

Kwame Nkrumah University of Science and Technology, School of Medical Sciences
Department of Community Health



An assessment of knowledge on VCT for HIV among adolescents in SHSs in the Nadowli district of the Upper West Region of Ghana using HIV/AIDS and VCT education

A thesis submitted to the School of Graduate Studies, Kwame Nkrumah University of Science and Technology, Kumasi in partial fulfilment of the requirements for the award of Masters of Science degree in Health Services Planning and Management.

By

Raymond Kunsu

May, 2010

DECLARATION

I hereby declare that this submission is my own work towards the MSc. Health Services Planning and Management and that, to the best of my knowledge, it contains no material previously published by another person(s) nor material which has been accepted for the award of any other degree in any academic or research institution, except where due acknowledgement has been made in the text.

Raymond Kunsu & PG1790507

Student Name & ID

.....
Signature

.....

Date

Certified by:

Dr (Mrs) Agatha Akua Bonney

Supervisor's Name

.....
Signature

.....

Date

Certified by:

.....

Name of Head of Department.

.....
Signature

.....

Date

DEDICATION

I dedicate this thesis to my lovely wife and only son; Seidu Hamidatu Banawabali and Kunsu Hammond respectively. May they both take education as the key to the development of the human resource and learn to greater heights.

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ACKNOWLEDGEMENT

With God all things are possible. So, with Him this Masters thesis has reached the stage of a hard copy, hence His name must be praised.

The earthly contributors must also not go unmentioned. Gratitude is due Mr. Aiden Kunsu, my elder brother, my parents and other siblings who contributed both financially and spiritually during my academic pursuit. Without them this thesis would still have been at the embryo stage.

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Also, my relations during the two year Master programmes stand tall in the success of this thesis, especially, Mr. Jusewuni Abdul-Aziz, Mr. Justin Amoro and others, who constituted my peers during academic discussions. May the merciful Lord reward them abundantly.

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LIST OF ABBREVIATIONS

ABCD	Abstain, Be faithful, Change your lifestyle or Danger contracting AIDS
AIDS	Acquired Immune Deficiency Syndrome
ART	Antiretroviral Therapy
CHPS	Community-Based Health Planning and Services
DHMT	District Health Management Team
DHSs	Demographic and Housing Surveys
FM	Frequency Modulation
FREED	Foundation for Rural Empowerment, Education and Development
GES	Ghana Education Service
GHS	Ghana Health Service
GIT	Gastrointestinal Tract
GNAT	Ghana National Association of Teachers
HIV	Human Immunodeficiency Virus
IEC	Information, Education and Communication
MDG(s)	Millennium Development Goal(s)
MTN	Mobile Telecommunication Network
NGO	Non - Governmental Organization
NSA	National Survey of Adolescents
NMIMR	Noguchi Memorial Institute for Medical Research
PLWHA	People Living with HIV/AIDS
PMTCT	Prevention of Mother-to-Child Transmission
PTA	Parent-Teacher Association
SHS(s)	Senior High School(s)

SPSS	Statistical Package for Social Sciences
STI(s)	Sexually Transmitted Infection(s)
TI	True Islam
UNICEF	United Nations Children Fund
USA	United States of America
VCT	Voluntary Counselling and Testing

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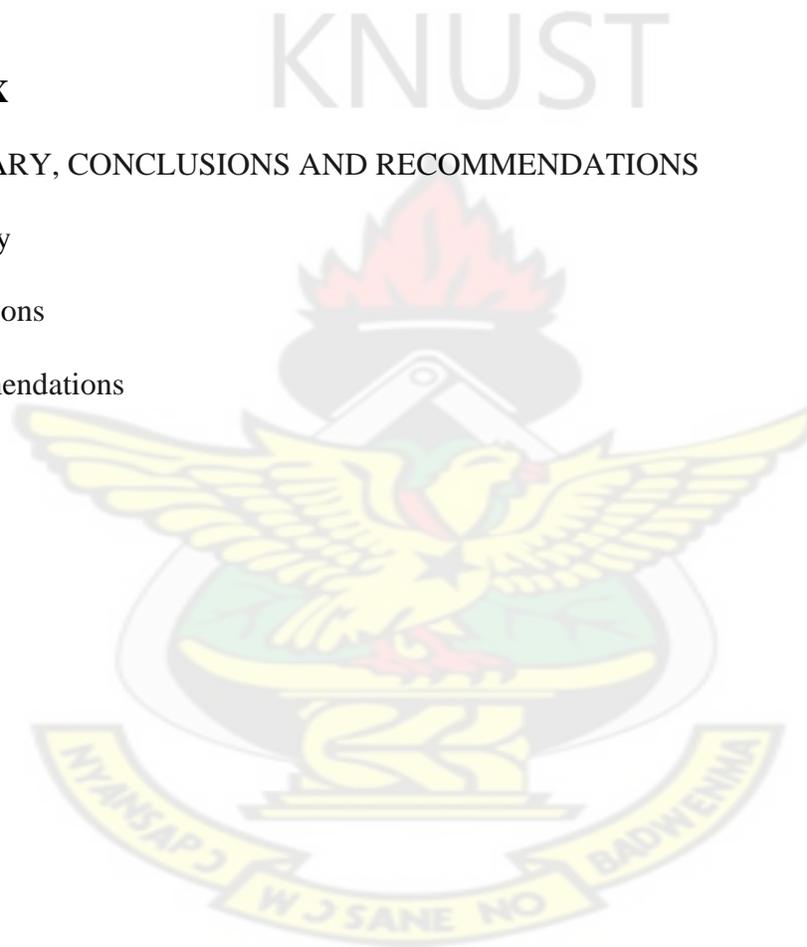
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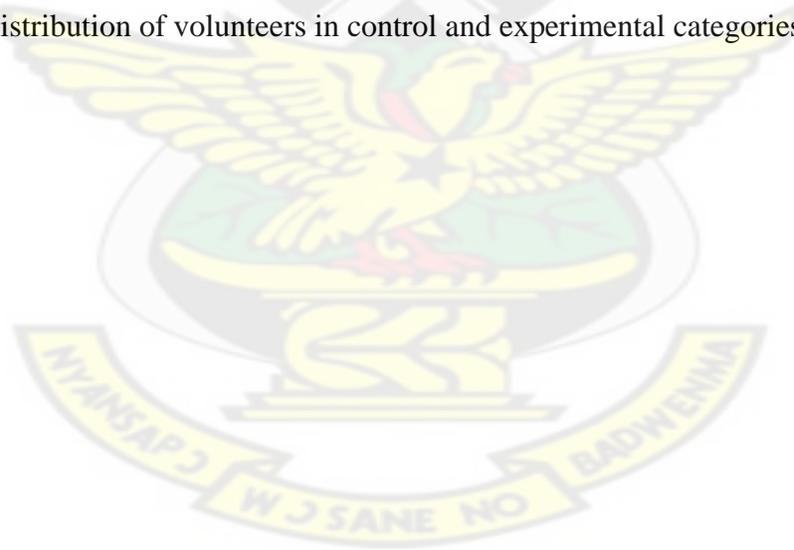
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ABSTRACT

Voluntary Counselling and Testing (VCT) for HIV has long been recognized from many studies to have a potent effect on the reduction of HIV infections as well as case fatality and therefore is recommended in national HIV/AIDS control programmes. If VCT for HIV education is properly tailored to adolescents before VCT for HIV services are rendered to this age group significant result will be obtained in scaling up the patronage of VCT for HIV services as well as reducing the stigma attached to HIV/AIDS issues. However, education concerning the linkages between VCT for HIV and other relevant services remain not fully exploited in sub-Saharan Africa.

This interventional study was carried out from August, 2008 to September, 2008 to find out the effect of HIV/VCT education on the uptake of VCT services by in-school adolescents at Nadowli Queen of Peace and Daffiama SHSs.

It involved 100 students as intervention group and 100 others as control group in two SHSs in Nadowli district of Ghana. The intervention group was given HIV and VCT education while the control group was given 'placebo' education in personal hygiene before subjecting both groups to VCT services.

The study revealed that 90 per cent of the respondents were willing to know their HIV status while still healthy but lacked basic information about VCT and therefore a lot of education should be channeled in that direction. The results of participation in the VCT for HIV exercise were also analyzed and it revealed that 91.80 per cent took the test in the intervention group while 80.00 per cent of respondents took the test in the control group.

The study recommended that the National AIDS Control Programme (NACP) and Ghana Health Service (GHS) should intensify mass campaigns on “Know your HIV status” throughout the year. This would benefit both in and out of school adolescents while the Ghana Education Service (GES) adds VCT education as a topic to the HIV/AIDS education that exist in the curriculum of SHSs and stress on VCT during the teaching and learning of these topics since adolescents play a role in the efforts towards reducing HIV/AIDS.

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CHAPTER ONE

GENERAL INTRODUCTION

1.0 Introduction

More than 90 per cent of the 42,000 people living with HIV are in resource constrained places such as Asia, Latin America and sub-Saharan Africa. Despite the high number of people living with HIV/AIDS (PLWHA) only 10 per cent are aware that they are infected, basically due to the lack of access to VCT for HIV information, accompanied by the perceived fear of stigmatization when one tests positive to HIV (Family Health International, 2003).

The Millennium Development Goals (MDGs) declaration in 1999 saw most member Nations represented and they agreed to work towards achieving the MDGs. One of the targets of MDG 6 is to have halt and begin to reverse the spread of HIV/AIDS by 2015. However, it has been estimated that 14,000 people get infected globally with HIV per day, with the infection spreading fast in Asia, Latin America, the Caribbean, with sub-Saharan Africa leading with the infection toll (Family Health International, 2003).

UNICEF stated that 34 per cent of PLWHA are young people between the ages of 15-24 years. From this UNICEF report, majority of the HIV toll is in adolescents (UNICEF, 2002). The number of annual new AIDS cases has risen dramatically over the last ten years, from an estimated 5,500 in 1994 to 36,000 in 2004 (National AIDS/STI Control Programme, 2004). Ghana AIDS Commission Annual Report revealed that the HIV infection among the youth

(15-24 years) accounted for about 30 per cent of the prevalence rate in Ghana (Ghana AIDS Commission Annual Report, 2006)

Meeks and others in 2005 predicted that the global HIV/AIDS epidemic will continue to increase unless efforts to protect the world's population against this epidemic increase. Such efforts can include tailoring HIV/AIDS preventive services to meet the needs of the population at greater risk such as scaling up VCT for HIV services for adolescents by rendering HIV/AIDS and VCT for HIV education to this population at risk to patronize VCT for HIV services (Meeks et al, 2005).

VCT for HIV programmes are often the link between prevention and mitigating activities. For those who test negative for HIV, VCT for HIV can be a powerful incentive to change high risk sexual behaviour in order to remain negative and for those who test positive, VCT for HIV can serve as a link to care, support and treatment options (Fisher et al, 2002). There are increasing efforts to capture adolescents in utilizing VCT for HIV services. However, few programmes are currently providing counselling and testing that are tailored to the special needs of adolescents such as provision of formal HIV/AIDS and VCT education to them before they embark on the test.

VCT for HIV service delivery is one of the potent strategies put in place to achieve positive results in the prevention of HIV/AIDS infection in resource developed countries. Considering the significant achievements of VCT for HIV in resourced developed countries, developing countries are also implementing VCT for HIV prevention services. But the level of awareness of a service usually leads to the patronage of that particular service. A study carried out by UNICEF, revealed that 75 per cent of adolescents in Kenya and about 90 per

cent in Uganda, indicated that they would like to be tested for HIV while still healthy (UNICEF, 2002).

According to Sue, if significant numbers of HIV positive persons are to benefit from antiretroviral therapy (ART), voluntary and confidential counselling and testing services need to be widely available. This must be done alongside education of adolescents as to what the service stands to benefit the individual, the community and the nation at large (Sue, 2003).

With its recognized importance in National AIDS Control programmes, VCT for HIV service is yet not patronized by adolescents as compared to its level of establishment nationwide. On a *Joy FM* mid-day news on 21st June, 2008 the Director of policy, planning and implementation for Ghana AIDS Commission lamented the non utilization of the numerous VCT for HIV centres dotted all over Ghana and categorically stated that only 7 per cent of the Ghanaian population knew their HIV status notwithstanding the existence of these centres. She therefore called on government to enact a law making VCT for HIV compulsory for all who visited the health facility as done in other countries where pragmatic actions are being taken to curb the AIDS pandemic.

In other African countries where HIV infection is subsiding or declining such as in Botswana, Zambia and Uganda, adolescents played an integral role. Boswell and Baggaley in a draft national guidelines for the Republic of Ghana stated that “it shall seek to ensure the expansion of the access of young people to youth-friendly facilities and services including HIV and STI (sexually transmitted infection) prevention, management and testing,

counselling and the provision of care and support services” (Boswell and Baggaley 2002) . Yet VCT for HIV services in Ghana are not designed to meet the specific needs of adolescents such as giving adolescents formal education on HIV/AIDS and VCT for HIV to raise their knowledge concerning HIV/AIDS and the benefits of VCT for HIV or its linkage to other services.

As part of efforts to strengthen and expand VCT for HIV services for adolescents in Ghana, the Noguchi Memorial Institute for Medical Research (NMIMR) conducted an HIV/AIDS/STIs health awareness project in some rural communities of the Eastern Region of Ghana. Ten selected communities were visited and offered health-oriented services including VCT for HIV education. Rallies were held, during which talks were given and films shown on HIV/AIDS/STIs. At the following day's clinic session, pre-test counselling, testing for HIV and post-test Counselling were offered to volunteers. On average, 6,621 adults and adolescents attended the rallies during each round of visits to the communities. 12.5 per cent of the people voluntarily took the HIV test. All those who tested returned to receive their test results. Out of the number 2.1 per cent of them were confirmed positive. (Nii-trebi et al, 2002).

This meant that with adequately tailored and packaged HIV/AIDS and VCT for HIV education such as that of NMIMR designed for adolescents, remarkable achievements can be obtained in scaling up VCT for HIV prevention in adolescents.

The results of NMIMR also suggested that there were more adolescents who did not know their HIV status than those who knew their HIV status due to lack of HIV/AIDS and VCT education.

1.1 Statement of the Problem

Despite the preventive nature of HIV/AIDS infection, the number of new cases occurring keeps increasing. This is evident by the 4.1 million new cases of the infection reported in 2005 and the number of HIV/AIDS related deaths also increased that year.

Sub-Saharan Africa is said to be the “Headquarters” of the HIV/AIDS epidemic. With just over 10 per cent of the world’s population, the region houses about 64 per cent of HIV – positive people. In Ghana, a report revealed that in 1992, HIV prevalence was 0.7 per cent in Accra and Kumasi. In 2000 it rose to 3.1 per cent in Accra and 3.8 per cent in Kumasi. In Tamale, the prevalence rate increased from 1.0 per cent in 1994 to 1.3 per cent in 2000. Outside these areas, HIV prevalence increased from 1 per cent in 1991 to 3 per cent in 1998. (Nii-Trebi et al, 2002).

The 2007 HIV prevalence in Ghana is 1.7 but from HIV/AIDS experts any country with an adult HIV/AIDS prevalence greater than one is having an epidemic of HIV. These HIV prevalence values over the years have shown that the HIV prevalence is never going to reduce below the epidemic mark without pragmatic actions being taken to address the population at a higher risk to the epidemic such as adolescents (Nii-Trebi et al, 2002).

Among the HIV positive persons in Sub-Saharan African it is only about 10 per cent who actually know they are HIV positive. The situation is not different in the Nadowli district of the Upper West Region of Ghana. For instance, out of the 89,990 population of the district in the year 2000 only 14 persons have registered with the “Tiataa” association, (an association for PLWHA in the Nadowli district) and attended meetings as PLWHA, though the number PLWHA in the district is greater than 40 (Nadowli District Health Management Team Annual Report, 2006).

HIV/AIDS prevention experts believe that for a nation to reduce its HIV/AIDS burden adolescents must play a key role in the preventive measure(s). Also, despite its recognized importance in national AIDS control programmes VCT for HIV is poorly patronized by adolescents in Ghana. Various factors have been responsible for adolescents who are sexually active and stand a higher risk of HIV/AIDS not taking advantage of the existence of eight VCT for HIV centers in Nadowli district.

Since the inception of VCT centre in Nadowli district hospital in July 2006 only 47 persons came for counselling from July 2006 to December 2006 and from January 2007 to August 2007 only 164 persons have patronized the facility. Meanwhile there is the general notion that each person should know his/her HIV status in order to live a responsible life. But this notion can only be achieved through the use of VCT for HIV centers by adolescents. Hence this study availed HIV/AIDS and VCT lessons to an intervention group of hundred students while giving a ‘placebo’ of personal hygiene education to the control group of hundred students in two SHSs in Nadowli district, after having collected baseline data from both groups using the same questionnaire.

It has been demonstrated that several adolescents are interested to know their HIV status but a host of factors such as the fear of stigmatization, lack of education, unavailability of VCT for HIV services and trauma of the test results have never allowed these persons who are interested in knowing their HIV status to overcome this inertia despite the advocacy for VCT for HIV services in all districts of Ghana. This study helped adolescents in Nadowli district SHSs to undergo VCT for HIV testing.

1.2 Rationale of the Study

A significant proportion of young adults who currently have AIDS were infected during their adolescent years.

Living a healthy life devoid of risky practices, demand that adolescents know their HIV status while healthy. This is because they are at a higher risk of HIV infection as a result of increased hormonal changes in their bodies, immaturity, misconceptions from both adults and peers, ignorance on their part, peer pressure and worse of all curiosity on their part to explore their developing reproductive organs. Hence they engage in unplanned and unprotected premarital sex.

Behavioural change is recommended as one of the best methods to be employed to curb HIV/AIDS epidemic effectively, especially in adolescents. The use of VCT for HIV, whose fundamental principles use behavioural change communication, is seemingly not being appreciated as an effective tool in curbing HIV/AIDS epidemic by adolescents in the Nadowli district of the Upper West Region of Ghana.

Hence, this study inculcated in adolescents HIV and VCT education using HIV and VCT lessons delivered to a set of students while providing a placebo to the control group. The study believed that if adolescents received formal education on HIV/AIDS and VCT for HIV delivered by trained staff they will receive much knowledge on the linkages of VCT for HIV and other services. Equipped with such knowledge adolescents would be willing to participate in VCT for HIV services hence scaling up their participation in VCT for HIV to curb HIV/AIDS.

After the HIV/AIDS and VCT and personal hygiene education to the intervention and control groups respectively analysis of both control and intervention groups was done after both groups had voluntarily participated in VCT for HIV screening to find out the efficacy of the lessons delivered to the intervention group.

Also, the researcher believed that when adolescents, the group of individuals who are vulnerable to HIV, are given preparative lessons on HIV and VCT it would overcome the refusal inertia of knowing their HIV status while healthy hence reducing the prevalence of HIV infection, number of HIV related deaths as well as receiving ART for prolongation of the lives of those who test positive to HIV.

1.3 Conceptual Framework

1.3.1 VCT for HIV in Adolescents as a Link to Preventive Services

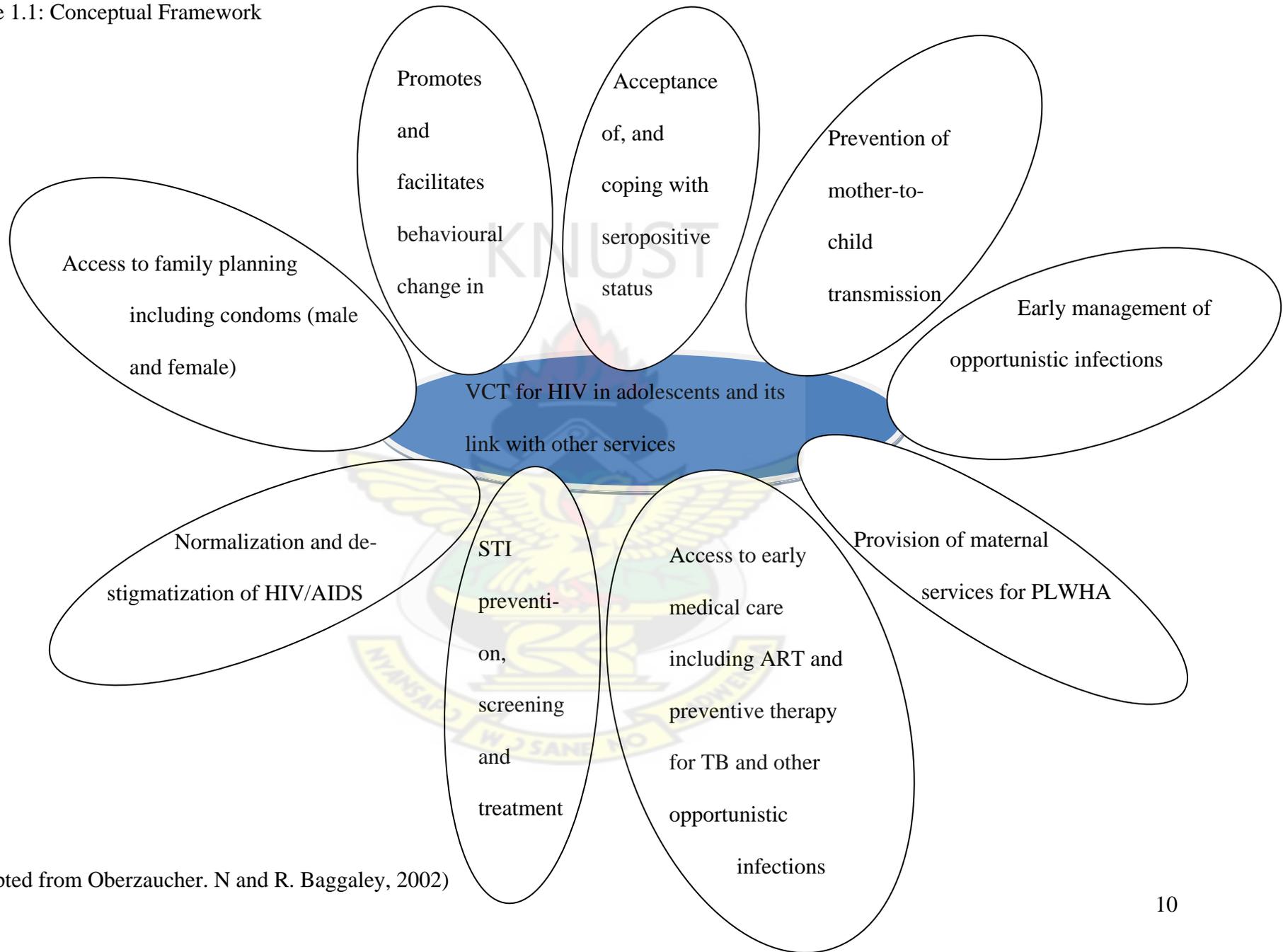
- ✓ Promotes and facilitates behavioural change in seronegative individuals
- ✓ Access to condom use (male and female)
- ✓ Access to family planning
- ✓ Normalization and de-stigmatization of HIV/AIDS
- ✓ STIs prevention, screening and treatment

1.3.2 VCT for HIV in adolescents as a Link to Treatment and Supportive Services

- ✓ Prevention of mother to child transmission (PMTCT)
- ✓ Provision of maternity services for PLWHA
- ✓ Early management of opportunistic infections
- ✓ Access to early medical care including ART and preventive therapy for tuberculosis (TB)



Figure 1.1: Conceptual Framework



(Adopted from Oberzaucher. N and R. Baggaley, 2002)

1.4 Research Questions

The research sought answers to the following questions:

- ✓ Do adolescents in SHSs have adequate knowledge on HIV/AIDS and VCT?
- ✓ Is the proportion of adolescent students who are willing to know their HIV status while still healthy greater than 75 per cent?
- ✓ What is the proportion of adolescent students who know their HIV status before the intervention?
- ✓ Would HIV and VCT education lessons scale up VCT for HIV service patronage by adolescents in SHSs?
- ✓ What is the percentage rate of acceptance of VCT for HIV services in adolescent students who have had HIV and VCT education?

1.5 Main Objective

To explore the use of HIV and VCT lessons to scale up the patronage of VCT for HIV services among adolescents in SHSs

1.6 Specific Objectives

To assess the knowledge of adolescent students concerning HIV/AIDS and VCT issues;

To determine the proportion of adolescents in SHS who are willing to know their HIV status while still healthy;

To establish the possible causes of low patronage of VCT for HIV services by adolescents in SHSs;

To determine if there is any significant difference between the proportion of acceptance of VCT for HIV services among the intervention and the control groups;

To recommend to Stakeholders the importance of HIV and VCT lessons in curbing HIV/AIDS epidemic among adolescents in SHS.

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CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 HIV and AIDS

The acronym HIV stands for Human Immunodeficiency Virus. It is the virus that has been demonstrated to cause the disease Acquired Immune Deficiency Syndrome (AIDS) in humans. Yet, Meeks and others say HIV is a pathogen that destroys infection-fighting T cells in the body. When HIV enters the body it attaches itself to a molecule called CD₄ on helper T cells. HIV then takes control of the helper T cells and reproduces more HIV. As HIV reproduces and makes more HIV, they attack other helper T cells and take control of them (Meeks et al, 2005)

According to Macpherson, (2002) Human Immunodeficiency Virus (HIV) is the virus that is responsible for AIDS and it is one of the families of human T-cell lymphocytotropic viruses, others of which may cause lymphomas in man.

Huber and Gillapsy defined AIDS as an illness characterized by infection with the HIV coupled with the presence of one or more of a constellation of opportunistic infections or diseases such as *Pneumocytic carinii* pneumonia, Kaposi's sarcoma, *candidiasis* in the absence of any other known cause of immunodeficiency(Huber and Gillapsy, 2000)

2.2 VCT for HIV

VCT stands for Voluntary Counselling and Testing. This is the procedure one undergoes to be able to know his/her HIV status, be it negative or positive.

VCT or voluntary counselling and testing, refers to the process of giving people professional counselling before and after the HIV test. The process helps people prepare for and understand their test results. Those who test negative can learn ways to avoid becoming infected, and those who are positive can learn how to live longer, healthier lives and prevent transmission of the virus to others. In this way, VCT offers an important entry point to early prevention, care, and support (USAID 2003).

In 2006 Family Health International explained VCT as: a confidential process that enables a person to assess his or her relative risk of acquiring or transmitting HIV. Counselling also helps a person determine whether to be tested and provided support when he/she receives the test results.

HIV testing involves analysis of blood or body fluids for the presence of antigens or antibodies produced in response to HIV. There are many technologies available today, including a proliferation of high-quality rapid tests (Family Health International, 2006)

2.3 Adolescents

Adolescent has been defined or explained in various ways. According to World Health Organization (WHO) and adopted by the Ministry of Health, adolescents are people between 10 and 19 years. The youth is defined as people between 15 and 24 years and young people are people between 10 and 24 years. Adolescents are not all alike: they differ in gender, age, religion, socio-economic status, urban/rural status, family circumstances, level of education, ability and sexuality and it is

important that when dealing with problems of adolescents, individual differences must be taken into consideration (Adadevoh, et al, 2005)

In this write up the terms youth and young people also stand for adolescents and they are people between the age of 14 and 19 years.

2.4 Adolescents and HIV/AIDS

Adolescents are harboring HIV more than any of the cohorts of the age groups. Fifty per cent of all new HIV infections worldwide are found in young people (Vitulo, 2006). Significant proportions of young adults who currently have AIDS were infected during their adolescent years as a result of risky behaviours they practiced (Meeks et al, 2005).

In another report by WHO, (1996) HIV infection is one of the major problems facing school-age children today. They face fear if they are ignorant, discrimination if they or a family member or friend is infected, and suffering and death if they are not able to protect themselves from this preventable disease. In sub-Saharan Africa, girls are frequently becoming infected in their early teens. (Meeks et al, 2005)

The Center for Disease Prevention and Control has identified sexual behaviours that contribute to unwanted pregnancy, HIV infection and other STIs to be among other five risk behaviours of students. The Center added that less than half (45.6 per cent) of all high school students report having had sexual intercourse during their lifetime and more than one – third (33.3 per cent) report having had intercourse in the past three months. 14 per cent of students have had sexual intercourse during their lifetime with four or more sexual partners. Sexual intercourse during the teen years,

especially first intercourse, is usually unplanned hence increasing the risk of contracting HIV infection and unwanted pregnancies.

2.5 HIV/AIDS Prevention

On the occasion of the 20th World AIDS day, Thoraya lamented that even though young people account for nearly half of all new HIV infections, they still lack accurate information on how to protect themselves. More needs to be done to reach out to the youth as partners in prevention of HIV/AIDS (Thoraya, 2008).

Several initiatives have been instituted for the prevention of HIV/AIDS. The South Africa Catholic Bishops Conference instituted *Education for life* where they stressed on *ABCD* which stands for **A**bstain, **B**e faithful, **C**hange your lifestyle, or **D**anger of contracting AIDS (Vitulo, 2006).

Willis in 2002 reported that the former Health Commissioner of Illinois, United States of America (USA), Dr. Herbert Ratner contended that today abstinence and monogamy are no longer dismissed as religious dictates. Rather they are seen as the pragmatic answer to a pressing problem....abstain before marriage and monogamy thereafter are sexual norms protective of *Homo sapiens* which serve the survival needs of human animal (Willis, 2002)

Willis quoted the former President of South Africa, Nelson Mandela, during his closing address at the XIIIth World AIDS conference from 9th July, 2002 - 14th July, 2002 in Durban, South Africa as having said: "The challenge in preventing HIV/AIDS is to move from rhetoric to action, and action at an unprecedented intensity and scale. There is a need to focus on what we know works, we need to break the silence, banish stigma and discrimination, and ensure total inclusiveness within the

struggle against AIDS: those who are infected with this terrible disease do not want stigma, they want love. Together we can make a difference”

Therefore to prevent the epidemic of HIV/AIDS among students in SHSs we need actions such as VCT for HIV and those who are infected must form part of the preventive process because these are actions that have worked in other countries where the infection is declining such as Zambia Botswana, Uganda etc . The people who are infected need not be discriminated against at public places such as schools, workplace and so forth.

According to UNICEF, national and community leaders must break the silence, challenges, and stigma and eliminate the shame associated with HIV/AIDS. Presidents, Prime ministers, youth leaders, entertainers, sport figures, religious leaders and other influential individuals must have the courage to talk openly and without judgment about adolescent sexuality. Young people should also be provided with knowledge about HIV/AIDS (UNICEF, 2002)

One of the key issues to implement in the prevention of HIV/AIDS among adolescents is to inform and encourage them on voluntary confidential counselling and testing but emphasizes should be made on accessibility to promotive, preventive and rehabilitative health services for young people. This is still below the required standards at all levels for majority of young people (Adadevoh, et al, 2005).

2.6 Adolescents Knowledge on HIV/AIDS and VCT

Gavana in 2006 indicated that it is important to realize that knowledge on reproductive functioning in South African adolescents is generally poor. Although every adolescent has some belief, ideas and information about sex and sexuality, the information is not received from formal lessons or talks about sex and sexuality or from adults or parents, nurses and teachers. It is therefore often inaccurate and misleading (Gavana, 2006)

In some countries sex and its related issues are openly discussed. In Ghana sex and its related issues are not openly discussed irrespective of peoples' educational or socio-economic background. Whilst the awareness of HIV is almost universal, this has not been translated into the desired behaviour change. The reasons accounting for the disparity between awareness on HIV/AIDS and positive behavioural change are misconceptions about the disease such as AIDS is as a result of witchcraft, there is a cure for the disease and others believe that the educational campaign is just out to scare people. Adolescents are also affected by all these misconceptions in addition to their immaturity and hormonal secretions (Adadevoh et al, 2005)

According to Awusabo-Asare and others evidence from the 1998 and 2003 Ghana Demographic and Health Surveys (DHSs) show that over 95 per cent of adolescents had heard about HIV/AIDS. Results from the 2004 National Survey of Adolescents (NSA) also indicated that 96–97 per cent of adolescents were aware of HIV/AIDS. The level of awareness is slightly higher among 15–19-year-olds (97 per cent of females and 98 per cent of males) than 12–14-year-olds which recorded 94 per cent of females and males (Awusabo-Asare et al, 2006)

Among 550 adolescent survey respondents in Zambia, 73 had never heard of VCT or the blood test for HIV, 36 self-reported having taken an HIV test, 98 planned to take an HIV test within the next year, 341 had never taken an HIV test and did not plan to within the next year. Of the 36 youth (12 males, 24 females) who had taken an HIV test; five self-reported being infected with HIV. (Denison. and Sweat, 2006)

2.7 Adolescents, HIV and VCT Education

HIV/AIDS is a household name in every part of the world. Much is talked about the terrible infection but very few people understand all about the infection not excluding adolescents in SHSs.

It is against this back drop that UNICEF (2002) proposed ten strategies that every young person has the right to know. These include:

- ✓ Know about sex and their sexuality;
- ✓ Know the basic facts on HIV/AIDS and have the necessary life skills to protect themselves from HIV and other STIs;
- ✓ To know their HIV status;
- ✓ To know how to protect themselves if they are living with HIV/AIDS;
- ✓ To know where to get medical, emotional and psychological support if they are living with HIV/AIDS;
- ✓ To know how to protect peers and family members from HIV;
- ✓ To know how to protect those in their communities who are living with HIV/AIDS;

- ✓ To know about and participate in HIV education programmes tailored for the youth;
- ✓ To know their rights and entitlements, and the commitments that Governments have made to them and finally;
- ✓ To know how to protect, claim and realize these rights.

2.8 Pre and Post Counselling Support during VCT for HIV

During pre-test counselling, the counselor may need to:

- ✓ Explore young people's reasons for presenting themselves and provide unconditional support;
- ✓ Affirm their courage in seeking services and encourage their attempts to practice healthful behavior;
- ✓ Assess their risks, perceptions and factors relating to vulnerability;
- ✓ Outline the test procedures and practice and find out what a positive or negative result would mean to them and to whom they would disclose their status;
- ✓ Ask about their existing support systems;
- ✓ Provide health education and/or information as required (including modes of transmission and prevention, condom demonstration and distribution);
- ✓ Help them understand how they can reduce their risk, perhaps using role-play;
- ✓ Offer an opportunity for them to ask questions and communicate their concerns;
- ✓ Refer them as appropriate to generic or specialized counselling, drug and alcohol services, abuse and domestic violence services, medical services, support groups, peer support, personal, legal and financial services, religious organizations, etc;
- ✓ Distribute information, education and communication (IEC) materials as appropriate;

During post-test counselling, the counselor may need to:

- ✓ Explore young people's readiness to receive test results;
- ✓ Explore how things have been and what may have changed since the last meeting if not on the same day as the pre-test;
- ✓ Revisit risk assessment and risk-reduction planning as required;
- ✓ Role-play/practice behaviour modification;
- ✓ Offer additional health education and/or information as required (including modes of transmission and prevention, condom demonstration and distribution);
- ✓ Allow them to ask questions and communicate their concerns;
- ✓ Revisit the matter of their support systems, disclosure and coping capacity (especially when the result is positive);
- ✓ Refer them as appropriate to generic or specialized counselling, drug and alcohol services, abuse and domestic violence services, medical services, support groups, peer support, personal, legal and financial services, religious organizations, etc.;
- ✓ Distribute additional IEC materials as appropriate;
- ✓ Facilitate or mediate familial and spousal support as desired and appropriate;
- ✓ Plan for additional or ongoing support as possible and desired (Boswell and Baggaley, 2002).

2.9 Causes of low patronage of VCT for HIV by Adolescents

Nine out of 10 people living with HIV/AIDS do not know they are infected. The fear of stigma and deep-rooted discrimination make young people less likely to adopt preventive strategies such as using condoms and seeking testing for HIV and other STIs (UNICEF, 2002)

There are several hindrances to the patronage and utilization of VCT services by the public, especially adolescents. USAID fact sheet document (2000) listed the barriers to greater use of high quality VCT to include low awareness of the psychosocial benefits of counselling and testing, fear of stigma and rejection, cost, distance to service, quality of care, confidentiality. The financial and psychological costs associated with waiting for test results reduce the demand for VCT as well as the proportion of clients who return for their test results.

Together, stigma and discrimination constitute one of the greatest barriers to dealing effectively with the epidemic. They discourage governments from acknowledging or taking timely action against AIDS. They deter individuals from finding out about their HIV status. They also inhibit those who know they are infected from sharing their diagnosis and taking action to protect others and from seeking treatment and care for themselves.

People fail to be tested for HIV for many reasons: lack of access to testing services, fear of stigma and discrimination, fear that the test will be positive, and lack of access to treatment. These facts meant that thousands of opportunities for increased access to treatment, care, support and prevention have been, and are being, missed.

In the consultations leading up to the High Level Meeting on HIV in 2006, where Member States committed themselves to attaining universal access to HIV prevention, care and treatment,

participants stressed again and again that discrimination, gender inequality and the marginalization of vulnerable groups constitute major barriers to universal access (UNICEF, 2002).

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CHAPTER THREE

3.0 METHODOLOGY

3.1 Study method and Design

Two hundred students were sampled through a simple ballot as the sample size. The researcher then randomized the sampled population into two equal groups of intervention and control groups of 100 students in each group. A baseline questionnaire with the same questions was administered to both groups. The researcher then analyzed the baseline questionnaire according to the two groups.

Three HIV/AIDS and VCT lessons were administered to the intervention group. Three 'placebo' lessons on personal hygiene were also administered to the control group. Both control and intervention groups were then asked to volunteer for VCT for HIV testing. The uptake of the intervention and the controlled groups in VCT for HIV was again analyzed. Focus group discussions were held with the intervention group to find out reasons why individual could abstain from VCT for HIV even when they had education.

3.2 Data Collection Tools and Techniques

Questionnaire of 25 items was administered to both experimental/interventional and control group. Lectures on HIV/AIDS and VCT for HIV were given to the experimental/interventional/interventional group while lectures on personal hygiene were given to the control group after both groups responded to the baseline questionnaire. Also, VCT was given to both groups. Finally focus group discussion was organized for the experimental/interventional/interventional group.

3.3 Study Population

The study population was two hundred students in two SHSs in the Nadowli district. They were Queen of Peace and Daffiama SHSs in the Nadowli district of the Upper West Region of Ghana

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Table 3.1: Study Variable

VARIABLE	OPERATIONAL DEFINITION	INDICATOR	SCALE OF MEASUREMENT	TECHNIQUES
AGE	Those within the 14-19 years	Senior High School	Continuous	Questionnaire
SEX	Male or Female	Senior High School	Binary	Questionnaire
KNOWLEDGE OF HIV	Ability to give appropriate answer to questionnaire.	Analysis of Questionnaire	Ordered Categorical	VCT lessons and Questionnaire
PRE-COUNSELLING	Acceptance of VCT pre-counselling	Availing one's self for pre-counselling	Discrete	VCT lessons
VCT TESTING	Being tested for HIV	Availing one's self for the test	Discrete	VCT lessons
RESULTS	Accepting the status as indicated by the results	Availing one's self for the results and results	Discrete	Reaction to results declared
POST COUNSELLING	Accepting to be post-counselled after testing	Availing one's self for post-counselling	Discrete	Reaction to post counselling

3.4 Sampling Technique/Size

Sample size was determined by using the relation:

$$N = (Z^2) \times pq / (d^2)$$

Where N=sample size, Z= the confidence interval, p = proportion of VCT for HIV patronage, q=1-p and d= the width of the error which the researcher has chosen to be 0.01.

$$\text{Therefore } N = (1.96^2) \times (.004)(0.996) / (0.01^2)$$

$$= 3.84 \times 0.00398 / 0.0001$$

$$= 152$$

Making up for drop out from the study, 30 per cent dropout rate was considered since a study into HIV/AIDS issues is likely to have a high dropout rate.

$$\text{Therefore, } 152 \times 0.3 = 46$$

$$\text{Implying, } 152 + 46 = 198$$

Hence two hundred students were sampled for the study.

The sampling technique that was employed was a simple random sampling technique, which was used to arrive at the study population of two hundred students in both schools. The study population in each school was randomized into intervention and control groups using simple random sampling technique in where the letter 'E' was written hundred times and the letter 'C' also written hundred times on pieces of paper and mixed thoroughly; each student in the sampled population then picked one and the group to which he or she belonged determined. Students who picked 'E' belonged to the intervention group and students who picked 'C' belonged to the control group.

3.5 Pre-testing

The research instrument was pre-test at Kaleo Senior High and Technical school and the identified problems modified before the research instrument was finally administered to the sampled population.

3.6 Plans for Data Collection

The safety of data collected was guaranteed by ensuring proper handling and maintaining data from the effect of the weather especially rains since data was collected during the rainy season.

3.7 Data Analysis

Statistical Package for Social Scientists (SPSS) version 14 software was used to create the database and statistical analysis. Data collected was summarized and stored in graphs, matrices charts and tables. Frequency distribution tables were used to group sample data.

3.8 Quality Control

Measures such as daily entry of data collected and cross checking that all questionnaires were answered by all respondents were done to ensure that the data collected was reliable and valid, as good data is the heart of research.

3.9 Preparations for Intervention Lessons

Lessons for teaching HIV/AIDS and personal hygiene were prepared to outline certain standards to be followed by the research team.

3.10 Selection and Training of Research Assistants

Five research assistants who are Registered General Nurses were selected and given refresher training in the field of HIV/AIDS, VCT and personal hygiene as well as teaching methods. They assisted the researcher in the data collection.

3.11 Supervision of Research assistants

The principal researcher personally supervised the research assistants to make sure that quality data was collected throughout the research period.

3.12 Expected output

A report on the analysis, findings and a set of recommendations from the research was written and presented to the Department of Community Health in partial fulfillment of the requirements for the award of the Masters of Science degree.

3.13 Ethical Considerations

Permission to undertake this study was sought from the Nadowli District Directorate of Education as well as the Parent Teacher Associations (PTAs) of the study schools. Also, the consent of the students in the study population was sought.

3.14 Limitations

The study had the following as limitation:

Out of school adolescents were not part of the study.

3.15 Study Assumptions

The study had the underlisted assumptions:

- ✓ Students had some reasonable knowledge concerning HIV/AIDS;
- ✓ There were HIV/AIDS peer educators among these students;
- ✓ The DHMT gave students school health education including HIV/AIDS lessons;
- ✓ Majority of adolescents were in-school adolescents;
- ✓ No ethnic conflicts existed in the study area.

3.16 Profile of the Study Area

Nadowli district is located in the heart of the Upper West Region of Ghana. The district was carved out of Wa district in 1988 as the fifth district of the Upper West Region of Ghana at that time. It is one of the least developed districts in the region and nationwide in terms of infrastructure. The district is mainly rural and has a 2002 projected population of 89 990.

It is bordered to the south by Wa Municipal, west by Burkina Faso, north by Jirapa district and to the east by the Lambussie/Karni and Sissala East districts. The district covers a total land area of 2,742.50 square kilometers (Km²). It stretches 4km from Wa to the Dapuori bridge (almost 12 Km from Jirapa) on the main Wa – Jirapa – Hamile road.

The annual population growth rate of the district is 1.7 per cent; which is below the regional and national population growth rates of 2.3 per cent and 2.7 per cent respectively. The district has 163 settlements. The dependency ratio is 1:1.2.

Only 8 communities are connected to the national electricity grid and less than 20 communities receive signals from the three most popular cellular telephone networks in Ghana: *Mobile Telecommunication Network (MTN)*, *ONEtouch* and *tiGo*. The district receives television transmission from the state owned television station based in the national capital. The district has no *Frequency Modulation (FM)* station but receives *FM* transmission from three *FM* stations based in the region and these include *radio Foundation for Rural Empowerment, Education and Development (FREED)* based in Lawra district, *radio Upper West* and *radio Progress*, both based in Wa Municipal. The Ghanaian *Daily Graphic* is the most popular print media that comes to the district regularly.

The main means of transport within the district include minibuses, pickups and trotros. Most communities however still depend on non-conventional means of transport such as bicycles and carrying of goods on their heads to transport their goods to major market centres. There is no statistical data on emigrational trend in the district. However, movement of people into and out of the district exist. There is seasonal emigration of the youth, especially, the males to the southern part of Ghana to work, thereby reducing the labour force in the district whilst there is also intra-district migration from the west to the fertile east to farm. The emigration of the youth has serious implications for the embryonic economy of the district, as the potentials for production are lost to other districts. These

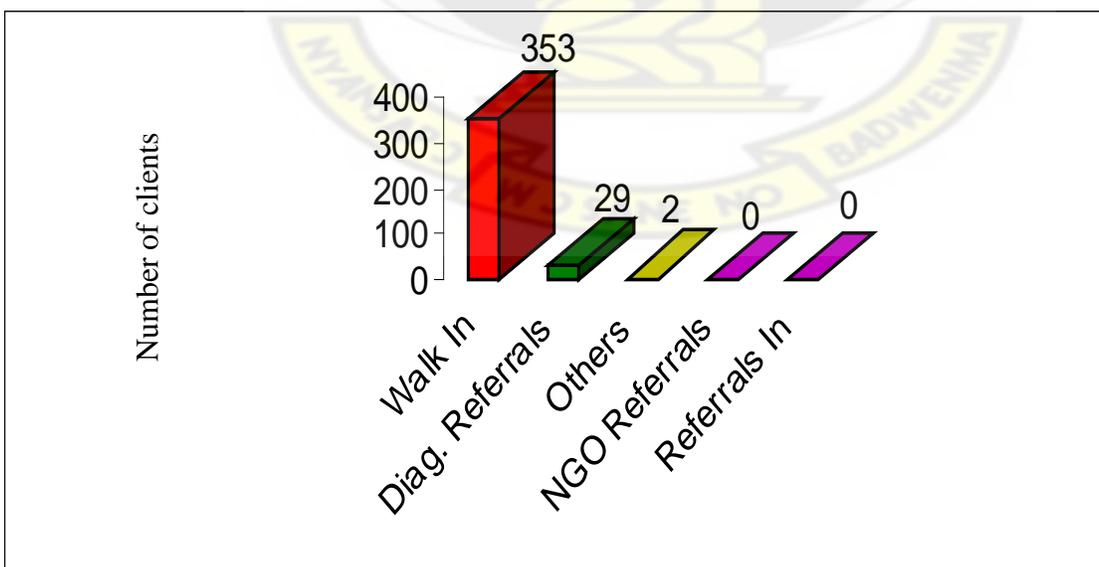
migrants import disease conditions such as Guinea worm and STIs/HIV/AIDS into the district. (Nadowli District Health Management Annual Report, 2006)

The district is endowed with 126 educational institutions ranging from Day-care through Primary to Senior High Schools and Vocational/Technical institutions. The district has two hospitals- the public one is located in the district capital, Nadowli and the other one belongs to the True Islam (T.I) Ahmadiyya Muslim Mission located at Kaleo. These hospitals are supported by 13 clinics and 13 Community-based Health Planning and Services (CHPS) compounds.

The district has eight functional adolescent centers that offer VCT for HIV located at the following sub-districts: Nadowli, Daffiama, Fian, Sombo, Charikpong, Jang, Issa, and Nanvilli.

VCT for HIV services patronage from the district hospital in the year 2006 is shown in Figure 1.2.

Figure 3.1: Total number of clients that underwent VCT for HIV in 2006 at Nadowli



The total number of people who accessed VCT for HIV services were 384 out of a population of 89 990. This gave a proportion of $384/89\ 990$ or 0.004. Interestingly, out of the total number of clients who had VCT for HIV services in 2006 (384 clients) 91.9 per cent of them walked in (353 clients) and the remaining (31 clients) representing 8.1 per cent had the service due to the recommendation of either a medical facility or a Non-Governmental Organization. It therefore meant that more adolescents would participate in VCT for HIV if education was provided to adolescents since with the records in Nadowli those that Volunteered for the service were more than any other category of clients.



CHAPTER FOUR

4.0 PRESENTATION OF FINDINGS

4.1 Number and sex of respondents

A total of two hundred (200) respondents responded to the baseline questionnaire of twenty five (25) items. One hundred and ninety one (191) were complete and valid hence were analyzed. Nine were incomplete hence were not analyzed and this accounted for the short fall of respondents in chapter four. Tables 4.1 and 4.2 show the details of the distribution of respondents by schools, sexes and experimental and control categories.

Table 4.1: Distribution of respondents at Daffiama SHS

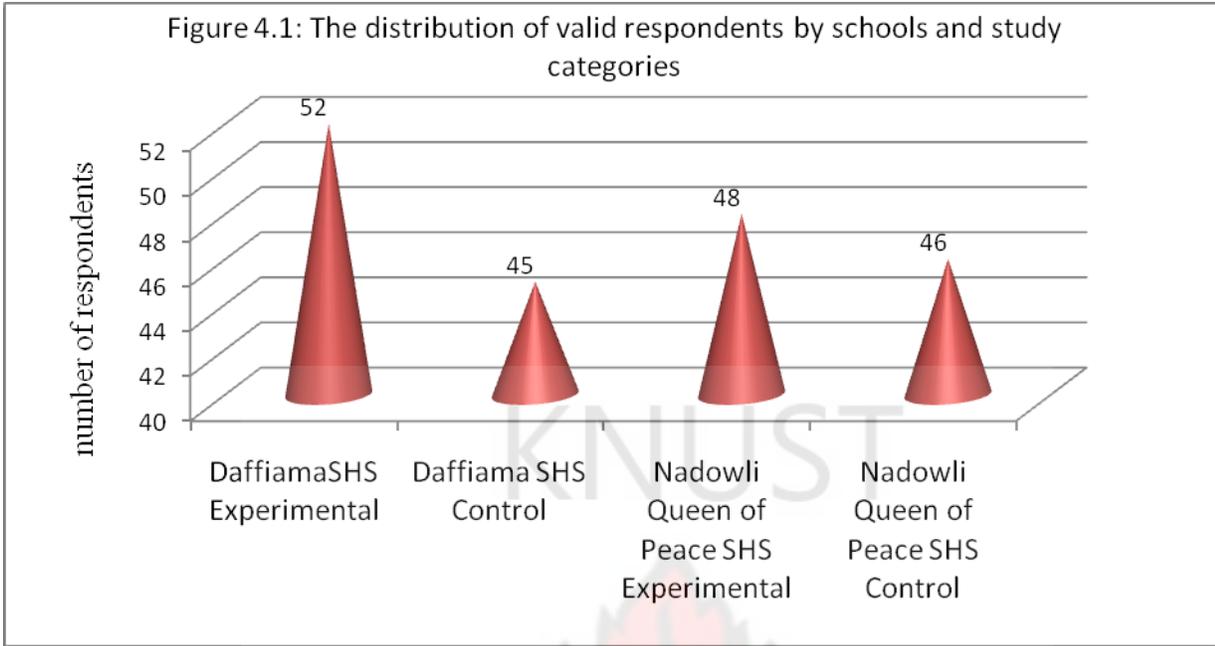
Sex	Daffiama SHS			
	Experimental	percentage	Control	Percentage
Male	27	51.9	29	64.4
Female	25	48.1	16	35.6
Total	52	100	45	100.0

(Source: Field data, 2008)

Table 4.2: Distribution of respondents at Nadowli Queen of Peace SHS

Sex	Nadowli Queen of Peace SHS			
	Experimental	percentage	Control	Percentage
Male	37	77.1	37	80.4
Female	11	22.9	9	19.6
Total	48	100.0	46	100.0

(Source: Field data, 2008)



(Source: Field data, 2008)

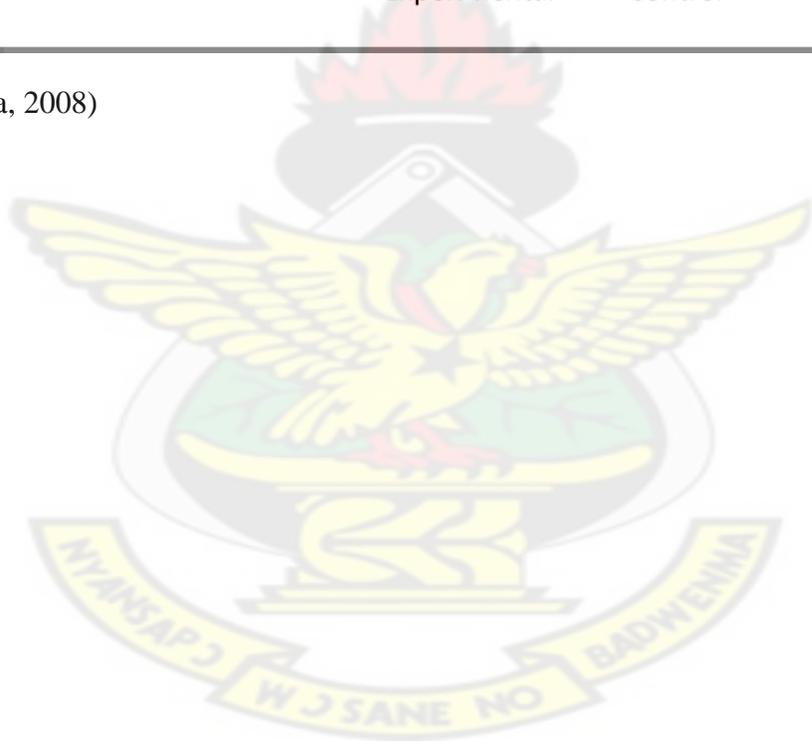


Figure 4.2: A section of sampled respondents as they prepare to respond to the baseline questionnaire at Daffiama

SHS



(Source: Field data, 2008)



Figure4.3: A section of sampled respondents as they prepare to respond to the baseline questionnaire at Nadowli Queen of Peace SHS



(Source: Field data, 2008)

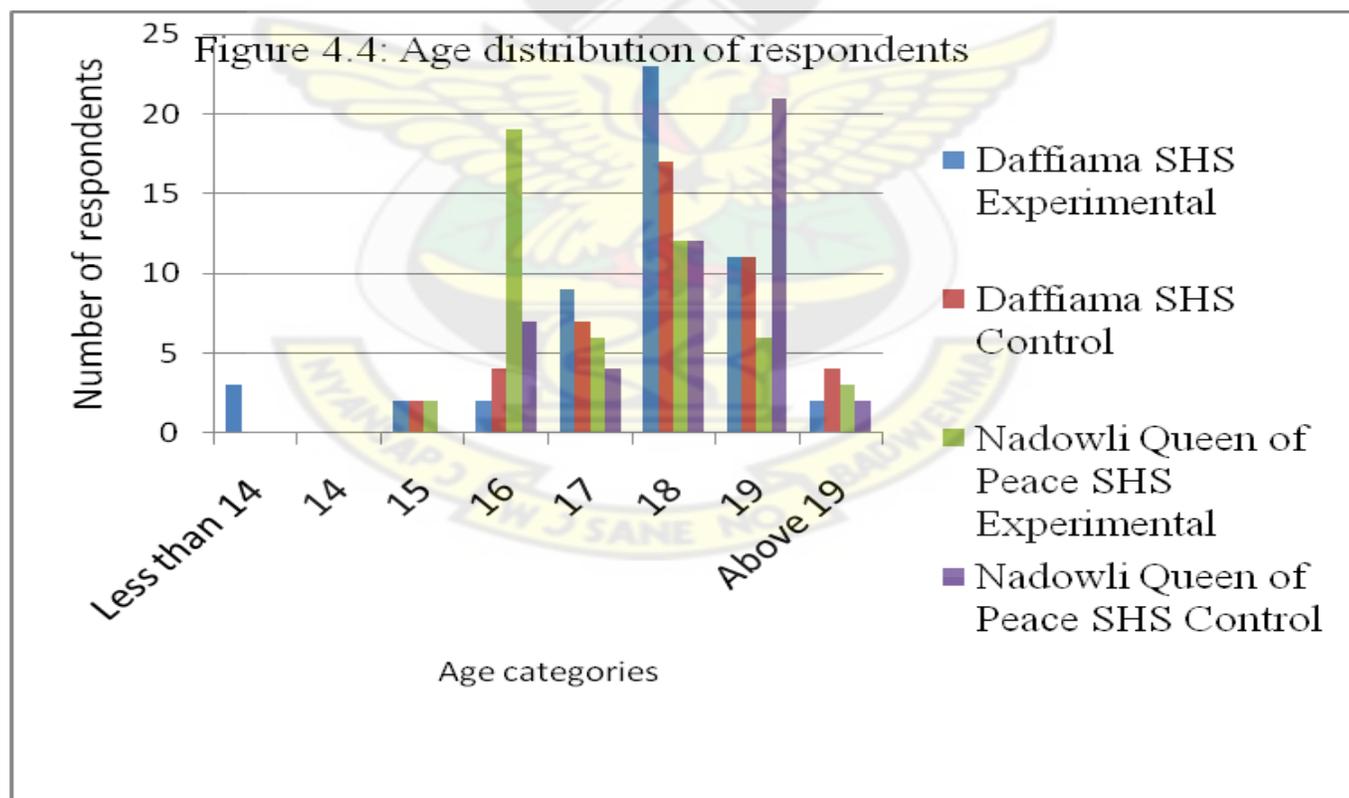
4.2 Ages of Respondents

The respondents to the baseline questionnaire have their ages between 15 and 19 years. However, three were below 14 years and 11 were above 19 years. Interestingly no student interviewed was 14 years.

Table 4.3: Age distribution of valid respondents

Age (years)of respondents	Daffiama SHS		Nadowli Queen of Peace SHS		Grand total
	Experimental	Control	Experimental	Control	
Less than 14	3	0	0	0	3
14	0	0	0	0	0
15	2	2	2	0	6
16	2	4	19	7	32
17	9	7	6	4	26
18	23	17	12	12	64
19	11	11	6	21	49
Above 19	2	4	3	2	11
Total	52	45	48	46	191

(Source: Field data, 2008)



(Source: Field data, 2008)

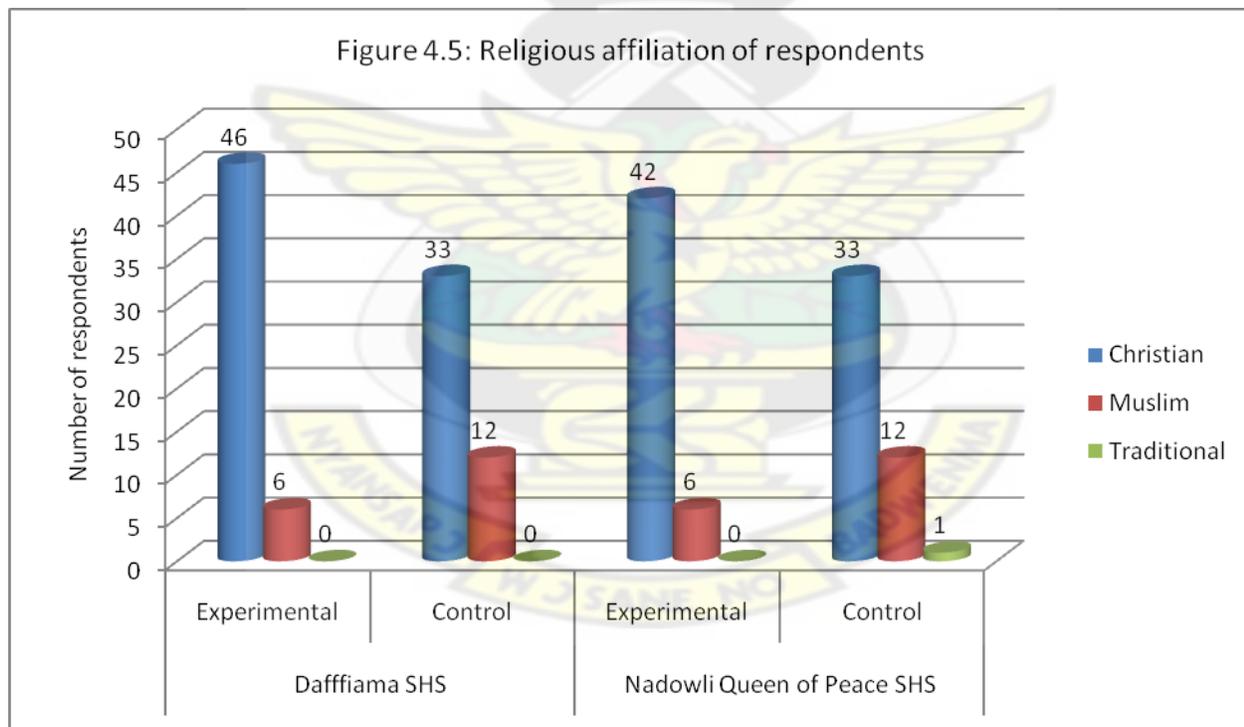
4.3 Religious Affiliation of Respondents

The religious affiliations of the respondents is shown in Table 4.4

Table 4.4: Religious affiliation of respondents

Religious affiliation of respondents	Daffiama SHS		Nadowli Queen of Peace SHS	
	Experimental	Control	Experimental	Control
Christian	46	33	42	33
Muslim	6	12	6	12
Traditional	0	0	0	1
Total	52	45	48	46

(Source: Field data, 2008)



(Source: Field data, 2008)

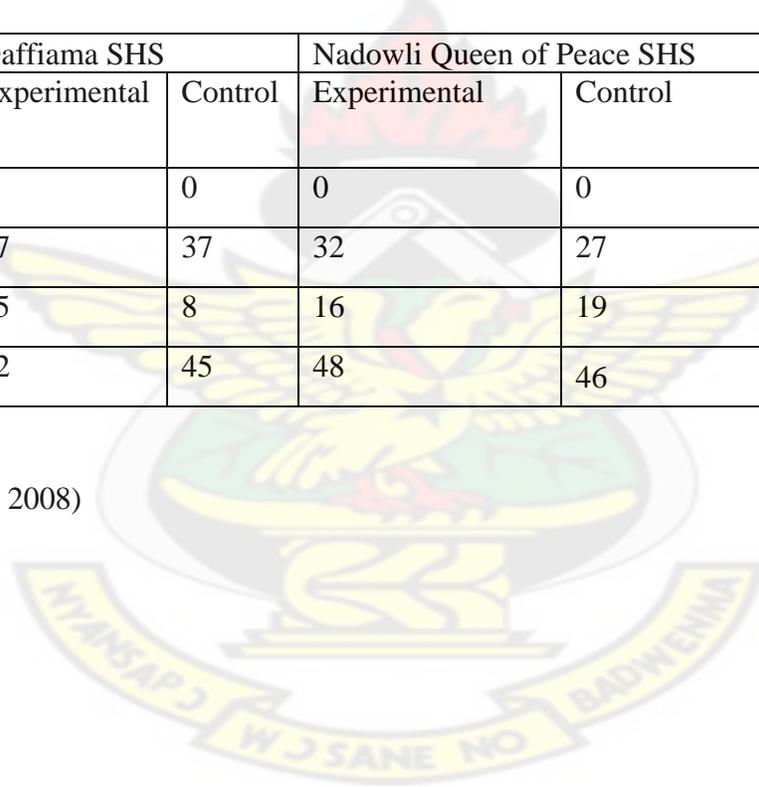
4.4 Class of Respondents

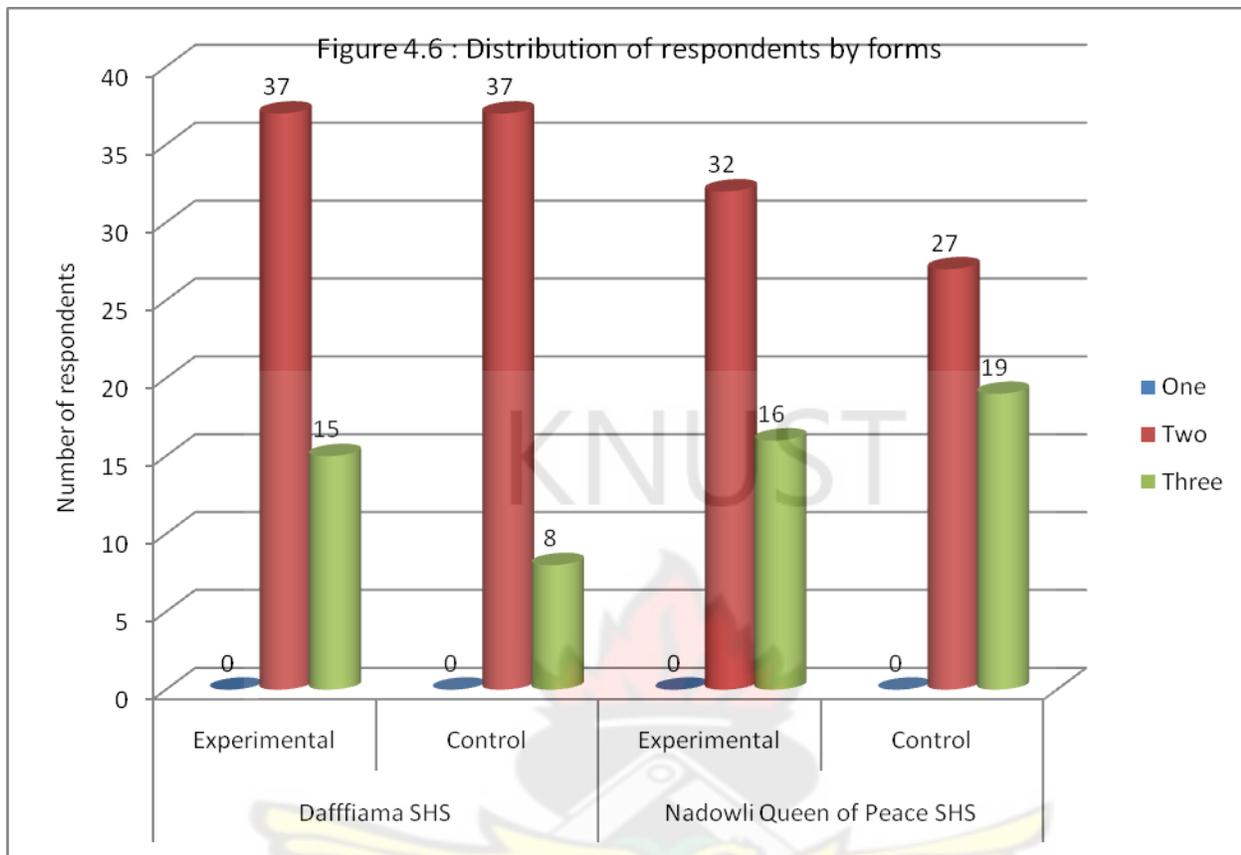
69.63 per cent of the respondents were in Form two in both Daffiama and Nadowli Queen of Peace SHSs and 30.37 per cent in Form three in both schools. There were no respondents in Form one because at the time of collecting this data the Form one students for SHSs nationwide had not yet reported to their various schools. Table 4.5 depicts the distribution of respondents by Forms in both schools for both control and experimental groups.

Table 4.5: Distribution of respondents by Forms in the control and experimental categories

Form of respondents	Daffiama SHS		Nadowli Queen of Peace SHS		Grand Total	Percentage
	Experimental	Control	Experimental	Control		
One	0	0	0	0	0	0
Two	37	37	32	27	133	69.63
Three	15	8	16	19	58	30.37
Total	52	45	48	46	191	100

(Source: Field data, 2008)





(Source: Field data, 2008)

4.5 Respondents' Knowledge on HIV/AIDS

Forty two respondents in the control group at Daffiama and forty one in Nadowli representing 95.70 per cent of respondents in the control group indicated that they had ever heard of the acronym AIDS. Again, forty nine respondents Daffiama and forty five respondents in Nadowli representing 94.00 per cent from the experimental group also indicated that they had ever heard of the acronym AIDS.

Yet, twenty nine respondents at Daffiama SHS and thirty two respondents at Nadowli Queen of Peace SHS representing 67.00 per cent wrote out correctly the meaning of the acronym AIDS in the control group.

Likewise, in the experimental group, twenty one respondents and thirty three respondents representing 54.60 per cent for Daffiama and Nadowli Queen of Peace SHSs respectively wrote out the correct meaning of the acronym AIDS.

With regard to three major signs and symptoms of AIDS in the control groups, forty four respondents and forty three respondents representing an average of 95.7 per cent at Daffiama and Nadowli Queen of Peace SHSs respectively indicated them to be loss of body weight, diarrhoea and vomiting. Only one respondent in Daffiama and three respondents at Nadowli representing 4.4 per cent did not know these were the three basic signs and symptoms of AIDS.

On the part of the experimental/interventional groups, fifty one respondents at Daffiama and all 48 respondents at Nadowli representing 99.10 per cent chose the three basic signs and symptoms of AIDS to be loss of body weight, diarrhoea and vomiting.

4.6 Respondents' Knowledge on VCT

On the part of the control group thirty respondents at Daffiama and forty three respondents at Nadowli representing 80.10 per cent gave the correct meaning of the acronym VCT while 15 respondents at Daffiama and three respondents at Nadowli representing 39.80 per cent did not know the correct meaning of the acronym VCT.

On the part of the experimental/interventional groups thirty six respondents and thirty three respondents representing 69.0 per cent from Daffiama and Nadowli Queen of Peace SHSs respectively gave the correct meaning of the acronym VCT while 16 respondents and fifteen respondents representing 31.1

per cent from Daffiama and Nadowli Queen of Peace SHSs respectively did not know the correct meaning of the acronym VCT.

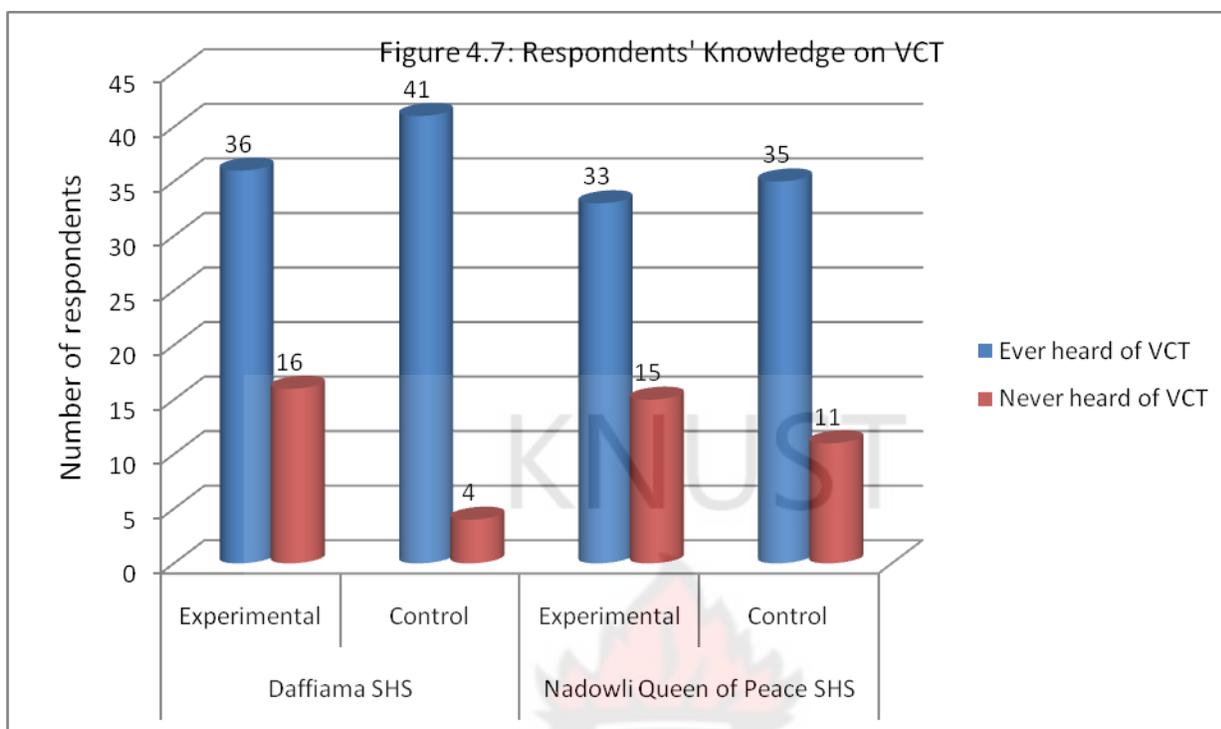
More than 80.00 per cent of respondents in the control group indicated that VCT is for everyone and approximately 90 .00 per cent of respondents in the experimental/interventional group indicated that VCT is for every individual.

However, less than 25 per cent of respondents in the control group knew that VCT has three major stages namely the pre-counselling, testing and post counselling stages and 20 per cent of respondents in the experimental/interventional group indicated that VCT has three stages.

Table 4.6: Knowledge of respondents on VCT across the two schools and investigation groups

	Daffiama SHS		Nadowli Queen of Peace SHS	
	Experimental /interventional	Control	Experimental/interventional	Control
Ever heard of VCT	36	41	33	35
Never heard of VCT	16	4	15	11
Total	52	45	48	46

(Source: Field data, 2008)



(Source: Field data, 2008)

4.7 Proportion of respondents who knew their HIV status

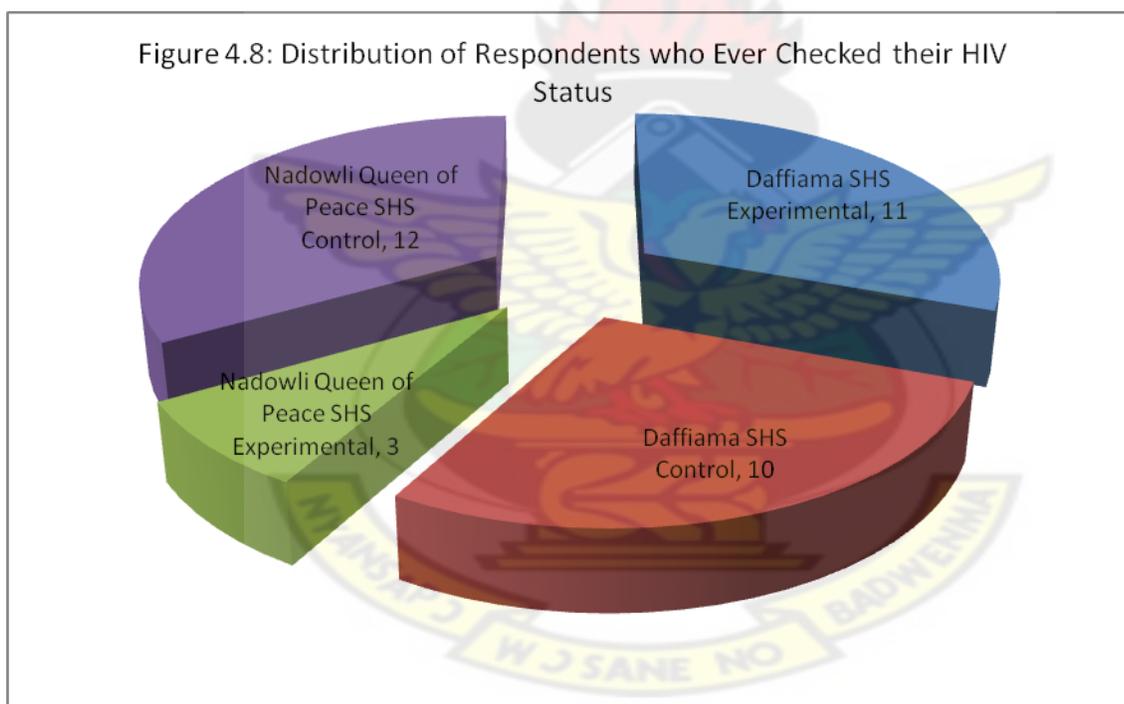
On the part of the control groups twenty two respondents representing 24.1 per cent reported having ever gone to check their HIV status at a VCT centre while the remaining sixty nine respondents in the control groups representing 75.9 per cent reported that they did not test their HIV status.

On the part of the experimental/interventional group fourteen respondents (representing an average of 13.8 per cent) have ever gone to check their HIV status yet eighty six respondents (representing an average of 86.3 per cent) have never gone to check their HIV status.

Table 4.7: Before intervention VCT status of respondents across the categories

Checking of HIV status	Daffiama SHS		Nadowli Queen of Peace SHS		Grand Total	Per centage
	Experimental /intervention al	Control	Experimental/interventional	Control		
Ever checked HIV status	11	10	3	12	36	18.85
Never checked HIV status	41	35	45	34	155	81.15
Total	52	45	48	46	191	100.00

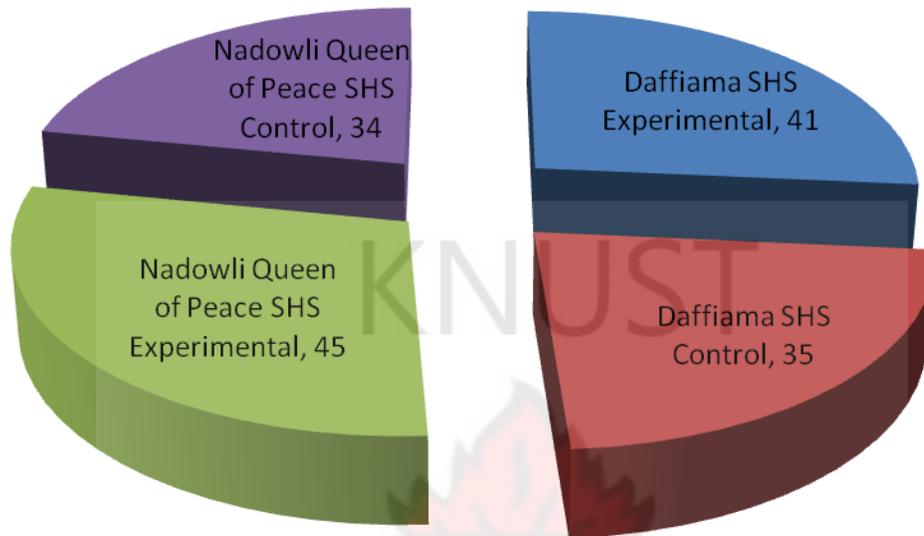
(Source: Field data, 2008)



(Source: Field data, 2008)

A total of thirty six respondents out of the one hundred and ninety one valid respondents representing 18.85 per cent of respondents indicated that they have ever had a VCT test hence knew their HIV status before intervention.

Figure 4.9: Distribution of respondents who never checked HIV status



(Source: Field data, 2008)

A total of one hundred and fifty five respondents out of the one hundred and ninety one valid respondents representing 81.15 indicated that they have never had a VCT test hence never knew their HIV status before intervention.

4.8 Major Causes of Low Patronage of VCT for HIV by Respondents

From the analysis of four major factors that led to respondents not patronizing the eight VCT centres in the district, in the control group the factors were found to be lack of information about where to test their HIV status (17.80 per cent), fear of testing positive (13.30 per cent), the monetary cost of the HIV test (11.1 per cent) and fear of stigmatization (8.90 per cent) for respondents in Daffiama SHS while

those for Nadowli Queen of Peace SHS were lack of information about where to test their HIV status (15.20 per cent), the monetary cost of the HIV test (13.00 per cent), fear of stigmatization (10.90 per cent) and fear of testing positive (8.70 per cent)

4.9 Post Intervention Findings

The post intervention results were presented according to the two categories i.e control and intervention groups only. The one hundred respondents in each study category were taken through lessons in either HIV/AIDS and VCT or personal hygiene education for three times after which individuals in each group were given counselling and they then volunteered for HIV test to be performed on them at either Daffiama or Nadowli VCT centres. The findings were as follows:.

Out of the one hundred respondents who were enrolled in the control category and given personal hygiene education for four weeks, ninety-two volunteers representing (92.00 per cent) presented themselves and took the VCT. The remaining eight did not turn up for the VCT. The date of the VCT actual testing coincided with the period of Idil-fitr and students were given the chance to go home and celebrate the occasion with their parents. This might have accounted for the deficit of eight respondents in this category.

Out of one hundred respondents who were enrolled in the experimental/interventional group and given education on HIV/AIDS and VCT, ninety seven of them representing 97 per cent took the VCT. The remaining three did not turn up. The celebration of Idil-fitr could have affected the results.

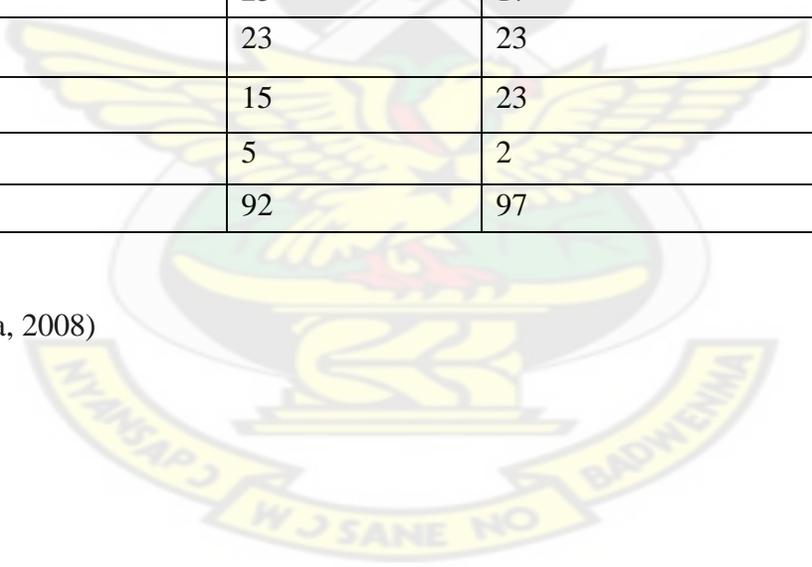
The ages of the respondents in both control and experimental/interventional categories is shown in Table 4.8.

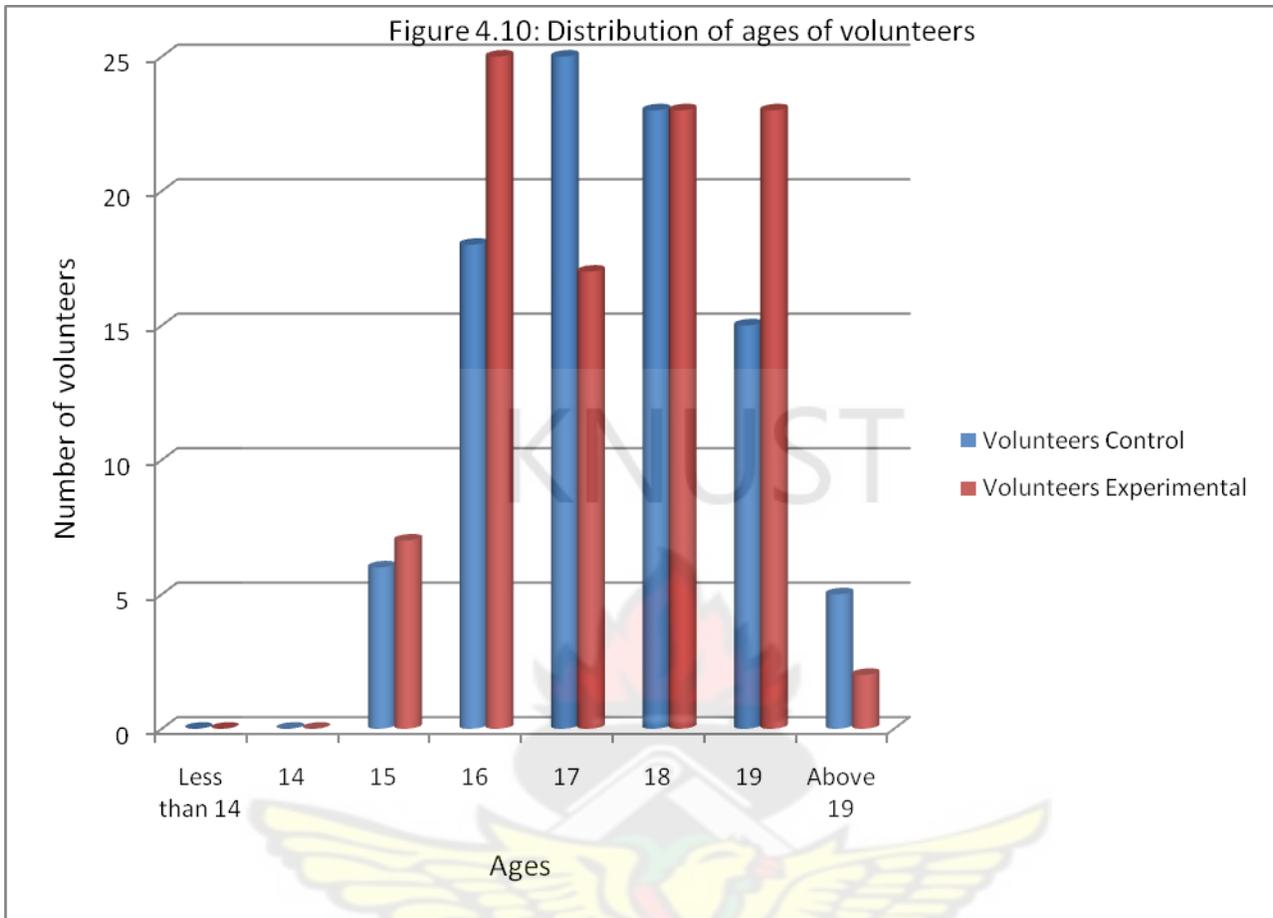
Sixty one of the volunteers were males (representing 66.3 per cent) and thirty one volunteers were female (representing 33.7 per cent) in the control group

Table 4.8: Ages distribution of volunteers in control and experimental/interventional categories

Age (years)of respondents	Volunteers	
	Control	Experimental/interventional
Less than 14	0	0
14	0	0
15	6	7
16	18	25
17	25	17
18	23	23
19	15	23
Above 19	5	2
Total	92	97

(Source: Field data, 2008)





(Source: Field data, 2008)

In the control group 81 out of 92 volunteers went through pre-counselling, testing, post counselling and accepted their results. This represented 88.00 per cent. In the intervention group 89 volunteers out of 97 went through pre-counselling, testing, post-counselling and accepted their results. This represented 91.80 per cent of volunteers who availed themselves for the VCT for HIV.

However, 11volunteers (representing 12.00 per cent) out of the 92 in the control group declined to have the VCT for HIV. Also, within the intervention group eight volunteers (representing 8.20 per cent) out

of the 97 volunteers declined to have the VCT for HIV performed on them despite having had the lessons to prepare them to readily accept a VCT for HIV test.

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CHAPTER FIVE

5.0 DISCUSSION OF FINDINGS

5.1 Knowledge of Adolescent Students Concerning HIV/AIDS and VCT Issues

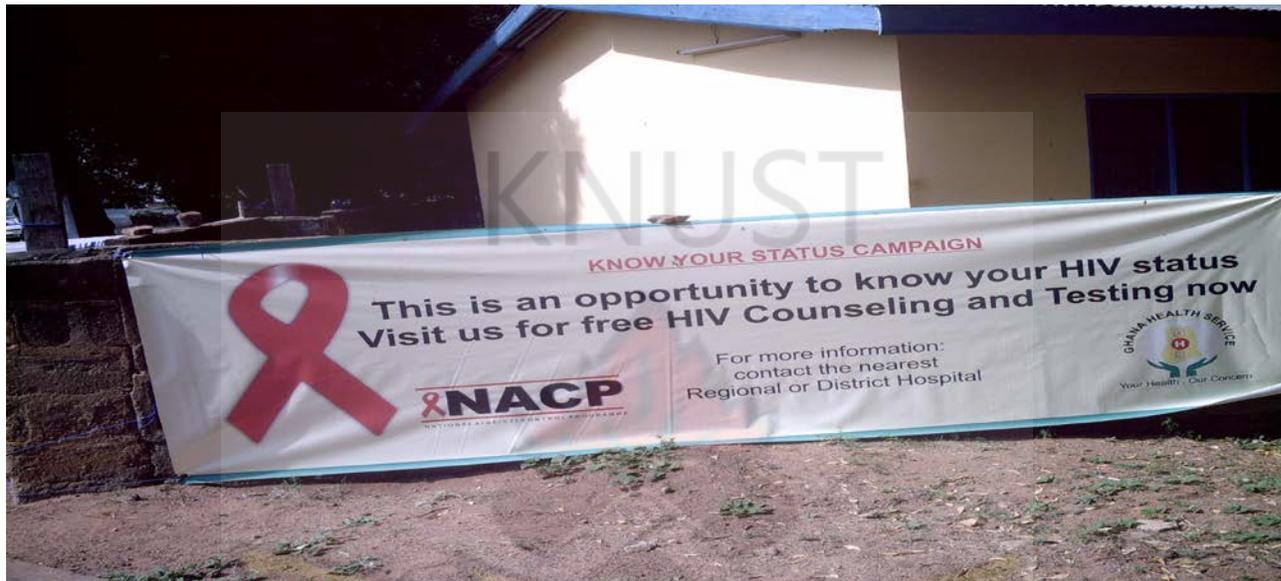
The findings indicated that more than 90 per cent of respondents have in-depth knowledge on HIV/AIDS issues only but less than this per centage have knowledge concerning VCT. Adadevoh and others indicated that the awareness of HIV among adolescents is almost universal but this has not been translated into the desired behavioural change (Adadevoh, et al, 2005).

From the 1998 and 2003 Ghana Demographic and Health Surveys over 95 per centage of adolescents had heard about HIV/AIDS (Awusabo-Asare et al, 2006). This supports the findings of this research which indicated that not less than 90 per cent of respondents in both intervention and control groups indicated the correct meaning of the acronym AIDS, three major signs and symptoms of AIDS infection and confirmed that the causative organism for HIV/AIDS was a virus.

On the part of respondents knowledge on VCT it was found that more than 80.10 per cent of the respondents knew the correct meaning of the abbreviation VCT. However, less than 30 per cent knew VCT has three stages namely: pre-counselling, testing and post counselling stages. This deviated from the finding of Denison and Sweat, 2006 which indicated that among 550 adolescents survey respondents in Zambia, 73 (representing 13.27 per cent) had never heard of VCT or the blood test for HIV. This de can departure from Denison and Sweat can be attributed to the shifting emphasis from having knowledge in HIV/AIDS to knowing your HIV status. Recently, the National AIDS Control Programme (NACP) and the Ghana Health Service (GHS) ran a campaign on “know your HIV status” before the commencement of this research. This

might have accounted for the deviation. Figure 5.1 shows one of the campaign advertisement banners encountered during the data collection for this research.

Figure 5.1: Banner showing a national campaign on “know your HIV status”.



(Source: Field data, 2008)

5.2 Proportion of Adolescents who are willing to know their HIV status while Healthy

An average proportion of 89.9 respondents from both intervention and control groups went through VCT to know their HIV status. Conclusively this per centage of adolescents wanted to know their HIV status while still healthy. This finding agreed with that of UNICEF, (2002) which revealed that 75 per cent of adolescents in Kenya and about 90 per cent in Uganda, indicated that they would like to be tested for HIV while still healthy.

5.3 Possible Causes of Low Patronage of VCT by Adolescents in SHSs

The study arrived at the following in descending order to be the possible barriers to the patronage of VCT by adolescents: lack of information about where to test one's HIV status, fear of testing positive, the monetary cost of the HIV test and fear of stigmatization. Similarly, USAID fact sheet document (2000) stated the barriers to greater use of high quality VCT to include low awareness of the psychosocial benefits of counselling and testing, fear of stigma and rejection, and low access to trusted services which include cost, distance to service, quality of care and confidentiality. The financial and psychological costs associated with waiting for test results reduced the demand for VCT as well as the proportion of clients who return for their test results.

However, UNICEF, 2002 in the consultations leading up to the High Level Meeting on HIV in 2006, where Member States committed themselves to attaining universal access to HIV prevention, care and treatment, participants stressed again and again that discrimination, gender inequality and the marginalization of vulnerable groups constituted major barriers to universal access to VCT.

5.4 Difference in uptake of VCT among Intervention and Control groups

Little is however known on the proportion of change that would occur between the intervention group and that of the control group but Meeks and others in 2005 predicted that the global HIV/AIDS epidemic will continue to increase unless efforts to protect the world's population against this epidemic increase (Meeks et al, 2005). Such efforts can include tailoring HIV/AIDS preventive services to meet the needs of the population at greater risk such as scaling up VCT for HIV services for adolescents by rendering HIV/AIDS and VCT for HIV education to the populations at risk to patronize VCT for HIV services. Therefore from these findings significant

changes in the form of acceptance of VCT is expected in the experimental group than the control group since they never received education on HIV/AIDS and VCT issues.

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CHAPTER SIX

6.0 CONCLUSIONS AND RECOMMENDATIONS

6.1 Summary

Two hundred students from both Daffiama and Queen of Peace SHSs were enrolled into the research to determine whether rendering HIV/AIDS and VCT education to adolescent students would scale up their patronage of eight VCT centres in the Nadowli district.

The sampled population was randomized into intervention and control groups, baseline data was collected from both groups using the same questionnaire, three lessons in HIV/AIDS and VCT was rendered to the intervention group while three lessons in personal hygiene was also rendered to the control group.

Both intervention and control groups were then exposed to Voluntary Counselling and Testing services and they were expected to volunteer for the VCT service. Those who volunteered were pre-counseled, tested and post counseled. The numbers from both groups that participated in the full VCT process were analyzed. The results of participation in the VCT for HIV exercise were analyzed and it revealed that 91.80 per cent took the test in the experimental group while 88.00 per cent of respondents took the test in the control group.

6.1 Conclusions

Adolescent students possess more knowledge in HIV/AIDS but their knowledge in VCT is low. Despite the knowledge adolescents possess on HIV/AIDS issues they still engage in behaviours that make them vulnerable to the infection such as having unprotected sexual intercourse.

VCT seems to be a new thematic area embarked upon for the curbing of the spread of HIV/AIDS. With the vigorous mass campaign on “Know your status” strategy employed by NACP and GHS in September, 2008 adolescents have come to know more about. This campaign has provided information to them but is still inadequate for them to use to participate in VCT activities. However, close to ninety per cent of adolescent students in SHS are willing to know their HIV status while healthy.

The provision of VCT information designed to remove the stigma the world attaches to PLWHA including adolescents through formal education of in-school adolescents would play a pivotal role in availing adolescents for VCT services.

From the study it is evident that close to 90 per cent of adolescents were willing to know their HIV status while still healthy but hindrances such as stigmatization when positive, inadequate information about VCT information reaching adolescents, the monetary commitment before they could be tested were identified as the major barriers that prevented adolescents from participating in VCT.

6.3 Recommendations

The study recommends that the National AIDS Control Programme (NACP) and Ghana Health Service (GHS) should intensify mass campaigns on “Know your HIV status” throughout the year to benefit both in and out of school adolescents while the Ghana Education Service (GES) adds VCT education as a topic to the HIV/AIDS education that exist in the curriculum of SHSs and stresses VCT during the teaching and learning of these topics since adolescents play a role in the efforts towards reducing HIV/AIDS.

Also, GES should speed up with their development of VCT centres so as to reach the various SHSs in the district with the Nadowli district assembly and district health administration acting as collaborator in providing funds and technical support respectively for the realization of VCT centres in the SHSs.

Furthermore, the GES in the district should set aside a week as district week of HIV/AIDS education in which issues on HIV/AIDS and VCT would be discussed with the students using experts in the health sector as facilitators.

Non-Governmental organizations such as *World Vision international*, *Plan Ghana* and *Action Aid Ghana* that operate within the district should also commit more financial resources to waiving the monetary cost of VCT services for interested individuals including adolescents to have the procedure done free of charge for them. This would go a long way to remove the financial barrier that prevents adolescents from accessing VCT.

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APPENDIX ONE: QUESTIONNAIRE

KWAME NKURUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY

SCHOOL OF MEDICAL SCIENCES, DEPARTMENT OF COMMUNITY HEALTH

MASTERS OF SCIENCE/MASTERS OF PUBLIC HEALTH RESEARCH QUESTIONNAIRE –

SEPTEMBER, 2008

INTRUCTIONS:

Dear Respondent,

I am a student of the Kwame Nkrumah University of Science and Technology (KNUST) and I am conducting an academic research into Voluntary counselling and testing (VCT) by adolescent students.

You have **volunteered** to respond to this study questionnaire. The information that would be obtained from this questionnaire is for the purpose of **educational research**, and no part of it would be used for any other purpose **without** your permission. You are **advised** not to write **your name** on any part of the questionnaire for the purpose of **confidentiality**. Provide the **truth** as the questionnaire applies to you since your name is not on the questionnaire. Write the alphabet i.e. **a, b, c, or d, etc**, that applies to your choice of answer in the boxes provided. Also supply the answer where options are not provided to choose from.

SECTION A

BIOSTATISCAL DATA

1) What is your age in years?

a) less than 14

b) 15

c) 16

d) 17

e) 18

f) 19

g) above 19

2) What is your sex?

a) Male

b) Female

3) Which is your Religion?

a) Christian

b) Muslim

c) Traditional

d) Others (specify).....

4) Which Senior High School do you attend?

a) Daffiama Senior High School

b) Nadowli Queen of Peace Senior High School

5) Which form are you in this school

a) 1

b) 2

c) 3

d) 4

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SECTION B

HIV/AIDS INFORMATION

6) Have you ever heard of the acronym AIDS?

a) Yes

b) No

7) What is the meaning of the acronym AIDS?

A.....

I.....

D.....and

S.....

8) What is the name of the organism that causes AIDS?

a) Virus

b) Bacterium

c) Fungus

d) Parasite

e) I do not know

9) What would show that somebody has AIDS?

- a) loss of weight, diarrhoea and vomiting
- b) eating too much, sleeping too much and fighting everyday
- c) gain in weigh, high blood pressure and headache
- d) chest pains, abdominal pains and blood in the urine
- e) I do not know

10) Do you know your HIV status?

- a) Yes
- b) No

11) Have you ever gone to check your HIV status?

- a) Yes (if yes continue at question 14)
- b) No (if no continue at question 12)

12) What has prevented you from testing to know your HIV status? (select many options as applicable)

- a) Fear of testing positive
- b) Fear of stigmatization
- c) There is no benefit in knowing my HIV status
- d) Lack of information about were to test my HIV status
- e) Worries about other people hearing my test result
- f) The monetary cost of the HIV test

13) If you have the chance to test and know your HIV status would you agree?

- a) Yes
- b) No

14) A pregnant woman with HIV can transfer HIV to the unborn baby?

- a) True
- b) False
- c) I do not know

For question 15 and 16 choose as many answers as you think, write the alphabets of your choice in the box provided.

15) What are the ways/modes of getting HIV/AIDS?

- a) Having unprotected sex with an infected partner
- b) Shaking hands with somebody having AIDS
- c) Receiving blood from somebody with HIV infection
- d) HIV positive pregnant mother can transmit HIV to the unborn baby

- e) Through a mosquito bite
- f) Hugging somebody with HIV/AIDS can give you AIDS
- g) Eating from the same bowl with HIV/AIDS person can give you HIV/AIDS

17) What are the ways that are thought to give AIDS but do not actually give AIDS?

- a) Having unprotected sex with an infected partner
- b) Shaking hands with somebody having AIDS
- c) Receiving blood from somebody with HIV infection
- d) HIV positive pregnant mother can transmit HIV to the unborn baby

- e) Through a mosquito bite
- f) Hugging somebody with HIV/AIDS can give you AIDS
- g) Eating from the same bowl with HIV/AIDS person can give you HIV/AIDS

h) I do not know

17) How many unprotected sex have you ever had? **(Please be sincere)**

a) 0

b) 1

c) 2

d) 3

e) 4

f) More than 4

g) I do not know

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SECTION C

VOLUNTARY COUNSELLING FOR HIV TESTING INFORMATION

18) Have you ever heard of the acronym VCT?

a) Yes

b) No

19) What is the meaning of the acronym VCT as used in HIV/AIDS issues?

V.....

C..... and

T.....

20) Voluntary counselling and testing for HIV is for every person?

a) True

b) False

c) I do not know

21) Adolescents are the group of people who need voluntary counseling and testing most. Do you agree?

a) Yes

b) No

c) I do not know

22) How many stages are involved in the process of voluntary counselling and testing for HIV?

a) 2

b) 3

c) 4

d) 5

e) 6

f) I do not know

23) Where in Nadowli district can one check to know his/her HIV status? (Select as many places as you know)

a) Sombo

b) Nadowli

c) Fain

d) Daffiama

e) Issa

f) Charikpong

g) Jang

24) Which specific place would one go to check to know his or her HIV status?

- a) Voluntary counselling and testing centers
- b) West Africa Examination council
- c) Churches in Ghana
- d) Mosques in Ghana
- e) I do not know

25) When you test negative for HIV you would remain negative for the rest of your life despite any bad way of living?

- a) True
- b) False
- c) I do not know

Thank you very much for choosing to take part.

APPENDIX TWO: LESSONS FOR INTERVENTION GROUP

LESSON ONE

DEFINITION OR EXPLANATION OF HIV/AIDS

A stands for Acquire, **I** for **I**mmune, **D** for **D**eficiency and **S** for **S**yndrome. Hence **AIDS** fully stands for Acquire Immune Deficiency Syndrome.

CAUSE OF AIDS

AIDS is caused by a germ called **virus**. This virus is specifically referred to as **Human Immunodeficiency Virus (HIV)**. This virus is responsible for causing AIDS in human beings.

MODE OF ENTRY OF HIV INTO THE HUMAN BODY

The most frequent way by which HIV gets into the human body is through **seminal fluids** or **vaginal secretions** as human beings engage in unprotected sexual intercourse with infected persons. However, the following can also be ways HIV can get in to the body of other people: sharing needles, syringes, tooth brushes, razor blades with an infected person, having blood transfusion in which the blood in from an HIV infected person, HIV positive blood entering the cut of an uninfected person and also mothers that have HIV can transfer the germ to their unborn child or children.

HUMAN FLUIDS THAT CONTAIN HIV

The underlisted human fluids contain the HIV:

Seminal fluid

Semen

Vaginal secretions

Breast milk

Blood

Saliva

Tears

HOW HIV WORKS IN HUMAN BODY

The germ on entering human cell attacks a particular type of **white blood cells** and converts these human cells into producing more HIV cells. An individual with the virus for about 10 years may then begin to show the signs and symptoms of AIDS depending on the extent to which his or her immunity is weakened by the HIV.

People with AIDS easily suffer diseases that they would not have suffered if their immune systems were strong or if their body was free from HIV infection. These diseases that people with HIV infection easily suffer from are collectively called **Opportunistic infections**. Some common examples of these opportunistic infections are **thrush, tuberculosis, pneumonia and Kaposi's sarcoma**

SIGNS AND SYMPTOMS OF AIDS

People with AIDS would show three or more of the following signs and symptoms:

Fever or high body temperature for a long duration

Sore in the throat

Skin rashes

Long standing diarrhoea and vomiting

Loss of appetite

Boils that occur frequently and drastic loss of body weight and night sweating

LESSON TWO

MODES THAT DO NOT SPREAD HIV

Hugging an HIV/AIDS patient

Touching, holding or shaking hands with an HIV/AIDS patient

HIV/AIDS patient coughing or sneezing on you

Sharing food or cooking utensils with HIV/AIDS patient

Sharing towels, or combs or soap with HIV/AIDS patient

Sharing a pen or pencil or book with HIV/AIDS patient

Eating food prepared by HIV/AIDS patient

Using a telephone or computer used by an HIV/AIDS patient

By mosquito bites or bites from other insects

METHOD OF DETERMINING ONES HIV STATUS

This can be known through a test that involves blood or saliva or other body fluids. The test can only be done after the one to take the test has been counselled and has agreed to be tested. The procedure that healthy people go through before they are tested for HIV infection is called Voluntary Counselling and Testing (VCT) for HIV. VCT for HIV is provided by trained persons called **Counsellors**.

It would be a violation of one's human rights if the HIV test is conducted on him/her without his/her consent or approval. However, people donating blood are screened for HIV before they donate blood.

METHODS OF PREVENTING HIV/AIDS

The Abbreviation **BACK** is useful

B stands for Be faithful to your partner if you have one

A stands for Abstain from unprotected sex

C stands for Condom use

K stands for Know your HIV status.

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LESSON THREE

VCT

This acronym stands for Voluntary Counselling and Testing. This is the process of rendering counselling to a person before and after an HIV test. It reduces irrational acts when the potential HIV person is told his/her state.

Few adolescents like you who are at risk of HIV infection know whether they are infected or not. Testing with counselling allows adolescents to decide whether to take an HIV test, to discover their status and to receive support.

VCT is seen as the entry point to prevention, care and support. VCT centres set up by MOH/GHS/NACP in nine communities in the Nadowli district. The communities in the Nadowli district where VCT centres are found are:

Issa

Daffiama

Fian

Jang

Nanvilli

Sombo

Nadowli and

Charikpong

The VCT centres are found in the various clinics in these communities while that of Nadowli is found in the hospital.

BENEFITS OF VCT

VCT has the following benefits to adolescents who access it:

Facilitates behaviour change

Access to prevention of mother to child transmission (PMTCT)

Acceptance of status and coping with PLWHA

Planning for orphans future

Access to prevention treatment and contraceptive advice

PROCEDURES OF VCT

Pre test counselling

Testing

Post test counselling

PRE TEST COUNSELLING

The counsellor introduces himself/herself to the adolescent client

He/she assures the client that the interview is completely confidential

He/she explains why the adolescent has to know his/her HIV status

Asks what the adolescent client already knows about HIV, its spread and how to prevent it

Explains the medical facts about HIV infection and how it is spread:

- How HIV affects the immune system

- How HIV infection is different from AIDS

- That there is a long incubation period

- The route of transmission

- How HIV does not spread

That there is no cure at present

There is treatment for opportunistic infections

Give hope that there may be treatment in the future

Explains that the HIV antibody test is not a test for AIDS

Explains the 'window period' ie the time between infection and when it is detected in the body. The test is negative during that time but the person is infected and infectious

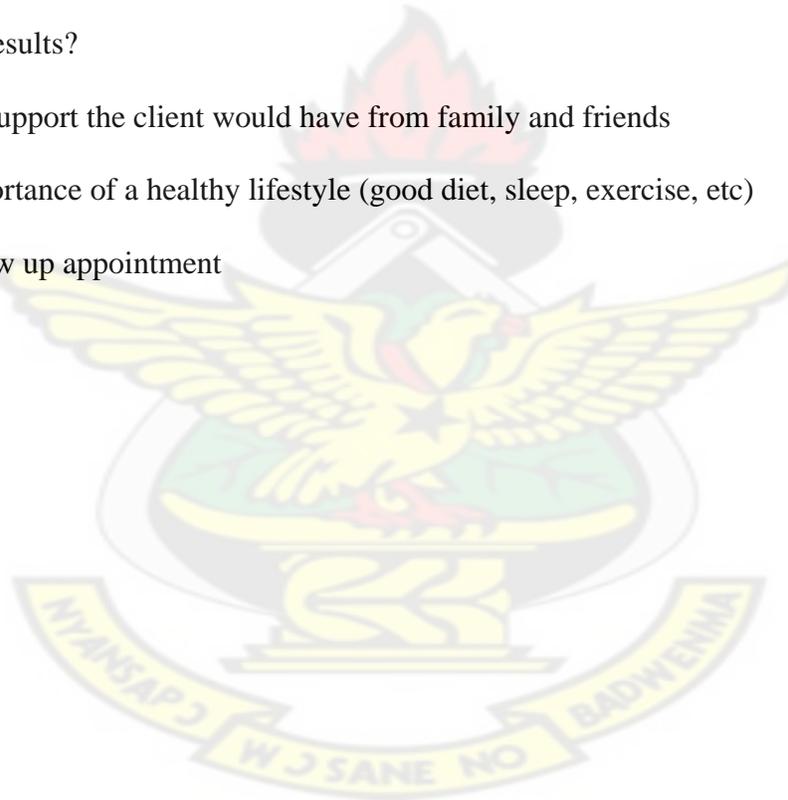
Asks about family circumstances

Discuss the personal implications of a positive result: whom would they tell? How might they cope with a positive results?

Identifies what support the client would have from family and friends

Discuss the importance of a healthy lifestyle (good diet, sleep, exercise, etc)

Arranges a follow up appointment



APPENDIX THREE: LESSONS FOR CONTROL GROUP

LESSON ONE

DEFINITION OF PERSONAL HYGIENE

The science of health and its preservation or maintenance

It is the care one gives to his or her body including the fingernails, toenails, etc

It also refers to the measures that one takes to keep his/her body clean and in good condition.

FACTORS THAT INFLUENCE PERSONAL HYGIENE

The following factors are found to influence one's care he/she gives to the body. They include the following;

One's perception of his or herself

Socio-economic factors

The developmental status of the individual

The health status of the individual

Knowledge of the importance of hygiene and

Peer pressure

ONE'S PERCEPTION OF HIS/HERSELF

If one has the believe that he/she is handsome or beautiful, then there is the tendency for him/her to observe high degree of personal hygiene but if one sees him/herself to be ugly he/she is likely not to observe good hygienic practices.

SOCIO-ECONOMIC FACTORS

If one has money or occupies a respectable position in class or in school he/she is likely to observe good hygienic practices in order to maintain the respect or prestige the class or school has for

him/her. On the other hand if one is poor or disregarded in class or school he/she is likely not to maintain his or her personal hygiene.

THE DEVELOPMENTAL STATUS OF THE INDIVIDUAL

The amount of personal hygiene one observes is dependent on the developmental stage of the person. For instance a child may like being dirty while an adult or adolescent may spend great time in observing personal hygiene.

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KNOWLEDGE OF THE IMPORTANCE OF HYGIENE

If one is educated on the importance, effects of personal hygiene as well as the ways to keeping one's self clean, he/she is more likely to practice personal hygiene than those who do not have any education.

PEER PRESSURE

If the social group to which one belongs embraces or upholds good personal hygiene one is in a position to maintain his or her personal hygiene in order to be accepted by the social group he/she belongs. However if such a social group does not value personal hygiene then the individual is likely to neglect his/her personal hygiene.

LESSON TWO

COMPONENT OF PERSONAL HYGIENE

The following are the components of personal hygiene:

Cleanliness of the skin and appendages

Care of the hands and nails

Care of the feet

Care of the hair

Care of the genitalia

Care of the gastrointestinal tract (GIT).

Cleanliness during adolescence

Hygiene and management during menstruation

Management of excessive sweating and body odour

CLEANLINESS OF THE SKIN AND APPENDAGES

The skin has three layers: epidermis, dermis and hypodermis and performs a host of functions for the body and they include the following:

Serves as an organ for sensation

It helps regulate the body temperature

It aids in the manufacture of vitamin D

It produces and excretes waste products such as sweat.

Bathing is one of the practices that maintain the normal colour, texture and temperature of the skin.

Bathing is done with soap and either cold or warm water. If the water is cold the bath is referred to as a cold bath and this is recommended early in the morning because it closes the small holes in the

skin (pores) thereby retaining heat in the body. On the other hand if the water is warm the bath is termed a warm bath. It is recommended when going to bed in the night because it induces sleep.

Body make ups go a long way to enhance the morale of the individual especially females. They should be cleaned off thoroughly every night when going to bed. Stale make ups can block pores of the skin and cause pimples which interfere with the excretion of waste products from the body.

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CARE OF HANDS AND NAILS

Cleanliness of hands is needed to prevent hand and food borne diseases such as cholera, typhoid fever, dysentery, etc. Hands must be washed with soap and under running water during the following times:

Before preparing food

Before eating

After visiting urinal pit and toilet

After hand shake with people

Whenever you touch a dirty article or object

After sweeping

One's fingernails serve as a source for germs to stay and should be cut and kept clean

CARE OF THE FEET

The feet are used for locomotion and standing by an individual. Regular exercises should be given to the feet to refresh them. The toe nails should be cut short and kept clean. The spaces between the toes must be kept dry all the times.

LESSON THREE

CARE OF THE HAIR.

Care of the hair can take any of the following forms:

Shampooing

Plaiting and weaving

Perming and jelly

Combing.

Caring for the hair gives the following merits to the individual-

It removes dirt hence preventing offensive odour from the individual

It arranges one's hair improving the self image and morale

It promotes blood circulation to the scalp

Neglected hair leads to infestation by hair lice (pediculosis). Hair lice suck the blood of the individual and also distract his/her attention in class. Hair lice also disgrace the individual in public places.

CARE OF THE GIT

GIT means gastrointestinal tract and starts from the mouth and ends at the anus.

Care of the GIT includes:

Oral hygiene

Eating of appropriate diet

Dental check ups

Regular defaecation

ORAL HYGIENE

Oral hygiene can take the form of brushing of teeth. This should be done early in the morning and if possible after meals and before going to bed. Brushing of teeth removes food particles, odour and massages the gums. In Ghana various facilities are used for this purpose and they include chewing stick, chewing sponge and several varieties of tooth paste such as *close up*, *pepsodent*, *yazz*, *colgate* etc

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APPENDIX FOUR: FOCUS GROUP DISCUSSION GUIDE

KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY

SCHOOL OF MEDICAL SCIENCES, DEPARTMENT OF COMMUNITY HEALTH

MASTER OF SCIENCE/MASTER OF PUBLIC HEALTH RESEARCH

FOCUS GROUP DISCUSSION GUIDE - SEPTEMBER, 2008

INSTRUCTIONS: Respond to these questions as they apply to you as an individual. Do not allow anybody in the group to influence your choice of answers. Be assured that such answers given would not be used at any time and place against you whatsoever without your consent but for the purpose of this academic research.

- 1) Why would you refuse to have an HIV test?
- 2) What are the reasons that you do not want anybody to know your HIV status
- 3) Why do you not want your friends to know that you went for an HIV test?
- 4) How many students in your school have you heard from friends say they have HIV?
- 5) What would be your behaviour towards your best friend who you hear tested positive to positive
- 6) What would the Headmaster and Staff do to persons who test HIV positive
- 7) Who do you think the persons who tested your friend for HIV will disclose the test result to apart from your friend?
- 8) Comment on the behaviour of the person who tested your HIV status
- 9) Comment on the truthfulness of the VCT results that are produced by the counsellors
- 10) Comment on the attitude of those who test positive to HIV
- 11) Do HIV persons need to be given drugs to live longer?

APPENDIX FIVE: TRANSCRIPT OF FOCUS GROUP DISCUSSION

Volunteer A: I cannot just imagine being told that I have AIDS after allowing the nurse to test me for HIV. I would want to kill myself if the results should indicate that I have HIV.

Volunteer B: For me my friends and family would reject me if my HIV status is positive. I do not want to lose my school friends as well as my mother and father

Volunteers C: Especially with the way nowadays so many people are been said to have the disease and people do not even what to live with them in the same town

Facilitator: who has told you that people have the disease nowadays?

Volunteer C: “Fila” in town come to us by surprise. I cannot name anybody that has said students are been tested HIV but the information is all over and I also read books that tell me that HIV is spreading fast.

Volunteer D: I want to believe that the nurses who test people for HIV go to tell others that those they have tested positive have HIV

Facilitator: Do you know that those nurses who test people for HIV have sworn an oath never to disclose the status of anybody coming to test for HIV to a third party?

Volunteer E: Some of the nurses are not trustworthy and would tell an HIV positive result to the public without the agreement of those that they have tested.

Volunteer F: I personally do not trust the test that is done to say someone has HIV. The nurse can make a mistake and say some one has HIV but the person does not have the disease.

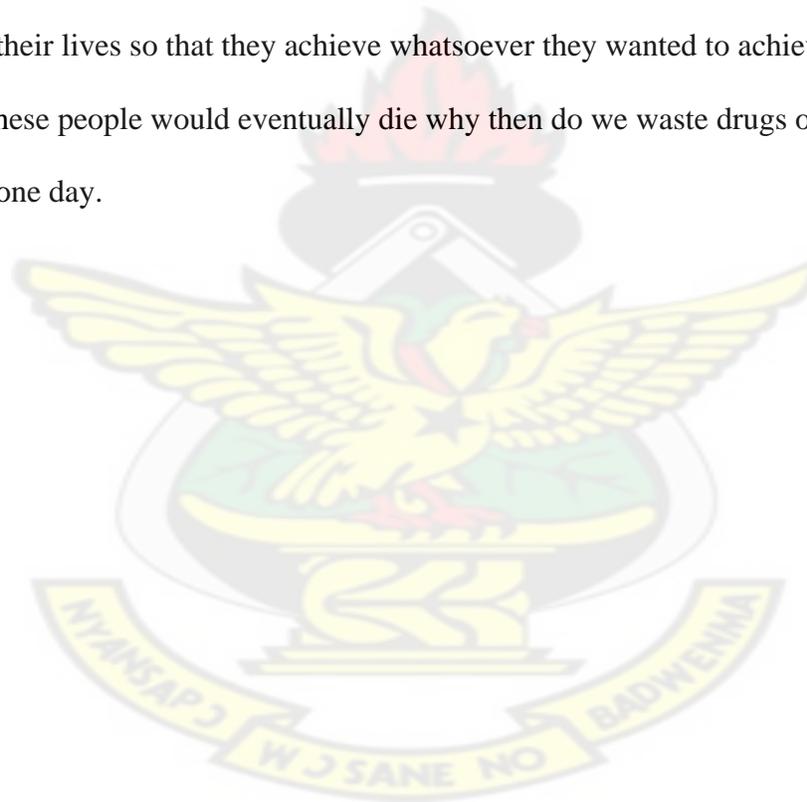
Facilitator: Do you know that the nurse repeats the test to be sure of what he or she would tell the client especially when the test results is positive for the first test?

Volunteer D: we have heard of people who have tested HIV positive yet they are still alive while strong people are dying every day.

Volunteer C: we were also told that if you test for HIV you would die in some few years to come. Why then would I want to test for HIV and when I am told I am positive I would die prematurely.

Facilitator: Do you know that drugs exist that can be given to people who test positive to prolong their lives so that they achieve whatsoever they wanted to achieve in life?

Volunteer F: These people would eventually die why then do we waste drugs on them to finally die one day.



APPENDIX SIX: REQUEST FOR PERMISSION TO CONDUCT RESEARCH

C/o Nadowli District Health Administration

P O Box 3

Nadowli – Upper West Region

20th August, 2008

The District Director of Education

Ghana Education Service

Nadowli – Upper West Region

Dear Sir/Madam,

RESEARCH REQUEST

I am a final year student enrolling in master of public health at the Kwame Nkrumah University of Science and Technology (KNUST) and my data collection site is Nadowli district. Also, my thesis topic intends to increase the awareness in adolescent students of the existence of Voluntary Counselling and Testing (VCT) centers therefore increasing their patronage in VCT services.

I am therefore by this letter requesting for your permission to use Nadowli Queen of Peace and Daffiama Senior High Schools students as my study subjects.

I assure you that this exercise is only for educational purpose and any information that would be elicited from these students during the period of the research shall be used for only this academic work.

Also, the confidentiality of the students during the whole period of the research would be guaranteed and any student has the right to pull out of the research at any time when he/she considers his/her privacy threatened. The research is slated to start in second week of September, 2008 and ends in six (6) weeks thereafter.

Counting on enjoying your assistance in this important academic exercise.

Thank you

Yours Faithfully,

SIGNED

Kunsu, Raymond

DISTRIBUTIONS:

Headmistress, Queen of Peace SHS

Headmaster, Daffiama SHS

Parent-Teacher Association (PTA) Chairperson, Queen of Peace SHS

PTA Chairperson, Daffiama SHS District

Director, Nadowli District Health Administration