforts made to interview a 26-year old male accounting consultant on several occasions proved futile. I wanted to interview him because I was interested in how his life as a young man, working as an accountant, his relationship with his fiancée and his activity and time budget influenced his diet and also physical activity. This was never possible because he said he was very busy during the week and worked on Saturdays as well. Sundays were the days he rested and spent time with his fiancée. He said I was lucky to have met him on that particular Saturday because he did not go to work.

Before conducting each interview, I briefed the informants on the answers they had provided earlier in the survey interview and then explained why this second section was necessary. This

was important because, revisiting the previous answers refreshed the memories of the informants. Some informants wanted to know what I was going to use the information for and whether they would be paid for the interview. All these had to be clarified before the interviews began. None of the informants were paid for the interviews granted and I informed them of my intentions to use the information for my Master thesis.

The interviews were recorded with an audio recorder to allow a thorough and repeated examination of what my informants said (Bryman, 2012). I transcribed each interview afterwards. Using of an audio-recorder is important because conversations can be replayed and transcriptions can be improved (Silverman, 2003). All the informants consented to the use of the recorder during the interview. I agreed to play back the conversation to them so both the informant and I would have an agreement on the information given.

Observations of the research environment and individuals were also made during the interviews. For example, during most of the interview sections, people in the neighbourhood often stared or came to ask if it involved any form of money. This gave me further grounds to explain the purpose of my research, the kind of people need and the fact that it did not include any form of remuneration.

Plate 1. Informant and I engaging in an interview in Old Asokwa.



Source: Fieldwork 2013.

Also GPS coordinates of the various locations of the case study informants were taken and a map was generated with it. This map provides a visual representation of issues discussed (See Map 2).. Some of the data mapped out from these cases include various patterns in awareness, practice, gap between these, as well as their time and activity budgets.

3.5 Key informant Interviews

Interviews were also conducted with key informants using a list of semi-structured questions (see Appendix III). These informants included the personnel in charge of lifestyle information on the Regenerative Health and Nutrition Program in Accra and also the nutritionist at the Metropolitan Health Clinic in Kumasi. The officer in charge of lifestyles information in Accra provided information on the objectives of the program and its activities so far. The personnel at the Metro health clinic in Kumasi gave me an overview of the local activities like community durbars that are organized in Kumasi under the program. An informal discussion was held with the Assembly man who also served as a key informant.

3.6 Secondary data

Several written documents were obtained. The National Health Policy (Ministry of Health, 2007), the Strategic Plan for the Regenerative Health and Nutrition Program (Ministry of Health, 2008) as well as the training manual for the Regenerative Health and Nutrition Program (Ministry of Health, 2012) were obtained from the Ministry of Health in Accra. These documents provided additional information on the program at the national level. Digital maps (Owusu-Sekyere, 2008) and the Kumasi poverty report (Kumasi Metropolitan Assembly, 2004) were obtained from the Town and Planning Council in Kumasi. These helped in selecting the study area and provided background information on the chosen area.

3.7 Data analysis

The IBM (International Business Machines) Statistical Package for the Social Sciences (SPSS) is a widely used 'computer software for analysis of quantitative data for social scientist' (Bryman, 2012: 354). This software was used in the analysis of quantitative data collected from the field. After the data were produced the answers given by the informants were grouped according to similarities and coded (Ibid.). For example code 5 is given to the response 'drinking a lot of water' to the question of how informants understood the concept of healthy living. This helped me to run frequencies and cross tabulations of the data received from the field like the relationship between variables like gender, age, level of awareness and education.

Upon transcription of the case study and key informant interviews, a 'text analysis' (Silverman, 2003) was conducted. This helps to decipher the various expressions can be used by the individuals of different statuses to describe their lifestyles and their understanding of healthy living. In order to do this I worked back and forth through the transcripts to identify the various themes discussed in texts and how they relate to the research questions (Mason, 1996 in Silverman, 2003). For example upon going through a conversation with a teacher, I analysed how she describes the influence of her status as a teacher, a mother and a wife on her health related lifestyle. I also identified her use of expressions or statements that describe ways in which she is constrained in time in administering all her duties at home and school. Information provided by key informants was also analysed in the same way.

3.8 Research ethics

There are several ethical principles to be considered before, during and after the process of data collection. Behaving in the right manner helps in assuring a favourable atmosphere for continued conduct of scientific research (Hay, 2010: 35). When researchers do not abide by these ethics they may lead to loss of credibility from informants (Westmarland 2001 in Bryman, 2012). I therefore took it upon myself to behave appropriately, protect my interest as well as those of my informants and future students doing fieldwork.

One of the important ethical principles used in this study, was seeking the consent of informants during the interviews because it is unethical to intrude the lives of informants without their consent (Hay, 2010). Before conducting any research interview, it is important to give prospective informants as much information as needed to make an informed decision of whether to participate or not (Bryman, 2012: 138). During this study prospective informants were informed about the purpose of the research, the objectives and the instruments to be used which include a questionnaire, a recorder and a GPS device. Since the discussions surrounding this study concerns the everyday lives of individuals, their statuses, perceptions, and behaviours, it was important that they consented to the interviews and were willing to participate. As Bryman (2012) puts it, “the right to privacy is a tenet that many of us hold dear and a transgression of that right in the name of research is not regarded as acceptable”. Thus, I gave each informant the right to end the interview anytime they felt uneasy about sharing some aspects of their private life. Fortunately, none of the informants ended the interviews before completion because I tried to make it more informal and interesting.

Though the use of the recorder was more efficient in capturing the details of issues discussed, I still had to respect the rights of the informant who did not want their voices recorded. For example during an interview with the nutritionist at the Metropolitan Clinic in Kumasi, I wrote down everything he said because he refused to be recorded.

Another principal ethical code outlined by Diener and Grandall (1978) is the importance of not ‘harming’ participants during the research (Bryman, 2012: 136). He goes on to say that participants are ‘harmed’ when they are affected in one way or the other by publication or disclosure of their identity (Ibid.). It is thus important to maintain as confidentiality data

obtained during a research. Informants were therefore assured of absolute confidentiality of the results. I assured them of my intentions to use their responses in my master thesis and that identities would be kept unknown.

In qualitative studies as compared to quantitative, the issue of confidentiality has to be considered carefully, this is because researchers are tempted in one way or the other to identify people and place while analysing cases (Bryman, 2012). In order to avoid this I gave informants the option of mentioning their names or otherwise keep it unknown before an interview began. I assigned pseudonyms to the informants who mentioned their names.

Finally, when taking the GPS coordinates of informants' homes and work places, I most often had to explain to them what a GPS is and what the coordinates would be used for. Upon gaining the trust of my case study informants, they agreed for me to register the coordinates of their homes and also their workplaces.

3.9 Validity and reliability of data

According to Rice (2010), though case studies cannot be used as basis for wide-ranging inferences, conclusions made from them are not necessarily false. They provide detailed information that may reveal general structures and can be used to generate or modify models or propositions (Harvey, 1969 in Rice, 2010). Conclusions in this study are made based on information analysed from data gathered from informants during the fieldwork. The cases selected in this study, though not representative of the views and lifestyles of the entire population, provide information on how certain factors affect particular groups of people in the community. These factors are common factors to the community and a national as a whole. As such conclusions made from this sample and the influence of these factors on them can therefore be similar to other persons in this community. For example, information gained on the influence of for example education on the health related lifestyle of an individual can provide information on the likely influence of education on choice of diet and physical activity on other similar individuals.

In addition, conclusions made on the influence of these social statuses on the health related lifestyles of individuals can be used to modify the training manuals and strategic plans of the Regenerative Health and Nutrition Program which do not explicitly document these

influences. Also since these are factors suggested by WHO in its report, cues can be used from this study and can be incorporated into the national strategy for diet and physical activity.

In order to ensure validity of the information gathered, it was imperative that the issues of positionality and reflexivity were taken into consideration. First of all, during the data collection process, I presented myself in a culturally decent way, greeted and dressed well to suit community standards. By presenting myself in this manner, informants accepted me as an insider to their community and were thus willing to give me audience. I tried to be polite to my informants so as to reduce biases that might come from my position as a woman, a student researcher from Norway and an indigene of the area.

This was done by acting out statuses that correspond at each time to the position of the informant and the research environment, thus creating a sense of impartiality. This impartial environment made informants open up and freely discussed the issues at hand. In addition to this, I engaged myself in a process called “reflexivity” (England, 2006). This process has two stages. I first reflected critically on the research. Reflecting on the importance of the questions I asked and also the broader social and political context in which the study is located. This is important because it helps the researcher to take out all assumption brought to the study and rather focus on the ways in which the particular social and political context might shape the research (Green & Thorogood, 2009: 24).

The second stage of reflexivity is where I personally considered my role as a researcher, my gender, my economic status relative to that of my informants. By doing this the influence of my status relative to my informants is brought to light and managed in a positive manner. I did this to know how these statuses of mine helped in producing the data. Nevertheless my personal involvement in the data collection and analysis process interfere with the process but rather like Green & Thorogood (2009:24) explains, it attempts to explicitly account for the fact that the data was not ‘merely collected’ but rather ‘produced’.

Also, during the interview I most often repeated the answers provided by the informants. This was important because I could cross check the answers that informants had given to know if they were the right answers in their opinion. I also read out the answers in the survey to informants before commencing the in-depth interviews to remind informants of the answers

they had provided in the previous section. This was necessary to ensure that answers provided were a follow up of those provided in the survey so as not to deviate from the point of discussion. For example when asking an informant about his daily exercise pattern, I checked his response for whether he engaged in any form of physical activity aside work or not. This ensures that the responses given in both interview sections are related.

In addition to the above, I played back recorded conversations to informants (i.e., ‘informant validation’ as Bryman (2012) calls it). This was necessary to ensure that informants and myself had an agreement on the information been given out. I made every effort to translate the English questions to the Twi language without compromising its meaning. By doing this I ensure that informants and I had a common understanding of the question before we proceeded to the answers.

Finally, by disclosing the various processes involved in the collection and analysis of the data, my position in the fields and the various challenges encountered, fellow researchers and myself can have a common understanding of the ways in which various conclusions were arrived at.

CHAPTER FOUR

Advocacy, Awareness and Practice of Healthy Lifestyle in Asokwa Community

This chapter outlines the various local activities of the Regenerative Health and Nutrition Program (RHNP) in Kumasi generally and in Asokwa particularly and the level of awareness and practice of the standardized messages in Asokwa. It explains with illustrations, the influence of social statuses on the health related lifestyle of individuals in the community.

4.1 Advocacy in Asokwa community

The Metro Health Clinic under the Ministry of Health in Kumasi is in charge of activities related to the Regenerative Health and Nutrition Program (RHNP) in the entire metropolitan area including Asokwa. The main duty of the clinic in reference to this program is advocacy of the standardized messages designed at the national level by the Ministry of Health, Accra. At this level the standardized messages are modified to suit the local context. The Program's activities in the area can be divided into activities organized for government agencies and public offices and activities targeted at the individual. Most of its activities were however targeted at reaching the individual.

The Clinic organizes training sessions for workers in the government sector. They present the standardized messages to various stakeholders and groups to encourage them to live healthily. These training sessions are held with the Municipal Assemblies (government offices) and also various Heads of Departments including Agriculture, Education, and Social Welfare in Kumasi.

Officials from these departments are trained as change agents and also advised to help in spreading the message of healthy living in their offices and also to the general public. 'Keep fit clubs' are formed in the various government official workplaces in Kumasi to encourage employees to engage in physical exercise. These clubs are made up of people who meet at scheduled times to engage in physical exercise, for example, jogging. Below is a picture of a training session been held at the municipal assembly in Kumasi.

Plate 2. Training section for Municipal Assembly in Kumasi.



Source: Metropolitan Health Clinic 2013.

For the individual, agents working under the program visit religious bodies on a regular basis training them and encouraging members to live healthy. The Program recognizes the church, mosque or shrine to be centres of mass information exchange. They encourage religious leaders to preach the message of healthy living to their congregations. The structure of the message changes depending on the kind of religious group being addressed. For example when talking to Muslims and other Christians who engage in periodic fasting, they are encouraged to drink a lot of water and eat a lot of fruits when they break their fast.

Table 3. Relationship between practice and religious group advocacy.

Level of practice of requirements	Have received health advice from Religious group		Total
	Yes	No	
high	50	21	71
low	16	13	29
Total	66	34	100

Source: Fieldwork data 2013.

During the survey informants were asked if their religious organizations did provide them with any information on how to live healthily. 66 of the 100 informants agreed to the fact that

their religious organizations provided them with a lot of information concerning their diet and physical exercise.

This is an indication that, efforts made by the program to incorporate religious bodies in the advocacy process has made progress. Informants consider the information from these bodies as vital to their wellbeing, since these faith organizations are accorded with so much respect in the community. They deem it important to ‘obey’ all the advice given by these religious bodies. In effect, practice of these health messages is high among 50 of the 60 informants whose religious bodies provide health advice. This is shown in table 3.

These 50 informants practiced three or more of the messages they had heard of from their religious bodies. The 21 informants who say that their religious organization do not provide them with any information still practice more than three of the messages, meaning that they have other sources of information other than the religious organizations. These other sources will be discussed in other sections.

The content of the health messages also changes depending on the socio-economic status of the group being addressed. Different messages are given to people of a high socio-economic status who live in for example New Asokwa and engage in time consuming and sedentary jobs as compared to people of low socio-economic statuses (Old Asokwa) whose jobs presumably involve a lot of physical movements. Residents in New Asokwa are advised to eat heavy meals in the afternoons only and eat light meals like porridges in the evenings and mornings if they have time. They are also advised to eat less meat and make time out of their busy schedule to engage in some form of intense physical exercise. If that cannot be done, they are encouraged to spend some hours walking before they retire to bed after eating in the evenings. People with low socio-economic statuses on the other hand, are encouraged to eat heavy balanced meals in the mornings and during the day since they use a lot of energy. They are also advised to eat fruit especially those that are in season since they are cheaper during these times. Despite the fact most people of the low socio-economic status are presumed to engage in physically intensive jobs, they are also encouraged to engage in some physical exercise like jogging in their free time.

For students in the communities, ‘keep fit clubs’ are organized. These clubs are mostly in the tertiary educational institutions. Students are encouraged to join these clubs to engage in some

form of exercise. These clubs meet every Saturday morning to jog. None of the students interviewed were part of these clubs.

As part of the advocacy, programs are also broadcasted periodically through radio stations in Kumasi. The frequency of these programs depends on the funds available. At the time of the study, these programs were not on going because of inadequate funding. This is a rather disturbing issue since radio was the most popular source of health information for informants sampled. 20 of the 100 informants agreed to have heard each of the five messages from the radio.

There is a very high level of awareness among the informants interviewed in the Asokwa community. 83 of the 100 informants had heard about three or more of the five messages being advocated. Informants were asked of the amount of water they drank, if they engaged in any form of physical exercise including physical activity at work, if they ate fruit, more vegetables and rested in any form. It turned out that many of them practiced the messages they had heard. 71 of the 100 followed the advice in one way or the other. This means that they drank at least eight glasses of water a day, ate fruits daily, added more vegetables to food, engaged in at least 30 minutes of exercise three times a week and made time to rest. The influence of social statuses on awareness of the messages was not as much as it was on practicing these messages.

It is interesting to note that when informants were asked categorically if they had heard of the 'RHNP' introduced by the Ministry of Health, only 26 out of the 100 informants had heard of it. This confirms the caution given by the personnel in charge of lifestyle at the Ministry of Health, Accra. He said when monitoring the effectiveness of advocacy and level of awareness of the Program, it is important to ask people about the standardized messages which is the most important and not by referring to the name of the program especially when talking to people of low education.

Advocacy is important, but the final goal of the advocacy as stated in the strategic plan of the program is a change in the lifestyle of people (MOH, 2008). When there is a change in lifestyle the health service paradigm can thus shift from a curative to a preventive one (Ibid.: 1). All that can be done by the national and local agents of the program to meet this objective is advocacy, creating an enabling environment and giving people reasons why it is important

to live healthily. Advocacy is also enhanced with enough funds, so when funds are not available for this, the messages in effect do not get to the people.

Nevertheless, the ultimate decision lies with the individual, who decides to listen and also practice what he or she hears. These decisions are most often clouded by the interaction of several factors that are sometimes beyond the control of the individual. The complexity of this relationship would be discussed in detail in other sections.

4.2 Healthy diet advocacy and street food in Asokwa

According to the nutritionist at the Metropolitan Health Clinic, when funds are available, community durbars are organized in almost every community in Kumasi to increase their awareness about healthy living. The community durbars are events organized to demonstrate to the communities the combination of foods that are healthy and to be eaten. Cooked local meals are brought to the meeting place for demonstration. The health officer in charge of the durbar talks about the nutritional content of each of these meals and the benefits they provide. According to the nutritionist at the Metropolitan Health Clinic, Asokwa community where this study was based also benefited from one of these durbars.

Plate 3. Community durbar in Asokwa.



Source: Metropolitan Health Clinic 2013.

During the durbar, the health officer demonstrates to residents the combinations of meals that make up a balanced diet. Each diet should contain three basic components. These according to the Nutritionist are 'energy-providing', 'protective' and 'body building' food. These are terms used during the campaign to simplify the message and ensure a better understanding of their meaning. Energy food contains carbohydrates, fats and oil; these provide energy and warmth to the body. Protective food like vegetables contains vitamins that help to protect the body against diseases. Finally body building food like meat and fish contain protein. These help the body to grow and repair worn out tissues. Thus in order to eat a balanced diet a common meal like 'fufu' eaten in the Asokwa community should contain carbohydrates which is the pounded cassava, meat or fish for protein and soup with vegetables for vitamins. After such a meal, fruits like water melon which is a common fruit sold in the community can be eaten for additional vitamins, as advised by the health officer.

As we can see in the photo, food that contains the three basic components is displayed. Local fruits and vegetables that are affordable are also displayed to residents in the community. Both men and women, young and old, participate in the program by listening and asking questions about health issues.

In addition to the above activities, the nutritionist stated that frequent visits by health officers are made to the Kumasi central market as well as other market places to talk to both sellers and customers about healthy living and street foods. Kumasi is one of the major city markets in Ghana with the Kumasi Central market as the largest (Clark, 2000). According to the nutritionist, the sellers at the market are encouraged to handle food (cooked and fresh) the proper way and the customers to buy food from the right places. This is a very important message because it has been estimated that 22.4% of the national income in Ghana goes into buying cooked food out of home (MOH, 2008).

Apart from fresh food, a lot of informants (85) buy prepared meals outside the home, commonly referred to as street foods. 'Street food' is a term used to refer to a wide variety of ready-to-eat food and beverages, and sometimes prepared, in public places' (Mensah et al, 2002: 546). Eating outside home, according to Tomlins et al. (2006), is a lifestyle common in urban areas like Accra and in this case Kumasi (Afele, 2006).). Accra, a similar urban area as

Kumasi, was estimated to have about 60,000 food vendors (Ibid.: 772). In addition, about 60% of 951 mothers studied by Mensah et al (2002) in Accra supplemented their children's diet with street food.

The potential for the purchase of street foods in Ghana to impact negatively on the health of buyers should be given attention (Amoah et al, 2004). This is because there are records of outbreaks of food borne diseases and the transmission of communicable diseases resulting from the consumption of street food (Moy et al, 1997 in Amoah et al, 2004). One of the recommendations in relation to healthy diet is the consumption of more vegetables. Unfortunately, research has highlighted the low quality of vegetable sold in the urban market and bought to prepare food by street vendors (Rheinländer et al, 2008).

Women in Amoah et al study (2004) dominated in food vending while majority of the consumers were men. This is because of the central role women play in the preparation of food in Kumasi (Clark, 2000). Single men and women also formed majority of the main patrons of street food in Kumasi (Ibid.). During my field work in Kumasi, I observed about 10 food vendors, nine in Old Asokwa and one in New Asokwa. 77 of the 100 informants say that they prefer home-made food to buying on the street, the remaining 23 who are unmarried preferred street food. The table shows the places where informants bought food.

Table 4. Places where informants buy food outside their homes (only the first choice is included in this table).

Places where informants buy food	Number of Informants
Street vendors	56
Restaurant (continental dishes)	13
Canteen (work/school)	5
Chop bar (local dishes)	11
Total	85
Never eat outside the home	15
Total	100

Source: Fieldwork data 2013.

Even though street food is often prepared under questionable hygienic conditions and its nutritional content is often unsatisfactory, many of the people who depend on such food are often more interested in convenience than in the safety of the meals (Mensah et al, 2002). As many as 85 of the 100 informants say they purchase food outside the home at least once a week as shown in table 4. Even though most of the informants as stated above preferred home-made food, they still buy food out of home because of its convenience. Men formed the majority of patrons of food sold outside in the Asokwa community. 13 of the 15 informants who never eat out were women. Street food has become an inevitable venture in urban areas like Kumasi and these places are sources for most of the vegetables eaten by residents, thus health education for these vendors is an action in the right direction.

It is thus very important to educate both the sellers and the buyers on the right practices. The RHNP does not discourage people from buying food outside the home, rather they encourage people to buy a combination of food that is balanced and also buy food from vendors in hygienic environments. All food vendors are required to have a health certificate from the Ministry of health but in most cases they do not have one. Nevertheless these food vendors are all encouraged to cook with fresh ingredients in a clean environment.

4.3 Local perception of what is physical exercise in Asokwa

Physical exercise is one of the two important factors known to reduce the occurrence of non-communicable diseases (WHO, 2004). 61 of the 100 informants interviewed in Old and New Asokwa say they engage in some form of physical exercise either during their free time or during their working hours.

Physical activity in Asokwa is not only perceived in terms of exercising during one's free time but as many other activities. For example, informants whose jobs involve an amount of vigorous activity consider it a form of exercise and that to them is enough. A middle school educated female muslim textile maker living in Old Asokwa, describes her situation in this way: *'As for exercise, I do not really do it.... the work I dohmmm this morning I woke up, went for water to fill the barrel, I came and cooked the textiles, I dried them, I bent, I stood, This is even more than jogging [with a laugh]'*. To her, the activities she is engaged in while working involve a lot of physical activity and that is enough exercise.

A 43 year old food vendor and mother of eight children also living in Old Asokwa considers the activities she is involved in while working as exercise. She says that: *'Yes, as I go and come every day, it is a form of exercise, with some occupations you just sit down and might become sick but as I move about my body straightens up, and it is said that walking is a good medicine'*. She goes on to explain that she has other forms of exercise other than walking; this she calls 'enjoyment'. She says *(while laughing)* that: *'Enjoyment in bed with her husband...this is exercise for me.'* She explained that after her days of work which involve a combination of walking and long hours of sitting, she makes time in the evening for this type of exercise.

Informants in the community have several perceptions about going to the gym to exercise. When an unmarried 31 year old male driver was asked if he had heard of a gym and the kind of people he thought could go to the gym, he says *'Yeah they go to lift metals to get muscles.....I know some go for muscles and exercise and take in drugs to build up...I do not like it, because it has a bad reputation and I do not want to be associated with it'*. This is an informant who lives in New Asokwa, the rich community and has a middle school education. Yet his understanding of the purpose of the gym is clouded by the social perception he has of it and thus he does not want to be seen there. A 45 year old widow and single mother, who had stayed in the USA for about 10 years and now stays in New Asokwa, stated her perception and the realities associated with attending the gym. She says: *Normally, everyone should go to the gym but the truth is that it is all about money. That is why people prefer to jog around. So people who have money go to the gym. Registration for the month is about 100 Ghana cedi (35 US Dollar⁴). One might not even have money to buy food, so why not jog around, which is free. So if you do not have money you should not 'kill' yourself by paying to go to the gym. If it was not costly, then it would have been good for everyone to go there to train'*. The cost aspect of attending the gym discourages many from training with such facilities. Even though this informant has secondary school education and her stay abroad has given her some enlightenment on the importance of going to the gym, she cannot bear the cost involved as a single mother and widow.

Some of the informants had heard of the gym but were not sure of the kind of activities that goes on there. A married 43 year old woman resident in Old Asokwa, explains her knowledge of the gym *"Ohh most often they have some [gym] on television, sometimes you see someone*

⁴ Currency conversion from Ghana cedi to US Dollar: 1 Dollar= 0.35 Ghana cedi

walking on something while the thing is moving [thread mill]...I do not know if they pay money to attend it or they go there for free or go to cure themselves of some pain. I do not really know". From her response, it was obvious she has never been to the gym but saw such activities only on television. Also, to her it was for people who have money to pay because she has an idea of some monetary involvement. Another male informant confirms this when asked about the amount needed to register for the gym he used to attend, he says: *'Yeah it is about 200 Ghana cedi (70 US Dollar) a month'*. He added that this amount was his total monthly salary and could not use all on a gym. He has therefore stopped attending the gym for exercise. He now prefers to go jogging with his friends, which is free.

Despite the fact that facilities like a gym are available in a community like this, people do not patronize this service because of the perception they have concerning the kind of people, activities engaged and also the cost involved when using this facility. It is thus important to consider the local perception of such facilities for physical exercise or recreation before establishing them in the community

The RHNP has made it one of its objectives to project an already existing physical environment in the community as conducive for exercise and rest. The use of this environment for physical exercise comes at no cost to users. 61 of the 100 informants interviewed stated that their environment was indeed conducive enough for engaging in physical exercise. This is because of the physical location of the two neighbourhoods. They are located along a highway, close to a stadium and also a school park.

The stadium creates an avenue for exercising; some informants also play football in the school park during their free time as a form of exercise. A 29 year old married welder living in New Asokwa says that: *'When there is time on Sundays I go and play ball in the park [pointing to the park close by]'*. The highway also serves as an important arena for informants who want to run or jog around. A 22 year old man living in Old Asokwa says: *'I go on road with my friends'*. 'Going on road' to him means jogging along the roadside. A married 40 year old man in Old Asokwa also says: *'At times too, road...Yes, it is at the stadium...I jog'*. Meaning he also jogs along the roadside to the stadium and back. 'Going on road' is a term used by most of the male informants in both Old and New Asokwa to refer to jogging activities along the road side. Amongst these informants, jogging by the roadside is considered a masculine activity thus women are rarely seen 'on road'. The gendered ideology

concerning the use of such public spaces in the community permits men rather than women jog in these places. This is not a prohibition but it is a practice that has come to stay. A woman engaging in so much jogging activities is seen as a man.

Most of the facilities like the stadium and the park that are suitable for exercising are located closer to New Asokwa than to Old Asokwa, but residents in the Old Asokwa do not consider this a problem since it is just a 750 meters away. A 40 year old married man who lives in old Asokwa and also 'goes to road' says: *'In Old Asokwa here, we do not have any place for physical training and other things, so we have to go early morning at least by 4.30 a.m.... we go on road to the stadium , have a little exercise and come home'*.

For most of the informants who have no idea of what a gym is or cannot afford to go to the gym or have a negative perception of it, the conducive nature of their environment still makes it possible for them to have a place to engage in some form of physical exercise for free. Nevertheless there are informants in this community where these facilities and space are available who do not patronize it. The following section discusses the gap in awareness and practice of these healthy lifestyle messages.

4.4 Gap in practice of healthy lifestyle messages by individuals in Old and New Asokwa

Gap in practice is a term used in this study to refer to the difference between awareness of health messages and the practicing of them. When knowledge is circulated, it does not always lead to an automatic change in behaviour (Robbins, 2010). The people sampled did not follow all the advice they had received. 81 of the informants had heard about three or more of the five standardized messages, yet only 71 of these practiced three or more of it. This means that 12 persons among sampled informants did not practice at least three of the messages they had heard of. To have a better understanding of this gap in practice, it is important to analyse the gap in each of the five messages. This will provide information about how the informants responded to the five messages that had been advocated. Table 3 shows the various gaps between awareness and practice.

Table 5. Practice and awareness of standardized messages * Numbers in red represent the gap in the practicing of received healthy lifestyle messages in the Asokwa community.

Whether the following messages had been received		Reported intake of required amount of vegetables		Total
		Yes	No	
'Fruits and Vegetables is Medicine'	No	12	11	23
	Yes	64	13	77
Total		76	24	100
		Reported intake of required amount of fruit		Total
		Yes	No	
'Fruits and Vegetable is Medicine'	No	17	6	23
	Yes	63	14	77
Total		80	20	100
		Reported intake of required amount of water		Total
		Yes	No	
'Water is Medicine'	No	8	8	16
	Yes	22	62	84
Total		30	70	100
		Reported total physical activity (work or Free time)		Total
		Yes	No	
'Exercise is Medicine'	No	14	6	20
	Yes	47	33	80
Total		61	39	100
		Reported forms of rest (closing early from work or annual leave)		Total
		Yes	No	
'Rest is Medicine'	No	9	9	18
	Yes	45	37	82
Total		54	46	100

Source: Fieldwork data 2013.

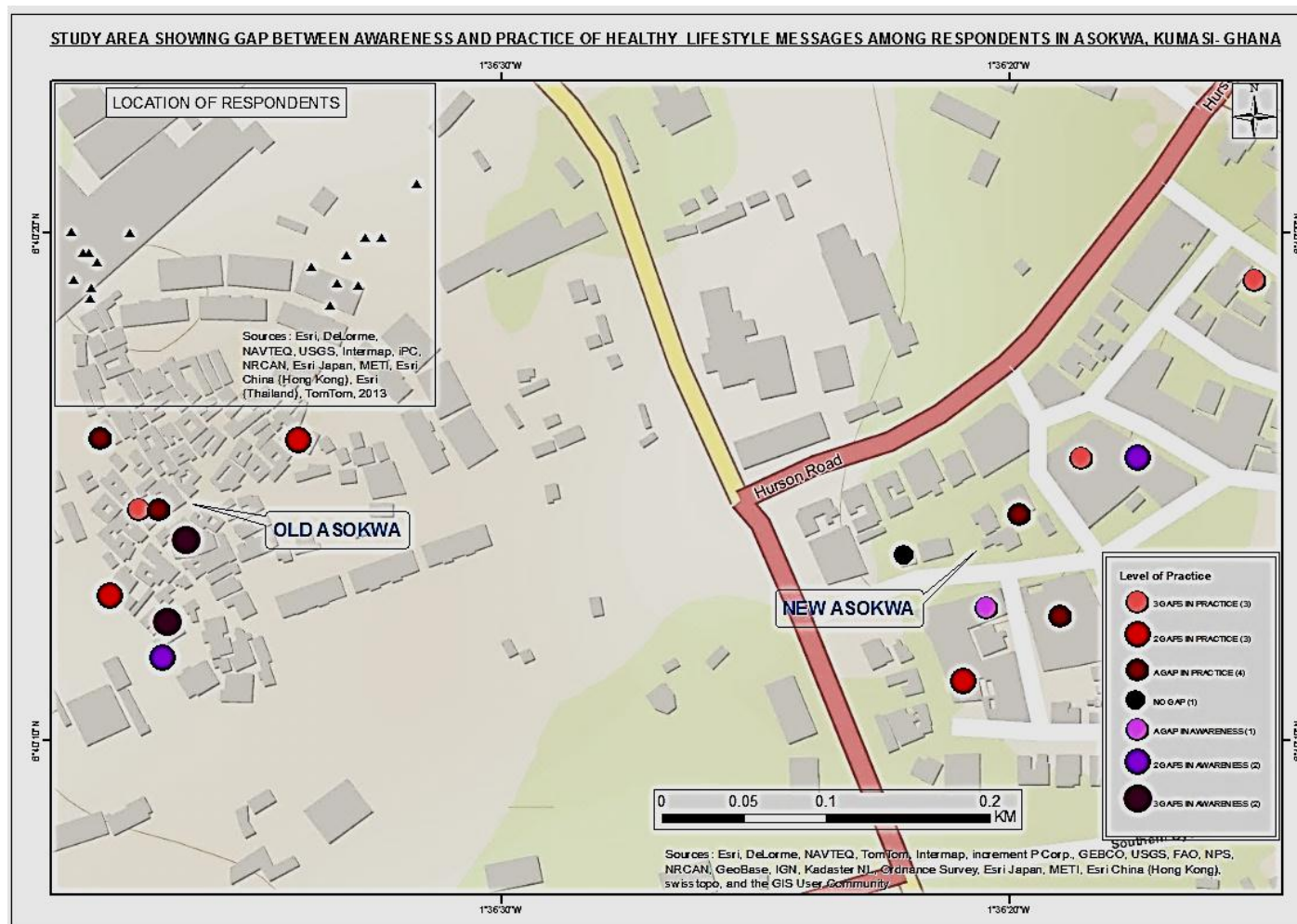
In table 3, there are four categories of individuals. The first group (No, Yes) represents informants who have not heard about the messages but do practice them. The second group (Yes, Yes) is those who have heard the messages and also practice them. The third group (No, No) is those who have neither heard about nor practice the messages. The final group (Yes, No) represents individuals who have heard about the messages but do not practice any of them. This final group represents those who have a gap between being informed and practicing advice, and this group will be the focus of the discussion. The informants in this group have heard about either of the messages, but do not practice them. The numbers in red represent this category.

It can be observed that the message with least gap in practice was recorded by informants who added some amount of vegetable to their meals. This is because apart from vegetables eaten raw, most of the local vegetables like garden eggs, tomatoes etc. are added to meals while cooking on a daily basis. Consumption of these vegetable cooked or raw contributes to an informants' total consumption of vegetables. The highest gap of practice is drinking the required amount of water which is 8 glasses of water (in this case 8 water sachets⁵) a day. All the 100 informants in Asokwa both Old and New drank some amount of water but not the required amount. Only 22 of these informants knew the message and still drank the required amount. The gap observed represents a large number of informants in the community, and according to the parameters specified by the Ministry of Health in Ghana concerning intake of water, these people are considered as not following the required recommendation for intake of water. People are encouraged to be conscious of the amount of water they drink and thus make an effort to drink at least 8 glasses but very few informants were conscious of this action.

In addition to the above, the gap in practice among the 16 case studies can be analysed and compared in the two neighbourhoods; Old and New Asokwa (see Map 2). These informants were interviewed more in depth than in the survey and the information yielded provided explanations to the reasons behind the gap in their awareness and practice of healthy living.

⁵ Sachet water is water bagged in a polythene bag usually of 500 milligrams and is used by most people in Ghana (Institute of infrastructure development, 2006).

Map 2. Gaps in awareness and practice of standardized messages of healthy living in Old and New Asokwa.



Source: Geographic Information System Laboratory, University Of Ghana 2013.

As the map above shows, 10 of the 16 case informants had a gap in practice; five a gap in awareness, and one of them had no gap. The informant that had no gap in practice had an equal number of awareness and practice of the standardized messages. She is ‘Eva’ a 40 year old teacher who was aware of four of the messages and practiced four of them. Out of the 16 informants chosen for the case studies, 10 had heard the messages but yet did not practice all of them. Interestingly there is an equal number of five informants in both old and New Asokwa who had a practice gap. The health related lifestyle of these 10 informants like the remaining six are influence not just by awareness but also by several other social factors. These factors prevent the practice of the messages learned or heard of. The influence of these factors will be discussed in subsequent sections.

In addition to these gaps, informants were asked if these messages had any influence on their diet and physical activity. Table 6 below shows the number of people whose lifestyle had been directly influenced by their awareness of these messages.

Table 6. Influence of advocacy on diet and physical activity.

Responses	Diet change after messages	Physical activity change after messages
Yes	52	29
No	48	71
Total	100	100

Source: Fieldwork data 2013.

It can be seen from the table above that many people’s diet had been influenced by the messages they heard. On the other hand, the messages have not had a tremendous effect on the amount of physical activity (in this case during free time). This is probably because of several factors one of which could be the fact that of the five messages three of them are about one’s diet. Also eating as compared to exercising is an activity that occurs on a daily basis.

What may appear as individual choice about food consumption and also physical exercise is related to political and other socio-economic factors (Robbins, 2010). The government has played a major role at the policy level by advocating the messages to the public and creating an enabling environment for healthy living. It thus up to individuals to put into practice this

information, yet the practice of these messages is constrained by several factors that are somewhat beyond the individual. The influence of social statuses like level of education, marital status, age, religion, occupation and gender roles at home will be discussed in the next section.

4.5 Influence of social statuses on the lives of individuals in Old and New Asokwa, Kumasi.

This section evaluates the health related life situations of individuals whose cases are illustrations of the influence of education, marital status, gender, age, occupation and religion on their health related lifestyle. It analyses the influence of gender roles as it intersects with other social statuses taking into consideration the different locations of informants. It discusses the extent of the influence of these factors and how they constrain or enable practices of healthy living in Old and New Asokwa.

4.5.1 Influence of formal education on healthy living in Asokwa

Education is important because it influences the amount of health information an informant has access to. Nevertheless considering the medium through this information is dispersed (radio, television, churches, etc.) both the educated and non-educated have access to them. Also, even though some informants have lower formal education than others, they still have access to a lot of health information because of their family background and life experiences.

All the informants sampled for the case study interviews had some form of formal education. The highest level of education, among the informants in Asokwa which is a master was attained by 'Eva' a female teacher living in New Asokwa. Even though formal education to some extent influences access to the messages, it does not independently influence the practice of the messages. Interviews with some educated informants who had accessed such information in books and articles showed how well informed they were, but other factors, such as time available after work and other chores at home influenced their ability to practice what they were aware of.

The lifestyle of the 40 year old female teacher, Eva, who had attained the highest level of education among informants, is an example of an educated woman who did not have time to

exercise because she had other occupational and family responsibilities that made it difficult to put into practice what she had learned. Even though she tries to make the habit of eating healthy and engaging in physical activity in her free time part of her lifestyle, it is impossible. She says *'When I got to know about eating vegetables and fruits, exercising, and all those things. I tried to make it part of my lifestyle'*.

Nevertheless her family responsibilities, which include taking care of her two children, making time for husband as well as occupational responsibilities (preparation of teaching manuals and sometimes marking scripts at home), make it impossible for her to engage in any form of physical exercise. Her job is also one of sitting and standing with very little physical activity. She states that *'Well, sometimes you may want to....like at this time maybe I would want to just take a walk but, I was in the kitchen when you came...I must cook for my husband and my kids...: I do not have a house help at the moment. I used to have but for some reasons I just decided not to.....So, sometimes I have a whole lot of duties to perform at home, I must go to work as well and I must go to church, so I realize I am stressed up.....I finish the day's activity and realize I am tired.* Despite the fact that she is well educated and knows the benefits or consequence of living healthy or otherwise, her responsibilities at home and at work prevent her from living the healthy life she has knowledge of.

Another case is the widowed single mother who had stayed in the USA for 10 years and had a lot of information on healthy living. She is a trader who has a shop at Amakom junction, approximately 30 minutes with a taxi from her house. She explains the manner in which her responsibilities as a mother reduce her ability to practice healthy living. Her whole life is geared towards taking care of her 5 year old girl child and selling clothes in her shop. She narrates the various things she has to do for her daughter in a day so that she has very little time to engage in any physical exercise. She is able to make a lot of time for her daughter even whiles at work because she is the owner of the shop. Her time schedule at work also makes it impossible for her to eat early in the evenings. She eats what her daughter wants to eat which most contains a lot of sugar and protein with very fresh little vegetables. She has to cook for the whole week during the weekends and thus eats reheated food most of the time. She states that *'I send my child to school by 7:30 a.m., and then I also leave for work from there. When its three o'clock I go back to pick her up. When I pick her, I take her to my workplace [a boutique] and prepare food for her. I ask her what she wants to eat so that she will not reject it. I then prepare it for her. We stay in my shop and entertain visitors that come*

around. By 8:30 p.m. we close and come home. When we come home, I change her clothes and bath her. If she would like to drink tea, then I prepare it for her. I eat what she eats at the time she wants. We then go bed by 9:30 p.m.’. Though the woman is educated and appreciates the importance of healthy living, her status as a single parent prevents her from making time for herself and her health. She spends the whole day engaging in activity for her child and the child determines the kind of food she eats.

She does not employ the services of any one to help her take care of her child while she concentrates on her work. This is because like most Ashanti women, they do believe that it is their responsibility to provide for their children and no one can do it better (Clark, 2000). Unlike other Ashanti women would not mind delegating childcare to other mothers who appreciate this responsibility (Ibid.), this informant is very committed to taking care of her child alone because to her it is her duty and a sign of loyalty to her deceased husband. She therefore does not want the child to lack anything and would therefore work hard at any expense to provide for her.

The lifestyle of ‘Mr. Osei’, a 47 year old driver who completed middle school and lives in Old Asokwa knows a lot about health because of his family background. His parents had always informed him on the importance of eating healthy and on time, as well as engaging in a lot of physical exercise. He accepted his parent’s advice and practices them because he believes this could help him live as long as his parents did since they practiced what they taught him. This information has since then guided him in his life. His father and mother lived up to 94 and 87 years respectively. He says that *‘As for me, my form of exercise is walking. I can walk from here to the stadium [about two kilometres from his house] before I go to work and when I am going to work, instead of picking a vehicle I prefer to walk. When I close from work I walk home. At work I am always seated in a car and if I do not walk that often, it would make me sick. Sometimes I walk to and from the central market. Someone would ask me why I am walking but they do not know I am exercising. That is why I am strong. Before I used to do sports but now I cannot do it but as for the walking I still walk a lot...I have learnt to do exactly what my parents did to live long’*. This man closes from work by 5 p.m. and he does not have any responsibilities at home. All he does is to visit his friends and take a walk in the community. He has a lot of time to engage in a lot of physical activity. His knowledge also enables him to make the right food choices.

‘Mr. Foli’, a 29 year old welder who also has middle school education further affirms the importance of health information. He also has a very flexible time schedule with no family responsibilities after work. He engages in very little physical exercise compared to Mr. Osei. The life of Mr. Osei has been greatly influenced by the amount information he has on healthy living contrary to the life of Mr. Foli. Mr. Foli displayed very little knowledge of healthy living during our discussions. All Mr. Foli does is as he says ‘*When I come home from work I take a rest and then eat... I then watch movies until 21:00, and then I go to bed*’. Thus although Mr Foli has a similar time schedule as Mr Osei, he does very little physical exercise. This is probably because he is not as well informed about health as Mr Osei.

The ability to engage in physical activity and make the right food choices as an educated person or a person with so much knowledge about health depends on the other responsibilities one has towards the family and also the amount of time available for an individual before and after official working hours. Education on healthy living, whether formal or informal, is nevertheless very important because it provides a source of health information. Formal or informal access to health information as shown above does not automatically lead to practice of the information because after factors as gender roles at home as briefly stated in this section inhibit this practice. This will be discussed in detail in the next section.

4.5.2 Gender roles and marriage in Asokwa, Kumasi

Gender roles of men and women shape their responsibilities at home. In Kumasi women have the responsibility of cooking both for their husbands and children on a daily basis (Clark, 2000). This is because cooking for one’s husband has both sexual and economic connotations and thus women reluctantly delegate this responsibility (Clark, 1994). A woman who pays more attention to income generation rather than housekeeping is seen as neglecting her husband (Clark, 2000).

Child birth in Ghana and in Ashanti’s culture is an important requirement for married couples (Clark, 2000). Deciding not to have children in the Ashanti culture is liken to committing suicide since this rules out an individual of the final stage in life as an ancestor (Ibid.). Childcare in the Asokwa community is mostly the responsibility of a woman. ‘Motherhood is central to female gender ideals for the Ashanti as in many cultural systems’ (Clark, 2000:

717). Amongst the 9 male case studies of which four are married, none of them spent their time in taking care of their children. Table 7 below provides these details.

Table 7. Time spent on childcare.

Hours spent on child care per day	Gender of informant		Total
	Female	Male	
0	2	8	10
1	2	0	2
1,5	2	0	2
2	1	0	1
2,5	1	0	1
Total	8	8	16

Source: Fieldwork data 2013.

Ashanti is one of the matrilineal Akan cultures in the south of Ghana (Clark, 2000). In a matrilineal society as Kumasi, the men provide economic support for their children but also have the economic responsibility of taking care of their nieces and nephews (Clark, 1994). According to Clark (2000), ‘financial support in childhood or young adulthood is important in bonding children to their fathers and male kin’. When an Ashanti man dies, his assets are given to his nephews. Thus Ashanti women have to also work in order to provide for themselves and their children. A woman’s breadwinning role forces a mother to work (Clark, 2000).

Ashanti women consider it a ‘dominant bond of motherhood’ to work and feed their children (Ibid.). As more women started working out of the home e.g. trading activities, most would prefer income generating work rather than to cook or engage fully in any domestic house chores for the husband and children (Clark, 1994). She adds that it is thus common in Kumasi to find homes with ‘househelps’ or other relatives who provide these services or people would rather eat outside the home (mostly single men and travellers) (Ibid.). Even though most women ideally would want to cook for their husband, their busy schedules at work and their want for economic security in the absence of their husbands necessitate the need for extra help at home.

Househelps play an important role in assisting working mothers with childcare and general housekeeping (Clark, 1994). From my knowledge as a Ghanaian woman and my stay with househelps made me aware of the provisions made for them. Househelps are to be taken care of by sending them to learn a trade or providing them with some form of financial support. This requires that families engaging the services of a househelp should be able to afford them. Even though this study was conducted in a rich as well as poor neighbourhood none of the informants employed the services of a maid. This might probably be because of the negative connotation that comes with their service.

The only informant living in New Asokwa, the rich neighbourhood who had ever hired the services of one says that she will like to have a housemaid to help her in her household activities but her experience with one some time ago relents this decision. She adds that her househelp after staying with her for 2 years became disrespectful and was very comfortable around her husband. For this reason she sent her off and has decided not to have one in her home again. Most women with similar experiences like in this case study need help with household duties because they engage in other occupations outside the home but they would rather prefer to take care of their children and families alone. This combined responsibility has an effect on their health related lifestyle.

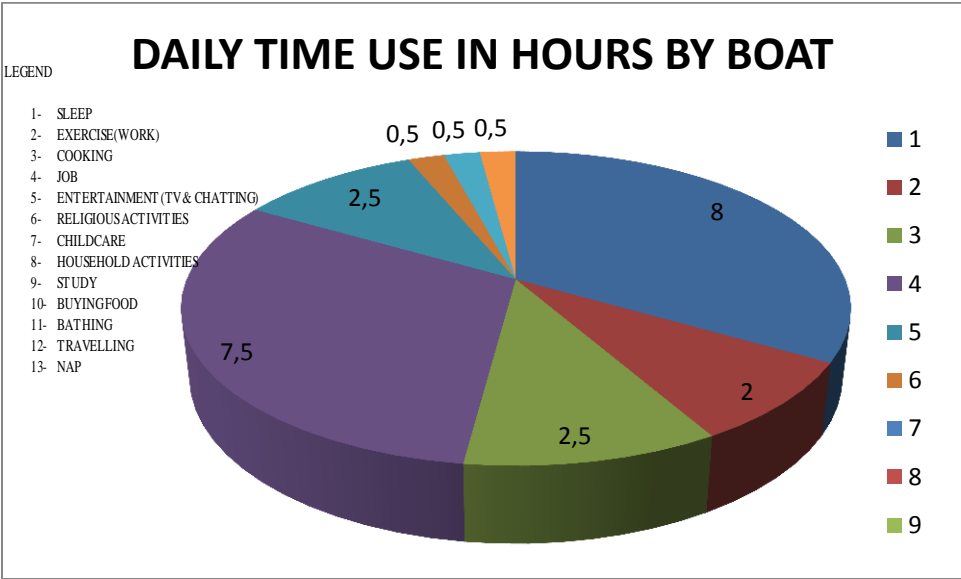
4.5.3 Influence of gender roles at home on healthy living in Asokwa

In-depth studies of the lives of two informants in Asokwa show how gender roles at home influence their health related lifestyles regarding their choice of diet and ability to engage in physical activity during their free time. I will compare the lifestyle of a woman whom I call 'Eva' (already introduced) and a man I call 'Boat'. Even though these two individuals are similar with regards to their work schedule, age, level of education and marital status, they have different health related lifestyles because of their gender roles at home.

Eva is a 40 year old teacher in a primary school, married with two children (2 and 13 years old). She lives in New Asokwa with her husband, who is a banker, and her children. Boat on the other hand is a 40 year old Transport Supervisor at the State Transport Corporation in Kumasi. He is married with a 10 year old daughter. He lives in Old Asokwa with his wife who is a secretary in a private auditing firm in Kumasi and his daughter. The highest level of education for Eva is a master degree while Boat has attained a bachelor degree. They both

understand the concept of healthy living very well. They have a similar work schedule which starts from 7:30 a.m. in the morning until 3:00 p.m. On a typical day Eva spends most of her time at work, followed by cooking at home and sleeping as shown on map 3. She spends more time cooking compared to Boat because it is her primary responsibility as a wife as seen in Diagram 3. Boat cooks only when his wife is late from work. From the map, most of Boat's time is spent at work and sleep. Boat and Eva spend the same amount of time of 30 minutes on travel from home to work and back in his private vehicle and her hired taxi respectively.

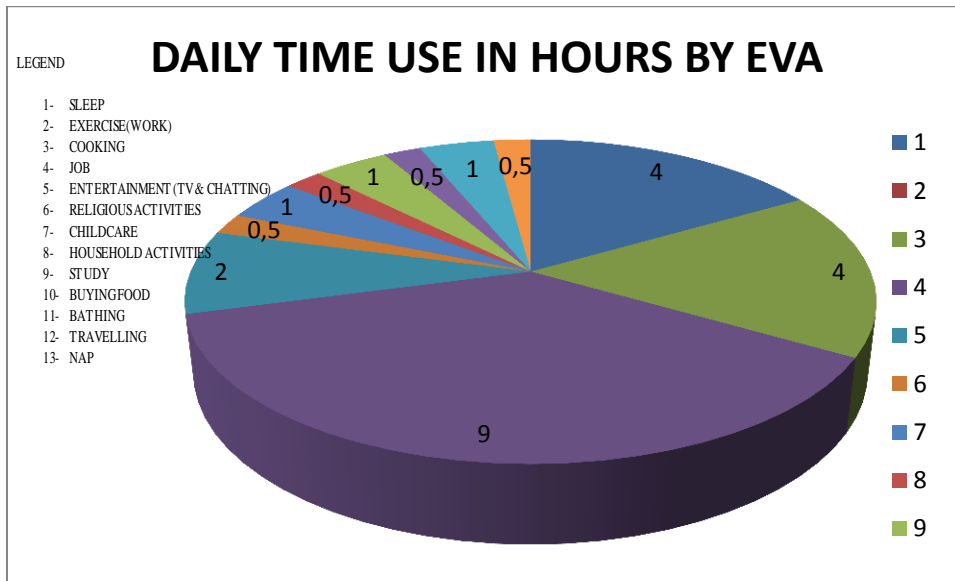
Diagram 2. Time use in hours by a case study informant in Asokwa.



Source: Fieldwork data 2013.

When Eva wakes up at 4:00 in the morning, she prays for 30 minutes after which she goes to the kitchen to cook. She then wakes her children up and gets their uniforms and food ready for school. She also prepares breakfast for her husband. After work she goes to the market to shop for food stuffs. When she comes home, she prepares supper for her family. She then cleans the kitchen and the entire house. After all this, she sits in the hall with her family to watch television and goes straight to bed. She is also in charge of sweeping the house and cleaning the bathroom on a daily basis. She also washes her clothes as well as those of her children and her husband. She has no house help to assist her. This is her responsibility as a woman, a mother and a wife. She also has teaching duties such as marking of scripts.

Diagram 3. Time use in hours by a case study informant in Asokwa.

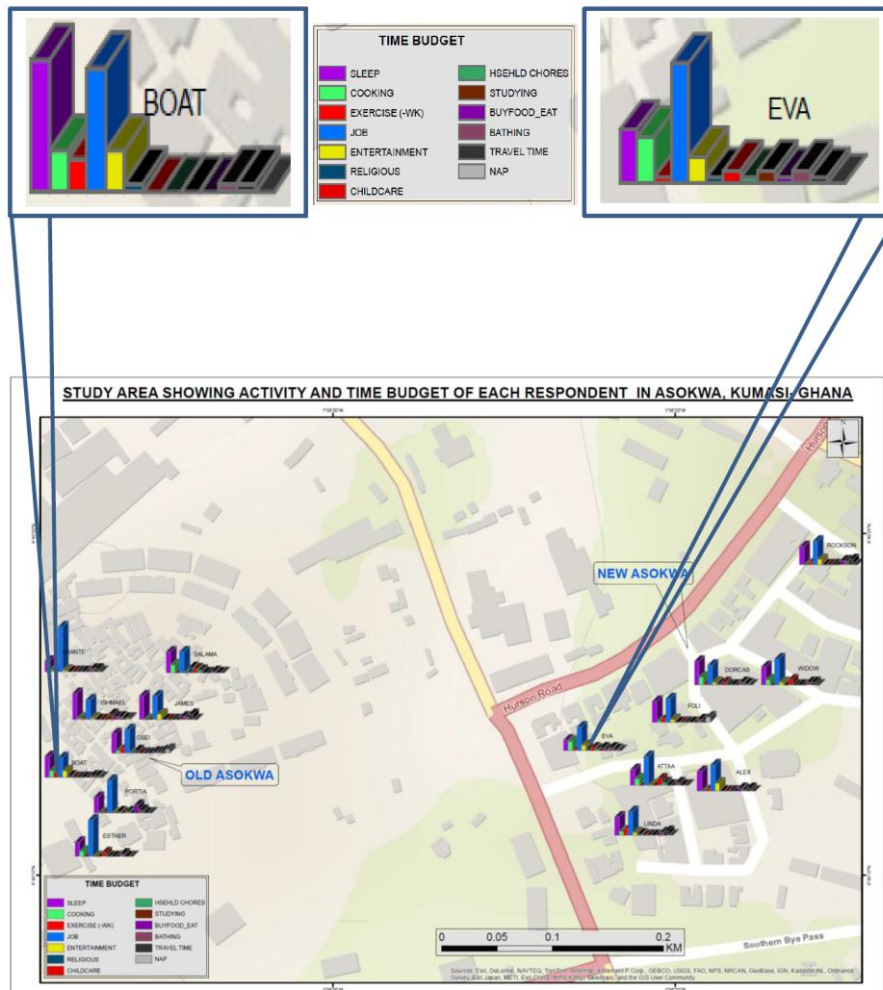


Source: Fieldwork data 2013.

Boat on the other hand, wakes up 4:30 in the morning and after 30 minutes of praying, sets out to jog for one hour and half; he then gets ready for work. After the day's work he returns home. He starts dinner if his wife is late from work which is he says seldom happens. If the wife cooks he rests and eats dinner. He is not in charge of any other responsibilities related to housekeeping. After dinner, he takes a walk in the neighbourhood for about an hour. He returns home to watch television, after which he goes straight to bed. This time allocations can be seen in detail in the chart (Diagram 2 & 3) below which describes the time use of these two informants.

Analysing the daily activity budget of Eva and Boat, it is obvious that their lived experiences are mostly influenced by their gender roles at home. When it comes to diet both of them are well learned and know the importance of eating at home and buying food from hygienic places out of home. Both of them consume a lot of vegetables and drink lot of water. Nevertheless, their physical exercise schedule is somewhat affected by their household activities.

Map 3. Activity budgets of case study informants interviewed in Old and New Asokwa



Source: Geographic Information System Laboratory, University Of Ghana 2013.

Eva after mediating all her travels which includes going to the shop to buy food stuff gets home late. She gets home around five o'clock because of her journey to the central market where she buys food stuff. She is thus constrained in time and space since she now has little time to cook for her husband and children who return home by six o'clock. Eva after engaging in all the household chores including cooking does not even think of going out to jog or engaging in any other physical exercise, all she thinks of is sleeping to wake up to another busy day. She states her desire to sometimes talk a walk after the day's work but is most often too tired to do so.

Boat on the other hand is not responsible for childcare and cooks only when his wife delays, he does not engage in any form of household chores aside this as seen in Diagram 2. He goes home straight from work. He also has enough time after eating to take an hour walk in the neighbourhood. Both of these informants have a high level of awareness, and are very much aware of the importance of living a healthy life but for Eva this is not possible because of her gender roles of housekeeping. Her eating habit has been influenced tremendously by marriage, because she now eats regularly and from home compared to her unmarried situation. As Eva puts it *'Uhhh, as a single woman then, you know sometimes you feel you are alone, as I was telling you the other time so sometimes when you come back from work we even feel lazy to cook...Now you must cook'*. Before marriage, she felt lazy to cook for just herself when she returned from work but now she has no option. Boat's life has not changed so much after marriage because his ideals of healthy living were established before marriage. He rather encourages his wife to live healthily. The influence of marriage is another broad category to be discussed in the following sections.

The lives of these two educated persons illustrate the influence of housekeeping, cooking and marital gender roles at home on diet and physical activity. It can thus be said that an individual's responsibilities at home can either constrain or enable him or her have time to engage in some form of physical activity in their free time.

4.5.4 Influence of marriage on healthy living in Asokwa

Most of the informants surveyed in the Asokwa community were single. This means that they were not married or cohabiting. Table 9 shows the marriage categories of informants in the community. Despite the high number of single informants (51), most of them say that the marriage has an influence on the health and lifestyle of an individual. 49 of the 100 informants interviewed from table 10, however say marriage has an influence on their own lifestyles. Informants had different opinions of this influence, some deemed it as positive or negative and others say it really has no effect on lifestyle.

Table 8. Marital categories and its influence on healthy lifestyle.

Marital status of informants	Number of Informants
Married	36
Single	51
Co-habiting	5
Widow/Widower	3
Divorced/Separated	5
Total	100

Source: Fieldwork data 2013.

Though there are negative effects as shown in table 9, the general impression of marriage is a positive one. Informants no longer eat or buy food outside because either their wives have to cook for them or they have to cook for their husbands and families. A 47 year old male informant in Old Asokwa states that for him marriage made him unhealthy because it causes him to think a lot and gives emotional problems, so he does not exercise as much as he used to as when he was not married. He puts it this way ‘*When I was not married I used to run a lot but now I cannot because I think a lot and cannot concentrate*’. He also states that when it comes to his diet, marriage is most influential because it restricts him. ‘*I think marriage is part because marriage really restricts me, what I want to eat is not what the woman wants to eat*’. He added that his wife for 17 years always decides what the family should eat and does not allow him to make any contribution in this regard. His wife cooks according to what their children prefer to eat and not what he would like to eat. He explains that even though the wife’s meals are not unhealthy, he would have wished to have a say in the kind of food eaten at home. He eats at home because he does not like to buy food outside and this act could also be a threat to his marriage.

This is because among the Ashanti’s in Kumasi, it is a sign of love and honour when your husband eats your food and appreciates it. Nevertheless he provides the money for the meals prepared at home. For this informant, marriage has not served him well because he is unable to exercise as much as he used to and also his diet is now restricted by his wife.

Table 9. The mentioned impacts of marriage on an individual's life.

Health-related Influence of marital status		Number of Informants
No effect		39
Positive effect	Balanced Diet	4
	Exercise	4
	Eats at Home	15
	Do not Know	13
Negative effect	Buy food or eat what is available	22
	Emotional stress	1
	Conflict in choice of meal	1
	Inability to eat during pregnancy	1
Total		100

Source: Fieldwork data 2013

For others, especially the male informants, their diet and physical activity has changed positively after marriage. A 30 year old driver in Old Asokwa who was interviewed attests to the fact that marriage has had the most influence when it comes to his diet and physical exercise. He has been married for five years now. He leaves the house to work early in the morning and returns late to his wife's home cooked meal. He explains this: *'Marriage changes everything for me... I can tell my wife to eat what I want to eat...When I was single I used to eat outside but now I eat from home every time, morning, afternoon and evening... My wife exercises, so she causes me to also exercise'*. His ability to eat healthy and engage in some form of exercise is solely because of his wife's influence.

For all of the 22 married women surveyed (11 in each neighbourhood), marriage compelled them to eat at home because they have to cook for their husbands and children. The female textile maker woman puts it as this *'Well when I was not married I ate every food my mother cooked but now...laughs'*. A 32 year old security officer's lifestyle has changed for the better because of her husband's help in cleaning the house and other household activities. This has

positively influence her life in terms of physical exercise because she can make time off her busy daily schedule to exercise. Her husband wakes her up and encourages her to exercise and she eats home cooked food because she has the responsibility to cook for her family.

A 31 year old married woman explained how often she ate out with her friends when she was single but could not do that anymore since she is now married. In her own words she says *'Before I got married I often used to go out with my friends to Asante Home Touch to eat or we walked a drinking bar close to the stadium, to drink a lot of alcohol. I really had fun but since I got married my friends do not even come around'*. She is also currently pregnant and this has had a tremendous effect on her diet and physical activity. She does less of eating and physical activity than before she got pregnant. She says that: *'When I was not pregnant I could eat but now I cannot eat much. Sometimes I eat just two packs of 'indomie'⁶ and that's all. I do not eat again the whole day'*. She also drinks very little water; she does not like vegetables and engages in no physical exercise. She says her life before pregnancy was much better than it is now. She describes it like this *'Now that I got pregnant I cannot do any exercise and hard work. I cannot go out to train like I used to do when I was not pregnant. I used to drink a lot of water. When I filled the bottles into the fridge, it got finished in no time but since I got pregnant I cannot even drink a sachet of water, and when the weather is cold I do not even drink at all. Yeah I do not vegetables and fruits too. It is now that I am trying to, so if a water melon seller is passing by, I just buy a little and eat. I used to eat everything'*. Though her current status is temporary it has had a massive effect on her health related lifestyle. She never envisaged that the conditions that came with been married (pregnancy) would have such an effect on her diet and physical exercise.

Some unmarried informants expressed their desire to get married since they believed that would cause them to eat home cooked food. A male carpenter explains the contribution of his wife to his diet: *'When I get married, my wife would cook for me in the morning before work and also by the time I get home from work I would have cooked food'*. One single male informant also agrees that his life would be different if he marries. He explains himself in these words: *'Yeah It would be different, for instance I would eat cooked food from home and not eat out'* He say the main reason why he eats out is because he does not know how to cook and is not married.

⁶ Indomie is a brand name of a popular pack of noodles sold in Ghana.

From these account from informants, it can be said that marriage thus has a great influence on their lives. Marriage has made most of them eat home cooked food, which informants consider to be the healthiest. Spouses are also able to encourage each other to engage in some form of physical activity. The presence of children also encourages healthy living since parents want to live long in order to take care of their children.

4.5.5 Influence of occupation on healthy living in Asokwa

Occupation is one of the important factors that influence an individual’s ability to engage in physical exercise and also be conscious of his or her diet. Informants surveyed engaged in all kinds of occupation from professional to unskilled labour. 18 of the informants however did not engage in any form of work. Seven of these are students and the remaining 11 are unemployed. Below is a table showing the informants’ occupations.

Table 10. Informants’ occupations.

Occupation of Informant	Number of informants
Student	7
Unemployed	11
Professional	7
Managerial	3
Clerical	4
Sales	20
Farmer	1
Service	19
Skilled Manual	25
Unskilled Manual	3
Total	100

Source: Fieldwork data 2013.

In this study, physical activity includes activities engaged in at work, that is, if informants engage in any form of vigorous physical activity at work. Results from the survey showed that 32 of the 81 informants that work engage in some form of physical activity apart from work. 22 of these informants did not engage in any form of physical activity apart from work as

shown in Table 12. This is because they consider it as exercise and therefore do not have time to engage in other physical exercise. A female food seller states that walking back and forth every day to buy food stuff to prepare food was exercise to her. The narrations by this female food vendor and the female textile maker in Old Asokwa as already stated, attest to the fact that their occupations involved a lot of physical activity and this to them is enough exercise.

Table 11. Informants’ physical activity at work and during the free time.

		Engage in any form of physical activity during free time		Total
		Yes	No	
Vigorous physical activity at work	Yes	15	22	37
	No	17	27	44
Total		32	49	81

Source: Fieldwork data 2013.

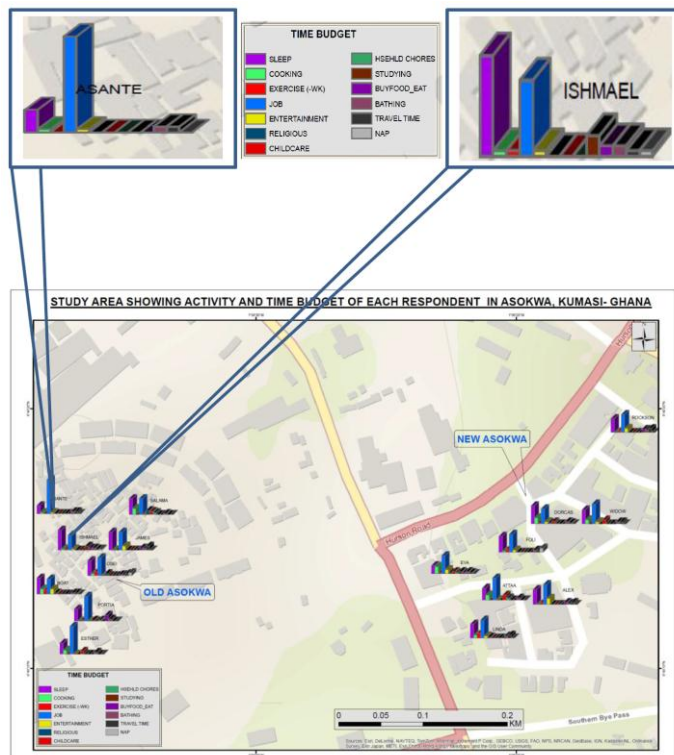
The amount of time an individual has after work and sleep determines the free time he has to engage in any form of exercise and eat right. The time and activity budget of a male driver in Old Asokwa illustrates the absence of time for physical activity during his typical day. His work does not involve any form of vigorous physical activity. Thus he does not exercise during his working hours. ‘Asante’ as I call him, wakes up at 4:30 a.m., takes a bath, drinks tea and leaves for work by 5:30 a.m. He drives a bus (public transport). He drives through the environs of Asokwa to the city centre and back the whole day in search of passengers. It is his private business, so his aim is to make the most of the day. He recently purchased the vehicle so he wants to work hard to pay back the loan and provide for his wife, his child and his mother who lives with them. He closes from work at 11:00 p.m., gets home to eat, watch television and sleeps by 12 midnight, hoping to wake up in the next four and half hours. After working for 17 hours a day, he hardly has time for any physical exercise. He is constrained in his movement since he spends most part of his day in one space that is his ‘car’.

He complains of body pains because of long hours of driving and sitting down. Marriage has served him well, he says, he does not buy food outside but comes home to food prepared by his wife in the evening and sometimes in the afternoon. Work in his case takes all his time

and as such he does not make time for other things including physical activity and rest. An account of what his time is used for in a typical day is shown in a Map 4. The tallest bar shows the number of hours spent at work, followed by sleeping. Every other activity (of which exercise is excluded) takes an insignificant number of his time. He has no time for exercise.

Another illustrative case is a man whom I call Ishmael. He has a more flexible work schedule and as such is able to make time to engage in other activities including exercise. Most of Ishmael's time as shown below is spent on sleeping or resting. He calls himself a 'health talker'. His work involves selling health products and talking to people about their health. He is thus well informed on issues related to diet and physical activity. He works for seven and a half hours a day, five days per week so has time for other things. He is an unmarried man, with no girlfriend or kids and lives alone. His responsibilities are primarily towards himself and his little brother who lives in his village in the Eastern Region of Ghana. He supports him by sending money to him for school. He wakes up at 7:00 a.m., baths, prepares and leaves for work by 8:00 a.m. to Amakom roundabout, about three kilometres from his home in Old Asokwa. He closes by 3:00 p.m. He picks a public transport vehicle and gets home within 30 minutes, since his route is free of traffic at that particular time. When he gets home, he rests, watches television and leaves for the gym in New Asokwa. After spending 30 minutes at the gym, he comes home to bath, cook and eat by 6:00 p.m. He sleeps by 9:00 p.m. and wakes up after 10 hours. Ishmael's work schedule makes it possible for him to go to the gym and also have enough rest. Being a health talker, he is also conscious about his health and so he eats at home, rest and engages in physical activity.

Map 4. Time and activity budget of two male informants in Old Asokwa.



Source: Geographic Information System Laboratory, University of Ghana 2013.

By comparing the activity and time budget of Ishmael and Asante, it is obvious that their work schedules either constrain or enable them to engage in some form of physical activity and rest. Ishmael is able to go to the gym and also have enough work because of his flexible time schedule. He also has very few responsibilities towards his family so he is therefore under no pressure to work for more hours. He is thus able to live a relaxed life and have time to exercise and eat well. Also because of his knowledge on health issues, he refrains from buying food outside. He cooks himself. Asante's multiple responsibilities to his immediate family and mother, necessitates his long hours of work in order to have enough for his family. 'Children's loyalty to their mothers is explicitly rooted in the economic merging or fusion expected and experienced in this relationship alone' (Clark, 2000: 720).

Children like Mr. Asante in the Ashanti tradition have the responsibility of taking care of their mothers because it is their mothers who have managed to cater for them until childhood. In the Ashanti tradition men and women who put their spouses first are sometimes describes immature (Clark, 2000). He also has to work hard to pay off the loan taken to purchase the

vehicle. Luckily for him his wife, who works as a trader in his neighbourhood, is normally available to cook for him. The time schedules and family responsibilities of these two men have presented them life different choices in relation to their diet, physical activity and also rest. An individual's occupation and the amount of time available after work, could contribute to building a healthy or unhealthy lifestyle.

4.6 Time use by case study informants

Referring to table 5 it can be seen that only four out of 16 informants, who are 'Dorcas', 'Ishmael' and 'James' and 'Osei' actually spent nine or more hours on sleep or nap as maintenance activities as suggested by (Kwan 1999a) the time budget. Among the selected cases 12 of them spent less than nine hours in sleep or nap but rather spent their time engaging in other in-house and out of home activities during the 24 hours.

Table 12. Time use by 16 case study informants.

NAME	LOCALITY	GENDER	SLEEP	EXERCISE	COOK	JOB	LEISURE	RELIGIOUS	CHILDCARE	HEALTH	STUDY	BUYFOOD	BATHING	TRAVEL	NAP
SALAMA	OA	F	8	0	3	8	0	2	1,5	1	0	0	0,5	0	0
ATTAA	NA	F	6	0	2,5	11	0	0	2,5	1	0	0	1	0	0
LINDA	NA	F	7	2,5	1,5	9	1	0,5	0	0	0	0	1	1,5	0
ESTHER	OA	F	5,5	0	2	14	0	0	1,5	0	0	0	1	0	0
EVA	NA	F	4	0	4	9	2	0,5	1	0,5	1	0,5	1	0,5	0
PORTIA	OA	F	6	0,5	0	13	0	0,5	0	0,5	0	3	1	0	0
WIDOW	NA	F	7	0	2	10	1	0	2	0	0	0	1	1	0
DORCAS	NA	F	9	0,5	3	7,5	1	0,5	1	0	0	0	1	0,5	0
AVERAGE TIME USE			6,6	0,4	2,3	10	0,6	0,5	1,2	0,4	0,1	0,4	0,9	0,4	0
ISHMAEL	OA	M	10	0,5	0,5	7,5	0,5	0	0	0	2	1	1	0,5	0,5
JAMES	OA	M	9	0	0	9	2	0	0	0	0	1	1	2	0
BOAT	OA	M	8	2	2,5	7,5	2,5	0,5	0	0	0	0	0,5	0,5	0
FOLI	NA	M	8	1,5	0,5	9	1	0	0	0	0	0	1	1	2
ALEX	NA	M	7,5	1	0	10	3	0	0	0	0	1	0,5	1	0
ASANTE	OA	M	4	0	0,5	17	0,5	0	0	0	0	0	1	1	0
ROCKSC	NA	M	7	1	0	9	2	0	0	0	0	1,5	1,5	2	0
OSEI	OA	M	7,5	2	1	9	0	1	0	0	0	0,5	0,5	1	1,5
AVERAGE TIME USE			7,1	0,7	1,5	10	1	0,4	0,6	0,2	0,2	0,5	0,9	0,8	0,2
TOTAL TIME BUDGET			13,7	1,1	3,8	20	1,6	0,9	1,8	0,6	0,3	0,9	1,8	1,2	0,2

Source: Fieldwork data 2013. NA=New Asokwa, OA= Old Asokwa

When calculated per activity, work consumed most of the 24 hours available for an individual. Men spent more time in sleeping and taking naps compared to women probably because women had to wake up early to engage in household activities. None of the women ever took a nap during the day.

An average of the amount of time used in cooking as shown in table 13, for both men and women showed that women spent more time in cooking compared to men. Men spent some time cooking only in the absence of their wives and also because they are unmarried. Some married men also prepared beverage for themselves in the morning and considered this as cooking. Men spent more time on entertainment than on cooking. Also more men (mostly the unmarried men) spent more time in buying food outside compared to women, similar to findings in Amoah et al study (2000). Cooking is a very important activity in relations to healthy diet and allocating time for this is very important. This is because food cooked at home is considered healthier compared to those cooked and sold outside the home.

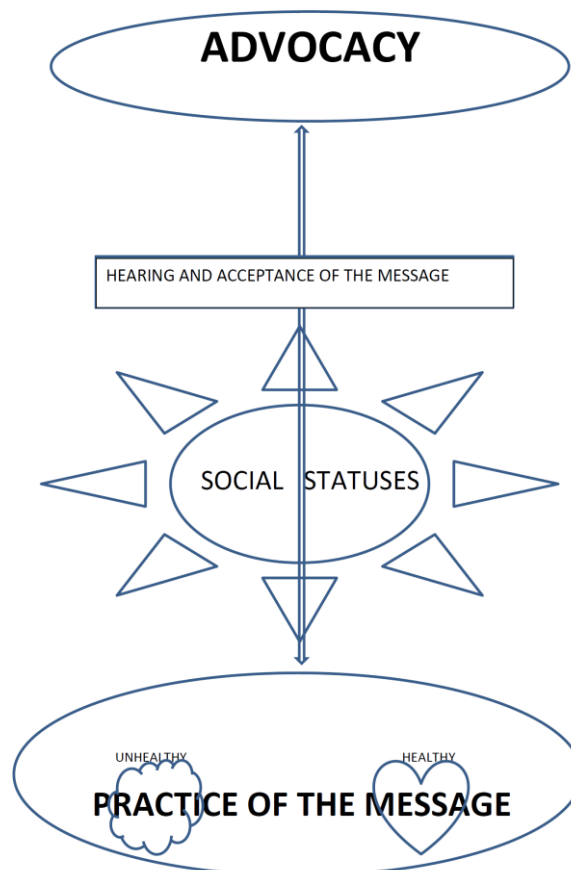
Exercise from the table is calculated by the amount of time people spend aside work to engage in some form of exercise during their free time. That is making a conscious effort to exercise. It excludes exercise done during one's time of work. Comparing the gender difference in time spent on physical exercise, men in total were able to make time aside work and other activities to engage in some form of physical exercise. Five out of the seven married women were unable to make time aside work and their household activities because they spent most of their time in cooking and taking care of their children at home. The remaining two had husband who often helped in the household chores thus allowing them to make time for exercising. In total it can be said from the table that women among these cases are more time constrained as compared to the men. This because they cumulatively spend more hours at work, more hours in cooking and childcare and therefore are unable to make time out of their business schedule for physical exercise. Since cooking is the primary responsibility for a woman in the Ashanti Region, these women seldom buy food outside because they have to cook for and eat with their families.

As seen from the table, work and sleep were the activities that most of the informants spent their time on. The activities with the lowest time spent on were studying and household chores. This because only one of the case study informants was a student and also most of the women did their household chores together with cooking. Also informants that spent most of their time at work, that is 17, 12.5 and 11 hours at work were residents of Old Asokwa. This means that they were located in a poor area assumed to be a hub for poor low income workers, and their life circumstances necessitated their many hours of work.

4.7 Conclusion of findings

From the above discussions, it can be said that decisions pertaining to diet and physical exercise are not made in a vacuum but are significantly influenced by social statuses.

Diagram 4: Journey from Advocacy to Practice of health advice.



Source: Author's construct, 2014

This diagram is a summary findings discussed above. It gives an illustration of what goes on after advocacy to the practice of health advice. The journey between advocacy and practice of health advice is not a simple and straight as it looks in the diagram as a discussed in the above sections. After the individual has received this message, his ability to finally practice what he has heard is informed by the interactions of his or her social statuses.

These statuses include a person's level of formal education and health education, marital status, occupation and gender roles at home. The influence of these statuses as shown above, do not work in isolation but they intersect in their ability to either constrain or enable the

effect of the other on diet and physical activity. For example, an individual gender role at home is influenced by his/her marital status. Also an individual's ability to practice healthy living is influenced by his occupation which is also influenced by his level of education determining whether the occupation is physically intensive or not. The effects of religion are seen in the use of religious organizations as mediums for spreading health information. Religion did not appear to be a determinant or an influence on the practice of health related lifestyle among informants. Likewise the age of informants was overshadowed by other statuses such as the status of being married or not. An individual health status is thus influenced by the combination of the effect on these statuses on his or her lifestyle.

CHAPTER FIVE

DISCUSSION OF FINDINGS

This chapter discusses the findings from the analysis of field data collected on the health related lifestyles of individuals in the Asokwa community in the Ashanti region of Ghana. The findings of the study are discussed in the light of structuration theory, the feminist theories of intersectionality and gender as well as the concept of time-space constraints.

5.1 Advocacy of public health advice

The health information provided by the Regenerative Health and Nutrition Program (RHNP) provides relevant contextual information about the definition of ‘appropriate health behaviour’ for informants. The knowledge gained from this information seeks to ‘constraint’ or ‘enable’ the activities of the individual towards good living. This is because the messages have been internalized and form a structure that shapes their behaviour. There is a high level of awareness of these health messages in the community. This is as a result of efforts made under the RHNP to encourage healthy living. Advocacy of the health messages is one of the main measures taken by the Regenerative Health and Nutrition Program in its efforts to curb chronic non-communicable diseases in Ghana.

5.1.1 RHNP advocacy: constitutive and constituted by the lifestyle of residents

The structuration theory by Giddens’ (1984) explains the relationship that exists between and the structure (society) and the human agent (Dyck & Kearns, 2006). This relationship is a mutual one where neither the structure nor the agent dominates but rather, their existence is an outcome of this mutual relationship (Ibid.). The relationship between the health information provided by the RHNP and lifestyle of the informants selected in this study are similar to Giddens explanations of the structure and the agent. This relationship is a mutual one, where the context of messages received are influenced by the life conditions of informants and the lifestyle of the informant is also influenced in one way or the other by the messages sent out to them. For example, on a general note, it is as a result of the unhealthy eating habits and physical inactivity of individuals and its consequent impact on the increasing prevalence of chronic non-communicable diseases in the country that necessitated the need for advocacy of healthy lifestyle messages. The dietary transitions and want for a less tiring sedentary

occupation among other things has led to the need for and provision of health messages and these messages are intended to influence the lifestyle of individuals toward good living.

The five standardized messages used in the advocacy process together with the enabling environment projected to encourage healthy living form structures that influence human action. This is because as standardized messages (see table 14) they provide rules that guide an individual’s choice of diet and also physical exercise. The enabling environment also serves as a resource for persons who want to engage in some form of physical exercise. These components of the RHNP help it functions as a structure in ways similar to the structure referred to in the structuration theory. A structure according to Bryant & Jary (2001) is made up of rules and resources it provides for the human agent in social practice.

Table 13. Standardized Messages.

1. Water is medicine
2. Exercise is medicine
3. Fruits is medicine
4. Vegetables is medicine
5. Rest is medicine

Source: Regenerative Health and Nutrition Program (2012).

The recommendations for appropriate health behaviour define the various techniques and procedures needed to live a healthy life. These rules according to Dyck & Kearns (2006) are the techniques and procedures that guide human practice. For example, the message concerning amount of water to drink, specifically recommends 8 glasses (sachets) of water a day. It was found in the study that 62 of the 100 informants surveyed drank some water during the day but not the required amount of 8 sachets. Informants who drank some amount of water but not the required amount were not considered as living the appropriate healthy life as stated by the recommendations. The rules are state exactly what has to be done to live healthily and by following them as recommended by the regenerative health and nutrition program, individuals can live a healthy lifestyle.

From the study, knowledge of these rules influences the level of awareness in issues related to healthy living but does not entirely influence the practice of these messages. The findings in

relation to practice of these messages bring to light the power of the human agency. The informants in this study are not only made up of their ability to received and interpret her messages but are also made up of social statuses that influence their lifestyle. Thus even though the structure may provide the require information, the onus lies with the agency of human to either practice or not. When it is accepted and put into practice that is when it becomes an active rules or structure. As Giddens (1984) puts it, the existence of the human agent is important in determining the utilization of these rules set by the structure (Dyck & Kearns, 2006). It was found from the study that out of the 83 people who have a high level of awareness of these messages, 71 informants among these put the message into practice. 12 of these informants have heard of three or more of these messages but practiced less than three of them. This therefore reduces the power the structure has over the human agent as a result of informants' inability to practice these messages. It is easier for awareness to be impacted by the spread of the message than it is for practice to be influenced. From the study, it was discovered that this inability of the human agent to put to practice messages heard springs from the combination of the social statuses that influence his or her day to day lifestyle. This is because the agency of humans to change is influence not solely by the spread, receipt and internalization of messages by also by the influence of social statuses on the day to day lifestyle of an individual. This is in agreement with Giddens' idea of the influence of human agent on the existence of rules for social action.

To Giddens the human agent is knowledgeable and has the ability to transform the structure through his or her actions and daily lifestyle (Dyck & Kearns, 2006). This transformative ability for informants interviewed is influenced by their social statuses. In order to make an impact on their health related lifestyles, the recommendations are semi-structured in line with some of the social statuses of individual in the study, to encourage practice and utilization of these rules and making it easy to conform to them. The program takes into consideration the different socio-economic and religious backgrounds of informants. Gender roles of informants are among one of the statuses that have not been taken into consideration by the Program as of the study.

The intersectionality of the statuses and its influence on their health related lifestyles are taken into consideration by the advocates of healthy living. This is the reason why the recommendations on healthy living are made in accordance with the different poverty and work situations of residents in the two neighbourhoods (Old and New Asokwa). This is done

by considering the social space within which individual lives are lived. Residents living in the rich area with high economic status, high education and sedentary jobs receive messages (as stated in the findings) different from residents with living in the poor area, with low economic status, low education who engage in physically active jobs. The eating pattern and physical exercise suggested for people with such combinations as seen in the findings were different from those recommended for individuals with low level of education, low economic status and probably highly physical intensive jobs. Therefore, health related lifestyle of a person of a high economic status is not one that has been imposed on him or her by the RHNP but is one that has been formed out of a mutual interaction between the conditions of his life and the tenets of appropriate behaviour.

The same considerations are made to residents of different religious background who receive different messages, the messages they receive is designed with respect to their religious practices. For example, Muslims and Christians who engage in periodic fasting as stated in the findings are given messages different from informants of other religious affiliations. Their lifestyle is then affected by the information, which is in line with their daily religious practices.

When the health related lifestyles of individuals are impacted positively through the application of rules that suit their lifestyles, then the ultimate impact desired by the Ministry of Health would be arrived at. This is seen in the Ministry's 'paradigm shift' in 2007 which lays more emphasis on a change in lifestyle to prevent the occurrence of disease rather than a curative health approach (MOH, 2008:1). In this regard, then the lifestyles of individuals which have been influenced by the messages towards healthy living have also influence the health approach of the country. The theory shows 'how social institutions are both constituted by human agency and yet at the same time are the very medium of such constitution' Bryant & Jary, 2001:11).

The dialectical relationship (see Diagram 1) between informant's life situations and the RHNP program is one that is never ending. The duality of the structure by Giddens (1984 in Dyck and Kearns, 2006) provides an explanation to this dialectical relationship. It explains how the human agent and structure are both a medium and an outcome each other's actions (Giddens, 1984 in Ibid.). One of the main functions of the structure in influencing the human agent is its ability to 'enable' or 'constrain' social practice (Dyck & Kearns, 2006). These

rules or standards of healthy living specified under the RHNP come in the form of recommendations as stated above. These recommendations are not obligatory but as informants are informed of it through several platforms of knowledge sharing; they internalize them and consequently become a conventionalized way of living. These standardized messages thus form a structure that tends to impose an ‘appropriate way of healthy living’ on the lives of informants. They to some extent define the components of a healthy life. By so doing the lives of informants are constrained towards healthy living because this messages provides framework of ‘an appropriate health behaviour’ Thus their former ways of unhealthy living are constrained by the information they have received.

For example, the narration of Eva a case study informant, who knows of the information provided by the RHNP and has accepted it as the appropriate way of living, is unable to live by these standards. Unfortunately, her gendered roles and responsibilities that come with her status as a married woman at home makes her inadequate enough to practice them. She thus feels she is living inappropriately. Because this message has been internalized by this informant she felt obliged to put them into practice and her inability to do this made her consider herself as living unhealthily. Another example is of a ‘health talker’ who by virtue of the messages he heard of tries to live a healthily. He received, understood, accepted and internalized these messages and as such made every effort to put them into practice. This enables him to live an appropriate healthy life. When the health messages are internalized, they provide an enabling opportunity in the form of guidelines to informants who can to a large extent live a healthy life and constrains unhealthy living.

According to Dyck & Kearns (2006) human actors may not know the meaning of rules but can put them to use in the transformation process. In the case of the informants in the Asokwa community they understand the rules but did have complete knowledge about the source of these messages but this did not stop them from using this information to transform their lives. This is reflected in the number of people who knew the messages but did not know the name of the body or organization that sent out the message. When informants were asked specifically of their awareness of the ‘RHNP’ and its health messages, only 26 of the 100 informants said yes. This represents very few people compared to the 83 persons who agreed to have heard of three or more of the five standardized messages which are sent in by this same body. Thus, even though the informants in the community do not completely understand and know the origin and the objective of this health information, they accepted this message

as one that has the ability to transform their lives. These standardized messages provide information which to various degrees influences the lives of an individual towards healthy living. It informs people on what to do and how to live a healthy life. The lives of individuals at this local level is been influenced by recommendations that have been adapted from a global health policy. Thus the structure that is influencing the lives of the individual at this local level is one that has its roots beyond the Metropolitan area.

The RHNP provides resources that facilitate healthy living. The RHNP projects the already existing physical urban structure as an environment conducive for physical exercise. This is in line with the characteristics of a structure in Giddens' (1984) structuration theory where it provides not just rules but also resources to facilitate the adherence to the rules provided (Bryant and Jary, 2001). The school park, pedestrian lane and also the stadium located close to the neighbourhoods serves as avenue for physical exercise and relaxation. These are physical structures that can be used to enhance healthy living. The projection of these enabling environments as avenues for physical exercise is proper because it can be used at no cost and is also available to all. As a resource it enables the practice of healthy living among resident in both New and Old Asokwa.

The perceptions of informants in the community have influenced the use of this particular resource. Other avenues for physical exercise like the gym which is located about 100 meters from the community by foot is not patronized, mostly because of the cost involved and also the 'fashion- oriented' perception the informants have about it. The concept of the duality of the structure is also seen in this example where resources enable the practice of healthy living and perceptions of individual concerning the use of resources influence the utilization of resources.

The influence of local perception is also seen in the 'gendered social construction' of the use of these public spaces. Gender as social construction according to Dyck and Kearns (2006) makes use of words in distinguishing the differences between male and female activities or relations. This social construction is reflected in the unconscious manner in which jogging activities have been reserved for men. The use of the word 'going on road' is a male term used to describe these activities. Women were not observed on the road in the morning or evening jogging along the road. This is because of the gender ideology associated with the use of public places for exercise. Jogging along the road in Asokwa is considered among

informants as a masculine activity and it is unusual to find women in sports clothing jogging back and forth on the road. The place of the women according to the informants is usually at home, cooking and taking care of children where her 'agency' has an effect and not along the road. Female informants exercise their bodies through the physically intensive job they did, through sex with their husband (as narrated by an informant) or did not exercise at all.

5.2 Practicing healthy living in Asokwa

This section explains in detail how the expectations of behaviour that come with social statuses structure the health related lifestyles of individuals. The social statuses do not operate in isolation but influence the effect of one on the other. They impose a certain structure on the individual that tends to affect his or her lifestyle in relation to health. The following section discusses the process of structuring and intersection of social statuses as the influence health behaviour in the light of the selected theories.

5.2.1 Healthy living as an outcome of the influence of social statuses.

Practice of information is not only influenced by awareness (Robbins, 2010) but also by social statuses. This is because there are several factors that come between knowledge of healthy living standards and practicing of it (see Diagram 4). Factors that define the lifestyle of informants like their education, occupation, marital status and their gendered roles influence the kind of lifestyle they are likely to live in relation to their diet and physical activity. These statuses or roles as Linton (1936) explain comes with different expectations for the individuals that hold them.

These expectations of behaviour form a structure within which choices concerning diet and physical exercise are made. According to the theory an individual is the perpetrator of events and has the power to act differently, he goes on to state that this that the 'strategic conduct of human action does not take place under conditions of his/her own choosing' Dyck and Kearns (2006:88). It is the unintended consequence of human action that builds the social system which overtime controls human action (Ibid.). The point here is that even though the human agent is knowledgeable and has the power to act differently and make changes; this very power is embedded in his own actions which has over time become a structure that controls him. The 'agency' of an individual in this study is influenced by his position at the

combination of the various statuses he or she holds. The power to make decisions and choices is influenced by the expectations that come with bearing different statuses as seen in the findings chapter.

When it comes to the practice of healthy living in Asokwa, informants' social statuses project their ability to act as agents in changing their lifestyles. Decisions in relation to diet and physical activity from the findings are never made without the consideration of factors like one's job and also time available after engaging in home activities. These roles come with the social statuses that individuals bear. Some informants wished they could live a healthy life but the conditions of their life limited this ability. They have limited choice but to act according to the dictates of their statuses in relation to diet and physical exercise. The human agent in this case is influenced by the structures presented by the social statuses that define his or her behaviour. These social statuses provide rules and resources that either enable or constrain the practice of healthy living among informants.

The marital status of informant as unmarried or married come with expectations of behaviour which define the lifestyle of informants. For example female married informants have the responsibility of cooking for their husbands and families as a gendered role. This role is one that is rooted in Ashanti ideology of men and women's roles at home. This ideology is a structure that influences the expectations that come with the status of being married in an Ashanti community like Asokwa. These expectations come with requirements of cooking that enable married women to eat home cooked food which is considered as healthy food. On the other hand these very gender roles of women at home constrain their ability to have time to engage in physical exercise. Thus, the status of being a married woman in the community enables and also constraints healthy living among women.

The married men on the other hand were required to eat at home which was a resource that enabled the eating of healthy meal compared to food sold outside the home. They however did not have gendered roles of cleaning and cooking so as such have time after work to engage in some form of exercise. This is a possible reason for the high number of unmarried patrons of street found in Amoah et al (2004) study in Kumasi. The diet and physical exercises of unmarried men and women with no children were influenced by the 'freedom' that comes along with the status. This freedom for the unmarried women and men allowed them time for other activities but the use of this time for exercise was influenced by the

amount of health information and their understanding of the concept of healthy living. Amoah et al (2004) provided several reasons for the influx of street food in urban areas and among this is the absence of marriage life among the youth. These researchers also recognize the 'resources' that marriage as a structure provides to individuals.

In addition, the occupation of an informant presents to him or her certain conditions on the job that either enable him to engage in physical exercise while working. Informants who engage in physically intensive jobs like the case of one textile manufacture necessitate constant mobility which is considered as physical exercise. Informants who engaged in sedentary occupation spend most of their working hours sitting down; they also closed very late and were thus unable to have some free time for physical exercise. These conditions that come with one's occupational status according to the structuration theory constrain and also enable healthy living.

Intersectional relationship between social statuses and their influence on the health related lifestyles of individuals.

The theory of intersectionality explains how an individual is not made up of one status but rather the combination of different statuses (Shields, 2008). These selected statuses are mutually constitutive in their influence of each other as a requirement of intersecting statuses (Ibid.). The outcome of behaviour of this mutual interaction among the statuses affects health behaviour of informants studied. Human agency differs from one individual to the other because of the different combination of statuses that made up a person.

5.2.2 The conditions of the married life and its influence on healthy living

Gender roles of men and women in the household come with it certain expectations of behaviour. According to the concept of gender as social relation, the patriarchal relation that exist between men and women is one in which men dominate this relationship. In this social relationship men dominate some aspects of the marriage life and women have control over certain aspects of the home. Men do not control the entire domination process. As men are in control of decisions related to children capacity building in terms of schooling and apprenticeship, women are also in charge of affairs related to childcare and feeding. Men are thus by the dictates of this relationship supposed to eat their wives food every time as a sign

of love. This is a form of domination since married men like unmarried ones are not able to eat from places of their choice except from their wives. This is evident in the case of Mr. Osei who though is the 'man of the house' and contributes financially to child upbringing, is unhappy in the marriage because he is obliged to eat from the home and eat whatever the wife prepares. His case is illustrative of the kind of domination women have in the dietary decisions of the family. Nevertheless men some cases sometimes have the power to determine the kind of food prepared. All the married men selected as case studies unlike Mr. Osei are able to contribute to the dietary decisions.

This patriarchal relationship according to Dixon and Jones III (2006) is culture and place specific and varies over time. The patriarchal relation in Ghana where the man and women both dominate is common to most ethnic groups in Ghana with a few of them deviating from the normal. The expectations of this relationship are embedded in the Ashanti concept marriage and housekeeping and have over time become normal. In this culture men have the power over women both the married and unmarried. This power does put women as subordinates to men but rather places the opinion of men in certain matters as children's education higher than women. Their ability to be transformative as human agent is seen mostly in relation to consumption. This central role in the decision making process increasing the agency of the women at home. This is evident in the amount of time women spend on house hold activities compared to men. Delegating cooking roles even to a husband's daughter in the Ashanti tradition is seen as easily weakening and endangering marital relationship (Clark 1989a in Clark, 2000:721). Even though this patriarchal relationship allows men a lot of free time to use for other activities including physical exercise, women are not entirely disadvantage because they have control of the dietary decisions of the home.

As gender roles intersect with marriage they present to the informants various enabling opportunities and constraints in relation to diet and physical activity. The enabling ability of this status in the light of healthy living is the fact that it provides a safe avenue for women especially the married ones to eat from home. This buttresses the finding by Amoah et al (2004) where single men and women were found to be the main buyers of street food in Kumasi. This is because of the benefits that accompany the status of being married. For unmarried women, there is no obligation to prepare food for one's family and husband. Even though household activity in the Ashanti tradition is seen as the responsibility of women the level of obligation differs with married and unmarried women. This social expectation of

behaviour creates a difference between married men and women's behaviour in relation to health.

The theory of intersectionality emphasizes the fact that individuals are different because of the different combination of statuses that a person hold. This therefore influences the different outcome of behaviour. Even though gender roles structured from the Ashanti ideologies influence the behaviour of married women in the Asokwa community, this is not the case for all women who have additional statuses of 'a helping husband'. Even though marriage presents these general patterns of behaviour the theory of intersectionality provides an understanding of the fact that the different combinations of status with gender are able to produce different kinds of behaviour (Valentine, 2007). The characteristics of the social actors in social practice play an important role in explaining the outcome of behaviour (Dixon and Jones III, 2006).

The findings from the study showed that indeed though marriage and its related gender roles limit the free time available for women, this is not the case for a 32 year old Security Officer living in New Asokwa whose husband, a teacher helps her in the household chores and also child care, he also sometimes helps in the preparation of meals at home. This did not prevent him from providing financial support for the family. His occupation and time schedule as a teacher and his being a single child to a bereaved mother according to his wife is what has helped him develop this behaviour different from the common pattern of behaviour in Asokwa community among married men. She is thus able to have time to engage in physical exercise because of the extra help she has at home from her husband. The account of the widow in New Asokwa also illustrates the role of married men as she says if her husband was alive he would help her in her household chore and also in childcare. Thus here status as a woman in combination the conditions that come with her marital status and her husband status place her in a different intersection and this affects her health behaviour.

The decisions in relation to physical activity made by this female security officer married to a helpful husband is different from that made by a female textile operator married to a typical Ashanti man. This textile maker's inability to engage in physical activity does not only result from her gender roles at home but also from her occupation as a textile maker. Taking care of her children and her husband is a huge responsibility and takes most of her time during the day but she does not have in mind an activity such as physical exercise when she is free of her

duties. To her, her job already involves a lot of physical activity and therefore sees no need for extra exercising. In her case her gender roles though similar to most of the informants is not the most important factor contributing to her inability to engage in physical exercise during her free time.

5.2.3 Constraints experienced by all: Educated and Non-Educated

The influence of formal education is mostly seen in how it affects level of awareness but when it comes to the practice of these messages, other factors social statuses downplay the influence of education. As the theory of intersectionality explains, no one status operates on its own but is influenced by other statuses. In the same way the influence of education on the practice of healthy living is in combination with the influence of gender roles and also marital status. Education as other statuses cannot solely influence the health behaviour of an individual because the lifestyle a person lives is influenced by the combination of several statuses which mutually affect each other.

It is thus not possible to make conclusions on health behaviour based on a person's level of education without taking into consideration the influence of other statuses like his or her gendered roles and marital status. For example it cannot be said from the findings that 'EVA' a well-trained teacher is living a healthy or unhealthy life by virtue of her status as a teacher. Also expectations cannot be made of her to live a healthy life because she is well educated or she is a teacher. Even though her time budget and fixity constraints are influenced by the work she does, her eating and exercising activities of Eva are influenced mostly by her gender roles of cooking and child care at home. The findings revealed that information gained on healthy diet is adhered to because of the conditions of cooking that comes with marriage as discussed above. Educated informants appreciated more the concept of healthy diet and tried to live by it. Thus a highly educated married woman with traditional gender roles of cooking and house cleaning is unable to put to practice all insights gained concerning healthy living.

From the findings, Informants with low level of education were however informed about the recommendations for healthy living from sources including family background and the radio which was open to all. They were only able to practice this if their responsibilities aside work allowed them free time to engage in some form of physical exercise and cook at home. Their choices a person of low education is influenced by the dictates of their occupation, whether or

not they are able to make time after the day's activities to cook or engage in physical activity (this would be discussed in detail in the next section). From the study, it was found that choices of married educated men in relation to diet and physical exercise differed from that of a single educated man. The single informants who were well educated on these recommendations, were able to put them into practice because they had the time and place to do so. Thus being single and educated presented informants with better opportunities in living healthy compared with married educated individuals. The statuses of marriage and its accompanied gender roles, and educated combine as shown in examples stated above to influence health behaviour

Even though information gained through education or informal access becomes a structure that guides healthy living, the practice of living healthy or not is influenced by gender roles, marital statuses and time constraints of individuals.

5.2.4 Occupational influence on the practice of healthy living

The space-time constrain approach by (Kwan, 1999) states that an individual is time and space constrain if he is unable to change the location of the activity he or she engages in and also if he has little time to engage in out-of-home activities after time spent for sleep and other maintenance activities. He states that each individual has 15 hours a day after sleep. From the case study interviews it was found that individuals faced a certain amount of constraints relating to time and space. For example Mr. Asante the bus driver who lives in Old Asokwa complains of the many hours he has to spend in his car looking for passengers. He works for 17 hours on typical 24 hour day and does not have time either in-house or out of home activities. The nature of his job and his quest for money requires that he spends so many hours in a day at work. He is fixed to one position, which is his bus, and is unable to change this. He is constrained in a fixed space. Sitting down for most of the 17 hours he says makes him feel sick and also leaves him very little time for rest and also physical exercise. He has to stop work against his will and drive from his bus terminal which is about a kilometre from his home to eat. He sometimes wishes he could purchase food nearby but in this case he is fixed to the dictates of his wife as a show of love to her. This in terms of healthy living is beneficial since it provides an opportunity for him to eat home-cooked meal as lunch during the day.

A person as Mr. Asante is both time and space constrained because of his work. He spends only four hours of his 24 hours a day to sleep, contrary to the framework suggested by Kwan (1999a) where individual had 9 hours of sleep a day. Because of his strict time budget he spends no time with friends or leisure on a typical day. He is also space constraint because he is unable to change the location of his eating place during lunch and has to drive home every day to have lunch. The dictates of his job also requires he stays at a fixed position for the most part of the day. This informant is experiencing fixity constraint and also time-budget constraint because of the job he does.

Travel distance from work and other fixed activities according to Kwan (1999) influence time available for other activities. The fixity constraint for female case studies results from a combination of several factors including childcare. The findings from the study revealed the case of the widowed single mother, who had to mediate travel between her home, her daughter's school and her work place. This is because she had the sole responsibility of childcare in the absence of her deceased husband and also of operating her boutique. She did not own her vehicle so as picks public transport to send her daughter to school 500 meters from her home and then pick another vehicle to her shop about 30 minutes apart. She complained of the many times she was late to pick her daughter from school because of the distance she had to travel. Her whole life she says is influence by her responsibility of childcare. She eats what her child eats and is unable to engage in physical exercise because of the limited time she has after a typical days work.

In Kwan's (1999) explanations, an individual's work time schedule has an influence on the kind of constrains they experienced. In this study, it was found that it was not just an individual's work time schedule but also the kind of job that individual engages in also had an effect his or her time available for other activities. These constrains have an effect on the amount of time allocated by informants for physical exercise during their free time and also for cooking at home. Case study informants who worked in the informal sector as, textile makers, traders and carpenters stated that their work already involved lot of physical activity and as such did not see the need to engage in extra physical exercise. The nature of their jobs influences the appreciation of a need for physical exercise outside the job. Some of the informants in this job category also walked to and from work since their jobs were located close to their homes or just a small distance away. This is regarded in this study as exercising. The gender variations are similar with those in the formal sector where men have more time.

Comparing the gender difference in time spent on physical exercise, men in total were able to make time aside work and other activities to engage in some form of physical exercise. Married women are more time constrained after work because of their gender related responsibilities at home. No matter the kind of job female married informants engaged in, they still had a responsibility after work to cook, take care of their children and clean their homes. With enough time on men's hand, they spend more time in sleeping and taking naps compared to women probably because women had to wake up early to engage in household activities. None of the women ever took a nap during the day. This because they cumulatively spend more hours at work, more hours in cooking and childcare and therefore are unable to make time out of their business schedule for physical exercise. Consequently, the time budget analysis places married men as the individual with most advantage with regards to time.

Conclusion of Discussions

In conclusion, men and women are faced with different life choices because of the influence of factors as education, marital status, occupation, gender roles and also the amount of health information they have access to. This in turn affects their decisions in relation to diet and physical activity. These mutually constitutive statuses work together in their influence of healthy lifestyles in an intersectional manner as explain by the theory of intersectionality and gender relation. As these structures present rules and resources that constrain and enable decision making, these choices over time are normalized and become the lifestyle of individual. This normalization has been influenced by the unintended actions of individuals which have influenced the effect of marital status, education, occupation, gender roles and health information on diet and physical exercise. It is thus possible to find individuals in a society with the same set of statuses facing similar constrains and enablement in healthy living as discussed in this chapter.

CHAPTER SIX

CONCLUSIONS

This chapter summarizes the various conclusions and discussions made in this study and most importantly provides answers to the research questions. The study findings show how different social statuses intersect in their influence of healthy lifestyle in Asokwa, Kumasi. Also this chapter provides information that will strengthen the efforts being made by the Regenerative Health and Nutrition Program (RHNP) in their quest to encourage healthy living in Ghana.

With more attention paid towards encouraging healthy lifestyle behaviours specifically in diet and physical exercise among men and women in Ghana, there can be an ultimate reduction in the increasing prevalence of chronic non-communicable diseases. An exploration of the factors influencing awareness of public health advice and its practice revealed that statuses such as gender roles, level of education, marital status, access to health information and also a person's occupation and time use play important roles. These statuses are structures that enable or constraint awareness and practice of a healthy lifestyle. Individuals and groups cannot be classified as living 'healthy' or 'unhealthy' lifestyles by looking at the influence of only one structure because different and multiple structures or statuses operate in synergy to influence outcomes of behaviour.

There is a high level of awareness of 83 out of the 100 informants sampled for this study. The high level of awareness of these messages among informant was as a result of the various formal and informal platforms of information dissemination. This forms part of the advocacy programs organised by the Ministry of Health through the Regenerative Health and Nutrition Program. The five standardised messages sent out provide a framework for defining healthy living. These messages are disseminated through channels such as the radio, market meetings, community durbars, schools and government agencies where the rich and the poor, the young and the old, married and unmarried etc. have access.

Informants are encouraged to use facilities already existing in the community as avenues for physical exercise. The practice of this health information is influenced by the facilities available. Facilities for engaging in physical exercises include already-existing physical structures which are available to all informants. The pedestrian lane along road sides where

the community is located, the stadium and the school park serve as facilities for those who want to engage in some form of physical exercise. These facilities serve as a resource needed for healthy living. Local perceptions of the use of these facilities are very important to the implementation of this RHNP since it somehow determines how informants receive, interpret and apply health messages. It was found from the study, that there is a dialectical relationship between the health information received and the lifestyle of residents in the community. Thus the structuring of the information takes into consideration the ways of life of informants. Thus different messages are structured for different informants of various socio-economic statuses. This health information received is internalized and with time become an acceptable way of practicing healthy living.

Health information and resources provide the needed guidelines and materials for healthy living but the practice of this lifestyle is influenced by the combination of social statuses that define a person. These social statuses become structures that influence health behaviour because, embedded in them are expectations of behaviour that impose a certain lifestyle on informants. Thus a person's health behaviour is either constrained or enable by his or her social statuses. As social structures they do not operate in isolation but intersect each other in producing the outcome of behaviour in relation to health. For example, from the study it is illustrated how marital gender roles of an individual affect the influence of one's level of education on diet and physical exercise.

These social statuses for informants do not directly influence healthy lifestyle but rather influence the day-to-day activities of an individual which includes a healthy lifestyle. For example, an individual's gender role does not determine whether he or she would practice healthy living or not but rather imposes on him or her certain lifestyle which then influences his or her health-related lifestyle. Thus the overall lifestyles of individuals are affected by these social statuses. The study's central contribution is to shed light on the specific ways in which these statuses intersect in their influence the health related lifestyle of individuals.

The Ashanti tradition of patriarchy places gender roles at home and also marital status as important statuses that influence the choice of diet and also physical exercise in Asokwa. These statuses do not work in isolation but rather interact with the other statuses in influencing the health related lifestyle of an individual in Asokwa. Gender roles at home of married and unmarried persons define the responsibilities and expectations of behaviour.

Female married informants spent most of their time after work engaging in in-house activities of childcare, cooking and housekeeping and this was important in differentiating the resultant lifestyle between women and men. Men because of their few household responsibilities or gender roles at home are able to have enough time compared to women after work to engage in some physical exercise. Women been responsible for child care and also housekeeping as well as their paid jobs have very little time to engage in any form of physical exercise. This is a probable reason to the increasing rate of obesity among women in Ghana (Biritwum, 2005).

Women in Tagoe and Dake (2011) study of healthy lifestyle in Ghana lived healthier lifestyles after the introduction of the health program while men lived risker lifestyles. The findings from this study which delved into the reason for the existence of a gendered difference in healthy lifestyle behaviours found that married men are more likely to live healthily in relation to diet and physical exercise compared to married women because the gender roles. Unmarried men and women had similar conditions.

The dietary arrangement of married men and women are similar because the conditions of being married in the Asante tradition include cooking and eating at home. This provides an avenue for men and women to eat home cooked food which is perceived by informants to be healthier than food prepared and bought out of home. Married persons also encouraged each other to engage in some form of exercise since there is the desire to live long to take care of their children. Women play a central role in a family's consumption and should be targeted as agents of change in encouraging the consumption of healthy diet. Apart from advocacy of healthy lifestyle messages, there should a focus on encouraging Ashanti men to help women with household duties. This will enable women have time to engage in physical exercise after the day's activities. Also the influence of gender roles and expectations on the diet and physical exercise of men and women as seen in the findings have not been included in the RHNP. The RHNP in its quest to encourage healthy living to reduce the increasing prevalence of CNCDS in Ghana should consider the influence of gender roles and other social statuses in the day to day activities of individuals

For unmarried adults, the most influential status that positively influences their health related lifestyle is their level of education. This is because as unmarried persons, they seldom have any obligatory home-related responsibilities towards their families thus have more time on their hands for other in-house and out of home activities. The use of this time to engage in

physical exercise and also to cook at home depends on their level of education, the jobs they do and also their understanding of what includes health and unhealthy living. Level of education provided access to extra health information aside the standardized messages provided. For this reason having a high level of education broadens the understanding of the concept of healthy living.

The decisions concerning diet and physical activity vary from one individual to the other and this decision is determined by a combination of his or her gendered responsibilities at home, level of education, marital status and occupation as explained. Individuals with different combination of these statuses make different decisions in relation to their health. Nevertheless men and women with similar gendered roles and marital status in Asokwa are likely to make similar decision since these roles and expectations are strongly influenced by a common tradition or culture within which they find themselves. When the avenue is created for the possibility of living healthy, the resources provided by the RHNP serve as tools to facilitate the practice of healthy living.

The RHNP model for healthy living is a very good model to guide the practice of a healthy lifestyle. This model however places emphasis on the individual agency of a person in transforming his or her lifestyle but this study is looking the influence of other social structures or statuses intersecting with the agency of individual to the influence of diet and physical exercise. Healthy or unhealthy living cannot be attributed to the sole influence of a structure and a human agent as separate entities but rather it is the relationship that exists between the human agent and the structure as one entity that influences health behaviour.

References

- Afele, M., (2006). Street food boom in Ghana spurs calls for better hygiene. *Bulletin of the World Health Organisation*, 84 (10):772-773.
- Agyei-Mensah, S. & De-Graft Aikins, A., (2010). Epidemiological transition and the double burden of disease in Accra, Ghana. *Bulletin of New York Academy of Medicine*, 87(5) 879-897.
- Amoah, D. K., Marfo, E. K., Wallace, P.A. & Osei, F., (2004). A case study of street food situation in Kumasi: socio-economic aspects and sanitary practices. *Agricultural and Food Science Journal of Ghana*, 3: 203-216.
- Aulikki, N., Ximena, B. & Pekka, P., (2001). Community-based non-communicable disease interventions: lessons from developed countries for developing ones. *Bulletin of World Health Organization*, 79 (10): 963-970.
- Braidotti, R., (2003). Feminist Philosophies. In Eagleton M. (Ed). *A Concise Companion to Feminist Theory*. Blackwell Publishing, Malden.
- Bryant, C. G. A., & Jary, D., (2001). Anthony Giddens: a Global Social Theorist. In: Bryant C. G. A., & Jary D. (Ed). *The contemporary Giddens: Social theory in a globalizing age*. Palgrave, Basingstoke.
- Biritwum, R. B., Gyapong, J. & Mensah, G., (2005). The Epidemiology of Obesity in Ghana. *Ghana Medical Journal* 39(3):82-85.
- Bryman, A., (2012). *Social Research Methods*. 4th Ed, Oxford Press. New York.
- Buikema, R., Griffin, G., & Lykke, N., (2011). *Theories and Methodologies in Postgraduate Feminist Research: Researching differently*. Routledge, London.
- Chanter, T., (2006). *Gender: Key concepts in Philosophy*. Continuum International Publishing Group, London.

- Clark, G., (1994). *Onions are my Husband: Survival and Accumulation by West African Market Women*. University of Chicago Press, Chicago, London.
- Clark, G., (2000). Mothering, Work and Gender in Urban Asante Ideology and Practice. *American Anthropologist* 101 (4):717-729.
- Cohen, I. J., (1989). Structuration theory: Anthony Giddens and the constitution of social life. Macmillan, Basingstoke.
- De-Graft Aikins, A., (2008). Public health psychology and chronic disease intervention in Africa: translating theory to practice. *2nd Annual Workshop of the UK-Africa Academic Partnership on Chronic Disease*, LSE. United Kingdom.
- Dixon, D. P. & Jones III, J. P., (2006). Feminist Geographies of Difference, Relation and Construction. In: Aitken S. & Valentine G. (Ed) *Approaches to Human Geography*. Sage Publications, London.
- Dyck, I. & Kearns, R. A., (2006). Structuration Theory: Agency, Structure and Everyday Life. In: Aitken S. & Valentine G. (Ed) *Approaches to Human Geography*. Sage Publications, London.
- England, K., (2006). Producing Feminist Geographies: Theory, Methodologies and Research Strategies. In: Aitken S. & Valentine G. (Ed) *Approaches to Human Geography*. Sage Publications, London.
- Entrikin, N. J. & Tepple, J. H., (2006). Humanism and Democratic Place-Making. In: Aitken S. & Valentine G. (Ed) *Approaches to Human Geography*. Sage Publications, London.
- Geographic Information System Laboratory, (2013). Study Area Map. University Of Ghana. Accra.
- Ghana District, (2006). Kumasi Metropolitan Assembly (Health Sector). Kumasi. (Online) From: <http://kma.ghanadistricts.gov.gh/?arrow=atd&=6&sa=1823> (Accessed on 26/08/2012)

Ghana Statistical Service, (2010). Population and Housing Census. Ghana Statistical Service, Accra.

Ghana Statistical Service, (2012). 2010 Population & Housing Census. Summary report of final results. Sakoa press limited, Accra.

GhanaWeb, (2013). Definition of Assembly Member. (Online) From:
<http://www.ghanaweb.com/GhanaHomePage/republic/constitution.php?id=Gconst20.html>.
(Accessed on 14/10/13).

Green, J. & Thorogood N., (2009). Qualitative Methods for Health Research (2nd Ed.). Sage Publications Limited, Los Angeles.

Hankivsky, O. & Christoffersen, A., (2008). Intersectionality and the determinants of health: a Canadian perspective, *Critical Public Health*, 18 (3): 271-283.

Hay, I., (2010). Ethical Practice in Geographical Research. In: Clifford et al (Eds). Key Methods in Geography (2nd Ed.). Sage Publications Limited, Los Angeles.

Henderson, G. & Sheppard, E., (2006). Marx and the Spirit of Marx. In: Aitken S. & Valentine G. (Ed) *Approaches to Human Geography*. Sage Publications, London.

Institute for Infrastructural Development, (2006). Sachet Water Project. (Online) From:
http://www.infrastructureghana.org/news_upcomingevents/sachet_water.html (Accessed on 14/02/14).

Janelle, D. G., (2001). Time-Space in Geography. In: *International Encyclopaedia of the Social & Behavioural Sciences*. Elsevier Science Limited, Amsterdam.

Keesling, R., (2008). "Gatekeeper". In Lavrakas P. J. (Ed). *Encyclopaedia of Survey Research Methods*. Sage Publications Limited, Thousand Oaks.

Kumasi Metropolitan Assembly, (2014). Town and Country Planning Department. (Online) From: <http://kma.gov.gh/kma/?town-and-country-planning&page=5322>. (Accessed on 20/01/2014)

- Kumasi Metropolitan Assembly, (2004). Poverty Report. Kumasi.
- Kumasi Municipal Council, (1954). Relocation of Residents in Old Asokwa. Kumasi.
- Kwan, M., (1999 a). Gender Differences in Space-time Constraints. *Annals of the Royal Geographical Society* 32 (2): 145-156.
- Kwan, M., (1999 b). Gender and Individual Access to Urban Opportunities: A study using space-time measures. *The Professional Geographer* 51(2): 211-227.
- Lenntorp, B., (1999). Time Geography: at the end of its beginning. *Geo-Journal* (48): 155-158.
- Linton, R., (1936). The study of man: An Introduction. Appleton-Century, New York.
- McCall, L., (2005). The Complexity of Intersectionality. *Chicago Journals* (30) 3:1771-1800.
- McCracken, K. & Phillips, D. R., (2009). Epidemiological Transition. In: *Kitchin, R. and Thrift, N.* (Eds.), *International Encyclopaedia of Human Geography*. Elsevier Science Limited, Amsterdam.
- McDowell, L., (1999). *Gender, Identity & Place: Understanding Feminist Geographies*. Polity Press Limited. Cambridge.
- McDowell, L., (2001). Father and Ford revisited: Gender, Class and Employment Change in the New Millennium. *Transactions of the Institute of British Geographers* 26 (4): 448-464.
- McLafferty, L. S., (2010). Conducting Questionnaire Surveys. In: Clifford et al (Eds) *Key Methods in Geography* (2nd Ed.). Sage Publications Limited, Los Angeles.
- Mensah, P., Yeboah-Manu, D., Owusu-Darko, K., & Ablordey, A., (2002). Street foods in Accra, Ghana: How safe are they? *Bulletin of the World Health Organization*, 80 (7): 546-554.

- Metropolitan Health Clinic, (2013). Picture of Training section and Community Durbar of Regenerative Health and Nutrition Program, Kumasi.
- Miller, J. H., (2005). A Measurement Theory for Time Geography. *Geographical Analysis* (2005) 17–45 2005 The Ohio State University.
- Ministry of Health, (2007). National Health Policy: Creating Wealth through Health. Government of Ghana, Accra.
- Ministry of Health, (2008). Regenerative Health and Nutrition Program: Strategic Plan. Government of Ghana, Accra.
- Ministry of Health, (2010). Dietary and Physical Activity Guidelines for Ghana. Government of Ghana, Accra.
- Ministry of Health, (2012). Regenerative Health and Nutrition: Training Manual. Government of Ghana, Accra.
- Moore, H. L., (1988). *Feminism and Anthropology*. Polity Press Limited., Cambridge.
- Mullings, B., (1999). Insider or Outsider, Both or Neither: Some Dilemmas of Interviewing in a Cross- Cultural Setting. *Geoforum*, (30) 337-350.
- OANDA, (2014). Currency Converter. (Online) From: <http://www.oanda.com/currency/converter/> (Accessed on 06/05/14. 20:27).
- Owusu-Sekyere, C., (2008). Sub-metropolitan areas of Kumasi. Town & Country Planning Department, Kumasi.
- Paquette, M., (2005). Perceptions of Healthy Eating, State of Knowledge and Research Gaps. *Canadian Journal of Public Health*, 96 (3):15-19.
- Phoenix, A. & Pattynama, P., (2011). Intersectionality. *European Journal of Women's Studies* 13(3): 187-192.

- Popkin, M. B., (2003). The Nutritional Transition in the Developing World. *Development Policy Review* 21(5-6): 581-597
- Robbins, P., Hintz, J. & Moore S. A., (2010). *Environment and Society, A critical Introduction*. John Wiley & Sons, West Sussex.
- Robinson, K. & Elliott, S. J., (2009). *Chronic Disease*. McMaster University, Hamilton.
- Robinson, E., Kolavalli, S. & Diao, X. (2012). *Food Processing and Agricultural Productivity Challenges: The case of tomatoes in Ghana*. Paper presented at the Transforming Agriculture Conference, Accra.
- Sandelowski, M., (2000). Focus on research methods: Combining qualitative and quantitative sampling, data collection, and analysis techniques in mixed-method studies. *Research in Nursing & Health* (23):246–255
- Shields, S. A., (2008). Gender: An Intersectionality Perspective. *Sex Roles* (59):301–311.
- Silverman, D., (2003). Analysing talk and text. In: Denzin N. K. & Lincoln Y. S. Ed: *Collecting and Interpreting Qualitative Materials*. Sage Publications, London
- Staunes, D. & Sondergaard, D. M., (2011). Intersectionality: A theoretical Adjustment. In: Buikema R., Griffin G., & Lykke N. (Ed). *Theories and Methodologies in Postgraduate Feminist Research. Researching Differently*. Routledge, London.
- Tagoe, H. & Dake, F. A., (2011). Healthy lifestyle behaviour among Ghanaian adults in the phase of a health policy change. *Globalization and Health* 7 (7) 1-9.
- Thien, D. & Del Casino, V. J. J., (2012). (Un)Healthy Men, Masculinities and the Geography of Health. *Annals of the Association of American Geographers*, 102 (5): 1146-1156.
- Rheinländer, T., Olsen, M., Bakang, J. A., Takyi ,H., Konradsen, F., & Samuelsen, H. (2008). Keeping Up Appearances: Perceptions of Street Food Safety in Urban Kumasi, Ghana. *Journal of Urban Health: Bulletin of the New York Academy of Medicine*, 85(6): 952-964

- Rice, S., (2010). Sampling In Geography. In: Clifford et al (Eds) Key Methods in Geography (2nd Ed.). Sage Publications Limited.
- Valentine, G., (2007). Theorizing and Researching Intersectionality: A Challenge for Feminist Geography, *The Professional Geographer* (59)1:10-21.
- Van der Tuin, I., (2011). Gender with 'Waves': On Repositioning a Neodisciplinary Apparatus. In: Buikema R., Griffin G., & Lykke N. (Eds). *Theories and Methodologies in Postgraduate Feminist Research. Researching Differently*. Routledge, London.
- Van der Lippe, T., (2001). Time-use and Gender. In: *International Encyclopaedia of the Social & Behavioural Sciences*. Elsevier Science Limited, Amsterdam.
- Weeks, J. R., Getis, A., Stow, D. A., Hill, A. G., Rain, D., Engstrom, R., Stoler, J., Lippitt, C., Jankowska, M., Lopez-Carr, A. C., Coulter, L. & Ofiesh, C., (2012). Connecting the Dots between Health, Poverty and Place in Accra, Ghana. *Annals of the Association of American Geographers*, 102 (5): 932-941.
- World Health Organization, (2004). *Global Strategy on Diet, Physical Activity and Health*. World Health Organization. Geneva
- World Health Organization, (2006). *Global Strategy on Diet, Physical Activity and Health, A framework to Monitor and Evaluate Implementation*. WHO Library Cataloguing-in-Publication Data, World Health Organization.
- World Health Organization, (2011). Non-Communicable Disease Country Profiles. World Health Organization, Accra.

APPENDIX I: Questionnaire for 100 informants

EXPLORING THE FACTORS INFLUENCING THE GENDERED DIFFERENCE IN HEALTHY LIFESTYLE AMONG ADULTS IN GHANA

Informant Number:..... Interviewer's number:.....

This interview is designed to collect data on issues related to gender and health. It is also in partial fulfilment of the requirement for the award of Master of Philosophy Degree in Development Geography at University of Bergen, Norway. All information shall be treated as confidential.

1. NAME OF INFORMANT (OPTIONAL):

2. NAME OF LOCALITY:

3. Age:..... Sex of Informant: M F

4. Marital Status:a) Married b)Single c)Cohabiting d)Widow/Widower e)Divorced

5. Do you have any children?

6. If Yes, Number..... Age oldest..... Age Youngest.....

7. Where were you born? (Specific name of Locality).....

8. What is your Ethnic group.....

9. What is your Religious Affiliation: a) No Religion b) Muslim c) Christian
d)Traditional e)Other Specify.....

10. Who are you living with/Members of your Household?

11. Have you ever attended school? Yes No

12. What is the highest level of Education you have attained?

a)Pre-School b)Primary c)Middle School d)Secondary e)Tertiary f)Higher

13. What is your occupation:

14. Are you Currently Working? Yes No

15. Where is the location of your job? Specific name of Locality.....

16. What time do you normally leave home for work/or start work at home?

17. By what means do you get to work every day?

18. What is the average time spent travelling from home to work on a normal day? (in hours/minutes).With Traffic.....Without Traffic.....

19. What is the average time spent at work on a normal day? (in hours/minutes)

.....

20. What does your work entail/ what specifically do you do at work?

.....

21. Does your employment require you to work at Night? Yes No

22. Does your work involve any form of vigorous physical activity?

23. In a typical week, on how many days do you do vigorous-intensity activities as part of your work?day(s)

24. How much is your monthly or daily salary on average?GHC

25. Is your work typical of your gender as a man or a woman?

26. Does your work pose any form of health risk to you?
27. What time do you normally get back from work?
28. What activities do you normally engage in before you retire to bed?
- a.
 - b.
 - c.
 - d.
 - e.
29. What time do you normally wake up in the morning?
30. Are there any duties at home that are your responsibility in particular?
- a.
 - b.
 - c.
 - d,
 - e.
31. Do you have any responsibilities towards the extended family?
32. Who decides on what to eat at home?
33. How often do you or someone in your home prepare your meals at home?
34. Who normally cooks at home?
35. How often do you (or any household member) eat outside the home?
36. Which do you prefer and why: Street food and homemade food.
37. What kind of food do you normally eat when outside?

- a.
- b.
- c.
- d.
- e.

38. From which kind of places do you normally buy food?

- a.
- b.
- c.
- d.

39. How do you understand the concept of healthy living?

40. Do you think you are living healthy by your own definition? Yes No

41. How many glasses of water do you drink a day?a day

42. How often do you eat fruits and vegetables?day a week

43. How do you get informed on issues about diet and physical activity?
.....

44. Do you watch television/listen to the radio that show or discuss health issues?

45. What are some of the issues ever discussed?

46. Have you heard of the Regenerative Health and Nutrition Program introduced by the
ministry of health? Yes No

47. If yes, how did you get to know about it?

48. Have you heard of any other health program or policy introduced by the ministry of
health?

49. Have you heard of the following messages

- A. Water is Medicine Yes No Where.....
- B. Fruits and Vegetables are medicine Yes No Where.....
- C. Exercise is medicine Yes No Where.....
- D. Rest is medicine Yes No Where.....
- E. Cleanliness is medicine Yes No Where.....

50. If yes to 43 & 45. Has this information influenced your eating habits in any way? If yes which way.

51. Has this affected your physical activity in any way? If yes which way.

52. Can you give me a brief overview of your weekly menu?

	WEEKDAYS	WEEKENDS
BREAKFAST		
LUNCH		
DINNER		
IN-BETWEEN MEALS/SNACKS		

53. How often do you eat cereals, roots and tubers? a day.

54. How often do you take in sugars?a day.

55. Do you engage in any form of physical activity apart from work?
56. Are there places in this community where you can engage in physical activity outside of your home (e.g. parks). Yes No
57. How much time do you spend doing vigorous –intensity sports fitness or recreational activities on a typical day.....hours.....minutes.
58. At what age do you think one has to be conscious of the kind of food to eat and also the kind of physical activity to engage in?years.
59. Do you think marital status matter for ones eating habits and physical activity?
Yes No How?
60. Has your health related lifestyle been affected by your marital status? In what ways?
61. Does your religion or ethnic background restrict the kind of food you are likely?
(cultural taboos)
62. Does your religion or ethnic background in any way provide you with health advice?
63. Does you religion influence the kind of work you can do?
64. Is your environment conducive enough for physical activity?
65. Are you currently a member of Any Physical activity group?
66. Do you engage in any form of sport?

APPENDIX II: Themes for the case study interview

Since no interviews will be identical and since the questions will be adjusted during the interviews, this is a list of themes around which discussions will evolve. These informants have been purposely selected from a previous survey.

- Concept of healthy living
- Gender roles at home and work
- Work and Health
- Social Environment and Health
- Physical Environment and Health
- Government Policy, Implementation and Impact
- Concept of Intersectionality (Combining all the roles that come with different statuses)

APPENDIX III: Interview guide for Government Health Officials

- What are the activities of the Regenerative Health and Nutrition Program.
- What is the RHNP's connection with the directives on diet and physical exercise from WHO.
- Does the program make some considerations with respect to gender difference in its design & implementation of the Program?
- What are the specific activities in relation to diet/physical exercise.
- What implementation programs are targeted directly at the individual.
- How do you monitor implementation of the program.
- What kind of training is giving to Health Officers.
- What is the extent of implementation of the program at local levels.
- What are the challenges faced in the implementation and monitoring of RHNP.