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WOMEN'S HEALTH IN ACCRA: EVIDENCE FROM THE 2003 WOMEN'S HEALTH STUDY IN ACCRA, GHANA

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ACCEPTANCE

Accepted by Faculty of Social Studies, University of Ghana, Legon, in partial fulfillment of the requirement for the Degree of M.A. (Population Studies)

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DECLARATION

I hereby declare that, except for references to other people's work, which have been duly acknowledged, this work is a result of my own research and that neither in part nor in whole has it been presented elsewhere for another degree.

Signed: 

Joyce Ami Amedoe

Date: .....

DEDICATED

To

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I however fully accept responsibility for any error found in this study since the ideas therein are mine and not anybody's or the institution.

Date: ..... JOYCE AMI AMEDOE

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ABSTRACT

This study aimed at examining women's health in Accra, Ghana. The study consisted of women aged 18 and over in the City of Accra. The data used for the study were collected from Women's Health Survey in Accra, 2003. The sample size was 3,200 women.

A descriptive analysis was used to analyse the characteristics of respondents, while chi-square test was used to determine the relationship between area of residence, age and specific health conditions. The health status of women relates to specific health conditions.

Six variables, which constituted the demographic and socio-economic characteristics of respondents, were used in the study. The variables include age, marital status, level of education attained, socio-economic area of residence, religion and occupation.

The study showed that most of the women (31.1 percent) were in age group 35-54. General health deteriorated with increase in age and younger women had better health than older women. Sexual behaviour was worse among younger women while reproductive health was also worse among the older ages evidenced in the high prevalence of diseases among older ages. Younger age groups were found to engage in more leisure activities than the others, and they have better nutrition but highest risk factors. Risk factors for non-communicable diseases were found to be quite high in the population. Vigorous activities were minimal among the population but moderate activities were performed by about 22 percent of the women population. Few of the respondents complained of having difficulty with self care and nutritional level is also

high except for the fact that, portions of the population reported of missing meals due to the problem of affordability.

Modern medical facilities were found to be patronized by a very high proportion of population as more than half of the women also tried to take steps to improve their health. Differences in diseases were found in relation to the demographic and socio-economic characteristics of the respondents.

The chi-square test revealed that there is no relationship between where people live and diseases. On the other hand, there was a significant relationship between age of women and non-communicable diseases.

It would therefore be necessary for government to see these diseases not only as a medical problem but also as a socio-economic problem that affects human resource development and in the long run, the nation's development for necessary interventions.

CHAPTER ONE

INTRODUCTION

1.1 Background Information

The chosen area for this study, the Accra Metropolitan Area, is the administrative unit, and core urban area within a large region known as Greater Accra Region. This area contains a population of 1.66 million people and 365,550 households according to the March 2000 census. According to McGranaham and Songsore, there is considerable socio-economic and cultural diversity within this area.[1] From the census, the household sizes in different districts in Accra range from 3.9 to 5.0 persons. There is a revelation of major contrasts between high-income areas such as Airport Residential/ East Legon and the crowded informal settlements of Nima or Maamobi or the inner core areas of James Town and Ussher Town.

Although Accra is the most prosperous city in Ghana, there are clear differentials within the city as one finds greater part of the population living in cramped accommodation with no electricity or drinking water in their homes. Many people also cook outside in the open using charcoal and sharing common bathroom or using open cubicles when bathing. There is therefore enough diversity in the metropolitan Accra population, which shows differences in health status and associated exposure variables and risk factors.[2]

The constitution of the World Health Organization (WHO) declares that health is one of the fundamental rights of every human being and is central to the attainment of

[1] McGranahan, G and Songsore J, "Wealth, health and urban household: weighing environmental burdens in Accra Urban health research in developing countries. Jakarta and Sao Paulo" Oxford: CAB International, 1996.

[2] Songsore J and Goldstein "Health and environment analysis for decision-making: field study in Accra, Ghana" World Health Statistical Quarterly 48(2): 1995.

international peace and security.[1] WHO defines health as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity".[2] To say that anything is a right involves the assumption that it is an object, service, or social condition that at least could be freely available, attainable or deliverable. But within and among nations health does not meet these criteria. On the contrary, it may neither be attainable nor available. The health status of a people reflects and evolves from the economic condition and the social values of a country and its community. As a result, it varies by country and community.

The last twenty years has seen a growth in the effort to provide measures of women's health status in developing countries. Broadly, data collection strategies have fallen into three models. The first wave includes nationally representative demographic surveys that began by focusing primarily on fertility and contraceptive use, and over the years has added more specific measures of maternal health and its service utilization. These include the World Fertility Survey (WFS), Demographic and Health Survey (DHS), Pan-Arab Programme on Child Health (PAPCHILD) and the Arab Gulf Sates Surveys.

The second model is exemplified by smaller, community-based studies carried out since the early 1970s. The objective of these studies has been primarily to describe and investigate the prevalence of women's reproductive morbidity, using systematic probability samples within specific communities. None of these studies was intended to be representative of national, regional or city populations. Rather, they have been in-depth investigations into the problems found in their specific target populations. The

[1] WHO, "Health and Status of Women", World Conference of the United Nations Conference for Women, Background paper 2, 1980

[2] WHO, Preamble to the Constitution of the World Health Organization as adopted by the International Health Conference, New York, 19-22 June, 1946

studies employed a combination of research methods; interviews, clinical examination; and laboratory tests as well.

Finally, studies such as the Philippines Safe Motherhood Survey (PSMS) and the WHO-sponsored World Health Survey (WHS) are examples of the third type of model that has emerged. These studies have attempted to provide new measures of physical and social health of adults using a more representative system of sampling. For instance, the PSMS focused on measuring the prevalence of obstetric and gynecological morbidity in the Philippines and it included a validation study of self-reported obstetric morbidity. In addition, data were obtained on the details of health, specifically rape and domestic violence.

In an attempt to produce new burden of disease estimates based on better information from poor countries, the WHO has recently developed and implemented a new survey programme called the World Health Survey (WHS). It aims to compile comprehensive baseline information on the health of population and on the outcomes associated with the investment in health systems, among other things. The WHS does not collect objective morbidity assessment such as performance tests, medical examinations or laboratory tests. The WHS and the study in Accra (women only), however, studied the health of all adults and not just the people of reproductive age and seek to improve the health of women by providing women with information about health conditions specific to their communities.

1.2 Problem Statement

Recent studies on the global and regional burden of diseases have shown that women bear a disproportionate share of the total burden of morbidity despite their

generally long life expectancy than men.[1] Among the reasons for this heavier morbidity burden are special perils women face through sexual relations and reproduction.[2] Other factors include gender discrimination with regard to access to health care services; and the "double burden" of working outside the home in combination with customary domestic and child care responsibilities.[3] Thus, women in the fast growing urban economies of low-income countries are at special risk of poor health since health services have not kept pace with population growth. In addition, the desire for children is still high in urban areas[4] and so there are strong pressures on urban women to seek non-farm, wage-earning employment as well as maintaining their longer established roles as housewives and mothers.

Women in the fast-growing urban economies of low-income countries are at risk of poor health since health services have not kept pace with population growth and health services that are often perceived by women as not meeting their specific health needs.

According to the United Nation (UN) study entitled, The World's Women (1991), women who had pregnancy in the poorer states face a risk due to pregnancy that is 80 to 600 times higher than that faced by women in developed richer countries. These were due to inadequate medical resources, an excessive number of pregnancy and malnutrition which are the main cause of maternal death in the world.[5]

[1] Murray CJL, Lopez AD, eds. The global burden of disease: a Comprehensive assessment of mortality and disability from diseases, injuries and risk factors in 1990 projected to 2000 Harvard University Press, Cambridge, MA: 1996

[2] Murray, C. J. L. and Lopez A. "Health dimensions of sex and reproduction", WHO: Global Burden of Disease series III: 1998

[3] Avotri J. Y. and Walters V. 'You just look at our work and see if you have any freedom on earth: Ghanaian women's accounts of their work and their health", Social Science and Medicine, vol. 48:1123–1133: 1999

[4] Ghana Statistical Service (GSS) and Macro International Inc. (MI) Demographic and Health Survey 1998. The GSS and MI, Calverton, ND, USA, 1999

[5] De Blij A. J. Human Geography: Culture, Society, and Space John Wiley and Sons, INC USA pp 145-184: 1995

It is apparent that those living in the developing world are now assuming a double burden of disease. They are with the usual tropical diseases such as malaria and vector borne illnesses and they are now experiencing chronic illnesses such as heart disease and diabetes. Non-communicable or chronic illnesses such as heart diseases and diabetes have been demonstrated directly and indirectly to be emerging as important health issues in many developing countries.

In 1996, the Global Burden of Disease (GBD) study which published summaries of the fatal and non-fatal diseases worldwide showed that women bear a disproportionate share of the total burden of morbidity of illnesses but there have been no major general medical health studies reported in the literature of either men or women in Ghana in particular and sub-Saharan Africa in general.

Apart from diseases such as sepsis (infections), hemorrhage, eclampsia and medical complications such as anemia and sickle cell, tetanus, and risks associated with pregnancy that affect maternal care, other diseases also burden women in Accra. Some of these include: malaria, diabetes, stroke, depression, cancer (breast and cervical), tuberculosis, obesity, arthritis, hypertension, and asthma, among others. Unfortunately, these diseases do not receive enough attention.

Also, women and men have distinctively different daily activities and social constraints. Women work longer hours, receive lower wages and perform lower wage earning jobs. The men often manage household income. Although there have been recent gains in some areas, gender inequalities continue to constraint women's ability to participate in and contribute to the economy of Ghana. These inequalities have direct and indirect harmful effects on women's health. Women's fertility, health and economic well-being are closely linked. A typical Ghanaian woman spends 16 years of her productive life pregnant and breastfeeding. Early child bearing is a major health problem in a

country where more than 60 percent of women are pregnant by age 20, often bringing the young woman's education and career to an end.[1] The study therefore represents one of the early attempts to understand the magnitude of the health burden of non-communicable disease in sub-Saharan Africa.

1.3 Rationale

The most valuable resource for any country or community is its population as it is the instrument for community and national development. In the light of this, the provision and access to health care is a prerequisite for sustainable development as no society can benefit much from an unhealthy population. More especially when it had to do with the most productive but vulnerable segment of the society. As evidenced in the 2000 census, women make up more than 50 percent of the population of Accra.[2]

Of late medical programmes for developing countries have been laying great emphasis upon maternal and child health. [3] While the need for such an emphasis seems to be almost universally accepted, the question still remains as the wisdom of this strategy, which implies that women are only of value as mothers.[4]

So far, most evaluations of the health and morbidity of African adults have taken place in rural areas where many longitudinal health and population projects have been based.[5] This bias is quite understandable given the poorer health of the rural populations in Africa and the practical need for a reasonable stable population for follow-up studies. We are becoming more and more aware that many of the most critical health problems

[1] Duda R. B., "Research plan" Women's health survey in Accra Ghana (WHSA)
[2] Ghana Statistical Service, The 2000 Population and Housing Census, Summary Report of Final Results, 2002.
[3] World Health Organisation, 'Health and the status of women', World Conference of the United Nations Conference for women, Background paper 2, 1980a.
[4] Sipila H.., Women, Health and Rights World Health, July, 6-9, 1979.
[5] Walraven G., Scherf C., West B. et al "The burden of reproductive-organ disease in rural women in the Gambia", West Africa lancet, Vol. 357: 1761-1167, 2001.

may be found in cities and not in rural areas both because of the increase in migration to cities, social exclusion of some of the recent arrivals in the cities and because of the sharp change in life style in urban communities.[1] The extended family can no longer support in the way that is possible in villages with large compounds and many co-resident relatives. In the cities, we see the conjunction of older patterns of morbidity stemming largely from infectious diseases and newer health problems linked to changes in living arrangements, eating habits and work patterns among others.[2] Additionally, many studies focus on one condition or disease and so even if they are community-based rather than facility-based studies, they fail to provide an overall assessment of the population's health.

The study seeks to improve the health of women by providing them with information about conditions specific to their community. In the Ghanaian household, an elderly woman may serve as the household head, and hence may have the advantage to exert the influence necessary to affect change over the traditional practices and so if the elderly woman can become informed about the value of a change in lifestyle and health seeking behavior, this may have a significant impact on the health of the younger women in particular as well as other family members. For instance, obesity is the sign of wealth or affluence in many African and for that matter, Ghanaian cultures, and yet, obesity is linked to many health problems including hypertension and diabetes. If a younger woman wishes to diet to remain slim, this may be viewed as an affront to the values and traditions of the mother or grandmothers. However, if the elderly mother is educated of the harmful effects of obesity, she may be the one to stress proper diet and nutrition and exercise to the daughters / or grand daughters.

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[1] Ousman A. I. "Nationwide prevalence study of hypertension and related non-communicable disease in Gambia" Tropical Medicine and International Health. vol.2 no.11: 1039-1048, 1997.
[2] Ikeme A. C., Pole D. J., Pobee J. O., et al "Cardiovascular status and blood pressure in a population sample in Ghana- The Mamprobi Survey" Tropical Geographic Medicine vol.30 no.3: 313-329,1978.

Having more than 50 percent of the country's population being females, it is of great importance that their needs are taking care of. This is because women constitute more than 50 percent of the country's labour force, they are the bread winners in many households, and bearers of children who grow up to become the labour force among other duties in helping build a nation. It is therefore necessary for their health needs to be addressed basically, as a human right, as bearers of a healthy future population and as important contributors to homes, communities and the economy as a whole and thus, the need for such a study.

This study will therefore contribute to the general knowledge and understanding of various health problems women face in Accra and provide a wide spectrum of information for the Government of Ghana. In addition, it will provide knowledge of various specific health problems faced by different socio-economic areas of residence in Accra as well as the various age groups. With limited work done in this area, the analysis will add to the current information on the subject, which will be of great significance to researchers.

1.4 Objective of Study

The overall objective of the study is to analyse the burden of diseases of adult women in Accra.

Specifically, the study will:

i) investigate the relationship between the socio-economic and demographic characteristics and the diseases of women;

ii) analyse the various diseases affecting the various age groups of women;

iii) make recommendations for possible policy interventions.

1.5 Literature Review

The aim of this section is to review related studies, which contribute to the general understanding of women's health. Medical science occupies a central position in health, but health is the outcome of a combination of factors, biological, genetic, environment and socio-economic.[1]

Whilst women tend to live longer than men in all regions of the world, the absolute gap varies greatly. This is determined by a combination of biological and socio-economic bias in food and health care allocation in the household, which are factors that can reduce female life expectancy.[2]

It has long been recognised that there is a close interaction between a healthy mind and a healthy body. Furthermore, health was considered in antiquity a beneficial asset and that one required action by the individual to preserve it. As it is written "a wise man ought to realize that health is his most valuable possession and learn to treat his illness by his own judgment".[3]

Sigerist, a well known public health professional, expressed the view that 'health is, therefore, not simply the absence of disease; it is something positive, a joyful attitude to life, and a cheerful acceptance of the responsibities that life puts upon the individual...A healthy individual is a man who is well balanced bodily and mentally, and well adjusted to his physical and social environment."[4]

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[1] Cook R.J. Women's Health and Human Rights World Health Organisation, Geneva, Printed in Switzerland, 1994

[2] United Nation Development Programme Human development report 1997. Oxford University Press, Oxford and New York, 1997

[3] Rosen G. A. "A history of public health" Medical Publications. New York. 1976

[4] Sigerist H.R. Medicine and human welfare Yale University Press, New Haven, 1941

The WHO's constitution recognised "the enjoyment of the highest attainable standard of health...as one of the fundamental rights of every human being".[1] This "right to health" as it became expressed in an abbreviated version in many subsequent documents, include the right to adequate food, water, clothing, housing, health care, education, security in the event of unemployment, sickness, disability, old age or lack of livelihood in circumstances beyond an individual's control.[2]

A greater emphasis in equity and social justice was given when the 30th WHO Assembly decided in 1977 that the main social targets of governments and WHO in the coming decades should be "the attainment of all citizens of the world by the year 2000 of a level of health that would permit them to lead socially and economically productive lives".[3]

Improvement in life expectancy has profound demographic and epidemiological changes that are now characterised by a rapid increase in the proportion of people living over 70 years of age, a marked increase in non-communicable diseases, particularly arising as a result of increased tobacco use and increased consumption of high-fat foods. Simultaneously, poverty-related infectious diseases remain with us, and new and emerging forms of infectious diseases are unfortunately appearing at regular rate.[4]

The Beijing platform, while recognizing the disparities in access to health care, had noted "Women have different and unequal access to and use of basic health resources, including primary health services for prevention and treatment of childhood diseases, malnutrition, anemia, etc. Women's health is also affected by gender bias in

[1] WHO World Health Organisation (1948) Constitution.. Geneva, 1948
[2] Derek Yach "Health and illness" The Definition of the World Health Organisation http://www.medizin-ethik.ch/publik/health_illness.htm
[3] WHO World Health Organisation (1977) resolution WHA40.43-Technical Cooperation. WHO Geneva, May, 1977.
[4] World Health Organisation "Life in the 21st Century: a vision for all" The World Report 1998. World Health Organisation, Geneva, 1998.

health system and by the provision of adequate and inappropriate health services to women".[1]

Social dimension of health is exemplified by the high levels of poverty that persist and have increased in many parts of the world. There are 1.3 billion people living in absolute poverty.[2] Levels of inequalities in wealth and health are increasing in many societies, be they advanced industralised countries or poorer developing countries. This means that progress in achieving the social dimensions of health remains a long way off.

Evidence from researches in developing countries has identified multiple links between the social status of women and their health throughout the life cycle.[3] The low status and social vulnerability of women also contributes to female genital mutilation (FGM), poor nutrition, overwork, stress, higher rates of sickness and maternal mortality, and limited access to health care. Also, an estimated 97 million women are missing worldwide, due to the excess mortality associated with gender discrimination.[4]

It is evidenced that there is a statistical association between some measures of women's status and female life expectancy and maternal mortality.[5] However, other data suggest that women's economic position is equally or more important for their health than their social status.[6]

Gender gaps are also persistent in health status, in access to health services, and in health outcomes. This shows that gender inequality, as well as poverty, needs to be

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[1] Kiran S. G., Redefining Women's Health Empowerment The south-asian.com
[2] World Health Organisation Health for all in the twenty-first Century Document A51/5, World Health Organisation, Geneva, May 1998
[3] Doyal L. "Gender and the 10/90 gab in health research" Bulletin of the World Health Organisation Vol 82 no.3,162, 2004
[4] Klasen S, Wink C. "A turning point in gender bias in mortality: An update on the number of missing women" Population and Development Review vol. 28: 285–312 2002
[5] Shen C. and Williamson J.B. "Maternal mortality, women's status, and economic dependency in less developed countries: A cross national analysis Social Science and Medicine vol. 49: 197-214 1999
[6] Defo B., "Effects of socio-economic disadvantage and women's status on women's health in Cameroon" Social Science and Medicine vol.44: 1023-1042 1997

addressed in health sectors. In 1990, over 36 percent of "healthy life" lost by adult women (15-44) was caused by reproductive health problems, especially maternity related causes and sexually transmitted infections (STIs), compared to only 12 percent for men. An additional 5 percent "healthy life" lost by women was estimated to be due to gender violence and rape.

To date, women's health has received little attention. This is reflected in the high levels of persistent, but largely preventable, morbidity and mortality. The status of women's health is largely reflected by the indicators like female mortality and morbidity, disease burden, reproductive health and reproductive behaviour, contraception, abortion, maternal mortality and morbidity, gynecological morbidity and infertility; nutrition; work environment and health covering aspects like poor sanitation, air pollution, poor quality of housing, degradation of natural resources, sexual harassment and health problems related to nature of women's productive work; and violence against women and its consequences for the health care system of women. The health profile clearly demonstrates that the situation is far from satisfactory. Malnutrition, often caused by the gender discrimination in food distribution, presents a serious threat to health of girls and women.[1]

Due to their reproductive function, women run risks of morbidity and mortality which men do not face. Their health is also affected by gender-specific cultural practices, such as female circumcision and domestic abuse, which are not a consequence of their behavior.[2] Women's risk of premature death and disability is higher during their reproductive years. Maternal mortality rate (MMR) and infant mortality rate (IMR)

[1] Kiran S. G., op. cit., p. 10

[2] World Bank "Women's Health and Development", Electronic Newsletter on Population, Health and Nutrition Issues; Population, Health and Nutrition (PHN) department, World Bank; PHNFLASH issue 44,1994

coupled with educational backwardness of women, result in low social and economic status limiting women's access to education, good nutrition, family planning services and health care.[1]

"Gender inequality and discrimination harm girls' and women's health directly and indirectly throughout the life cycle; and neglect of their needs prevents many women from taking a full part in society".[2] Since the late 1980s, comprehensive studies from countries like Egypt, India, Nigeria, and Turkey revealed the widespread prevalence of reproductive tract and other gynecologic disorder.

Statistics show that investing in women at different stages of life could save millions of women in developing countries from needless suffering or premature death. However, the resources allocated for women's health do not reflect the clearly demonstrated need. For example, it is estimated that less than 20 percent of government health budgets are allocated to maternal and child health and family planning; most of which goes to child health. Poor health is a reflection of the low status of women in many developing countries. Some cultures can also limit a women's access to health services.

Women's health is affected by complex biological, social, and cultural factors. Biological factors also increase health risks for women and sociocultural determinants of health such as age at marriage and status in the family, as well as psychological factors, such as low self-esteem and depression arising from discrimination and gender violence. Women's lack of education and disadvantaged social position help perpetuate poor health and high fertility, as well as the continued cycle of poverty. For example, female education, especially through the secondary level, is associated with greater use of

[1] Kiran S. G., op. cit. P. 10
[2] Rosen G. A. A history of public health Medical Publications, New York, (n.p) 1976

contraception and increased age of marriage, both of which improve women's health by reducing their exposure to pregnancy and early child bearing.[1]

The disparity between developed and developing countries in maternal mortality ratios is greater than for any other indicator. Every year, around 200 million women become pregnant and of these, approximately 150 million carry to term; around 20 million of theses end in unsafe abortions which many end in complications, disabilities and death; 500,000 end up in maternal deaths and 20 million suffered severe and long term disability as a result of poorly managed pregnancy or delivery in 1995.[2] In 1996, estimated 585,000 women died from pregnancy related causes. A more recent study indicates that about 15 percent of all pregnant women experience life-threatening complications as a result of pregnancy.[3]

Women's poor health also affects the welfare and productivity of their households and communities, since they play critical roles in the welfare of their families and of their national economies. A woman's ill health or death affects not only her own opportunities and potential but also those of her children. A mother's death in childbirth is a virtual death knell for her newborn, and it often has severe consequences for her other young children. A study in Bangladesh found that a mother's death sharply increased the chances that her children up to age 10 would die--particularly for her girl children whereas a father's death had no significant effect on his children's mortality rates.[4]

Reproductive tract infections (RTIs) have been hidden in the "culture of silence". They are known to all women in the world; when left untreated, they represent a vast

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[1] World Bank "A new agenda for women's health and nutrition" Development in practice World Bank Washington D.C.1994
[2] WHO/UNICEF Revised 1990 estimates of maternal mortality: A new approach. Geneva. 1996
[3] Ghana Service Provision Assessment 2002 p. 109 (citing Maternal and neonatal health programme 2001b. The skilled provider: A key player in saving the lives of women and new borns. Best practices brief. Baltimore, Maryland: JHPIEGO Corporation)
[4] World Bank, op. cit., P. 13

reservoir of infections with serious short-term and long-term effects on women's overall health status. RTIs have an impact on a range of issues, including maternal functions, STIs, HIV/AIDS, fatigue, and child survival.[1]

There are few African and Ghanaian studies that have assessed risk factors for cardio-vascular disease.[2] Pobee reported in 1993 that the prevalence of hypertension in urban adult in Ghana ranged from 8-13 percent while the rural population was 4.5 percent with determinants such as age, family history, body mass index etc. The National Cardio-thoracic Centre, Accra, Ghana reported that the peak incidence of heart failure in urban Ghanaians occurred during their fifth decades and the main causes of heart failure included hypertension, rheumatic heart disease and cardiomyopathy.[3]

In Ghana the percentage of pregnant women with bacteriological evidence of Chlamydia trachomatis in specific studies was 7.7 and the prevalence of gonorrhoea was 4.4. Women may be disadvantaged in protecting themselves against HIV infection not only through lack of information but also through lack of power to deny partners intercourse, to insist that partners use condoms or to obtain supplies of the female condom.[4] From insensitive clumsiness, through exploitation to physical violence, women experience both inside and outside their homes assaults on their integrity and bodies that deny them the sense of well-being, security and esteem that contributes to health.[5]

The consequences of trafficking include physical injuries, mental health problems, such as depression, post-traumatic stress disorder, and substance abuse, reproductive health problems such as STIs, HIV, unsafe abortions, complications of

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[1] World Health Organisation Women's Health: Across age and frontier Reprinted in Switzerland,1992
[2] Amoah A. G. and Kellen C., "Actiology of heart failure as seen from a National Cardiac Referral Centre in Africa" Cardiology vol. 93: 1-18, 2000
[3] Pobee J. O. M., "Community-based high blood pressure programmes in Sub-Saharan Africa" Ethn Dis vol. 3:S38-45, 1993
[4] Gollub El, Stein Z A. "The new female Condom-item on a Woman's AIDS prevention agenda" Commentary. American journal of public health vol. 83: 498-500 1993
[5] Cook R.J. op. cit., p. 8

pregnancy, chronic pelvic pain, and other gynecological disorders, and occupation health problems such as eye strain and back injuries. Female Genital Mutilation also has serious consequences on the health of women. The immediate and long-term health consequences of female genital mutilation vary according to the type and severity of the procedure performed. Some immediate complications include severe pain, shock, hemorrhage, urine retention, ulceration of the genital region and injury to adjacent tissue. Hemorrhage and infection can cause death. More recently, concern has arisen about possible transmission of the human immunodeficiency virus (HIV) due to the use of one instrument in multiple operations, but this has not been the subject of detailed research.

Sexually transmitted diseases are the most commonly reported infectious diseases, and are increasing. Gender differences in transmission, symptoms and treatment may not be adequately understood or appreciated by health authorities. Women are much more vulnerable biologically, culturally, and socioeconomically to STIs. The majority of sexually transmitted infections (STIs) are asymptomatic in women (60-70 percent of gonococcal and chlamydial infections). The consequences of STIs are very serious in women, sometimes fatal (e.g. cervical cancer, ectopic pregnancy, sepsis) and in their babies (stillbirth, blindness). Women also tend not to seek treatment, in addition to having no symptoms; more stigma is attached to STIs in women, who often have neither time nor money for health care.

UNAIDS estimates that whilst more men than women have contracted HIV to date, the gap is closing up. 41 percent of those currently infected with HIV/AIDS are

females, 31 percent of the 11.7 million who have died of AIDS are women.[1]

The transmission of HIV/AIDS from men to women is 2-4 times more efficient than from women to men and adolescent girls may be more physiologically vulnerable to HIV infection than older women.[2] And women also progress to AIDS earlier than men. In sub-Saharan Africa, women now form half of the estimated 20 million HIV-infected persons.

It is estimated that there are 33.6 million people living with HIV/AIDS, 14.8 million of who are women. There were 5 million adults newly infected in 1999, 2.3 million of which were women and 2.1 million died of AIDS in 1999, 1.1 million of whom were women. About 13 percent African women are currently infected for every 10 African men and 55 percent of adult infections in sub-Saharan Africa are in women. In Ghana, by the end of December 2003, a cumulative total of 76,139 AIDS cases had been recorded officially though actual number is estimated to be 200,00 and women make up two thirds of this number.[3]

A number of health problems associated with low socioeconomic status are emerging as concerns that need to be addressed by health and development programs. These include gender specific violence and occupational health hazards. Women's low status, particularly lack of education, exacerbated by economic hardship, is leading to increasing prostitution. This, in turn, is contributing to the rapid spread of sexually transmitted diseases, including AIDS.

In many under-served populations, women have considerable mental health needs. However, until recent years, the conception of women's mental health has been

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[1] Raymond, J. G. et al. A Comparative Study of Women Trafficked in the Migration Process: Coalition Against Trafficking in Women. New York 2002

[2] WHO "Women's Health" Improve our health, improve the world Position paper vol. 28, 1995

[3] Ghana Health Service HIV/AIDS in Ghana: Current Situation Projections Impact Interventions National AIDS/STI Control Programme, Ghana AIDS Commission, 4th Ed, 2004

limited, as have attempts to protect and promote it. When women's health issues have been addressed in these populations, activities have tended to focus on issues associated with reproduction such as family planning and child-bearing, while women's mental health has been relatively neglected.

In investigating common mental, behavioral and social problems in the community we find that women are more likely than men to be adversely affected by specific mental disorders, the most common being anxiety related disorders and depression; the effects of domestic violence; the effects of sexual violence; and escalating rates of substance use.

Prevalence rates of depression and anxiety disorders as well as psychological distress are higher for women than for men. These findings are consistent across a range of studies undertaken in different countries and settings.[1] In addition to the higher rates of depression and anxiety, women are much more likely to receive a diagnosis of obsessive compulsive disorder, somatization disorder and panic disorder.[2] Data from the World Bank study revealed that depressive disorders accounted for close to 30 percent of the disability from neuropsychiatric disorders amongst women in developing countries but only 12.6 percent of that among men.

Explanations for the gender differences in mental disorders have been discussed in relation to different help-seeking behaviours of the sexes, biological differences, social causes and the different ways in which women and men acknowledge and deal with

[1] Desjarlais, R., et al World Mental Health: Problems and Priorities in Low-income Countries. Oxford University Press, 1995
[2] Paludi, M., & Russo, N. F. Women in Psychology O'Connell, AN and Russo, NF (Eds.) Westport CT, Greenwood Press, 1990

distress.[1] While all these factors may contribute to higher rates of depression or psychological problems among women, social causes seem to be the most significant explanation. Women living in poor social and environmental circumstances with associated low education, low income and difficult family and marital relationships, are much more likely than other women to suffer from mental disorders. They conclude that the combined impact of gender and low socio-economic status are critical determinants of mental ill-health.[2]

The Global Burden of Disease study revealed that mental disorders have a far greater impact on public in both developing and developed countries than previously imagined, and they are also a substantial economic burden.[3] The incidence and symptoms of mental illness vary with culture, sex, and class. In Syria for example, polygyny and physical abuse are linked to women's mental distress.[4]

Poverty at older ages often reflects poor economic status earlier in life and is a determinant of health at all stages of life. Countries that have data on poverty by age and sex (mostly the developed countries) show that older women are more likely to be poor than older men. But in many developing countries there are often simply no reliable data on poverty tabulated by sex and age.

Poverty is also linked to inadequate access to food and nutrition and the health of older women often reflects the cumulative impact of poor diets. For example, years of

[1] Paykel E. S. "Depression in women" Br J Psychiatry. vol. 158 no. suppl 10: 122-29 1999
[2] Blue et al, http://www.rho.org/html/gsh_keyissues.htm 1995
[3] Koblinsky M., et.al., The health of women: A global perspective Boulder. Co. Westview Press 1993
[4] Maziak, W. et al. "Socio-demographic correlates of psychiatric morbidity among low-income women in Aleppo, Syria" Social Science & Medicine vol. 54: 1419–1427 2002

child bearing and sacrificing her own nutrition to that of the family can leave the older woman with chronic anemia.

Another determinant of health is education. Levels of education and literacy among current cohorts of older women in developing countries are low. Increased literacy for older women will bring health benefits for them and their families. Lack of safe drinking water, a gender-based division of domestic chores (including the carrying of water), environmental hazards, such as contact with polluted water, agricultural pesticides and indoor air pollution, all have a cumulative negative impact on the health of women as they age in many developing countries.

One of the most powerful tools for improving health is education. Educating the woman has been shown to markedly improve the health of children particularly the girls, and other family members. Traditionally, women are the primary adults responsible for the health and health care of the family. Education involves the ability to receive, create, and disseminate knowledge. It is also the prerequisite for the development and implementation of women's rights. In most conservative regions of the world where women are denied access to education and basic human rights, education may result in the ability for women to become better wives and mothers. As it became clear to researchers that the factors associated with economic development did not in themselves account for variations in health indicators, more attention was given to social factors. Education of the woman proved to be an important predictor of health of women and their families. Certain factors have been used to examine the relationship between education and health: history, cross-sectional, national case studies and individual or household base research and this support the conclusion that there is a direct association between women's education and health.

Having a large family restricts a woman's job choices, work productivity and mobility and overall health. There is a wide variation in employment status by a woman's background status. Older women are likely to be employed than younger women, urban women are less likely to be employed than their rural counterparts, and educated women are more likely to be currently unemployed than women with no education.[1]

Older women everywhere are far more likely to be widowed than older men and most women can expect widowhood to be a normal part of their adult daily lives. While most women adjust both emotionally and financially to their changed situation, traditional widowhood practices in some countries result in situations of violence and abuse and pose a serious threat to older women's health and well-being. The most frequent cancers in women in developing countries are cervical, breast and stomach cancers. In Africa, an estimate in the annual number of cases in the late 1970s was cervical cancer, 37,000; breast cancer, 27,000; and lymphatic cancer, 12,000.[2]

Smyke expresses the view that three broad factors affect the health status of an individual; biological inheritance; environment in which a person lives; physical, social, cultural, economic and others; and individual's behavior or lifestyle.[3] She further observed that a person's health is influenced also by the availability of health information and health care.

A research on 'son preference' reveals the dynamic by which the status of women can have a profound, even fatal, impact on the health of women and girls.[4] It revealed that son preference is both a consequence and a cause of low status of women. It is consequence because it arises as a result of women being considered as playing only

[1] Duda R. B., op. cit. p.5
[2] WHO, op. cit., p. 14
[3] Smyke P. Women and World Development Series "Women and Health" Zed Books Ltd. pp. 25-133 1991
[4] Ravinran S., Health implications of sex discrimination in childhood WHO/UNICEF document. p.2 1989

unimportant roles and thus being valued less, and a cause, because under valuation in turn leads to lower investment in females as a result of which they are only able to play a peripheral role in society causing a further lowering of the status. Distance from women's home to the health facility, the cost of health care or medicine, and the comfort of the place psychologically and the technology available all affect women's health. Education of women tends to have a great effect on their reproductive life. They make use of health service regularly; have healthy children among other benefits according to Smyke. In Kerala, for example, educated women, however poor seem to believe they have a right to good health care. If women's confidence is higher in clinic and hospital waiting rooms, it is likely to be higher at home too. Research from Nigeria, Bangladesh and Mexico confirms that educated women tend to communicate more with their husbands, to be more involved in family decisions and to be more respected more able in other words to plan what happens in their lives.[1]

Environmental factors influence women's health. An estimated 80 percent of all sickness and disease in the developing world can be attributed to unsafe water and inadequate sanitation. United Nation Development Programme stated that 1.2 billion people are still without easing access to good water and probably 1.9 billion still live with inadequate sanitation. The implication for women's health is sobering. The environment within the home, where women spend so much of their time, also helps determine the state of women's health.

As it is observed in developing countries good nutrition or malnutrition is the pivotal factor in many of the circular relationships between women, health and development. In some areas an important task of nutrition education is to persuade people

[1] Ravinran S., op. cit.

to abandon the food taboos and customs that contribute to malnutrition among women especially, in situations where pregnant women are not expected to eat chicken, eggs on other foods because of superstitions. According to the GDHS women experience 9 percent chronic malnourishment and 25 percent are obsessed. In Greater Accra, 4.3 percent of women are malnourished whiles 46.3 percent are obsessed.[1]

Progress in improving health indicators has been uneven particularly in poor countries. Inequality in access to services for poor people and low quality care have been identified as problems in health service provision, which it is argued, is biased towards higher income groups.[2] Evidence suggests that in some countries, user fees have led to falls in utilization of services by some poor groups[3]. This is the situation in Accra.

It is important to recognise that women's health problems and access to health care are affected not only by poverty but also by gender inequality. Studies of health care seeking behaviour suggest that the constraints of poverty and gender mean that it is poor women who are least likely to have access to appropriate care and to seek adequate treatment.

Based on evidence that strong links exist between female education and indicators of health status, the World Bank has placed a strong emphasis on the education of girls and women as a cost effective way to improve health.[4] It also states that more generally increasing household income is argued to be the most effective method for improving health status, as the poor are most likely to spend additional income in ways that enhance their health.

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[1] Ghana Statistical Service (GSS), op. cit., p. 4
[2] Oxaal Z and Baden S. "Challenges to women's reproductive health: maternal mortality" Bridge report vol. 38, 1996
[3] Ibid., 1
[4] World Health Organisation op. cit.

Worldwide, hypertension is common and now regarded as a major public health problem.[1] On the other hand, hypertension and its complications, including stroke, heart failure, and renal failure, have been reported in blacks all over the world. Hypertension is now being widely reported in Africa and is the most common cause of cardiovascular disease on the continent.[2] It is also a major factor in the high mortality of adults in sub-Saharan Africa. In Ghana, hypertensive renal disease is a common complication in both Kumasi and Accra.[3]

In Ghana, earlier studies revealed hypertension prevalence of 4.5 percent among rural dwellers and of 8 to 13 percent in the town. This was part of an evaluation of the health burden of cardiovascular diseases in Accra and was to form the basis for setting up a hypertension control program. More recently, the prevalence of hypertension in urban Accra was found to be 28.3 percent (crude) and 27.3 percent (age-standardized). Hypertension is becoming more common as urbanization increases, and this has been shown in several studies in Africa.[4]

A number of studies of urban African populations have shown a positive correlation between blood pressure, age, and gender. The prevalence of hypertension in Accra was much higher in men than in women aged less than 40 years but similar above that age. On the other hand, in a study in 1993, prevalence was higher in women than in men.[5] In Ghana, studies were carried out in Greater Accra from 1972 to 1987 as part of an investigation into the health burden of cardiovascular diseases. The prevalence of

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[1] Murray C. J., Lopez A. D. "Mortality by cause for eight regions of the world" Global Burden of Disease Lancet vol. 349: 1269–1276 1997

[2] Cooper R. S. and Rotimi C. "Establishing the epidemiologic basis for prevention of cardiovascular diseases in Africa" Ethn Dis vol. 3, 1993

[3] Mate-Kole M. O., Affram R. K. "Presentation and clinical course of End-Stage Renal Failure in Ghana: A preliminary prospective study". Ghana Medical Journal vol. 24: 164–168, 1990.

[4] Cooper R. S. and Rotimi C. op. cit. p. 23.

[5] Pobee J. O. M. op. cit. p.14.

hypertension was found to be 4.5% in the rural areas and 8to 13 percent in the city itself. More recently, in Accra, Amoah found overall crude and age-standardized prevalence rates of hypertension to be 28.3 percent and 27.3 percent, respectively.[1]

Tuberculosis (TB) kills about two million people each year, making it one of the world's leading infectious causes of death among young people and adults. One-third of the world's population is infected with TB. Five to 10 percent of people who are infected with TB become sick with TB at some time during their life. Each year, more than 8 million people become sick with TB.[2]

Due to economic decline, TB is on the rise in many developing and transitional economies. TB is a leading cause of death among women of reproductive age and is estimated to cause more deaths among this group than all causes of maternal mortality.[3]

More than 1.5 million TB cases occur in sub-Saharan Africa each year. This number is rising rapidly, largely due to high prevalence of HIV. Poverty, lack of basic health services, poor nutrition, and inadequate living conditions all contribute to the spread of TB. More than 75 percent of TB-related disease and death occurs among people between the ages of 15 to 54 the most economically active segment of the population.[4]

Available statistics from The National Tuberculosis Control Programme (NTCP) of the Korle Bu Teaching hospital in Accra researching into the high incidence of

[1] Amoah A. G. B. "Hypertension in Ghana: a cross-sectional community prevalence study in Greater Accra" Ethn Dis vol.13: 310–315, 2003
[2] World Health Organization Global Tuberculosis Control Report, Geneva: WHO, March 2002.
[3] The Stop TB Partnership Basic Facts on TB: Stop TB, fight poverty. March 24, 2002
[4] Simons L. A., et.al., "The Economic Impacts of Tuberculosis" The Stop TB Initiative, 2000 Series. Amsterdam, March, 2000.

reported cases of tuberculosis among men as against women indicated that, in the year 2004, 4,316 women reported having TB.[1]

To determine the relative frequencies of gynaecological cancers in Ghana at Korle Bu Teaching Hospital, seen in a fifty-two month period, cervical cancer was the commonest, constituting about 57.8 percent of gynaecological cancers.[2] Ovarian cancer, endometrial cancer, choriocarcinoma and vulval carcinoma followed in that order. The mean age and parity for cervical carcinoma (52.0 years, 5.8 respectively) were significantly higher than those for ovarian carcinoma (46.4 years, 3.5 respectively) but not significantly different from those for endometrial carcinoma (56.0 years, 5.4 respectively).

Social and clinical characteristics of one hundred and thirty-one women who attended the psychiatric outpatient clinic for the first time at the Department of Psychiatry, University of Ghana Medical School, within five years (1988-1992) were studied.[3] The data suggested that the peak age of depressed women at consultation was between 20 and 40 years and that a significant proportion of them were in the married group. Moreover, the majority has no or very little education and thus little opportunity for formal employment hence the majority were self-employed.

To determine the socio-demographic associations of obesity in Ghana, a cross-sectional descriptive study was conducted on a sample of 6,300 adults aged 25 years and over who were selected by random cluster sampling. Two urban (high-class and low-

[1] Afriyie M. R., National TB control programme probing high infection among men National Tuberculosis Control Programme (NTCP) 1995
[2] Nkyekyer K. "Pattern of gynaecological cancers in Ghana" Pub Med - indexed for MEDLINE Department of Obstetrics and Gynaecology, Ghana Medical School, Accra, Ghana.
[3] Turkson S. N., Dua A. N., "A study of the social and clinical characteristics of depressive illness among Ghanaian women-1988-1992" PubMed - indexed for MEDLINE Department of Ghana Medical School, Accra, Ghana.

class suburbs) and a rural community in Accra, Ghana were surveyed. The overall crude prevalence of overweight and obesity was 23.4 and 14.1 percent, respectively. The rates of overweight (27.1 vs. 17.5 percent) and obesity (20.2 vs. 4.6 percent) were higher in females than males. Obesity increased with age up to 64 years. There were more overweight and obesity in the urban high-class residents compared with the low-class residents. Respondents with tertiary education had the highest prevalence of obesity (18.8 percent) compared with less literate and illiterate respondents (12.5–13.8 percent). Respondents whose jobs were of a sedentary nature had higher levels of obesity (15 percent) than those whose jobs involved heavy physical activity (10 percent). Subjects who did not engage in leisure-time physical activity were more obese than those who had three or more sessions of leisure-time physical activity per week (15.3 vs. 13.5 percent).

It was concluded that overweight and obesity are common among residents in the Accra area. Older age, gender, urban, high-class residence, sedentary occupation and tertiary education were associated with higher levels of obesity. [1]

A research was conducted among Ghanaian women that represented a study of beliefs about breast cancer. In-person interviews based on the revised Powe fatalism inventory (rPFI) were held with 109 women and correlational analysis and factor analysis were performed. There were negative, nonsignificant associations between fatalism and age, and educational level. Fatalism scores were relatively low.[2]

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[1] Amoah A.G., Sociodemographic variations in obesity among Ghanaian adults Public Health Nutrition CABI Publishing vol. 6, no. 8: 751-757 December 2003

[2] Mayo R. M., et.al., Fatalism toward breast cancer among the women of Ghana
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1.6 Conceptual Framework

From the literature review it can be argued that demographic and socio-economic variables influence the health of women through the effect of intermediate variables. These demographic and socio-economic variables include, age, education, occupation, religion, place of residence, and marital status. The relationship between women's health status, the intermediate variables and the independent variables is shown in the Figure 1.1. In the framework, the demographic and socio-economic variables are the independent variables and health status is the dependent variable. The independent variables operate through the intermediate variables to affect the health of an individual. The independent variables therefore, do not affect the dependent variables directly. It is the intermediate variables that have direct effects on the health status. For instance, the occupation of a woman determines the income she receives and this will therefore affect her health seeking behaviour; whether she could afford a modern health facility or would go for traditional care, which in turn affects her health either negatively or positively. The occupation also influences how active a person would be, whether she is engaged in vigorous or moderate physical activities, whether she has enough time at her disposal for self care, her health seeking behaviour as well as her affordability for good nutrition thereby, determining her health status.

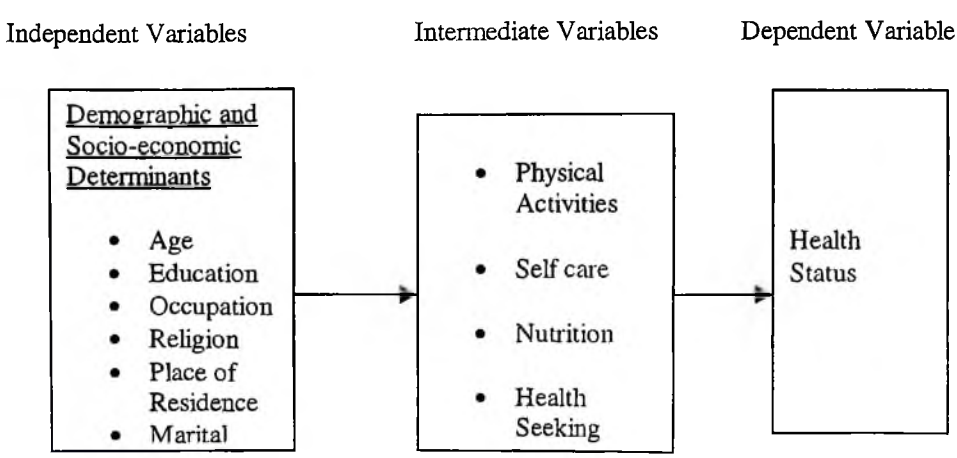
Education also affects women's health through physical activities, self care, nutrition and health seeking behaviour. An educated woman knows how important it is for her to be physically active, as she knows the implication of not being active. She therefore makes time for exercises in case her work does not give her such an opportunity. She knows how best to care for herself to avoid certain sicknesses, knows

the importance of the right quantity of the various nutrients in food and knows how best to take care of herself when she falls ill and the right place to seek for attention.

Religion also influences the intermediate variables. Certain groups of Christians are not supposed to seek medical attention from health centers but to pray for healing when one falls ill. Others do not receive blood transfusion (Jehovah Witnesses). Some do not eat certain types of foods that are possible to affect their health. In the same vein, self care and physical activity is affected by religion of the person which in turn affects the health status.

The place where one lives and her marital status also affect a woman's health through these intermediate variables. Her access to health care and other facilities, the nature of her environment, how busy one is in her home because she is taking care of her household and whether the husband restricts or prevent her or could determine the kind of health care she should go for. Also, whether she has a fair share of food especially, nutritious food, determines her health status. Health status here represents specific health conditions women experience.

Figure 1.1: Conceptual framework for the Analysis of Women's Health



1.7 Hypotheses

I) There is a relationship between the prevalence of diseases among the population and the place of residence.

II) The prevalence of non-communicable diseases varies with age of the women.

1.8 Methodology

1.8.1 Sources, Scope and Limitations of Data

The main source of data for this study is the 2003 Women's Health Survey in Accra (WHSA), Ghana. WHSA collected the health information on random selection of adult women aged 18 years and older in the raining and dry season of 2003. This is an assessment of the burden of disease of adult women of urban environment. This included a household survey conducted by a field interviewer and a comprehensive medical and laboratory examination performed by a physician in the Gynecology Outpatient Clinic at Korle Bu Hospital, University of Ghana.

The WHSA study collected data from three groups i.e. women aged 55 years and over, the study group; women aged 35 to 45 years and women aged 18 to 25 years, the control group. Information was collected from a total of 3,200 women in Accra, 800 people from age groups 18 to 24, 25 to 34, 35 to 54 and 55 and over. This took place from May to August 2003.

The WHSA study consisted of three major components, a household survey (HHS) which recorded the participants particulars; focus group discussions (FGD) of a total of 72 women randomly selected, 24 women from each three groups and; and a Six-Month Assessment (SMA) of 99 women.

There were evidence of missing figures in the responses and this varied from variable to variable. This therefore had effects on the analysis as it does not give the true

picture of what is in reality. Some age groups also had a bigger range than others thereby, making some groups larger than others.

1.8.2 Method of Analysis

Descriptive statistics will be employed in analyzing the data. Also, comparative analyses will be employed to compare the various forms of data collection and also for comparism of the various groups. Cross tabulation analysis would be used to analyse the independent variables and specific health conditions.

Chi-square test will be employed to find out if there is a relationship between the area of residence and the incidence of diseases and if there is also a relationship between ages of women and the prevalence of non-communicable diseases. Chi-square is considered as test of goodness of fit. This test evaluates whether data falling into several categories does so with a hypothesised set of probabilities. Also, it is considered as a test for independence. Here, data is classified on two dimensions and is summarised in a contingency table.

The test for independence then evaluates whether the cross-classified variables are independent of each other. If variables are not independent, then it can be established that the variables in question are related.[1] The probability curve depends upon a parameter called the number of degrees of freedom (df). To use the chi-square, a chi-square point is employed. The value of chi-square in a particular situation depends upon the right hand tail area and the number of degree of distribution.

In this study, the chi-square test for independence is considered to study the relationship between two variables (independent and dependent). The independent

[1] Bruce L Bowerman and Richard T. O'Connell, Applied Statistics, improving business process, USA, 1997 pp 1153-1184

variables considered here are ages of women and socio-economic area of residence while the dependent variable is the health status or conditions (hypertension, diabetes, heart attack, stroke chronic lung condition, asthma, depression, cancer, malaria, tuberculosis, obesity, urinal incontinence, broken bone, arthritis, schizophrenia, epilepsy and cataracts).

1.9 Organisation Of The Study

The study has been organised into five chapters. Chapter one is the introduction, consisting of the background of the study, problem statement, rationale, objectives of study, literature review, conceptual framework, methodology of the study and definitions of concepts.

Chapter two focuses on data evaluation, as well as an analysis and description of the demographic and socioeconomic characteristics of the respondents; while chapter three examines respondents' health conditions and risk factors. In chapter four, cross tabulation is used to analyse the independent variables and some selected health conditions of respondents. Chapter five of the study concludes with a summary of the findings of the study and recommendations.

CHAPTER TWO

EVALUATION OF DATA AND ANALYSIS OF DEMOGRAPHIC AND SOCIO-ECONOMIC CHARACTERISTICS OF RESPONDENTS

2.1 Introduction

The purpose of this chapter is to briefly evaluate the data and provide a descriptive analysis of some demographic and socio-economic characteristics of the respondents. Data evaluation is necessary in order to ascertain the quality of data and have a basis for explaining some of the findings of subsequent analysis. Also, an understanding of the background characteristics of respondents is necessary for analysis and interpretation of data on women's health. Although the survey collected data on many characteristics, this study is interested in only those socio-economic characteristics of women that impact on their specific health conditions. The demographic and socio-economic characteristics of the population have significant bearing on their health status. Respondents interviewed were 3,200 in number. The chapter discusses the percentage distribution of women aged 18-55 and over interviewed in the WHSA, 2003 by key background characteristics, which include age, area of residence, religion, education, marital status and occupation.

2.2 Data Evaluation

Before data are used in any meaningful demographic analysis, they need to be evaluated. Once the data set is evaluated and the errors investigated, data adjustment specific to the type of errors present in the data can be attempted. The process of evaluation is necessary because in sub-Saharan Africa data are obtained from censuses, sample surveys both of which are subject to coverage and content errors, which if not removed can bring about bias in estimates.

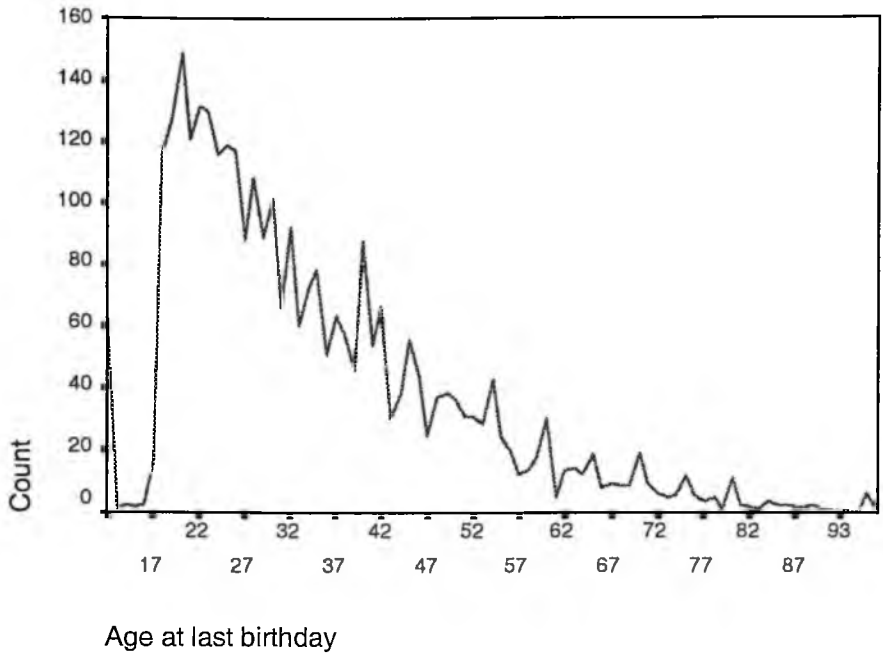
2.2.1 Evaluation of Age Data

Age is one of the most important variables used in demographic analysis. However, age data in most African settings are affected by coverage and content errors. Coverage errors relates to the completeness and quantitative accuracy of the data collection process. They result from the omission of individuals of certain ages or an erroneous inclusion/duplication of individuals of certain ages in a data collection. On the other hand, content errors occur due to misstatement of ages by respondents, erroneous estimation of the age of a respondent by the enumerator or mistakes occurring during the data processing exercise, etc.

Misstatement of ages by respondents may be deliberate or due to memory lapse. Respondents who do not know their ages may estimate it from historical events generally known to the population. Estimates of this nature may therefore contain some errors.

Figure 2.1 and Appendix A show the female population in single years. The graphical presentation illustrates the magnitude of errors in the single age data. It shows a jagged-edged saw pattern, evidence of age heaping likely to be caused by preference of certain digits, typical of sub-Saharan African age data. There is evidence of preference for ages ending in digits 0 and 5. It can also be observed from the graph that there is some slight avoidance of ages ending in digits like 7.

Figure 2.1 Graphical Representation of Female population in single years, Accra, 2003.



Source: Computed from Women's Health Survey in Accra, 2003

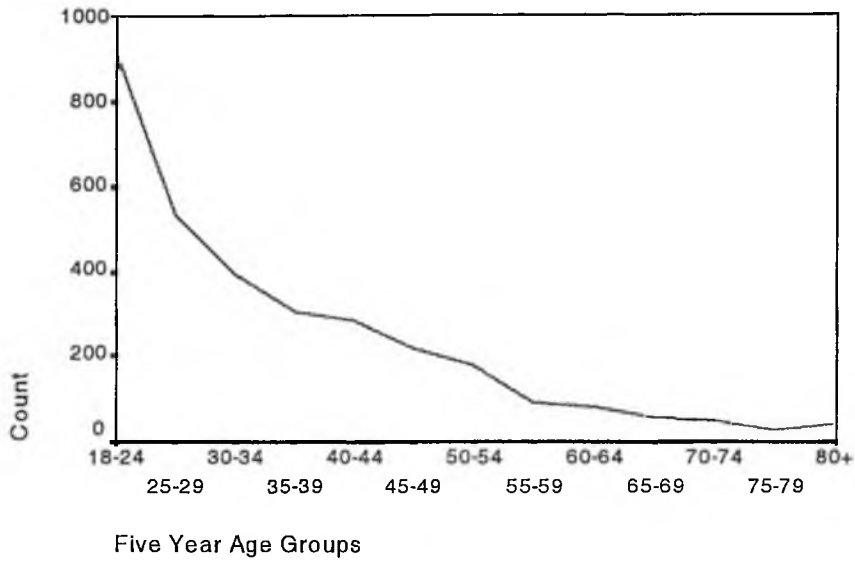
To reduce the effect of net misstatement of age, the data are often grouped into five-year age groups. Figure 2.2 and appendix B show the graphical representation of respondents' ages in five-year age groups. This shows a smoother curve that is characteristic of African population.

In order to quantify the magnitude of the digit preference depicted in the graphs above, the PAS software is employed. Five methods were employed using the software. These include, Carrier Farrag, Karup King Newton, Arriaga, United Nations, and Strong.

After applying the age ratio score technique the outcomes were Carrier (10.96), Karup King Newton (14.5), Arriaga (14.13), United Nations (9.43) and Strong (5.36). The outcome of the estimation revealed that the Strong method gave a more accurate

value of 5.36 indicating that the data can be used for further analysis. (Appendix C shows the general estimation of Age Ratio.)

Figure 2.2 Graphical Representation of Female population in Five-year age groups, Accra, 2003



Source: Computed from Women's Health Survey in Accra, 2003

2.3 Demographic and Socio-economic characteristics of Respondents

2.3.1 Age Distribution

Respondents' age is an important factor in any demographic analysis. Age also affects the socio-economic characteristics of an individual just like occupation and education. The distribution of respondents by age group is shown in Table 2.1. Most of the respondents are in age group 35-54, which constitutes about 31 percent but above that age, the percentage distribution of the sampled females decreases with age. The greater percentages are in the younger age group i.e. below 35 years making up about 58 percent.

Table 2.1 Percentage Distribution of Female Respondents Aged 18 years and over, Accra, 2003.

Age Groups	Frequency	Percentages
18-24	915	28.8
25-34	932	29.4
35-54	985	31.1
55+	340	10.7
Total	3172	100.0

Source: Computed from the Women's Health Survey in Accra, 2003

2.3.2 Place of Residence

Residential characteristics of respondents are very important factors that have an influence on their health. The type of residence is used as a proxy for physical access to modern health facilities and other social amenities. This is because, higher socio-economic area enjoys a higher level of economic development in terms of concentration of health facilities, whereas lower socio-economic areas are relatively less served with these facilities.

Table 2.2 shows that a majority of the respondents live in lower class areas (31.6 percent) whereas fewer live in the higher class area (17.6 percent) and the rest in the lower and upper middle class areas (50.8 percent).

Table 2.2 Percentage Distribution of Respondents by Socio-Economic of Area of Residence, Accra, 2003

Area Of Residence	Frequency	Percentages
Low Class	1003	31.6
Low Middle Class	834	26.3
Upper Middle Class	778	24.5
High Class	557	17.6
Total	3172	100

Source: Computed from Women's Health Survey in Accra, 2003

2.3.3 Religion

Religion influences the behaviour of individuals through faith or belief in a supernatural being by adherence to divine laws and commands. This has an effect on the health status of an individual as it determines the kind of service to seek when a person falls ill as some religious groups do not accept any modern preventive or curative measures. Table 2.3 shows that the majority of respondents are Christians consisting of 43.3 percent Pentecostals (charismatics, Pentecostals and other Christians), 6.6 percent Catholics and 28.2 percent Orthodox (Methodists, Presbyterians and Anglicans). Moslems make up 14.1 percent, whereas the other religious groups were relatively few.

Table 2.3 Percentage Distribution of Respondents by Religious Group, Accra, 2003

Religion	Frequency	Percentage
Catholic	210	6.6
Orthodox	896	28.3
Pentecostal	1368	43.3
Spiritualist	104	3.3
Moslem	446	14.1
Traditional	8	0.3
No religion	73	2.3
Total	3165	100

Source: Computed from Women's Health Survey in Accra, 2003

2.3.4 Educational Status

Educational attainment is generally one of the key factors that affect the health status of women. It affects women's knowledge, how to take care of themselves, their health seeking behaviour and most importantly, their affordability. The level of education has been found to be a major determinant of the type of employment and also to be correlated with income.[1] The level of education of a woman can be used as a proxy for her socio-economic status, since education increases the opportunity for paid employment in the modern sector, which gives women economic independence, thus

[1] Schultz, T.P., "Impact of household economic and community variables on child mortality" Population and Development Review Supplementary Vol. 10,1984

raising their status. In addition, education for women induces changes in beliefs and values by encouraging receptivity to new ideas, competitiveness and self-confidence.[1]

Table 2.4 shows the percentage distribution of the respondents by educational attainment. For the purpose of this study, Middle School is combined with Junior Secondary School (J.S.S.) and all higher educational levels above secondary are grouped under higher education. The table indicates that less than 13 percent of the women have obtained primary education, 44.6 percent had Middle or JSS education, 17 percent had secondary and 6.9 percent had higher educational level. A number of the respondents did not have any level of education, which constituted 18.6 percent. On the whole, 81 percent of the respondents had a form of formal education.

Where people live also affects their level of education, as higher-class areas are associated with a higher level of education and a lower class, a relatively lower level of education. From table 2.5, 27.4 percent of the respondents in low class areas are uneducated whereas those with higher education constitute only 3.3 percent of those living in the low class areas. As one moves towards a higher class, the percentage of those without education reduces. Middle/JSS education tends to be high in all the areas of residence.

The low middle class is also composed of as high as 18.4 percent of those without education and as low as 4.6 percent of higher education. The high-class areas also account for 12.7 percent with no education and 14.5 percent of higher education. Level of education tends to be related to where women live.

[1] Curton, L., "Status of Women: A comparative Analysis of Twenty Developing Countries", Reports on World Fertility Survey, Population Reference Bureau Inc., Washington D.C., 1982, 7-8

Table2.4 Percentage Distribution of Respondents by Level of Education, Accra, 2003

Educational Level	Frequency	Percentage
No education	588	18.6
Primary	399	12.7
Middle/JSS	1,406	44.6
Secondary/SSS	540	17.1
Higher	218	6.9
Total	3,151	100.0

Source: Computed from Women's Health Survey in Accra, 2003

Table 2.5 Percentage distribution of level of education by area of Residence, Accra, 2003

Level of education	Area of Residence			
	Low class	Low middle class	Upper middle class	High class
No education	27.4	18.4	11.8	12.7
Primary	17.7	11.3	10.7	8.3
Middle/JSS	41.0	49.0	47.9	40.1
Secondary/SSS	10.6	16.7	20.8	24.3
Higher	3.3	4.6	8.8	14.5
Total	100.0	100.0	100.0	100.0

Source: Computed from Women's Health Survey in Accra, 2003

2.3.5 Marital Status

Table 2.6 shows the percentage distribution of women by marital status. Marital status is classified into four categories; never married, currently married, widowed/separated/divorced, and ever married/status unknown. Marital status is important in analyzing the health status of women in terms of support. A majority of respondents reported being currently married (40.6 percent) followed by those never married (30.5 percent). The proportion reporting being widowed/divorced/separated accounted for 25.4 percent, which was quite high. Another 3.6 percent of the women had an unknown marital status.

Within the various age groups, most of the respondents in the 18-24 age group were never married (75.1 percent) and only 18.4 percent were currently married. Contrary to the former age group, the 25-34 age group had 55.4 percent of them being currently married that is, the group accounting for the highest proportion of currently married women. A substantial proportion of the women aged 35-54 years (39.7 percent) of the women were either widowed/divorced/separated. This status is also highest among the age group 55+ and this might be due to the fact that most of their partners might be dead during those years, while 1.5 percent of them according to the data, are never married.

Table 2.6 Percentage Distribution of Women's Marital Status by Age Group, Accra, 2003

Survey age group	Marital Status				
	Never married	**Currently married**	**Widowed/Divorced/Seperated**	**Status unknown**	**Total**
18-24	75.1	18.4	4.9	1.7	100.0
25-34	25.3	55.4	15.8	3.5	100.0
35-54	3.9	52.9	39.7	3.5	100.0
55+	1.5	26.8	64.9	6.8	100.0
Total &	**30.5**	**40.6**	**25.4**	**3.6**	**100.0**

Source: Computed from Women's Health Survey in Accra, 2003

2.3.6 Occupation

The occupational status of respondents is an important factor determining the health status of women. A woman's entry into the labour force has both negative and positive effects on her health. The negative effects result from reduced time available to seek medical attention and the positive effects result from increased household income and enhanced knowledge in disease prevention and cure. Table 2.7 shows the percentage distribution of respondents by occupational category. The majority of respondents are traders, and they constitute about 54 percent, followed by seamstresses and hairdressers who constitute 28.2 percent follow traders. A few were artisans or artists (0.7 percent) and the other occupations made up less than 10 percent each.

Table 2.7 Percentage Distribution of Respondents by Occupational Status, Accra, 2003

Occupation	Frequency	Percentage
Seamstress/hairdresser	649	28.2
Trader	1,232	53.4
Professional	73	3.2
Student/apprentice	72	3.1
Housework/childcare	116	5.0
Low skilled labour/office work	144	6.3
Artist/artisan	16	0.7
Total	2,302	100.0

Source: Computed from Women's Health Survey in Accra, 2003

Table 2.8 also shows the percentage distribution of respondents' occupational status according to their level of education. Quite expectedly, the majority of women with no education are engaged in housework/childcare (35.7 percent) or are traders (23.0 percent). The professionals mostly have higher level of education (42.5 percent) followed by those with secondary or SSS (35.6 percent) education and those with no education make up only 6.8 percent. Expectedly, none of the students/apprentices has no education but mostly have secondary (59.2 percent) or higher education (29.6 percent). Artists/artisans have similar proportions like students ad apprentices. Women with higher education who are traders account for only 2.9 percent but the significant proportions are those with middle/ JSS (49.0 percent) and the no education group (23.0 percent).

Professional workers have secondary or higher educational level. Low skilled labourers or office workers have secondary or middle/JSS education. Respondents with no educational attainment are mostly engaged in housework/child care or trading and so are respondents with primary school education. The level of education tends to be related to the kind of occupation they are engaged in.

Table 2.8 Percentage distribution of respondents by Level of Education and occupation, Accra, 2003

Education	OCCUPATION						
	Seamstress/ Hairdresser	Trader	Professional	Student/ Apprentice	Housework/ Child care	Low skilled labourers/ office work	Artist/ Artisan
No education	10.2	23.0	6.8	0.0	35.7	6.9	0.0
Primary	13.5	15.2	2.7	1.4	16.5	6.2	5.9
Middle/JSS	57.1	49.0	12.3	9.9	37.4	26.2	17.6
Secondary/SSS	12.9	10.0	35.6	59.2	7.0	42.1	41.2
Higher	6.4	2.9	42.5	29.6	3.4	18.6	35.3
Total %	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Computed from Women's Health Survey in Accra, 2003

CHAPTER THREE

GENERAL HEALTH, HEALTH CONDITION, RISK FACTORS AND HEALTH SEEKING BEHAVIOUR

3.1 Introduction

Owing to the complexity in determining women's health status, various socio-economic characteristics have been identified as indicators of women's health status. This chapter examines the general health, sexual behaviour and STIs, reproductive health, specific health conditions, self-care, health seeking behaviour, physical activities, risk factors for non-communicable diseases and nutrition as affected by socio-economic and demographic variables of the female respondents.

In this respect, general health, sexual behaviour, specific health conditions and STIs and reproductive health are analysed in relation to the age distribution using cross tabulation whereas risk factors for non-communicable disease, physical activities, health seeking behaviour, and nutrition are analysed in relation to the selected background characteristics.

3.2 General Health

Information on the general health of women was collected in diverse ways. Respondents were asked if their health now limits them in vigorous activities, whether physical health decreased work time, how much of the time respondents felt tied, if they had excellent health, among other information.

Table 3.1 presents information on the general health of respondents by age group. A total of 857 of respondents responding to whether they were limited to doing vigorous

activity answered in a positive way and out of this number, 19 percent were among the age group 18-24. The next highest proportion was found within the age group 25-34 who accounted for 28 percent, and those who were affected most were those belonging to age group 34-54 (43.2 percent). Those above 55 years accounted for about 9 percent of those limited in doing vigorous activity.

When asked about whether their physical health decreased their work time, a smaller percentage responded positively from the age group 18-24. The age group 25-34 accounted for 22.2 percent, while 35-54 accounted for about 36 percent and those over 55 years accounted for 24 percent. All ages with problems constituted about 23 percent of the total respondents. Those, who felt tired in the past four weeks accounted for about 94 percent of the respondents. Of these, 32 percent were in the age group 35-54 and 11 percent were for the ages above 55 years. The other groups accounted for percentages below 30.

Excellent health was greatest among the younger age groups. Ages 18-24 and 25-34 constituted 32.2 percent each. From the response, it can be observed that generally, younger ages reported better health than the older ages. Another observation is that, the 35-54 age groups reported the worse general health status.

Table 3.1 Percentage distribution of women's general health by age group, Accra 2003

Age group	Limitation to vigorous activity	Physical health decreases work time	Felt tired	Excellent health
18-24	19.4	18.0	27.9	32.2
25-34	28.0	22.2	29.2	32.2
35-54	43.2	35.8	31.9	29.0
55+	9.4	24.0	11.0	6.7
Total %	100.0	100.0	100.0	100.0
Total count	857	729	2967	2464

Source: Computed from Women's Health Survey in Accra, 2003

3.3 Sexual Behaviour/STIs

This section examines the sexual behaviour and Sexually Transmitted Infection (STIs) of respondents by age as shown in the Table 3.2. Women respondents were asked questions about their sexual behaviour and whether they had ever had sex, age at first sexual intercourse, number of lifetime sex partners, ever used condoms, and number of sexual intercourse without condoms in the last 30 days. Concerning STIs, respondent were asked if they had problems with urinating more often than normal, having pains in abdomen or vaginal area during sexual intercourse, having bad odour in vaginal area and having any ulcers or sores in vaginal area. About 5 percent of the respondents reported having abnormality when urinating and from this proportion, 36 percent were from age

group 35-54, 27 percent from ages 18-24, and as low as 11 percent from those over 55 years.

Pain during intercourse was most recorded among the ages, 18-24 and that is quite substantial (42 percent). The next younger group (25-34) accounted for 39 percent. Those above 55 years made up less than one percent. Again, odour in the vaginal area was high for those within 18-24 years, over 50 percent and decreased with increasing age. A little more than 6 percent and 5 percent was accounted for by those having pain during intercourse and having odour in vaginal area respectively out of the total respondents. Those with ulcers constituted about 3 percent of the female respondents with same characteristics as above. In all, about 19 percent of the respondents reported STI symptoms as shown in the table 3.2. STI symptoms seem to be quite high among the female population and it is quite high among the younger women most likely not to be married.

Table 3.2 Percentage Distribution of respondents with STI symptoms and sexual behaviour by age group, Accra 2003

Age group	Abnormal urine	Pain during intercourse	Odour in vagina	Ulcers around vagina	Ever had intercourse	Age at first intercourse		Number of sex partners in a life time			Ever used condom	No. of intercourse without condom in the last 30 days		
						Below age 13	Above age 13	1	2-6	7+		0	1-6	7+
18-24	27.1	41.5	51.2	48.8	21.0	46.9	21.7	28.4	17.2	20.6	34.2	39.7	38.5	33.3
25-34	25.7	39.0	31.3	36.0	32.0	18.8	33.3	27.9	35.2	29.4	41.6	39.0	38.4	53.3
35-54	36.1	19.0	16.3	14.0	34.9	25.0	34.3	28.1	38.0	50.0	23.0	20.2	23.1	13.4
55+	11.1	0.5	1.2	1.2	12.1	9.4	10.7	15.5	9.6	0.0	1.2	1.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total count	144	200	166	86	2799	32	2598	1010	1695	34	766	287	143	15

Source: Computed from Women's Health Survey in Accra, 2003

Table 3.2 also shows that 87 percent of the sample population reported having ever had intercourse of these, 21 percent were between ages 35-54 and 12 percent by those over 55 years. Ages 35-54 constituted 35 percent. Only about a percent of the respondents reported to have had their age at first intercourse below 13 years while the rest reported first sexual intercourse above age 12. The number of sexual partners ranged from one to over 20. About 33 percent of them had only one partner, 54 percent had between two and six partners and 13 percent had over six partners. The GDHS in 2003 recorded a male condom use within women of which age group 20-24 accounted for the highest proportion,

In this study, respondents who have ever used condom constituted 24 percent of the sample population, 34.2 percent of them were in the age group 18-24 and the highest percentage (41 percent) recorded by ages 25-34. For those answering the question of about the number of times having sex without condom in the last 30 days, about 65 percent reported zero times, meaning they did not have sex without using condom. Thirty two percent had between one and seven times and another 3 percent, more than seven times without the use of condom. In general, the sexual behaviour of the population under study showed that there is a low use of condom and high prevalence of STI symptoms.

3.4 Reproductive health

Table 3.3 shows the reproductive health of the women respondents by the various age groups. To determine the respondent's reproductive health situation, interview included questions relating to how old they were when they had the first menstruation; hot flushes or night sweat in the last six months; ever been pregnant even for a short time; total number of children living and total number of children dead. About 2 percent had their first menstruation before age 12 and among these, the highest proportion (53.4

percent) were in the youngest age group (18-24). The majority of the women also had their first menstruation between ages 12 and 19. For those who had their first menstrual period after age 19, the majority were in the older age groups (35-54 and 55+) accounting for about 67 percent. Also, 3.3 percent of the sample population reported having hot flushes in the last six months. Among this, age groups 18-24 and 24-34 accounted for about one percent each while the older ages reported a substantial proportion 68.6 and 29 percent for age groups 34-54 and 55+ respectively.

Those who have ever been pregnant constituted about 63 percent of the respondents. Among these, about 14 percent were within the ages 18-24 and the majority (40 percent) between ages 35-54. Those who have between one and five children living constituted about 55 percent and among them 35.6 and 41.7 percent were those belonging to ages 25-34 and 35-54 respectively. Others also had more than five living children which accounted for about 9 percent of the total sample. Those with more than five living children were mostly those aged over 55 years constituting exactly 50 percent and the ages 35-54, about 47.5 percent which agrees with the fact that the older a female's age, the higher her parity level.

Also, the higher a woman's fertility and the older she grows, the more she reports of dead children. The data for this study therefore support this fact. A little more than 15 percent lost between one and five children whereas 0.2 percent lost more than 5 children. On the whole, the total number of children per woman seems to be high as child loss also seems to be high.

Table 3.3 Percentage distribution of respondents' reproductive health by age, Accra 2003

Age group	Age at first menstrual period			Ever pregnant	Number of living children		Number of dead children		Hot flushes in last 6 months
	Below 12	12-19	20+		1-5	6+	1-5	6+	
18-24	53.4	30.2	4.7	13.6	12.5	1.1	6.6	0.0	0.9
25-34	27.6	30.1	28.6	31.4	35.6	1.4	21.0	33.3	1.0
35-54	13.8	3.09	42.9	40.5	41.7	47.5	41.2	16.7	68.6
55+	5.2	8.8	23.8	14.5	1.02	50.0	31.2	5.0.	29.5
Total %	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total count	58	2876	63	1985	1750	278	486	6	105

Source: Computed from Women's Health Survey in Accra, 2003

3.5 Specific Health Condition

This section deals with the specific health condition of the respondents and this is in two parts; diagnosed illness and laboratory examined illnesses. Table 3.4 presents the diagnosed illnesses and Table 3.5, the laboratory examined illness. Respondents were asked whether they had any condition and who diagnosed such conditions and if they had any laboratory examinations for those conditions. Diagnoses of conditions were by doctors, nurses, pharmacists, herbalists and others diagnosed themselves.

The various conditions included high blood pressure/hypertension, diabetes, heart attack/shock, stroke, chronic lung cancer, asthma, depression and cancer. Others included malaria, tuberculosis, obesity, urinal incontinence, broken bone, arthritis/joint pain, schizophrenia, epilepsy/seizure or fit and cataracts.

From the diagnoses, 51 percent of the respondents have malaria, 11 percent were hypertensive, and 9 percent had arthritis or joint pain and 3 percent, asthma. Certain diagnosed conditions were relatively insignificant among the population and these included epilepsy, schizophrenia, cancer, cataracts, tuberculosis, chronic lung conditions and stroke. Certain conditions were more prevalent among certain age groups. For instance, hypertension, diabetes, heart attacks, depression, cancers, tuberculosis, urine incontinence, broken bone, arthritis, schizophrenia and cataracts were more common among age groups 35-54 and 55 and over. Malaria and chronic lung conditions were relatively higher among the younger age groups.

The laboratory examination also resulted in similar results to that of the diagnosed conditions with very little difference. Malaria and chronic lung condition were still high among the young age group compared to about 85 percent of the respondents who were diagnosed of the various conditions, 75 percent were examined to have the various conditions out of the total sample population. Certain conditions were not reported

among certain age groups. As shown in Table 3.4, age group 18-24 did not have any record of stroke and schizophrenia and for age group 25-34, there were no chronic lung conditions among two age groups, 35-54 and over 55 years.

Table 3.4 Percentage distribution of respondents' diagnosed diseases by age, Accra 2003

AGE	HBP	DIAB	H.ATTAC	STROC	CLC	ASTHM	DEP	CANC	MAL	TB	OBES	URIN	BBON	ATRI	SHIS	EPI	CAT
18-24	1.7	2.1	12.1	5.3	52.9	14.1	15.2	16.7	27.0	12.5	8.5	19.0	14.7	15.7	0.0	50.0	8.3
25-34	6.8	4.3	15.2	10.5	0.0	18.2	30.4	16.7	30.3	12.5	22.0	19.0	17.6	18.1	28.6	0.0	0.0
35-54	49.4	40.4	57.6	5.3	29.4	47.5	43.5	50.0	32.5	50.0	47.5	28.6	35.3	37.1	71.4	50.0	16.7
55+	42.1	53.2	15.4	78.9	17.6	20.2	10.9	16.7	10.2	25.0	22.0	33.3	32.4	29.1	0.0	0.0	75.0
TC	354	47	33	19	17	99	46	6	1624	8	59	21	34	299	7	2	12

Source: Computed from Women's Health Survey in Accra, 2003

HBP-Hypertension DIAB-Diabetes H.ATTAC-Heart Attack STROC-Stroke CLC-Chronic lung condition ASTHM-Asthma DEP-Depression CANC –Cancer MAL-Malaria TB-Tuberculosis OBES-Obesity

URIN-Urinal incontinence BBON-Broken bone ATRI-Arthritis SCHIS-Schizophrenia EPI-Epilepsy CAT-Cataracts

Table 3.5 Percentage distribution of respondents' laboratory examined health conditions by age, Accra 2003

AGE	HBP	DIAB	H.ATTAC	STOC	CLC	ASTHM	DEP	CANC	MAL	TB	OBES	URIN	BBON	ATRI	SHIS	EPI	CAT
18-24	1.8	2.1	6.7	0.0	52.9	14.6	12.5	14.3	27.7	12.5	12.1	18.2	17.4	7.1	0.0	50.0	9.1
25-34	7.1	4.3	26.7	12.5	0.0	20.2	20.8	14.3	30.0	12.5	18.2	36.4	21.7	14.2	40.0	0.0	0.0
35-54	48.8	40.4	46.7	12.5	35.7	43.8	45.8	57.1	32.4	37.5	48.5	9.1	21.7	36.8	40.0	50.0	18.2
55+	42.3	53.2	20.0	75.0	21.4	21.3	20.8	14.1	9.9	37.5	21.2	36.4	39.1	41.9	20.0	0.0	72.7
TC	336	47	15	16	14	89	24	7	1569	8	33	11	23	155	5	2	11

Source: Computed from Women's Health Survey in Accra, 2003

HBP-Hypertension DIAB-Diabetes H.ATTAC-Heart Attack STROC-Stroke CLC-Chronic lung condition
ASTHM-Asthma DEP-Depression CANC –Cancer MAL-Malaria TB-Tuberculosis OBES-Obesity

URIN-Urinal incontinence BBON-Broken bone ATRI-Arthritis SCHIS-Schizophrenia
EPI-Epilepsy CAT-Cataracts

3.6 Physical activities

Physical activity is a very important component of health in that it has a great influence on certain diseases. Physical activities can prevent certain diseases and the absence of it can also cause diseases. Younger women do more physical activities and activities decrease with increasing age. Table 3.6 shows the percentage distribution of respondents' physical activities by age group. Expectedly, the age group 55 and over engage less in physical activities, but do better in moderate exercises and this might be due to inability to take part in physical activities due to weakness of the body.

Table 3.6 Percentage distribution of respondents' physical activities by age group, Accra 2003

Age group	Vigorous leisure activity	Moderate leisure activity
18-24	55.5	39.1
25-34	22.2	32.2
35-54	18.5	23.0
55+	3.7	5.7
Total	100.0	100.0
Total count	27	87

Source: Computed from Women's Health Survey in Accra, 2003

Table 3.7 shows the physical activities or exercises by background characteristics. Here respondents were asked if they do vigorous activities like playing basketball, running, competitive swimming, or gymnastics in their free time for at least 10 minutes at a time and if they do moderate intensive activities, like brisk walking, gentle swimming, or exercising in their free time for at least 10 minutes at a time.

Place of residence has a great influence on the physical activity of respondents. The higher the class of the place of residence of respondents, the more they engage in physical activities. As shown in the Table 3.7 people in higher-class residence account for 32 percent and 30 percent of both vigorous and moderate leisure activities respectively. People in low class areas have less of both activities.

Never married women engage more in vigorous activities and they constitute 54 percent of those who engage in such activities. Again, never married account for a high proportion of those who engage in moderate activities. This shows that never married females do more exercises than those of other marital statuses. This might be because the never married women have more time for leisure than their counterparts.

Higher educated people also engage more in physical activities than the less educated or no educated group. As a result of education, an individual gets to know the importance of exercising the body to improve on her health status and this might be the reason for the high proportion of those who engage in physical activities as one climbs the educational ladder and so those with secondary and higher education participate more in physical activities

For occupation, house workers/child carers did not engage in any vigorous leisure activities but on the whole, there does not seem to be any significant influence of occupation of physical activities and so is religion. Overall, the proportion of women who do any leisure activity is very small, about a percentage for vigorous activity and 3 percent for moderate activity out of the entire study sample.

Table 3.7 Percentage distribution of respondents' physical activities by background characteristics, Accra 2003

Background characteristics	Physical Activities	
Residence	Vigorous leisure activity	Moderate leisure activity
Low class	87.5	94.2
Low middle class	21.4	25.6
Upper middle class	21.4	20.9
High class	32.1	30.2
Marital status		
Never married	53.8	37.6
Currently married	26.9	36.5
Widowed/divorced/separated	11.5	23.5
Current status unknown	7.7	2.3
Education		
No education	10.7	5.8
Primary	3.4	5.8
Middle/JSS	25.0	41.9
Secondary/SSS	39.3	23.3
Higher	21.4	23.2
Occupation		
Seamstress/hairdresser	31.2	35.4
Trader	18.7	36.9
Professional	12.5	7.7
Student/apprentice	18.8	4.6
Housework/child care	0.0	4.6
Low skilled/office work	12.5	9.2
Artist/artisan	6.5	1.5
Religion		
Catholic	11.1	14.1
Orthodox	37.0	28.2
Spiritualist	7.4	2.3
Pentecostal	40.7	43.5
Moslem	11.1	8.2
Traditional	0.0	0.0
Other	0.0	3.5
Total	6.5	21.7
Total count	27	85

Source: Computed from Women's Health Survey in Accra, 2003

3.7 Self care

The way a person takes care of herself determines the state of her health. Whether the person is able to take care of herself or not is reflected in her health. Finding out about respondents' self care, they were asked if over all in the last 30 days, they had much difficulty in self-care such as washing or dressing oneself and in how much difficulty they had in taking care of themselves and maintaining general appearance.

Table 3.8 presents the difficulty in self-care and appearance. Expectedly, older women are faced with more difficulties than the younger women. About 41 percent of the respondents who reported having problem with self-care were in the age group 55 and over while age group 18-24 also represents 11 percent, the least reported. Another 53 percent of those with difficulty taking care of their appearance were above 55 years.

Table 3.8 Percentage distribution of respondents' difficulty of self-care by age distribution, Accra 2003

Age group	Self care	Appearance
18-24	11.1	8.8
25-34	18.5	18.8
35-54	29.0	20.2
55+	41.4	52.6
Total	100.0	100.0
Total count	162	114

Source: Computed from Women's Health Survey in Accra, 2003

It can be observed from Table 3.9, place of residence does not really affect the self-care of women. Those who do not have any problem with self-care or appearance

were from the low class area and percentages decreased drawing closer to higher-class areas. The situation of those having problem with self-care seems to be the same for those having difficulties in keeping or maintaining appearance.

For marital status, 42 percent of those without difficulty in self-care and appearance were among the currently married group. For those with problem with self-care, the widowed/divorced/separated accounted for 58 percent and for difficulty in keeping up appearance, 61 percent of them were also divorced/widowed/separated. Similar responses were observed for both difficulties.

Education also has influence on the self-care of respondents. Those who do not have problems are mainly the middle school or JSS group. The group with no education mostly experiences difficulty in self-care. Out of those with difficulties, respondents with no educational accounted for 37 percent in self-care and 43 percent appearance and least among those with secondary/ SSS or higher education.

In terms of occupation, students/apprentices and artists/artisans did not have any difficulty of self-care. On the other hand, seamstresses/hairdressers account for 29 and 31 percent, while traders represented 59 percent and 53 percent with difficulty in self-care and appearance respectively. The table further shows that among the women with difficulties in self care, about 30 percent are orthodox while 39 percent are Pentecostals and for those with difficulties in appearance, 34 and 30 percent are orthodox and Pentecostals respectively. The other religious groups have percentages below 10 but for Moslems and this is because not a lot of the respondents belong to those groups (spiritual, traditional and other religion). The majority of the respondents are Christians.

On the whole, 5 percent of the total respondents were women with difficulty of self-care and 4 percent were those with difficulty taking care of and maintaining

appearance. Difficulty of self-care increased with advancing age and so the higher one's age, the more difficulty she experiences. Place of residence does not have much influence on self-care and so is religion. On the other hand, marital status and education influence women's self-care.

Table 3.9 Percentage distribution of respondents' self-care and appearance by background characteristics

Background characteristics	Self-care		Appearance	
Residence	No	Yes	No	Yes
Low class	31.6	30.4	31.6	31.0
Low middle class	26.0	31.7	26.2	26.7
Upper middle class	24.7	22.4	24.6	24.1
High class	17.7	15.5	17.6	18.1
Marital status				
Never married	31.4	11.9	31.1	12.2
Currently married	41.5	25.2	41.2	24.3
Widowed/divorced/separated	23.5	58.5	24.0	60.9
Current status unknown	3.6	4.4	3.7	2.6
Education				
No education	17.6	37.3	17.7	43.2
Primary	12.4	17.1	12.4	17.1
Middle/JSS	45.1	36.1	45.2	31.5
Secondary/SSS	17.8	5.7	17.6	5.4
Higher	7.1	3.8	7.0	2.7
Occupation				
Seamstress/hairdresser	28.2	28.6	28.1	30.6
Trader	53.3	59.5	52.5	53.1
Professional	3.2	2.4	3.2	2.0
Student/apprentice	3.2	0.0	3.2	0.0
Housework/child care	5.0	4.8	4.9	10.2
Low skilled/office work	6.3	4.8	6.3	4.1
Artist/artisan	0.7	0.0	0.7	0.0
Religion				
Catholic	6.6	5.7	6.6	8.0
Orthodox	28.2	30.2	28.0	33.6
Spiritualist	3.2	5.0	3.0	8.0
Pentecostal	43.4	39.6	43.7	30.1
Moslem	14.1	13.8	14.1	15.0
Traditional	0.3	0.6	0.3	0.9
Other	4.2	5.0	4.2	1.8
Total	100.0	100.0	100.0	100.0
Total count	2834	144	2878	101

Source: Computed from Women's Health Survey in Accra, 2003

Note: Total of some characteristics may not be 100 percent due to missing cases.

3.8 Nutrition

Malnutrition places an important role in the health and welfare of children and women in Ghana. According to the GDHS, poor nutrition results in morbidity, mortality, poor education, and fewer opportunities for economic development. The report states further that, poor education, low socio-economic status, and higher fertility are factors that may influence the nutritional status of an individual. The Greater Accra region has the highest percentage of overweight women (46 percent) in Ghana and underweight women accounting for 4 percent while overweight women increases with increasing educational level as well as increasing wealth quintile [1]

The proportion of nutrients in food or consumed as well as the quantity of food is very important for the health of an individual. In this study, nutrition is determined by the number of servings of fruits taking per week, servings of fruits per day, servings of vegetables per day, whether food is normally prepared at home and if adult women skipped meals because there was not enough money for food. Table 3.10 shows the nutritional status of women by age group.

It can be observed that the nutritional status is even among all the age groups except for those above age 55. Meals skipped are also the same across all age strata but slightly higher for the age group 18-24. Over 80 percent of the respondents have at least a serving of fruits and vegetables per day and also prepare meals at home. Also, as many as 17 percent also skip meals sometimes because they do not have money.

[1] Ghana Statistical Service (GSS), op. cit., p. 4

Table 3.10 Percentage distribution of respondents' nutrition by age group, Accra 2003

Age group	Serving of fruit per week	Servings of fruits per day	Servings of vegetables per day	Prepare meals home	Skipped meals
18-24	29.5	29.5	28.8	28.0	32.8
25-34	30.1	30.1	29.4	29.1	30.9
35-54	29.7	29.8	31.1	32.0	29.4
55+	10.7	10.6	10.7	10.9	8.9
Total	100.0	100.0	100.0	100.0	100.0
Total count	2622	2546	2846	2856	540

Source: Computed from Women's Health Survey in Accra, 2003

Table 3.11 shows the nutritional status of women by the selected background characteristics. There does not seem to be much difference in fruits and vegetable consumption in relation to the area of residence. Greater proportion of the respondents at least has a serving of both fruits and vegetables. On the other hand, meals are mostly skipped by those residenced in low class area.

In the same way, marital status does not seem to have influence on the nutrition of respondents except for the skipping of meals, which the widow/divorced/separated seem to be somehow higher of about 28 percent though they make up 25 percent of the sample population. Evidence from the GDHS (2003) shows that women's education has a strong effect on the nutrition, as those with no education were 12 percent below weight, whereas those with secondary school and higher education accounted for only 5 percent

underweight. Overweight was also higher for the secondary and higher education (40 percent) than among those with no education (16 percent)[1]. In this study, the situation of Accra women seems to be different in that, there does not seem to be any difference in nutritional level considering educational status and fruit and vegetable consumption but skipping of meals shows interesting results. Skipping of meals is high among those with primary education and those with no education. The higher the educational level, the less meals are skipped. Occupation and religion of respondents dos not affect their nutritional status. All occupational groups and religious groups present similar nutritional characteristics.

[1] Ghana Statistical Service (GSS), op. cit., p. 4

Table 3.11 Percentage distribution of respondents' nutrition by background characteristics, Accra 2003

Background characteristics	Nutrition		
Residence	Fruits	Vegetables	Skipped meals
Low class	31.2	32.4	41.0
Low middle class	26.0	25.0	25.3
Upper middle class	24.4	25.8	21.3
High class	18.4	16.7	12.4
Marital status			
Never married	30.7	30.3	28.5
Currently married	41.1	40.8	39.6
Widowed/divorced/separated	25.0	25.5	28.0
Current status unknown	3.2	17.6	3.9
Education			
No education	17.9	18.3	25.0
Primary	12.0	12.4	19.1
Middle/JSS	44.7	45.1	42.7
Secondary/SSS	17.8	17.1	9.6
Higher	7.6	7.1	3.5
Occupation			
Seamstress/hairdresser	27.1	28.2	29.7
Trader	53.6	53.5	53.
Professional	3.5	3.4	2.6
Student/apprentice	3.4	2.9	1.6
Housework/child care	5.1	4.9	9.1
Low skilled/office work	6.5	6.6	3.4
Artist/artisan	0.7	0.7	0.3
Religion			
Catholic	6.6	6.6	5.5
Orthodox	28.8	29.0	26.1
Spiritualist	2.9	3.0	5.7
Pentecostal	43.0	43.3	41.0
Moslem	14.6	13.8	14.8
Traditional	0.1	0.3	0.5
Other	3.8	3.9	6.3
Total	100.0	100.0	100.0
Total count	2476	2147	509

Source: Computed from Women's Health Survey in Accra, 2003

Note: Total of some characteristics may not be 100 percent due to missing cases.

3.9 Risk factors

Respondents' risk factors to non-communicable diseases were determined by finding out whether they smoked, consume alcohol and how frequently they consumed alcohol. Finding out if the risk factors are affected by age, Table 3.12 shows that a very small proportion of the respondents' smoke (0.9 percent) while a higher proportion also consumes alcohol (26.2 percent). Smoking is higher in older ages, highest among the age group 35-54. Alcohol consumption though higher among the age group 35-54, is relatively high among the younger ages too.

Table 3.12 Percentage distribution of respondents' risk factors by age, Accra 2003

Age group	Risk factors	
	Ever smoke	Consume alcohol
18-24	6.7	20.4
25-34	20.0	33.7
35-54	53.3	37.7
55+	20.0	8.2
Total	100.0	100.0
Total count	30	830

Source: Computed from Women's Health Survey in Accra, 2003

Area of residence does not seem to influence the risk factors of respondents much. To determine the risk factors for non-communicable diseases, respondents were asked questions such as; do you currently smoke any tobacco product such as cigarettes, cigars, or pipes?, have you ever consumed a drink that contains alcohol within the past 12

months? and in the past 12 months, how frequently have you had at least one alcohol drink?

Table 3.13 presents the risk factors of respondents against the background characteristics. The frequency of alcohol is divided into two, drinking more than one day in a week and less than 14 days in a month. The percentage of respondents currently smoking is 1.6 and those consuming alcohol is 41.5 percent of the total respondents. For the currently smoking respondents, 35 percent live in the low class area and 31 percent live in low middle class area. The high-class area account for 18 percent and a little higher proportion consume alcohol. The frequency of alcohol consumption is also higher for the low class area. A lower proportion of the high-class residents consume alcohol more than one day in a week while a higher proportion consume alcohol less than 14 days in a month. The low class area on the other hand has a greater proportion consuming alcohol more than once a week than less than 14 days per month.

From the table, it can also be observed that marital status has a greater influence on risk factors. The single or never married have less risk than the other marital status groups. For those smoking, the women who are currently married account for 42 percent, followed by the widowed/divorced/separated (40 percent). Also, the currently married and the widowed/divorced/separated represent 45 percent 31 percent respectively. Though never married women represent a small percentage, the proportion of those consuming alcohol is higher than those smoking. A greater proportion of the never married women consume alcohol less than 14 days in a month. Again, 47 percent of the currently married respondents consume less alcohol, whereas the reverse is true for the widowed/divorced/separated.

Education has a great influence on the risk factors for non-communicable diseases of respondents. It is generally expected that education improves the health status of individuals and so the higher a person's education, the better her health. In the same vein, the higher a person's educational level the better she knows of risk factors to her health and so avoids things that will put her health at risk. Smoking is high among those who have attained middle/JSS and the secondary school education. Considering the proportion of respondents who have attained middle/JSS education (46 percent of the sample population), the proportion smoking is relatively low (23.5 percent). On the other hand, a higher proportion of the middle/JSS (50.6 percent) consume alcohol. For those with no education, a high proportion smoke than consume alcohol.

Respondents with no education and with primary education consume alcohol more frequently than the others. From Table 3.13, occupation does not exert any meaningful influence on the risk factors though it is expected that education has a relationship with occupation and so the higher one's education, the better her occupation. Religion does not have much influence. Although some religious groups frown on smoking and consumption of alcohol as in the case of Christians, it can be observed that the reverse is rather true. Religion therefore has no influence on the risk factors. Catholics and Pentecostals consume more than smoke. For the frequency of alcohol consumption, Pentecostals drink mostly less than 14 days in a month.

In sum, risk factors are great among currently married respondents with middle/JSS educational attainment, traders and Christians.

Table 3.13 Percentage distribution of respondents' risk factors by background characteristics

Background characteristics	Rick factors for communicable diseases			
	Currently smocking	Consumption of alcohol	Alcohol frequency	
Residence			1 day/week	14 day/month
Low class	35.3	30.4	35.6	31.7
Low middle class	31.4	22.4	26.5	24.8
Upper middle class	15.7	28.2	24.9	24.4
High class	17.6	19.0	13.0	19.0
Marital status				
Never married	14.5	19.5	9.8	21.5
Currently married	41.7	45.0	38.7	46.7
Widowed/divorced/separated	39.6	31.2	46.8	26.8
Current status unknown	4.2	4.3	4.6	5.0
Education				
No education	23.5	16.2	23.7	13.9
Primary	21.6	13.6	19.6	10.5
Middle/JSS	23.5	50.6	42.8	55.1
Secondary/SSS	25.5	13.6	11.6	13.8
Higher	5.9	5.9	2.3	6.6
Occupation				
Seamstress/hairdresser	33.3	28.5	27.2	27.8
Trader	44.4	53.6	53.1	54.5
Professional	2.2	3.5	1.4	1.7
Student/apprentice	0.0	1.8	1.4	1.9
Housework/child care	11.1	6.2	13.6	2.5
Low skilled/office work	8.8	5.8	3.4	6.8
Artist/artisan	0.0	0.7	0.0	0.8
Religion				
Catholic	5.8	6.8	8.1	8.7
Orthodox	34.6	33.3	34.9	34.4
Spiritualist	5.8	3.3	8.1	3.5
Pentecostal	30.8	45.2	29.1	42.8
Moslem	15.4	4.7	9.3	3.1
Traditional	0.0	0.4	2.9	0.0
Other	7.7	6.2	7.5	7.4
Total %	100.0	100.0	100.0	100.0
Total count	50	1259	168	622

Source: Computed from Women's Health Survey in Accra, 2003

Note: Total of some characteristics may not be 100 percent due to missing cases.

3.10 Health Seeking Behaviour

Health seeking behaviour is a very important aspect of health that needs attention in that the kind of health care an individual seeks for has an influence on her health status. This is because efficiency of a service delivered to a patient may either improve her health or worsen it. To investigate respondents' health seeking behaviour, they were asked where they usually went when they were not well or wanted information about their health. This is shown in Table 3.14 by background characteristics.

From the table, there are five places respondents visit when they are not well and these are: the health facility (clinic/health centre, doctor's office, hospital emergency room, hospital outpatient department and maternity home), pharmacy (pharmacist, chemical shop and self medication), church, spiritual place and others.

Considering how age affects the health seeking behaviour of respondents, it can be seen from the table that for the age group 18-24, none of them seeks attention from the church and none of the age group 25-34 also visits the spiritualist. The age group 55 and over seeks more attention from the spiritualist than any other group. Again, the age group 18-24 patronise the pharmacy more than the other ages. In relation to the total sample population, 79 percent of the women visit the health centre when they are not well or need any health attention, 15 percent utilise the services of the pharmacist, 0.1 visit the church, another 0.1 percent visit the spiritualist and 0.3 percent visit other places.

In considering place of residence in terms of health seeking behaviour, women living in high-class areas patronise mostly the health facilities. Those who visit the pharmacist are largely from the low class residential areas and also, out of the women who visit the church when they are not well, low class residents are the majority. For the proportion that visit the spiritualist, 60 percent are from the low middle class area of

residence though in count, they are not many. For the upper middle class, none visits the church, spiritualist nor does any of the high-class residents visit the church.

The higher educated respondents do not visit the health centre and the pharmacist much; neither do they seek attention from the church nor spiritualist, which might be because they do not usually fall ill. The primary and secondary/SSS educated also do not visit the church or the spiritualist. The middle/JSS group patronise health centre and pharmacist largely.

In occupational terms, professionals, students/apprentice, housework/child carers, low labour/office workers and artists/artisans visit only the health centre or pharmacist. Seamstress/ hairdressers visit all places but not the spiritualist, while traders visit all of the places when not well. Considering religion, health centre attendance is even across all religious groups with very little difference in characteristics of those visiting the pharmacist. Women who visit the church when ill are of the orthodox and Moslem religions. Women who visit the spiritualist are the orthodox, Pentecostals and spiritualists.

For those visiting the pharmacist, the never married women are the majority of about 41 percent but none of them visits the church for treatment. The widow/divorced/separated also form the majority of those visiting the church or the spiritualist. Influence of background characteristics on health seeking behaviour seems to be felt among those who visit the pharmacist, church, spiritualist and others but very little influence on those visiting health centres.

Table 3.15 indicates steps that respondents have taken to improve upon their health in the last 12 months. It is observed that 17 percent have increased exercises, 13 percent have turned to religion/prayers, 8.6 percent receive medical treatment, 8.3 percent

have changed their diet and others have quit smoking and drinking, reduced or learned to manage stress, use vitamins and other means.

The age group 18-24 has mainly increased exercises, changed diet, reduced or managed stress, used vitamins and have resorted to religion/prayers. The older group, age group 55 and over have quit smoking and manage stress mainly to improve their health.

Table 3.14 Percentage Distribution of respondents' health seeking behaviour by Background characteristics

Background Characteristics	Health centre	Pharmacist	Church	Spiritualist	Other
Age group					
18-24	25.4	44.0	0.0	25.0	50.0
25-34	29.1	33.3	33.3	0.0	10.0
35-54	33.8	20.5	33.3	25.0	10.0
55+	11.8	5.1	33.4	50.0	30.0
Residence					
Low	29.1	44.01	66.7	20.0	10.0
Low middle	26.9	23.3	33.3	60.0	40.0
Upper middle	24.9	22.6	0.0	0.0	30.0
High	19.1	10.0	0.0	20.0	20.0
Education					
No education	17.1	25.6	66.7	40.0	11.1
Primary	11.9	15.5	0.0	0.0	22.2
Middle/JSS	44.5	46.3	33.3	60.0	33.3
Secondary/SS	18.7	8.8	0.0	0.0	22.2
High	3.8	3.7	0.0	0.0	11.1
Occupation					
Seamstress/hairdresser	27.6	31.5	33.3	0.0	40.0
Trader	53.8	50.3	66.7	100.0	60.0
Profession	3.5	2.0	0.0	0.0	0.0
Student/apprentice	3.4	1.8	0.0	0.0	0.0
Housework/childcare	3.9	11.2	0.0	0.0	0.0
Low skilled/office work	7.0	3.2	0.0	0.0	0.0
Artist/ artisan	0.8	0.0	0.0	0.0	0.0
Religion					
Catholic	6.5	6.4	0.0	0.0	0.0
Orthodox	29.4	23.3	75.5	25.0	22.2
Pentecostal	43.4	41.5	0.0	50.0	66.7
Spiritualist	3.2	4.1	0.0	25.0	0.0
Moslem	13.1	20.8	25.0	0.0	11.1
Traditional	0.2	0.2	0.0	0.0	0.0
Other	4.1	3.6	0.0	0.0	0.0
Marital status					
Never married	27.8	40.6	0.0	25.0	40.0
Currently married	42.3	33.7	33.3	25.0	20.0
Widowed/divorced/separated	26.1	23.1	66.7	50.0	30.0
Status unknown	3.8	2.6	0.0	0.0	10.0
Total	100	100	100	100	100
Total count	2481	463	3	4	10

Source: Computed from Women's Health Survey in Accra, 2003

Note: Total of some characteristics may not be 100 percent due to missing cases.

Table 3.15 Percentage distribution of respondents' Steps to improve health in past 12 months, Accra 2003

Age group	Increased exercises	Changed diet	Quite smocking & drink less	Receive medical treatment	Reduced stress/learn stress management	Vitamins	Religious/prayers	Other
18-24	31.9	22.3	7.7	18.9	23.3	22.9	28.8	29.1
25-34	29.0	32.4	30.8	24.4	25.6	31.4	29.8	33.3
35-54	30.0	35.1	46.1	37.2	39.5	35.7	32.1	25.0
55+	9.1	1.2	15.4	20.4	11.6	10.0	9.3	12.5
Total %	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total count	548	265	13	274	43	70	420	24

Source: Computed from Women's Health Survey in Accra, 2003

CHAPTER FOUR

ANALYSIS OF SPECIFIC HEALTH CONDITIONS

4.1 Introduction

In this chapter, an analysis of differentials and variations in health status is made. The influences of socio-economic factors like level of education attained, area of residence, marital status, occupation and religion on women's health have been examined. The health status of women, the dependent variable in this study, refers to specific health conditions women suffer from. These specific health conditions include hypertension, diabetes, heart attack/shock, stroke, chronic lung condition (not asthma), asthma, depression/anxiety, cancer, malaria, tuberculosis, obesity, urinal incontinence, broken bone, arthritis/joint pain, schizophrenia, epilepsy/seizure/fit, and cataracts.

There are variations in the incidence of the different conditions, and these might be due to the variations of the socio-economic characteristics constituting the independent variables as well as the intermediate variables discussed in the previous chapter.

It is general knowledge that how susceptible an individual is to a health condition is influenced by so many factors. A mention can be made of the socio-economic status of the person; where an individual lives that is, her environment, whether bushy, have pools of stagnant water, access to toilet facilities or bath, access to water among other factors contribute to the health of an individual. Also an individual's level of education affects her knowledge of basic health and information.

It is therefore important to investigate how these socio-economic characteristics of women affect the kind of illness they are prone to. Respondents were therefore asked if they have been diagnosed of any selected conditions in the past 12 months.

In this study, it can be observed that certain conditions were more prevalent among Accra women than others. While highly prevalent conditions were over 50 percent of the entire sample population, less prevalent conditions were less than 1 percent. The total percentage of respondents for the various diseases also varied according to socio-economic characteristics. Again, the number of women who responded also varied from disease to disease and by socio-economic characteristics. There was therefore an appreciable number of missing cases that also varied with health condition and socio-economic area of residence.

4.2 Socio-economic level of area of residence

It is evident that where people live has a great influence on their lives more especially, on their health. Low class residential areas are characterised by poorer environmental and living conditions, and conditions improve with rising socio-economic class of residential areas. For instance, mosquitoes prevail mostly in areas with poor drainage, unorganised disposal of refuse and poor environmental sanitation. A low class area is likely to be characterised by the above example.

Table 4.1 shows the percentage distribution of respondents' health conditions by their area of residence. Generally, it can be observed that, much variation does not seem to be in the proportion of women's conditions and where they live. On the whole, taking into account residence of respondents, 11.4 percent of the total sample had hypertension. The high class area recorded the highest percentage of people who responded 'yes' when asked if they had such conditions; 14.4 percent of those living in high class area. The situation of the low class and more especially, the middle classes seems to be relatively lower, about 11 percent.

Diabetes can also be seen to be more prevalent among the higher class residence than among the lower classes. About 2.9 percent of the high class residential area women compared to 1.4 percent from the low class area of the entire sample population (1.6 percent) suffer from diabetes. Depression, contrary to those discussed above is rather higher among the low class residence than the high class and this might be due to data quality.

Malaria, apart from being very prevalent in the entire population of about 52 percent, it brings out differences in residence. Among the low and middle class areas, between 50 and 59 percent have malaria whereas, 44 percent of those in the high class area have malaria. Similarly, arthritis/joint pain, urinal incontinence, and obesity among other conditions are also less prevalent among the high class residence than among the low class.

Though there are variations in the incidence of various health conditions in relation to people's area of residence, the variations are not much.

Table 4.1 Percentage distribution of women's health conditions by area of residence

Health condition	Response	Area of residence					
		Low	Low mid	Upper mid	High	Total	Total no.
Hypertension	Yes	11.2	10.3	10.7	14.4	11.4	361
	No	88.8	89.7	89.3	85.6	88.6	2810
Diabetes	Yes	1.4	1.3	1.3	2.9	1.6	51
	No	98.6	98.7	98.7	97.1	98.4	3121
Heart attack	Yes	1.0	1.2	1.2	0.9	1.1	34
	No	99.0	98.8	98.8	99.1	98.9	3137
Stroke	Yes	0.9	0.6	0.5	0.7	0.7	22
	No	99.1	99.4	99.5	99.3	99.3	3150
Chronic L. Condition	Yes	0.5	0.5	0.9	0.5	0.6	19
	No	99.5	99.5	99.1	99.5	99.4	3153
Asthma	Yes	3.1	2.5	3.7	3.4	3.2	100
	No	96.9	97.5	96.3	96.6	96.9	3071
Depression/ Anxiety	Yes	1.6	1.9	1.3	1.4	1.6	50
	No	98.4	98.1	98.7	98.6	98.5	3122
Cancer	Yes	0.2	0.4	0.0	0.4	0.2	7
	No	99.8	99.6	100.0	99.7	99.8	3164
Malaria	Yes	50.3	58.8	51.8	44.2	51.8	1644
	No	49.7	41.2	48.2	55.8	48.1	1527
Tuberculosis	Yes	0.3	0.1	0.3	0.7	0.3	10
	No	99.7	99.9	99.7	99.3	99.7	3161
Obesity	Yes	2.1	3.4	1.5	2.9	2.4	77
	No	97.9	96.6	98.5	97.1	97.5	3095
Urinal Incontinence	Yes	0.9	1.0	0.8	0.4	0.8	25
	No	99.1	99.0	99.2	99.6	99.2	3147
Broken bone	Yes	0.9	1.3	0.9	2.0	1.2	38
	No	99.1	98.7	99.1	98.0	98.8	3133
Arthritis/ Joint pain	Yes	10.0	10.9	11.2	8.1	10.2	323
	No	90.0	89.0	88.8	91.9	89.9	2848
Schizophrenia	Yes	0.4	0.4	0.3	0.0	0.3	9
	No	99.6	99.6	99.7	100.0	99.7	3163
Epilepsy/ Seizure/fit	Yes	0.0	0.1	0.1	0.2	0.1	3
	No	100.0	99.9	99.9	99.8	99.9	3168
Cataracts	Yes	0.5	0.1	0.4	0.9	0.5	13
	No	99.5	99.8	99.6	99.1	99.5	256

Source: Computed from Women's Health Survey in Accra, 2003

4.3 Level of education

Education is one of the important indicators of health. Whether a person can read or write, is educated or not, or the level of education that person has attained has an

influence on her health. There are therefore variations in health conditions of respondents as a result of their educational attainment.

From Table 4.2 differences in the prevalence of diseases can be observed. Considering hypertension, one could realise that the percentage of women who reported having the condition among the no education group (18.9 percent) is higher than that of the high education respondents (10.6 percent) who reported having hypertension. On the other hand, the proportions reporting for middle/JSS and secondary (9.7 and 5.8 percent respectively) schools were relatively smaller.

Diabetes is also more prevalent among the non-educated than among the higher educated. Just like the hypertension, there are fewer reports of those with middle school attainment and secondary school attainment. The proportion of the primary educated respondents also appears to be higher than that of middle and secondary school respondents. The percentages of those who reported having diabetes therefore were 1.3, 0.9 and 0.7 for primary, middle/JSS, and secondary schools respectively.

All the other diseases follow the above patterns except for depression, malaria and tuberculosis though on the whole, the prevalence of these diseases tends to be quite low. Depression in the population was found to be higher for the high educated than for the non educated. The no education group recorded 1.0 percent having depression while the higher educated recorded 4.1 percent. In the case of malaria, though it would have been expected that the prevalence will be higher for the no education, on the contrary, it is rather higher for the highly educated. It can therefore be inferred from here that, the environment of the higher educated respondents may enable the growth of malaria parasites (mosquitoes) than is the case of their no education counterparts. From the preceding discussions it was observed that majority of high educated respondents lived in high class residential areas which comparatively are less built up and so might encourage

the breading of malaria parasites due to the presence of bushes while low class areas associated more with the no and less education categories are fully built up with development of slums at certain areas as a result of limited availability of land. Additionally, the sample size might have biased the results, coupled with the impact of data quality. More than half (58 percent) of the highly educated respondents reported having malaria compared to 50 percent of those with no education. The respondents with secondary school education recorded the lowest percentage of about 49 malaria prevalence.

There were also no records of certain conditions among some educational groups. The respondents with no education had no records of epilepsy while those with secondary educational attainment had no records of stroke, tuberculosis, and urinal incontinence. The high educated women had also no records of cancer, schizophrenia, epilepsy, and cataract. In general, diseases can be said to be higher among the respondents with no education than among the high education sampled population in Accra though the differences do not seem to be much. Women with secondary education reported fewer diseases.

Table 4.2 Percentage distribution of women's health conditions by level of education attained, Accra 2003

Health condition	Response	Education						
		No education	Primary	Middle/ JSS	Sec/ SSS	Higher	Total	Total No.
Hypertension	Yes	18.9	4.0	9.7	5.8	10.6	11.3	357
	No	81.2	86.0	90.3	94.3	89.5	89.8	2793
Diabetes	Yes	4.1	1.3	0.9	0.7	2.3	1.6	51
	No	95.9	98.8	99.1	99.3	97.7	98.4	3121
Heart attack	Yes	1.5	1.3	1.1	0.7	0.5	1.1	34
	No	98.4	98.7	98.9	99.3	99.5	98.9	3137
Stroke	Yes	1.5	1.0	0.5	0.0	0.5	0.7	21
	No	98.5	99.1	99.5	100.0	99.5	99.3	3151
Chronic L. Condition	Yes	0.5	1.0	0.6	0.4	0.5	0.6	18
	No	99.5	99.0	99.4	99.6	99.6	99.4	3133
Asthma	Yes	3.7	3.5	3.1	2.8	2.3	3.1	99
	No	96.3	96.5	97.0	97.2	97.7	96.9	3052
Depression/ Anxiety	Yes	1.0	1.5	1.8	0.9	4.1	1.6	51
	No	99.0	98.5	98.2	99.1	95.9	98.4	3100
Cancer	Yes	0.3	0.5	0.1	0.4	0.0	0.3	8
	No	99.7	99.5	99.8	99.6	100.0	99.7	3142
Malaria	Yes	49.8	52.8	52.5	48.7	58.3	51.8	1632
	No	50.2	47.3	47.5	51.3	41.7	48.2	1520
Tuberculosis	Yes	0.5	0.5	0.1	0.0	1.4	0.3	10
	No	99.4	99.5	99.9	100.0	98.6	99.7	3142
Obesity	Yes	2.9	2.8	2.7	1.1	1.4	2.3	74
	No	97.2	97.2	97.3	98.9	98.6	97.6	3077
Urinal Incontinence	Yes	1.0	1.5	0.6	0.0	0.9	0.7	23
	No	99.0	98.5	99.4	100.0	99.1	99.3	3127
Broken bone	Yes	1.9	0.5	1.4	0.6	1.8	1.2	39
	No	98.2	99.5	98.6	99.4	98.2	98.7	3114
Arthritis/ Joint pain	Yes	12.9	10.8	10.2	6.1	12.4	10.2	322
	No	87.1	89.3	89.8	93.9	87.6	89.8	2829
Schizophrenia	Yes	0.8	0.5	0.1	0.2	0.0	0.3	9
	No	99.2	99.5	9.9	99.8	100.0	99.7	3142
Epilepsy/ Seizure/fit	Yes	0.0	0.3	0.1	0.2	0.0	0.1	3
	No	100.0	99.7	99.9	99.8	100.0	99.9	3148
Cataracts	Yes	0.7	0.5	0.4	0.4	0.0	0.5	13
	No	99.3	99.5	99.6	99.6	100.0	99.5	2840

Source: Computed from Women's Health Survey in Accra, 2003

4.4 Marital status

A person's marital status has an influence on her health. For instance, how busy a person is at work or at home in taking care of her family can result in stress. The situation one faces in the home can affect her emotionally thereby resulting in depression and other health conditions. Other times, a woman can be so busy that she does not have enough time for leisure activities that in turn can result in certain health conditions. To find out the effect marital status has on the health of the woman, the outcome is presented in the Table 4.3 which shows the health conditions of respondents by marital status.

Never married respondents can be found from the table to be affected by most illness. The never married recorded less prevalence of diseases. Regarding hypertension for instance, 0.7 percent of those who were never married reported of the condition. Diabetes was also very low among the never married (0.1 percent). Apart from malaria and arthritis/joint pains, the never married women reported less than two percent of all health conditions. The prevalence of malaria among this group was about 50 percent while arthritis was 5.7 percent. The conditions that the never married reported which were a little high prevalence were depression/anxiety and arthritis/joint pains.

The widowed/ divorced/separated group represents the highest reported women of all conditions. This might be as a result of the emotional state they find themselves due to the loss of their partners which results in conditions that are emotionally based like hypertension, depression, heart attack among others. Depression was the only condition that this group recorded the lowest percentage among al the other statuses. This group therefore recorded 56, 23, 1.9, 1.6 and 5.2 percentages for malaria, hypertension, heart attack arthritis and asthma respectively among other conditions.

The currently married also tend to fall between the never married and the widowed/divorced/separated in that, they reported proportions that are higher than the

former and those that are lower than the later. Other women also fell under the category of status unknown and these women though had no records of certain conditions, other percentages within the group were quite high. Marital status may therefore bring about differences in health as never married had better health followed by currently married and the widowed/divorced/separated.

Table 4.3 Percentage distribution of respondents' health conditions by marital status, Accra 2003

Health condition	Response	Marital status					
		Never married	Currently married	Widowed/ Divorced/ Separated	Status unknown	Total	Total no.
Hypertension	Yes	0.7	12.0	22.6	16.7	11.5	356
	No	99.3	88.0	77.4	83.4	88.5	2774
Diabetes	Yes	0.1	1.4	3.4	4.4	1.6	51
	No	99.9	98.6	96.6	94.6	98.4	3081
Heart attack	Yes	0.4	1.0	1.9	2.6	1.1	35
	No	99.6	99.0	98.1	96.4	98.9	30099
Stroke	Yes	0.2	0.5	1.4	1.8	0.7	21
	No	99.8	99.5	98.6	98.2	99.3	3111
Chronic L. Condition	Yes	0.5	0.5	0.9	0.0	0.6	18
	No	99.5	99.5	99.1	100.0	99.4	3115
Asthma	Yes	1.5	3.1	5.2	6.1	3.2	101
	No	98.5	96.9	94.8	93.9	96.8	3034
Depression/ Anxiety	Yes	1.6	1.7	1.5	0.9	1.6	50
	No	98.4	98.3	98.5	99.1	98.4	3081
Cancer	Yes	0.1	0.2	0.5	0.9	0.3	8
	No	99.9	99.8	99.5	99.1	99.7	3124
Malaria	Yes	50.2	51.2	56.0	43.0	51.8	1632
	No	49.8	48.8	44.0	57.0	48.2	1520
Tuberculosis	Yes	0.1	0.3	0.6	0.0	0.3	10
	No	99.9	99.7	99.4	100.0	99.7	3122
Obesity	Yes	0.5	2.6	4.2	4.4	2.4	76
	No	99.5	97.4	95.8	95.6	97.6	3058
Urinal Incontinence	Yes	0.5	0.6	1.4	0.0	0.8	24
	No	99.5	99.4	98.6	100.0	99.2	3109
Broken bone	Yes	0.8	1.1	1.8	0.9	1.2	37
	No	99.2	98.9	98.2	99.1	98.8	3096
Arthritis/ Joint pain	Yes	5.7	10.0	16.0	10.5	10.2	320
	No	94.3	90.0	84.0	89.5	89.8	2812
Schizophrenia	Yes	0.1	0.3	0.5	0.0	0.3	9
	No	99.9	99.7	99.5	100.0	99.7	3124
Epilepsy/ Seizure/fit	Yes	0.1	0.1	0.1	0.0	0.1	3
	No	99.9	99.9	99.9	100.0	99.9	3129
Cataracts	Yes	0.1	0.3	1.1	0.9	0.5	14
	No	99.9	99.7	98.9	99.1	99.5	2827

Source: Computed from Women's Health Survey in Accra, 2003

4.5 Occupation

Access to employment in Accra is linked closely to educational status. In turn, education and occupation and type of employment are linked to the standard of living of households in Accra. Most employment in the formal sectors requires numeracy, literacy, and often fluency in English. Occupation is a very important determinant of health in that it affects a person's ability to afford certain basic needs of life.

Certain occupations might limit the time available for a person to engage in other activities that are so crucial to her health; a woman might have little time to seek preventive care or even engage in leisure activities. Apart from time limitation, the nature of the job one is engaged in whether vigorous or moderate, can have an implication on her health in that, if a person's occupation demands that she sits at one place for hours without moving about, this can result in diabetes or depression, holding other factors constant.

Another is how much a person earns. When a person earns much from the work she does, she is able to seek preventive, curative care and, afford healthy lifestyle that is beneficial to her health. These and others are ways in which occupation can affect the health of a woman.

In table 4.4, the variations in diseases in terms of occupational differences are shown. Certain occupational types have high prevalence of some diseases than others. Professionals can be seen to have a high proportion of people suffering from the various health conditions though there is not an incidence of certain diseases. Professionals recorded high percentages than the other occupations in certain conditions and these included hypertension (15 percent), diabetes (5.5 percent), arthritis/joint pains and a few others. There were conditions that professionals did not have any records of and these included urinal incontinence, schizophrenia, epilepsy, cataract, stroke and cancer. Low

skilled/ office workers have substantial proportions of the health conditions and so are the artists/artisans.

Other occupational groups worth discussing are the hairdressers/seamstresses and traders who have records of all the health conditions. These happen to be the only occupational groups with records of schizophrenia. Seamstresses/hairdressers though reported all the conditions, they tend to have a lower prevalence of the various conditions. The occupational groups that recorded least of all conditions are the students/apprentice and artists/artisans.

It can be inferred from the above discussions that occupation plays a very important role in determining the health status of women from the differences that were brought to light.

Table 4.4 Percentage distribution of occupation and women's health conditions, Accra 2003

Health condition	Response	Occupation								
		1	2	3	4	5	6	7	Total	Total No.
Hypertension	Yes	6.0	11.7	15.1	1.4	12.1	11.8	12.5	9.9	228
	No	94.0	88.3	84.9	98.6	87.9	87.5	87.5	91.9	2074
Diabetes	Yes	1.1	1.5	5.5	0.0	0.0	0.0	0.0	1.3	29
	No	99.9	98.5	94.5	100.0	100.0	100.0	100.0	98.7	2272
Heart attack	Yes	0.8	1.2	1.4	0.0	0.0	2.8	0.0	1.1	25
	No	99.2	98.8	98.6	100.0	100.0	97.2	100.0	98.9	2270
Stroke	Yes	0.3	0.5	0.0	0.0	0.0	0.0	0.0	0.3	8
	No	99.7	99.5	100.0	100.0	100.0	100.0	100.0	99.7	2293
Chronic L. Condition	Yes	0.3	0.3	2.7	0.0	0.0	1.4	0.0	0.4	10
	No	99.7	99.7	97.3	100.0	100.0	98.6	100.0	99.6	2291
Asthma	Yes	2.5	3.7	4.1	1.4	3.4	4.2	0.0	3.3	76
	No	97.5	96.3	95.9	98.6	96.6	95.8	100.0	96.7	2225
Depression/ Anxiety	Yes	1.7	1.6	4.1	0.0	0.0	1.4	6.3	1.6	37
	No	98.3	98.4	95.9	100.0	100.0	98.0	93.8	98.4	2267
Cancer	Yes	0.2	0.2	0.0	0.0	0.0	0.0	6.3	0.2	4
	No	99.8	99.8	100.0	100.0	100.0	100.0	93.8	99.8	2296
Malaria	Yes	56.9	52.6	54.8	58.3	50.0	52.8	43.8	54.0	1243
	No	43.1	47.4	45.5	41.7	50.0	47.2	56.3	46.0	1058
Tuberculosis	Yes	0.3	0.4	0.0	1.4	0.0	0.0	0.0	0.3	8
	No	99.7	99.6	100.0	98.6	100.0	100.0	100.0	99.7	2293
Obesity	Yes	2.9	2.8	0.0	1.4	2.6	2.1	0.0	2.7	61
	No	97.1	97.2	100.0	98.6	97.4	97.9	100.0	97.3	2240
Urinal Incontinence	Yes	0.6	0.8	0.0	0.0	1.7	0.0	0.0	0.7	16
	No	99.4	99.2	100.0	100.0	98.3	100.0	100.0	99.3	2286
Broken bone	Yes	1.2	0.9	1.4	0.0	4.3	0.0	0.0	1.1	25
	No	98.8	99.1	98.6	100.0	95.7	100.0	100.0	98.9	2276
Arthritis/ Joint pain	Yes	7.9	9.8	13.7	1.4	7.8	9.0	6.3	9.0	206
	No	92.1	90.2	86.3	98.6	92.2	91.0	93.8	91.0	2093
Schizophrenia	Yes	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.2	5
	No	100.0	99.6	100.0	100.0	100.0	100.0	100.0	99.2	2295
Epilepsy/ Seizure/fit	Yes	0.2	0.1	0.0	0.0	0.9	0.0	0.0	0.1	3
	No	99.8	99.9	100.0	100.0	99.1	100.0	100.0	99.9	2298
Cataracts	Yes	0.2	0.4	0.0	0.0	1.0	0.0	0.0	0.3	7
	No	99.8	99.6	100.0	100.0	99.0	100.0	100.0	99.7	2059

Source: Computed from Women's Health Survey in Accra, 2003

Note: 1=seamstress/hairdresser 2=trader 3=profession 4=student/apprentice
5=housework/child care 6=low skilled/office work 7=artist/artisan

4.6 Religion

The influence of religion on the health of a woman is very important to study. For instance, a person might refuse to eat certain foods as a result of her belief. Others may refuse to use a health facility since it is against the doctrine of their religion. Even at the point of death, a person might refuse health services like blood transfusion because of the person's religious affiliation and this affect the outcome of her health.

A staunch traditionalist may not accept any modern medical care whereas some Christians refuse transfusion of blood. Religion also affects certain risk factors of health either positively or otherwise. Such risk factors include smoking, drinking, eating certain nutritional foods among others. In the Table 4.5, although hypertension is quite high in the population, it can be observed that the religious groups that are most affected are the orthodox, about 16.2 percent of them. Moslems also had quite a high proportion of hypertensive women of about 13 percent. Catholic women on the other hand have higher percentages suffering from heart attack, cancer, and arthritis and had no woman reporting of chronic lung condition, tuberculosis, and a few other conditions.

Malaria is also highest among the Pentecostals, obesity highest among spiritualists while asthma is highest among traditionalists. Out of the 17 health conditions discussed in this study, traditionalists do not have any woman reporting 13 conditions while Pentecostals and orthodox women on the contrary reported all the conditions. Religion may therefore be a very important factor that influences the health of a woman from the differences in prevalence observed from Table 4.5.

Table 4.5 Percentage distribution of women's religion and specific health conditions, Accra 2003

Health condition	Response	Religion									
		1	2	3	4	5	6	7	8	Total	Tota no.
Hypertension	Yes	11.4	16.2	8.1	10.6	12.6	11.1	11.0	8.2	11.4	361
	No	88.6	83.8	99.9	89.4	87.4	88.9	89.0	91.8	88.6	2805
Diabetes	Yes	1.9	1.8	1.4	1.0	1.6	0.0	2.7	1.6	1.6	50
	No	98.1	98.2	98.6	99.0	98.4	100.0	97.3	98.4	98.4	3115
Heart attack	Yes	2.4	0.8	1.0	0.0	1.3	0.0	1.4	0.0	1.0	33
	No	97.6	99.2	99.0	100.0	98.7	100.0	98.6	100.0	98.9	3131
Stroke	Yes	1.0	0.8	0.6	0.0	0.7	0.0	1.4	1.6	0.7	22
	No	99.0	99.2	99.4	100.0	99.3	100.0	98.6	98.4	99.3	3145
Chronic L. Condition	Yes	0.0	1.1	0.1	1.9	0.2	0.0	2.7	0.0	0.5	17
	No	100.0	98.9	99.9	98.1	99.8	100.0	97.3	100.0	99.5	3148
Asthma	Yes	2.9	3.7	2.9	5.8	1.6	12.5	1.4	6.6	3.1	98
	No	97.1	96.3	97.1	94.2	98.4	87.5	98.6	93.4	96.9	3067
Depression/ anxiety	Yes	2.4	1.6	1.5	1.9	1.1	0.0	4.1	0.0	1.6	50
	No	97.6	98.4	98.4	98.1	98.9	100.0	95.9	100.0	98.4	3116
Cancer	Yes	0.5	0.4	0.2	0.0	0.0	0.0	0.0	0.0	0.3	8
	No	99.5	99.5	99.7	100.0	100.0	100.0	100.0	100.0	99.7	3157
Malaria	Yes	44.3	49.6	54.8	50.0	51.1	50.0	52.1	50.8	51.8	1639
	No	55.7	50.4	45.2	50.0	48.9	50.0	47.9	49.2	48.1	1524
Tuberculosis	Yes	0.0	0.4	0.2	1.0	0.4	0.0	0.0	0.0	0.3	10
	No	100.0	99.6	99.8	99.0	99.6	100.0	100.0	100.0	99.7	3155
Obesity	Yes	1.9	3.1	1.5	4.8	3.6	0.0	2.7	1.6	2.4	77
	No	98.1	96.9	98.4	95.2	96.4	100.0	97.3	98.4	97.5	3087
Urinal Incontinence	Yes	0.0	1.0	0.7	1.0	0.4	0.0	2.7	0.0	0.8	24
	No	100.0	99.0	99.3	99.0	99.5	100.0	97.3	100.0	99.2	3142
Broken bone	Yes	1.0	1.3	1.2	1.0	1.1	0.0	1.4	0.0	1.2	38
	No	99.0	98.7	98.7	99.0	98.9	100.0	98.6	100.0	98.8	3127
Arthritis/ Joint pain	Yes	12.4	12.1	9.1	9.6	9.9	11.1	5.5	9.8	10.2	324
	No	87.6	87.9	90.7	90.4	90.1	88.9	94.5	90.2	89.8	2843
Schizophrenia	Yes	0.0	0.4	0.2	0.0	0.4	0.0	0.0	0.0	0.3	9
	No	100.0	99.6	99.8	100.0	99.6	100.0	100.0	100.0	99.7	3157
Epilepsy/ Seizure/fit	Yes	0.0	0.1	0.1	0.0	0.2	0.0	0.0	0.0	0.1	3
	No	100.0	99.9	99.9	100.0	99.8	100.0	100.0	100.0	99.9	3163
Cataracts	Yes	0.5	0.2	0.3	1.0	0.8	0.0	0.0	1.7	0.4	12
	No	99.5	99.8	99.7	99.0	99.2	100.0	100.0	98.3	99.6	2850

Source: Computed from Women's Health Survey in Accra, 2003

Note: 1=catholic 2=orthodox 3=Pentecostal 4=Spiritualist
5=Moslem 6=Traditionalist 7=No religion 8=Other

4.7 Chi-square Test

4.7.1 Validation of Hypothesis

In validating the hypothesis which guides the present study, the conventional chi-square test is used. A conventional chi-square test is computed as:

$$\chi^2 = \sum_{i=1}^{k} \frac{(n_i - E_i)^2}{E_i}$$

Where n_i is the observed frequency of class i

Ei is the expected frequency of class i

χ^2 is chi-square

The decision criteria for accepting or rejecting the null hypothesis stated as follows if $\chi^2 > \chi^2_{\text{-crit}}$ then the null hypothesis is rejected in favour of the alternative hypothesis. On the other hand, if $\chi^2 < \chi^2_{\text{-crit}}$, then the null hypothesis is accepted. Here, χ^2 is the calculated chi-square value whilst $\chi^2_{\text{-crit}}$ denotes the critical chi-square value for the relevant degrees of freedom (df) and at specific significance level. The test is carried out at 5 percent significance level given a confidence level of 95 percent in the conclusion.

Table 4.6 shows the chi-square values obtained from the cross tabulation of socio-economic area of residence and various health conditions of women. From the table, it can be observed that at a significance level of 5 percent adopted for this study, only the incidence of malaria is significantly associated with socio-economic area of residence. This means that the prevalence of the diseases has no relationship with the place of residence and data quality and/or classification might have affected this result although in the preceding discussions on the relationship between area of residence and diseases was not very strong. Therefore, the hypothesis that the incidence of diseases among the

population relates inversely with socio-economic status of the place of residence is rejected.

Table 4.6 Chi-square showing the relationship between socio-economic area of residence and specific diseases

Health condition	Socio-economic Area of residence		
	Value	df	Significance
Hypertension	7.776	6	0.255
Diabetes	7.648	6	0.265
Heart attack	1.738	6	0.942
Stroke	2.566	6	0.861
Chronic lung condition	11.641	6	0.070
Asthma	3.535	6	0.739
Depression	2.618	6	0.855
Cancer	3.534	6	0.739
Malaria	32.042	6	0.000
Tuberculosis	5.459	6	0.486
Obesity	9.549	6	0.145
Urinal incontinence	6.112	6	0.411
Broken bone	5.898	6	0.435
Arthritis	5.742	6	0.453
Schizophrenia	4.405	6	0.622
Epilepsy	3.687	6	0.719
Cataracts	4.098	6	0.663

Source: Computed from Women's Health Survey in Accra, 2003

Table 4.7 also shows the chi-square values for age and the various non-communicable health conditions. Referring to the table, age and non-communicable health conditions tend to be very significant at 5 percent level of significance. The diseases that do not show significance are chronic lung conditions, epilepsy and depression at the five percent significance level.

The text therefore shows that non-communicable diseases are significantly dependent on age. From the analyses, the hypothesis which states that the prevalence of non-communicable diseases varies directly with age of the women is hereby accepted.

Table 4.7 Chi-square showing the relationship between age and non-communicable diseases of women, Accra 2003

Health condition	Age Group		
	Value	df	Significance
Hypertension	617.747	6	0.000
Diabetes	125.744	6	0.000
Heart attack	15.552	6	0.016
Stroke	81.238	6	0.000
Chronic lung condition	12.215	6	0.057
Asthma	31.318	6	0.000
Depression	10.899	6	0.092
Cancer	19.109	6	0.004
Obesity	47.009	6	0.000
Urinal incontinence	25.187	6	0.000
Broken bone	21.781	6	0.001
Arthritis	147.313	6	0.000
Schizophrenia	18.191	6	0.006
Epilepsy	11.029	6	0.087
Cataracts	71.351	6	0.000

Source: Computed from Women's Health Survey in Accra, 2003

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Summary

The main aim of this study was to analyse the burden of diseases among adult women in Accra and investigate the relationship between the socio-economic and demographic characteristics of women's health status in age groups 18-24, 25-34, 35-54 and, 55 years and over. An excellent health status of a woman is a prerequisite for sustainable development and more importantly, for herself and family.

In the literature review, various studies relating to the topic were discussed. The studies identified a number of factors that influence the health of an individual through the independent and intermediate variables. The factors include age, education, area of residence, marital status, occupation, religion, physical activities, self care, nutrition, health seeking behaviour and risk factors for non-communicable diseases. A conceptual framework showing how independent variables act through the intermediate variables to affect the dependent variables which is health status was discussed.

The study used data from the Women's Health Survey in Accra, 2003. The respondents consisted of 3,200 women. A look at the demographic and socio-economic characteristics of respondents showed that, most of them (31 percent) are in the category of 35-54 years. The majority (31.6 percent) of respondents live in low class socio-economic area of residence. Of all the women, 43.3 percent belonged to the Pentecostal religious group while 18.6 percent had no education. Also, 12.7 percent had attained primary education while those with higher education were 6.9 percent. Again, the majority of the respondents with no education (27.4 percent) were from the low class residential area and majority of primary educated (17.7 percent) were also from the low

class area. A large proportion of middle educated (49.0 percent) were from low middle class area, secondary (24.3 percent) from high class and higher educated women (14.5 percent) were again from the high class residential area. Most of the women (40.6 percent) are currently married and among them, about 55 percent belonged to the age group 25-34 years. Traders also make up the majority (53 percent) of all occupational types and 49 percent of these have attained middle/JSS education. The analysis shows that the higher a woman's socio-economic area of residence, the higher her level of education. This could mean that those in poorer communities have less access to education or better education than those in richer communities. About 19 percent of the population had no education.

The findings show that although most respondents (78 percent) said they had excellent health, from the various responses it was found out that about 48 percent did not have very good general health. Examining women's sexual behavior, about 19 percent of the population had STI symptoms, 55 percent had more than one sexual partner while, 5 percent had sex without condom. The reproductive health of the women in general was not very good in that, child birth is quite high while child death is relatively high (with about 16 percent of them reporting child deaths). Another 3.3 percent also experienced hot flushes, a symptom of menopause. Malaria, hypertension, arthritis and asthma were the prevalent conditions in the population. A majority of the women consume vegetable (90 percent) and fruits (more than 80 percent) quite often and prepare meals at home but others skip meals (17 percent) because they cannot afford it. Moreover, about 28 percent of the population engages in a form of exercise. About 95 percent of the women are able to take care of themselves. Alcohol consumption is high (about 42 percent), while smoking in the population is about 2 percent. Over 78 percent visit the hospital for medical attention.

The analysis showed that hypertension is high among women of high class residential area as well as diabetes, tuberculosis and cataract. Stroke was highest among the low class residential women whereas most conditions were highest among the lower middle class such as malaria, depression and urinal incontinence. Women with no education tend to have the highest prevalence of most of the diseases under study and the health conditions in which they had the highest records were hypertension, diabetes, heart attack, stroke, asthma, obesity, broken bone, arthritis, schizophrenia and cataracts though some of the diseases generally have low prevalence. Respondents with primary education also reported highest prevalence in chronic lung condition, cancer, urinal incontinence and epilepsy but these were below two percent of the population who have attained primary school education. Diseases in which the highest educated women lead in prevalence were depression, malaria and tuberculosis. Though it would be expected that the highest educated respondents will record the lowest prevalence of malaria since they have the knowledge of preventing the disease, on the contrary, they recorded the highest meaning that level of education does not affect risk of getting malaria.

Women widowed/divorced/separated tend to be unhealthier than the other marital groups. They have the highest records of hypertension, malaria, arthritis, urinal incontinence among other conditions. This might be as a result of their age as they are relatively older considering their status. They are therefore more susceptible to diseases. For the status unknown, conditions such as diabetes, heart attack, stroke, asthma, obesity and cataract were quite high among them. The healthiest marital group happened to be women who have never married followed by the currently married.

Occupational difference does not bring out many variations in health conditions. Except for seamstress/hairdressers, all the other occupations reported substantial proportions of diseases. Variations were found among religious groups in that while

certain conditions were not found in certain religious groups others reported all the conditions, for instance, traditionalists did not record 13 out of the 17 conditions. Orthodox and Pentecostals had the worse of health status.

The chi-square test found that where women live does not have an influence on their diseases. The test showed that area of residence and health conditions were not significant at even five percent significant level except for malaria. Age, on other hand, gave a different result. It showed that, age and non-communicable health conditions are associated and significant at even one percent significant level.

5.2 Conclusion

The findings from this study have shown that demographic and socio-economic factors have influence on women's health status.

Based on the findings presented in the study, the women populations form an important segment of the country's resources. It is therefore necessary that the government puts in place measures to minimize or avoid such diseases.

Non-communicable diseases have been described as a disease directly linked to human behaviour. The power to control diseases rests in the hands of individuals. Actions or inactions on the part of individuals could lead to contracting diseases or otherwise. Non-communicable diseases spread mainly through lifestyles such as smoking, excessive alcohol consumption, lack of exercises, and nutrition among other factors. Such behaviour has crucial medical, social, educational and economic consequences for individuals, community and the country as a whole. One of such consequences is that, the country loses its active labour force through diseases and poverty and children also suffer since they are prevented from the best care they need. To avoid many of these consequences, there is the urgent need to find solutions to curb this through behavioral change.

5.3 Recommendations

The analysis showed that most women engage in risk factors for non-communicable diseases such as alcohol consumption though smoking is quite minimal among the population. Hypertension, asthma, malaria, obesity and arthritis are the most prevalent health conditions in the population.

Government and other private agencies should make it a priority to organise campaigns on such diseases. More efforts should be put in the fight against malaria especially, keeping the environment clean and healthy to reduce the conduciveness for mosquitoes to strive. For the successful implementation of such programmes, vehicles, funds and the necessary logistics should be made available, and qualified personnel should be recruited and trained to handle these programmes.

The government, most especially, health sector must make efforts to intensify and review health education in schools and other social gatherings such as market places and other work places so that the public and especially, the older women would be more aware of the diseases and practise healthy lifestyle.

Volunteer services in the area of prevention of these conditions and risk behaviour should be encouraged. The goal should be to help in changing the attitudes of the people towards non-communicable diseases.

Agencies and institutions responsible for data collection should develop an efficient system of data collection on other diseases women suffer from other than reproductive health and its applications, particularly on risk factors and lifestyle to provide better services to disease prevention and control.

The government should continue to pursue policies and programmes that encourage female education. This would increase knowledge of prevention and control of

diseases thereby, reducing their exposure to non-communicable diseases as well as malaria. The media should also help in this direction.

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APPENDIX A

Age at last birthday								
Ages	Frequency	Percent	Ages	Frequency	Percent	Ages	Frequency	Percent
2	1	.0	44	39	1.2	75	12	.4
9	2	.1	45	56	1.8	76	6	.2
12	2	.1	46	44	1.4	77	4	.1
16	2	.1	47	25	.8	78	5	.2
17	16	.5	48	37	1.2	79	1	.0
18	116	3.7	49	39	1.2	80	11	.3
19	128	4.0	50	36	1.2	81	3	.1
20	149	4.7	51	31	1.0	82	2	.1
21	121	3.8	52	31	1.0	83	1	.0
22	131	4.1	53	29	.9	84	4	.1
23	130	4.1	54	43	1.3	85	2	.1
24	116	3.7	55	24	.8	86	3	.1
25	119	3.7	56	20	.6	87	2	.1
26	117	3.7	57	13	4	88	2	.1
27	89	2.8	58	14	.4	89	3	.1
28	108	3.4	59	18	.6	90	1	.0
29	89	2.8	60	31	1.0	91	1	.0
30	101	3.2	61	5	.2	93	1	.0
31	66	2.1	62	13	.4	94	1	.0
32	92	2.9	63	14	.4	98	0	.0
33	60	1.9	64	12	.4	99	6	.2
34	73	2.3	65	19	.6	100	0	.0
35	78	2.5	66	8	.3	Total	3108	98.0
36	51	1.6	67	10	.3	System	64	2.0
37	63	2.0	68	9	.3	3172	100.0	
38	58	1.8	69	9	.3			
39	46	1.4	70	19	.6			
40	88	2.8	71	9	.3			
41	54	1.7	72	6	.2			
42	66	2.1	73	5	.2			
43	31	1.0	74	6	.2			

APPENDIX B

Five Year Age Groups		
Age Group	**Frequency**	**Percent**
18-24	915	28.8
25-29	534	16.8
30-34	399	12.6
35-39	305	9.6
40-44	285	9.0
45-49	216	6.8
50-54	179	5.6
55-59	91	2.9
60-64	81	2.6
65-69	55	1.7
70-74	47	1.5
75-79	28	.9
80+	39	1.2
Total	3172	100.0

APPENDIX C

AGE RATIO

An age ratio is defined as: $${}_5AR_X = \frac{{}_5P_X}{\frac{1}{2}({}_5P_{X-5}+{}_5P_{X+5})}$$

${}_5AR_X$ represent the age ratio for ages $_x$ to $_{x+4}$

${}_5P_X$ represents the population at ages $_x$ to $_{x+4}$