THE IMPACT OF THE ANTI-AIDS BILLBOARD MEDIA ON KNOWLEDGE OF AND ATTITUDES ABOUT HIV/AIDS AMONG URBAN STUDENTS IN ZAMBIA

BY

Parkie Shakantu Mbozi

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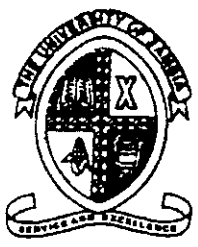
A DISSERTATION SUBMITTED TO THE UNIVERSITY OF ZAMBIA IN PARTIAL FULFILLMENT OF THE REQUIREMENTS OF THE DEGREE OF MASTER OF MASS COMMUNICATION



THE UNIVERSITY OF ZAMBIA

DECLARATION

I, Parkie Shakantu Mbozi, solemnly declare that this dissertation has not been submi
for a degree in this or any other university.

Signed:.....

Date: 26/9/97

APPROVAL

This dissertation of **Parkie Shakantu Mbozi** is approved as fulfilling part of the requirements for the award of Master of Mass Communication.

EXAMINERS DATE

1. EXTERNAL EXAMINER:..... 27/3/97.....

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3. SUPERVISOR:..... V Kasoma..... Sept. 29, 1997

DEDICATION

To my wife Bertha and our naughty children. This work is also dedicated to all the victims of HIV and/or AIDS and care-givers the world-over.

ABSTRACT

The study which formed the basis for the discussions in this thesis was conducted between September 1995 and March 1996. The researcher visited 17 schools and eight colleges and the two universities in Lusaka, Ndola and Kitwe. The purpose of the study was to establish the students' knowledge attitudes and behavioural intentions about HIV/AIDS as well as to gather their perceptions about the role and effectiveness of the anti-AIDS billboards in improving knowledge and attitudes about various aspects of the disease.

A total of 531 secondary school, college and university students responded to a survey questionnaire mainly on knowledge and attitudes. Thirty six (36) billboards were visited for qualitatitve evaluation by 360 students (10 per billboard) for quality of messages, design, display and other factors which are considered crucial to the overall effectiveness of any billboard. The survey found high knowledge on general information about HIV/AIDS, low on technical information and misconceptions on selected aspects of the disease. Apart from low acceptance of condom use and traces of denial of AIDS, the students' attitudes, particularly on people with HIV or AIDS (stigmatisation), were found to be generally positive.

With regard to the billboards, the results suggest that the students generally appreciate the need to use these media as means of communicating information on HIV and AIDS. However, it would appear that the generally poor designs, inappropriate messages and inaccessible or not easily accessible locations tend to affect the students' exposure and attention to, and retention of the current billboard messages. These three factors are the major determinants of the effectiveness of any billboard on knowledge, attitudes and behaviour change. Ultimately the impact of the current billboards in the three cities were found to be generally insignificant.

The study contains specific recommendations on how knowledge and attitudes about the disease and the impact of the billboards as HIV/AIDS IEC materials may be enhanced to the appreciable levels.

ACKNOWLEDGEMENTS

The subject of HIV/AIDS deserves a special place in our country where almost everyone of us has been affected in one way or the other. It is for this reason that I feel indebted to all the individuals and institutions who contributed in their own ways to the successful completion of my research and thesis write-up. It is difficult to acknowledge all the help that went into the creation of this volume, but one place to start is where it had its beggining, the **Department of Mass Communication, University of Zambia** (UNZA). At UNZA I am particulary grateful to my supervisor **Professor Francis P. Kasoma** for having been exceptionally speedy in executing his supervisory duties. Some of my colleagues, past and present, complained of delays by their supervisors in marking their work; this was not the case with me. I am also thankful to five students in the department who did the laborious work of collecting and coding the quantitative data: **Mark Maseko, Morden Mayembe, Austin Mbozi, Diana Phiri and Aaron Mushinge.** I also wish to thank the following institutions and their staff: the **National AIDS STD and Leprosy Programme, United Nations Childrens' Fund (UNICEF), the Family Health Trust, the Copperbelt Health Education Project (CHEP), UNZA Library, UNZA Computer Centre, Minitries of Health, Education, and Science and Technology, Co-operative College Printing Section, the Directorate of Research and Graduate Studies at UNZA and all the schools, colleges and the two universities and their students whom my research team visited in Lusaka, Ndola and Kitwe.**

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TABLE OF CONTENTS

CHAPTER TWO

RESULTS OF THE STUDY

CHAPTER THREE

CHAPTER FOUR

6.0 APPENDICES

LIST OF ABBREVIATIONS/ACRONYMS

ABBREVIATION	FULL MEANING
AAC	Anti-AIDS club
AAP	Anti-AIDS Project
AIDS	Acquired Immunodeficiency Syndrome
CHEP	Copperbelt Health Education Project
HBC	Home-based care
HIV	Human Immunodeficiency Virus
HTLV	Human Lymphotropic Virus
IDU	Intravenous drug user
IEC	Information, Education and Communication
KABP	Knowledge, attitudes, beliefs and practices
KAP	Knowledge, attitudes and practices
MOH	Ministry of Health
NASTLP	National AIDS STD and Leprosy Programme
NGO	Non Governmental Organisation
OSY	Out-of-school-youth
PWA	People with AIDS
PCP	Pnuemocystis Carinii Pnuemonia
SIV	Simian Immunodeficiency Virus
STD	Sexually transmitted disease
SSS	Sentinel Surveillance System
TH	Traditional healer
UNZA	University of Zambia
WHO	World Health Organisation
YMCA	Young Men Christian Association

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDICES

CHAPTER ONE

INTRODUCTION

1.1 HIV/AIDS IN ZAMBIA

The HIV/AIDS pandemic has firmly established itself as the fastest growing health and socio-economic disease. During the 1990s Acquire Immune-deficiency Syndrome (AIDS) has developed into the major cause of deaths among adults of ages 20 to 50 years and children under the age of five years. As such the disease has not only altered the demographic patterns of the most affected countries but also the social and economic statuses of the affected people, their families and the wider communities.

Up to June 1992, according to the Global Programme on AIDS (GPA), some 500,000 cases of full-blown AIDS were registered globally. Between that date and August 1995 this figure had more than doubled to 1,169,825 - albeit under- reporting and lack of data in the some countries - while the results of various Sentinel Surveillance Systems estimated 18,975,00 HIV infections globally (Whiteside, 1995).

Though generally a global problem, the available research data suggests higher prevalence of both HIV and AIDS in the sub-Saharan African region which ranges from Kenya and Tanzania in the Indian Ocean to Zaire and Angola in the South Atlantic Ocean down to the 'Cape of Good Hope' in Southern Africa. Of the total cases globally, 30 to 40 percent are documented to be in 12 countries of the sub-Saharan region and about 61% of HIV infections were estimated to be in this region (Becker, 1990). Ironically, the sub-Saharan region is composed of some of the world's poorest countries which are also undergoing the process of structural adjustment. Hence the impact of HIV/AIDS has created more hurdles in the social recovery process resulting from lost of labor, reduced productivity and diversion of the already meagre resources to coping systems.

Zambia is one of the sub-Saharan countries which account for the estimated 61% of the global HIV cases and 80% of all cases on the continent. By June 1995, Zambia was only surpassed by Tanzania, Zimbabwe and Malawi in terms of the recorded cases of full-blown AIDS in the region and, like the other affected countries, there are clear indications of rising prevalence of both HIV and AIDS and the negative socio-economic impact.

The evidence of rising cases of both HIV and AIDS and the resultant socio-economic impact continue to demand interventions and institutions targeted at increasing knowledge, cultivation and sustenance of appropriate attitudes and, hopefully, inducing behaviour change for the control, prevention and management of the disease among various populations in Zambia and the world-over.

1.2 HISTORICAL DEVELOPMENT OF AIDS

Acquired Immune Deficiency Syndrome (AIDS) is a health condition that develops as a result of the presence of Human Immuno-deficiency Virus (HIV) in a person's blood tissues. AIDS was first identified as a disease condition in 1981 in the United States of America (US) after doctors noted an unusually high number of cases of a rare form of pneumonia called Pneumocystis Carinii Pneumonia (PCP) in gay men. At that time, many theories were advanced with regard to the possible cause of this syndrome. As nearly all the cases were seen in gay men in the US,

many of the first attempts to explain the new condition focused on aspects which were supposedly common to a gay lifestyle. Early researchers suggested that causes might include the use of poppers (amyl nitrate) as a stimulant, repeated anal exposure to semen and living in the fast lane (i.e. a combination of poor diet, drug use and repeated incidences of sexually transmitted disease) (Rooney and Bird, 1992:7).

However, it soon became apparent that the condition we now know as AIDS was not just affecting gay men and, even amongst the gay men affected, common lifestyle factors were not always identified. When the recipient of blood and blood products began to develop AIDS, it became increasingly evident that some kind of transmissible agent was responsible.

Work began in earnest to isolate the new agent. In 1983, French researchers in Paris found a new virus in a man with AIDS which they referred to as lymphadenopathy associated virus or LAV.

One year later, in May 1984, American researchers also found a new virus from people with AIDS. They referred to their isolate as human T-cell lymphotropic virus III or HTLV-III. It was not until May 1986 that an international committee of virologists, in an attempt to create a common name and diffuse the cold war over the discovery of the virus between American and French researchers, coined the term Human Immunodeficiency Virus (HIV) (Rooney & Bird, 1992:7).

1.2.1 Dating the origin of AIDS

While AIDS was identified in the US in 1981 and in the United Kingdom (UK) in 1983 in a man in Oxford, the date of HIV is not yet clear. It is argued that the virus was present, with different manifestations, in Africa from the early 1970s or before, and recent analysis of medical archives and stored blood samples suggest that a British sailor who died in the late 1950s had HIV infection. Researchers believe that an HIV epidemic began unnoticed in injecting drug users (IDUs) in the US in the mid to late 1970s (Rooney and Bird, 1992:7).

Various methods have been used by scientists to estimate when the first HIV infection in humans occurred. By analyzing the genetic structure of HIV and comparing it with related viruses, one group of researchers concluded that HIV, in its present form, is only about 100 years old.

In 1991, epidemiologists at Imperial College, London, attempted to date the origin of HIV by calculating the amount of time required for the virus to become as widespread as it is today. Their calculations, which take into account a variety of data on transmission patterns in different populations, suggest that the first HIV infections in humans occurred approximately 160 years ago. All these dates for the origin of HIV are, however, only informed speculations and not definitive answers (Rooney and Bird, 1992:14).

1.2.2 Attempting to trace the origin of HIV

As with dating it, tracing the origin of HIV has raised more controversies than it has attempted to solve. From being an academic debate the search for the answer has degenerated into a racial and Eurocentric versus Afrocentric debate.

Two main scientific theories exist for the origin of HIV. One suggests that the virus is new to our species and entered a human population only in recent decades. The other theory suggests that human immunodeficiency viruses are many centuries old but, until recently, have existed

only in isolated human populations. In attempting to justify the first theory, upon which a great deal of the controversy is centred, scientists have been making comparisons between the genetic structure of the HIV and that of animal immunodeficiency viruses. Early theories about a possible source for ancestors of HIV focused on non human primates (i.e. monkeys and apes) (Rooney and Bird, 1992: 15).

Researchers claimed that they found antibodies against viruses similar to HIV's in a number of captive and wild animals from Africa and Asia. The 1985 and 1989 investigations on the monkeys linked simian (monkey) immunodeficiency viruses (SIV) and HIV-2 to the macaque (small Asian monkey) and sooty mangabey (Central African monkey) respectively. In October 1990, Belgian researchers also published details of the isolation of SIV from a chimpanzee imported from Central Africa and also concluded that this SIV was closely related to HIV-1. Though far from providing a conclusive answer, one interpretation of this data is that HIV-1 first entered the human population when someone from Central Africa became infected with a recent ancestor of HIV (possibly from a still unknown primate).

The 1992 report that two researchers had become infected in a laboratory with SIV supports the notion that the immuno deficiency viruses found in monkeys and apes can, under certain conditions, be transmitted to humans (Rooney and Birds, 1992:14).

This green-monkey theory has, however, been thrown over-board by Afrocentric scholars who saw it as only a way of blaming the Third World in general, particularly Africa, for the pandemic (New African, April 1990). Some of these scholars have gone to extremes of supplying evidence which suggests that HIV was manufactured and engineered in Western laboratories as part of a germ warfare programme to eliminate specific populations. This view too has, however, not been pursued very seriously due to weak evidence.

The third HIV origin theory spurred from the 1992 medical reports which posited that the HIV epidemic may have begun when a polio vaccine, grown in monkey cells contaminated with viruses, was used in hundreds of thousands of people in Central Sub-Saharan Africa in the late 1950s. Although researchers are agreed about cases of animal viruses having contaminated vaccines intended for humans, the idea that the HIV epidemic began in this way is also still speculation (Rooney and Bird, 1992:16).

It is clear from the above arguments that the actual origin and age of HIV and AIDS have not been traced so far. Under the circumstances, the time and resources being wasted on arguing and quarreling over the origin may be better utilised if diverted to finding a cure and vaccine to check the spread of this pandemic.

1.2.3 Geographical spread of HIV/AIDS

i. Australasia, North America and Western Europe

The Human Immunodeficiency Virus first spread widely in these regions during the late 1970s and early 1980s. Homosexuals and bisexual men and IDUs were initially the most affected though cases among heterosexuals are increasing. In North America, the Female: Male ratio of AIDS cases has halved from 14:1 in 1984 to 7:1 in 1993; The World Health Oranisation (WHO) estimates more than 1,1000,000 HIV infections in North america,

600,000 in Western Europe and more than 25,000 in Australasia. The US still reports more AIDS cases than any other country - 361,164 by December 1993 (Panos, 1994:3; Whiteside, 1995:5).

ii. **Latin America**

HIV is reported to have first spread in the early 1980s among homosexual and bisexual men and IDUs in Brazil. Like elsewhere, heterosexual transmissions are increasing rapidly; infection rates are increasing rapidly among women, as is mother-to-child transmission. In the Caribbean, heterosexual transmission is now well established and the men:women ratio is 1.5:1. WHO estimates two million infections in Latin America and the Caribbean (Panos, 1994:03; Whiteside, 1995:5).

iii. **Sub-Saharan Africa**

It is documented that extensive spread of HIV probably started in the 1970s. The region has 10% of the world's population, but WHO estimates that it accounts for two in every three global adult infections: over 80% of infections among women and 90% of infections among infants, mainly through mother-to-child transmission. It is reported to be the only region where women outnumber male infections:11 to 12 women for every 10 men. Central, Eastern and Southern Africa are severely hit by the HIV-1 pandemic, while West Africa has also recorded high HIV-2 prevalence. WHO estimates 11,500,000 (including over a million children) infections in this region(Panos, 1994:3; Whiteside, 1995:5).

Most countries in this region are, however, now reporting stability in HIV infection rates notwistanding the fact that the full impact of the HIV infections is yet to be felt.

iv. **South and Southeast Asia**

The pandemic is accelerating in this region where HIV is reported to have spread only in the mid 1980s or later. Although like in the Americas and Europe HIV first spread among IDUs, gay men and infected blood in countries such as India, heterosexual transmission is now dominant.

It is reported that the epidemic is now growing at the pace reminiscent of Sub-Saharan Africa in the early 1980s, but may have the potential for even greater spread in the world's most populous region. WHO estimates 3,500,000 infections in this region.

v. **Eastern Europe and Central Asia**

Major social and political upheavals in the last few years increased the potential for the spread of HIV in these regions. Mass migrations, economic hardships and civic conflicts are all considered the risky factors facing this region. HIV is reported to be prevalent among homosexuals and IDUs and there have been recorded cases in Romania and former Soviet Union of transmission to children in hospital settings through unsterilised equipment and unscreened transfusions. WHO estimates 50,000 cumulative HIV cases in this

region but warns that this figure may be misleading due to lack of data (Panos, 1994:3; whiteside, 1995:5).

vi. **East Asia and the Pacific**

The virus (HIV) is reported to have spread through this region from the mid-1980s, and there is limited data from the most populated country in the region, China. HIV is transmitted sexually and by intravenous drug use. Most of the small islands and territories of the Pacific have reported at least one case of AIDS. WHO estimates more than 50,000 HIV infections in this region.

vii. **North Africa and the Middle East**

This region offers little information on HIV and AIDS among its populations. Heterosexual intercourse and drug use are believed to be the main modes of transmission - although homosexuality has not been ruled out. There are also reports of high cases of sexually transmitted diseases (STDs) in the region along with evidence of the trade in heroin and other drugs. HIV levels are reportedly rising - in Djibouti, for instance, 4% of women seeking antenatal care were, at the time of this report, said to be HIV positive. WHO estimates that the region may have upwards of 150,000 cumulative cases of HIV (Whiteside, 1995:5).

The cumulative totals for the reported AIDS cases, as at mid-1995, stood at 1,169,821 globally. Of this total, Africa was reported to have contributed 418,051 cases, the Americas 580,129, Asia 23,912, Europe 141,275 and Oceania 6,444 (Whiteside, 1995:5).

It must be noted, however, that the HIV and AIDS figures presented in this thesis are mainly estimates based on the reported characteristics of specific samples of respective populations. The exact HIV/AIDS scenario will never be known until all the countries begin to report with a considerable degree of honesty and accuracy.

Table 1: Estimated distribution of total adult HIV infections to mid-1995

Region	Number
North America	1,100,000
South America	2,000,000
Western Europe	600,000
Eastern Europe and Central Asia	50,000
East Asia and the Pacific	50,000
South and Southeast Asia	3,500,000
Australasia	25,000
North Africa and Middle East	150,000
Sub-Saharan Africa	11,500,000
Global Total	**18,975,000**

Source: WHO Global Programme on AIDS accessed via World Wide Web 16/8/95

Table 2: **AIDS cases by continent (as of 30/06/95)**

Countries reporting one or more cases		No of cases by continent
Africa	**54**	**418,051**
Americas	45	580,129
Asia	42	23,912
Europe	37	141,275
Oceania	14	6,444
Global total	**192**	**1,169,821**

Source: WHO Global Programme on AIDS, accessed via World Wide Web 16/8/95

1.2.4 Progression of HIV/AIDS in Zambia

Since the first AIDS case was diagnosed in Zambia in 1984, the cumulative total number of AIDS cases (including AIDS-related complexes had increased to 29, 734 as at October 1993. The World Health Organisation (WHO) classifies Zambia among Pattern II countries in which the original spread occurred throughout the 1970s. Most people are infected through heterosexual contact and the female/male infection ratio is 1:1 (Rooney and Bird, 1992). On a regional

basis Zambia is rated among the countries most seriously affected by the HIV/AIDS pandemic in central and southern Africa.

The information on geographical variations indicate a marked variation between rural and urban areas. In the age group 15-39 attending ante-natal clinics, the 1992 HIV Sentinel Surveillance System (SSS) estimated the HIV prevalence to be 34% in urban areas 13% in rural areas (Msiska et al., 1994:2).

The figures for the 'high' estimate category of the adult HIV prevalence of 1992 are 27% and 10% in urban and rural areas respectively and 21% and 10% for the 'low' estimate figures between the two areas.

Accordingly, the Ministry of Health (MOH) estimates that between 600,000 and 700,000 (or 14% and 16.5%) of the adult population in the whole country are infected with HIV (Msiska et al., 1994). Future projections depict that AIDS and HIV in Zambia would steadily rise from 27% in 1992 to 33% in 1998 for urban areas and from 10% to 13% in rural areas.

The MOH also estimates that there were between 125,000 infections in children within the same year. Thus HIV is presently estimated to be spreading at a rate of between 400 and 500 new cases per day (MOH, 1994: 2).

It must be noted, however, that these figures are only informed guesses which could be either right or wrong.

1.2.5 Future implications

The MOH projects that the number of individuals who are likely to need intensive care will increase from the projected number of 70,000 in 1993 to 150,000 in 1998. The annual deaths during the five-year period (1993-1998) is likely to double from between 20,000 and 40,000 in 1993 to between 80,000 and 100,000 in 1998.

It is further hypothesized that Zambia's future generation will be the worst hit as 30% of deaths are expected to occur among children and the majority in the adult population will occur among the youth i.e. age group 20-44 years. The rise in adult mortality is expected to have an immense impact on children and families. From 70,000 estimated AIDS orphans in 1993, the MOH projects that this figure will go up to between 530,000 and 600,000 by the year 2000 A.D. The AIDS-related deaths in children are likely to further increase the child mortality from 83 per 1000 in 1990 to 269 per 1000 in 2005 with a substantially higher increase in urban than rural areas.

Life expectancy at birth is also expected to drop from 51 years in 1990 to 42.61 years by 2002. Population growth too is expected to drop from the current 3.35% to 2.6% by 2002 hence Zambia's population by the year 2030 is projected to be 25% less than expected without AIDS (about 25 million compared to 34 million) (MOH. 1994:3).

From the foregoing, four major observations can be made:

(i) HIV/AIDS are spreading at an alarming rate in Zambia;

(ii) More hardships are expected among families resulting from increasing numbers of orphans, widows and widowers;

(iii) The youth (15-40 years) are the ones most faced with the risk of extinction which will rob the nation and families of the most economically productive sector of labour; and,

(iv) There is need for continued HIV/AIDS information, education and communication, especially among the youth, to slow down the spread and its impact and enhance coping strategies.

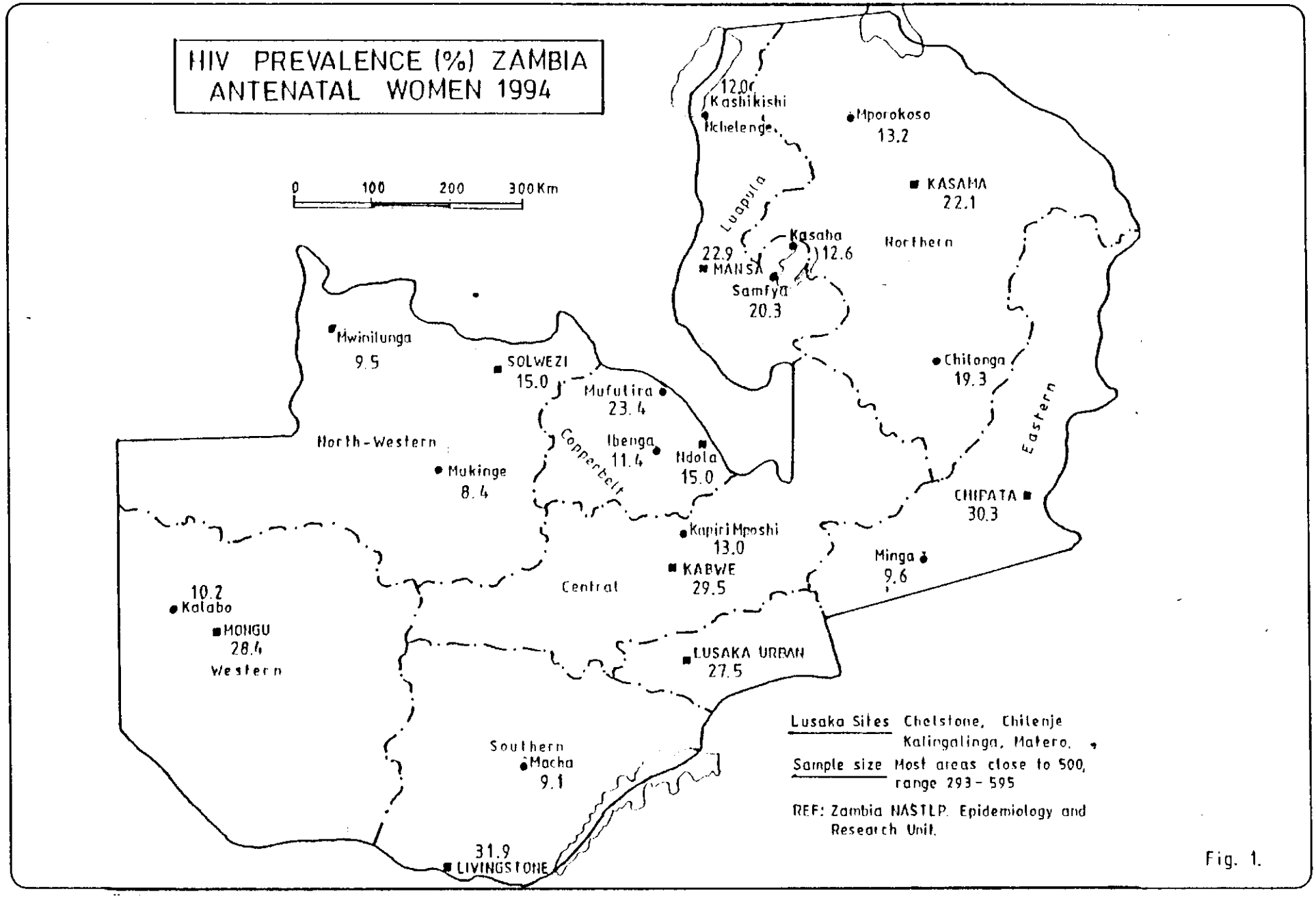


Fig. 1.

Figure 1: Geographical distribution of HIV prevalence among antenatal women in Zambia as at 1995

1.3 THE ANTI-AIDS MEDIA CAMPAIGN AND PROGRESSION OF MESSAGE EMPHASIS IN ZAMBIA

The MOH, along with a number of non-governmental organisations (NGO), launched massive media campaigns since the late 1980s. Media messages of various AIDS organisations have been changing in phases to meet the information demands at any given time. Up until the early 1990s the media carried predominantly fear arousal messages which were aimed at alarming the public about the dangers of the then new disease. Worded messages were also accompanied by allustrations meant to provide pictorial information about the disease such as that of a fat person standing next to a thin one to illustrate what happens to a health looking person after developing full-blown AIDS. Besides warning the public about AIDS, this sort of information was also meant to provide the public with the symptoms of the disease to avoid confusions emanating from misconceptions.

The message emphasis has since changed from fear arousal to emphasis on prevention against the disease and care for the people affected by both HIV and AIDS. Increasingly messages which emphasize hope and living positively are taking centre stage in both the interpersonal and media forms of communication.

The MOH began its media campaigns with posters, radio programmes, pamphlets and booklets. The television programme, Palaver, theatre and billboards (i.e. the large outdoor boards with information about HIV/AIDS) are the latest inclusion on the list of the anti-AIDS media campaigns. The MOH is responsible for all the pictorial billboards in Lusaka and other cities. In 1993 MOH produced its first 25 billboards displayed across the midlands. The billboards are, therefore, seen as belonging to the group of media used for information, education and communication (IEC) about HIV/AIDS.

The Anti-AIDS Project (AAP), under the Family Health Trust, started its media campaigns in the late 1980s with a series of pamphlets, booklets and posters before resorting to billboards in 1993. In Lusaka alone the project has six billboards displayed in what were considered to be strategic places such as along highways, near learning institutions and any other public places. The project is responsible for all the non-pictorial billboards. Both the MOH and AAP intend to increase the number of billboards throughout the country while the Copperbelt Health Education Project (CHEP) also has a number of billboards catering for the Copperbelt towns. In addition, donors are pumping in substantial sums of money into the campaigns using other media.

WHO, through the National AIDS STD and Leprosy Programme (NASTLP), and NGOs such as Young Women Christian Association (YWCA), and Kara Counseling Centre are also involved in media campaigns. More than 25 anti-AIDS posters under different formats have been distributed by different organisations while radio and TV programmes and advertisements keep coming and going. The youth are the chief target of all the anti-AIDS media campaigns.

1.3.1 The billboard as a mass medium

The billboard as a mass medium distinct from the poster and other outdoor media is quite a new phenomenon. This accounts for the fact that historians have always regarded billboards and posters as birds of the same feather distinguished only by the material used and the display

logistics as the following definition by the Encyclopedia Americana (1962:431) suggests:

> **"A poster is a painted or printed sign or placard, most frequently of large dimensions, posted in a public place, or along highways and railways. It's purpose is to sell a product, to announce an event, or to promote an idea or a service."**

This description unequivocally suits the modern billboard just as much as it suits the poster. The World Book Encyclopedia (1968:633) brings out no significant difference between the two in the following definition:

> **"Posters, commonly known as billboards, are the most widely used form of outdoor advertising. The advertiser prints and supplies the paper sheets for the posters to a local outdoor-advertising company. The company pastes the sheets on billboards."**

The developments in the graphics arena have, fortunately, made the contrasts between posters and billboards in terms of materials used, the designing mechanism and display much more elaborate.

Some modern dictionaries now have a definition, although still not completely detached from the poster, for the billboard (in some referred to as a hoarding) as the Collins Concise Dictionary (1980) postulates: **"a large board used for displaying posters, as by a road."**

Although inherent in this definition is the fact that some billboards contain messages lifted from posters, most modern billboards contain original messages specially painted on them. Some of the billboard messages are painted on wall fences as is the case with some of the anti-AIDS billboards on the Copperbelt province.

It can, therefore, be said that billboards and posters are different in the following ways:

(i) billboards are often hard wood or metal boards while posters are usually in paper form;
(ii) billboards are displayed in outdoor places while posters are often indoor;
(iii) billboards stand out on their own, often along highways, while posters are pasted or stapled against other surfaces; and,
(iv) while posters are produced through a printing process, billboards are produced through a painting process.

1.3.2 History of billboards

Billboards and posters have been known to mankind since the early days of ancient Egypt, Greece and Rome. Written on papyrus, engraved on tablets of bronze, on slabs or pillars of stone, signs were posted in public places to convey information (Encyclopedia Americana, 1962). For instance, an ancient Egyptian papyrus produced in 146 B.C. contains detailed description of two slaves who had escaped from Alexandria and a promise for a reward for anyone who reported their whereabouts (Encyclopedia Americana, 1962).

In ancient Greece billboards were written on walls, painted white for the purpose of public attraction, or on slabs of wood which had received special preparation. These billboards were put up vertically and joined at the edge to form a square column. For public games the names of the contestants and order of games were displayed.

There is also documented evidence that early forms of billboards and posters were used in Pompeii too where especially erected and richly decorated walls, painted white and known as albums, carried inscriptions and announcements of public interest such as theatre and art. These mass media occupied such a significant place that anybody who attempted to destroy or damage them incurred extremely severe punishment (Encyclopedia Americana 1962; The World Book Encyclopedia, 1968).

The billboards and posters had disappeared for a while and reappeared only after hundreds of years in various styles. Handwritten bills and placards were used by merchants to advertise their goods. Trade and shop signs, printed on both sides, were hung up and made to protrude into streets to indicate a merchant's place of business.

In 1539 France officially restored the use of posters through a royal proclamation. Under this royal restoration the police for the city of Paris were instructed that **"all decrees be on parchment posted in public places"** (Encyclopedia Americana, 1962: 432).

The development of printing by Jahann Gutenberg in 1450 and increase in literacy also boosted the potency of billboards and posters as means of propagating ideas. The Encyclopedia Americana (1962:431) indicates:

"the invention of printing by Johann Gutenberg, around 1450, by increasing the number of those who could read, had created freedom of thought, and had soon been recognised as a potent means of propagating ideas."

Sadly, similar to what occurred during the development of the newspaper press in the US, the free media market policies in France facilitated the abuse of the poster and billboard mass media through the proliferation of clandestine ones. Hence, in 1933 France passed another royal ordinance banning the pasting of bills and announcements publicly without permission.

This move probably marks the beginning of legislation demanding that billboards can only be displayed after one has obtained clearance from the city council, at a fee, as is the case in Zambia.

The development of lithography by Aloys Senefelder was another positive turning point in the poster and billboard development. For the first time it became possible to obtain a print from a drawing made with greasy ink or chalk on the polished side of limestone (Encyclopedia Americana, 1962). Jules Cheret, popularly referred to as the 'father of the poster' made another step to the development of lithographic printing by introducing and popularizing colour posters as we know them today (Encyclopedia Americana 1962, World Book Encyclopedia, 1968).

The advent of the first World War made a sharp functional orientation of the posters and billboards. Apart from their then traditional roles of amusement and commercial announcements, these mass media became powerful means of propaganda. Government and organisations used them to appeal for patriotism among the civilian population (Encyclopedia Americana, 1962).

After the two world wars the billboards and posters resumed their original functions of popularizing business, social services and public events.

1.3.3 Design and display

To survive centuries as worthwhile of public communication, billboards and posters have always demanded strict artistic discipline and total commitment. Being clear on the function being served and the search for 'visual equivalent' of every individual message have always been considered as crucial consideration for the designers. As the World Book Encyclopedia (1968: 432) observes:

> **"Facts need to be clear, graphic symbols ought to be forceful and messages need to be so brief as to be read or visualized and understood within, preferably, 30 seconds. For unless it conveys its message simply and forcefully, unless it appeals to the imagination of the observer, the poster (and billboard) can never succeed."**

A billboard is not an end in itself. Rather, it is a means to an end such as changing people's lifestyles. Therefore, the artist needs to be concerned with these practical demands.

There is also need for versatility in order to attract and fix the audience attention and many techniques have been developed to meet this requirement. The roles of painting, photography, photomontage and design, of colour and pure form have all been stressed over decades (Encyclopedia Americana, 1962; The World Book Encyclopedia, 1968).

American billboard and poster printers have a preference for billboards that display realistic situations. However, imaginative and abstract designs, as long as they are not too difficult for the audience to comprehend, have been found to be as effective as realistic illustrations of objects, products or situations. The Encyclopedia Americana (1962:431) observes:

> **"the unusual, the astonishing, the element of surprise inherent in every form of art, exercises greater interest and curiosity than all too familiar, which may often appear unimaginative and bannal."**

Effective but discriminate display of a billboard is considered as important as the design as the Encyclopedia Americana (1962:) sums up:

> **"If a poster (billboard) defaces architecture, if it intrudes rudely on historical sites, or if it spoils natural beauty it will certainly defeat its purpose and be remembered as a visual offence rather than a pleasurable experience."**

Hence small billboards, on specific places, are particularly prescribed in some countries.

1.3.4 Types of billboards/posters used in HIV/AIDS education

Four different types of billboards have been found to be useful in HIV\AIDS campaigns. These are:

a. Single Glance billboards/posters

These should be read and understood quickly by the target audience even without the spoken word. They should contain one simple message and always pose the solutions.

Checklist for Single Glance billboards:

(i) The site chosen for display should be one that can easily be seen;

(ii) The site should be clear so that the billboard attracts the most attention;

(iii) Sites where the billboard will be obstructed by other billboards or objects should be avoided;

(iv) There is need to select a site where the billboard will be protected from physical harm; and,

(v) The billboard should be placed at eye level.

b. Stop and Study billboards/posters

These must be studied more carefully by the observer who needs time to look at the pictures and captions.

Checklist for effective Stop and Study billboards/posters

(i) The site chosen for display must be suitable;

(ii) The site should be one where many people meet and necessarily have to hang around such as bus stops; and,

(iii) Places that people pass by hurriedly, such as the roadside, have to be avoided.

c. Wall billboards

These are displayed in a similar way hard-board billboards except that the drawings are made on walls where people can study them carefully. Sometimes they may contain information which is depicted in symbols and diagrams. They are becoming common too in AIDS education in Zambia.

d. Picture codes

These are differentiated by content. The picture codes present both a problem and solution depicted only by the characters in the pictures. For instance, a small school girl would be drawn coming out of a sugar daddy's car. Such a picture would be meant to depict the problem of what is known as the sugar daddy syndrome which is regarded as one of the problematic risky sexual habits vis-a-vis HIV/AIDS in Zambia.

General instructions for making an effective billboard

(i) KISS- Keep It Short and Simple - Simple illustrations are the best;

(ii) There is need to ensure that the messages fit the picture/s;

(iii) There is need to always emphasize the positive;

(iv) Colours which are not easily seen, such as yellow, have to be avoided;

(v) There is need to use clear line drawings or silhouettes to avoid distracting background details;

(vi) Symbols and abstract drawings that cannot be easily understood have to be avoided;

(vii) Designers need to put a border round the picture; this can help to 'frame' the picture;

(viii) The print sizes have to be bold and large. There is need for a combination of capitals and small letters;

(ix) There is need to avoid 'close-up' illustrations which only show part of the body and therefore may be difficult to understand; and,

(x) There is need to ensure that the drawings bear images that are recognizable and familiar to the target group.

1.3.5 The anti-AIDS billboards in Zambia

The MOH, along with a number of anti-AIDS NGOs, launched massive media campaigns in the late 1980s due to insufficient manpower and material resources to support interpersonal methods of fighting the pandemic. From alarmist messages of publicizing the disease and scaring away people from it, more emphasis is now being devoted to prevention and passion for people affected by HIV or AIDS . The idea of using billboards in community sensitization about HIV/AIDS was first adopted by CHEP which put up five billboards in Ndola, Kitwe and a few other Copperbelt towns.

The billboards are supported with a number of wall paintings. Over 100 dustbins have also since been painted with HIV/AIDS messages and distributed throughout the Copperbelt.

The billboard concept was also adopted, three years later, by the AAP in Lusaka which spent K2,029,280.00 to turn out nine non-pictorial billboards in Lusaka and surrounding areas of Chongwe and Kafue.

In 1993 the MOH, through NASTLP, also spent K13 million to produce 25 HIV/AIDS awareness pictorial billboards. Nineteen of these were distributed in Lusaka, two each in Luapula and Livingstone while the other two were kept on standby. In contrast to the non-pictorial billboards by CHEP and AAP, all the 25 NASTLP billboards contain a combination of word symbols and supporting drawings to justify their being referred to as pictorial.

Although all these billboards are meant for general public consumption, the youth are the priority target as suggested by their originators in separate interviews. The billboards of the AAP in particular are implanted in locations considered to be strategic for the youth such as learning institutions and youth drop-in centres. The rest of them by CHEP and NASTLP are in general public places such as markets, bus-stops, hospitals, leisure spots and highways.

The current billboards contain the following main themes in assorted formats:

(i) Prevention and control;
(ii) Modes of transmission;
(iii) Symptoms of the disease;
iv) Home and community care for people with HIV/AIDS;
(v) Need for personal caution;
(vi) The fact that there is no cure for AIDS;
(vi) General information about the disease; and,
(vi) The names of organisations responsible for the respective billboards.

The overall role of these billboards, like the other mass media used in the anti-AIDS campaigns in Zambia, is to increase knowledge of the pandemic, cultivate safe sex and other necessary attitudes and, hopefully, drift people away from risky sexual behaviour vis-a-vis HIV/AIDS. Their success toward the realization of this goal has, however, never been evaluated.

1.4 STATEMENT OF RESEARCH PROBLEM

As suggested above, billboards are becoming more and more preponderant in Zambia. The anti-AIDS campaign organisations are among the various business and charity institutions that are expending huge resources in the form of money, time and materials on billboards for public information and awareness campaigns. In spite of the resources spent on the billboards and the expressed faith in them by such anti-AIDS organisations as the NASTLP, MOH, CHEP and AAP, the actual impact of these media as means of enhancing knowledge and the cultivation of safe sex attitudes vis-a-vis HIV/AIDS, for which they are intended, has not been evaluated, at least in Zambia.

It has not been clear too what the audiences perceive of the billboards in terms of message, design, display, rating among the other media and their general contribution in the fight against the pandemic. Under these circumstances, it is not easy to say anything for or against the use of these media or to simply suggest ways of improving them as Information, Education and Communication HIV/AIDS materials. This study was, therefore, meant to provide a basis for future realization of the roles and effectiveness of these media in the HIV/AIDS campaign and any other related forms of public awareness which involves their use.

1.5 RATIONALE OF THE STUDY

The urban students, who represent an important constituency of the urban youth population, are the focus of this evaluation of the impact and effectiveness of the anti-AIDS billboards on their knowledge, attitudes, beliefs and practices vis-a-vis HIV/AIDS for the following reasons:

(i) The youth constitute the larger percentage of the Zambian population. The Central Statistical Office estimates that 90% of the population (7.9 million) is less than 45 years old and 45% being children aged 14 years or less. This indicates that Zambia's population is relatively young (CSO, 1991);

(ii) The urban students are in the high HIV/AIDS incidence bracket. The MOH estimates the HIV prevalence to be 34% in urban areas and only 13% in rural areas. The ministry thus estimates that the majority of AIDS deaths in the adult population will occur in the age group 20-44 years (MOH, 1994:3);

(iii) The urban students also enjoy more exposure to the HIV/AIDS information than their rural counterparts. Most mass media, including the billboards of the MOH, CHEP and AAP, are located in major urban centres; and,

(iv) The youth, often referred to as the future generation, are the main targets of the anti-AIDS media campaigns;

The billboards, on the other hand, are more appealing for impact evaluation now for the following reasons:

(i) They are the latest mass media phenomenon being adopted in the anti-AIDS campaigns in Zambia and most institutions are increasingly slotting them among their media campaign strategies. It is, therefore, necessary to assess whether they are really worth the interest they have generated in Zambia;

(ii) Huge sums of money are being spent by government, donors and NGOs on anti-AIDS billboards yet there has not been any deliberate attempt to obtain a feedback from the audiences about their effectiveness. The WHO, for instance, spent K13 (about US $10,000) million in 1993 alone to sponsor the production of the 25 billboards of the MOH;

(iii) The billboards are the most conspicuous and captivating. These two factors increase the probability that all the respondents in the study will have seen them; and,

(iv) Unlike the other media whose messages are being changed from time to time, the messages of the billboards are static, standard and still unchanged from the time that they were exposed to the public (at least up to the time of the study). To a great degree this value eases the recall problem among the respondents. The three attributes also facilitate the creation of a perceptual hegemony on the part of both the researcher and respondents vis-a-vis the messages being evaluated.

1.6 OBJECTIVES OF THE RESEARCH

This study will establish the impact of billboards in the anti-AIDS campaign by establishing:

(i) The students' knowledge of HIV/AIDS and whether the knowledge gained could be attributed to their exposure to billboard messages;

(ii) The students' attitudes about HIV/AIDS and the contribution of the billboards in cultivating safe sex attitudes;

(iii) The students' main source or sources of information about HIV/AIDS and whether billboards are among them;

(iv) The students' perceptions of the HIV/AIDS billboards with regard to the message design, content and physical locations. The students' media preferences will represent how they rate the billboards among the other media being used in the HIV/AIDS campaign; and,

(v) Whether the billboards, like the other mass media so far researched, are only supplying general awareness information about HIV/AIDS rather than detailed information about how to control, prevent and manage the disease.

1.7 HYPOTHESES

The hypotheses on which this study was based are:

(i) The students' exposure to the HIV/AIDS billboards has been effective in imparting general awareness information only rather than detailed knowledge of HIV/AIDS;

(ii) The students' exposure to the HIV/AIDS billboards has not been effective in cultivating safe sex attitudes about HIV/AIDS and sexual practices among the students;

(iii) The effectiveness of the HIV/AIDS billboard messages is related to the students' social and demographic factors;

(iv) The students perceive the HIV\AIDS billboards as useless media in the HIV/AIDS campaign; and,

(v) The billboards are less preferred by the youth for information on HIV/AIDS.

1.8 METHODOLOGY

1.8.1 Type of study and data collection procedures

The exercise was an evaluation research aimed at assessing the impact of HIV/AIDS IEC programmes in general, billboards in particular, in enhancing knowledge and attitudes about the disease. The levels of knowledge, type of attitudes held and behavioural intentions with regard to the disease were also subject of assessment. To measure these factors a combination of quantitative and qualitive methods of collecting information, using questionnaires, focus group discussions (FGDs) and observations were used. Both primary and secondary sources of information were referred to. The combination of qualitative and quantitative methodologies (triangulation) was used in order that the two methods could compliment each other so as to strengthen the validity of the data and/or information collected. The FGDs in particular were used in order to allow the students to express themselves freely and to collect information which may not have been accommodated in the structured questionnaires. Consequently, both descriptive and analytical data was gathered. For the evaluation of the messages on the billboards, the procedure of content analysis was adopted. The process of data/information collection involved the following processes:

Step one

(i) Data banks were visited for documents with relevant information on social psychology and mass media effects generally, and in HIV/AIDS campaigns in particular. The information from the secondary sources constituted the basis for the major hypotheses of the study.

(ii) The institutions responsible for the production of the billboards were visited for information on how the billboards were designed and produced, whom they were targeted at and the exact perceived goals.

Step two

(iii) The questionnaires that were designed to gather the students' knowledge, attitudes and perceptions about HIV/AIDS and the anti-AIDS billboards were pretested among selected students in Lusaka. The questionnaires were adjusted where necessary.

Step three

Questionnaires with questions probing the students knowledge of and attitudes about HIV/AIDS and their perceptions of the billboards as means of mass communicating information on HIV/AIDS were administered on 600 students (about 2% of the total student population) in mission and Government schools, colleges and universities in Lusaka, Kitwe and Ndola. These three cities represent typical urban life in Zambia. The questionnaires were self-administered

by the respondents in colleges only and the two universities. Research assistants were, nevertheless, used to read out some difficult questions in a classroom environment in the case of secondary school respondents.

The respondents were also encouraged to seek help from the research assistants where they had problems. The above process, which took just over three weeks, constituted the major quantitative part of data collection.

Step four

(iv) A fresh sample of 360 respondents was picked and taken to the sites of the billboards for the on-the-spot evaluations of the actual billboards in all the three cities. Ten students, each with an evaluation questionnaire, were assigned per billboard. The filing system evaluation forms carried uniform variables relating to the messages, design and display of each of the 36 billboards.

Step five

The groups converged after the site evaluations for the focus group discussions relating to the various aspects of the billboards and/or their messages. The billboard photographs were circulated to guide the discussions. The discussions were recorded on cassettes.

1.8.2. Population characteristics

The sample for both the quantitative survey and FGDs were drawn from students in Government secondary schools, colleges and the two universities in the three cities. It was felt that the students in these instutitions represented the general characteristcs of the student population in the country.

1.8.3 Sample size and sampling techniques

In order to ascertain the total population in the sampling frame, the Ministry of Education, the Department of Technical Education and Vocation Training (DTEVT) and the two universities were contacted for their total enrolments. The next step involved ascertaining the student population per town from which the ratio system was used to determine the number of respondents who could be selected in each individual town and institution. The total student population was 40,826 of whom 11,516 were females and 29,310 males.

Within the individual institutions a combination of stratified and systematic probability sampling methods was used to sample members of the sampling frame. The sampling rate in each of these cases was determined by the number that was required within the respective institution. The population was stratified to accommodate special groups in particular for the purpose of having fair representation on the basis of sex, age and level of education.

From this sampling technique 302 males and 229 females were selected for the quantitative survey. Of these 306 were based in Lusaka and 225 in Ndola and Kitwe. A Fresh sample of 360, 10 per billboard, was selected for site evaluations and for the focus group discussions involving 36 billboards located in the three cities. Purposive and, in some cases, available sampling techniques were used to gather participants in FGDs. One FGD was held per city. The FGDs consisted of 10 to 15 participants.

With regard to the selection of billboards, all the available and accessible billboards in the selected cities were used for the evaluation. The 10 to 15 respondents who participated in the site evaluation of each billboard and in FGDs were chosen on the basis of being readily available but with careful selection to ensure representation by gender and other special population characteristics.

1.8.4 Data analysis

The information from the questionnaires and billboard evaluation forms was transferred onto coding sheets and later fed into the computer, using the Statistical Package for the Social Sciences (SPSS), for analysis of quantitative data from both questionnaires and billboard evaluation sheets. Frequency distributions, percentages and cross-tabulations of relevant variables were used as the basis for the discussions and conclusions. The chi-square test was employed to analyse the relationships between and among selected variables. The level of significance for use in this study was 0.05%. The information recorded from the focus group discussions was fussed into the discussions of the thesis.

Analysis of information from FGDs consisted of transcription of the discussions and scanning of the comments. A category system was developed and all the comments were coded according to their respective categories (organised under general heading). Quantification involved a count and summary of statements falling under each category.

1.9 OPERATIONAL DEFINITIONS OF CONCEPTS

a. Impact

In this study, the word impact was used in the sense of the Collins Conscise Dictionary (1982) which defines it as **"the impression made by an idea, social group, etc."** This researcher uses impact also as a synonym for effectiveness of the anti-AIDS billboards on knowledge and attitudes about HIV/AIDS among urban students. The impact of the billboards was measured by:

(i) the students' **access** and **exposure** to their messages;
(ii) the **visibility** of the messages and the billboard materials;
(iii) the **readability** of their messages;
(iv) the students' **attention** to their messages;
(v) the **comprehensibility** of their messages;
(vi) the students' **retention** of the messages on the billboards;
(vii) the **acceptability** of the HIV/AIDS billboard messages on the basis of culture, religion, personal (moral) beliefs etc. to the respondents;

(iii) the **readability** of their messages;
(iv) the students' **attention** to their messages;
(v) the **comprehensibility** of their messages;
(vi) the students' **retention** of the messages on the billboards;

(vii) the **acceptability** of the HIV/AIDS billboard messages on the basis of culture, religion, personal (moral) beliefs etc. to the respondents;

(viii) the **rating** of the billboards among the students' **preferred sources** of information on HIV/AIDS; and,

(ix) the **rating** of the billboards among the students' **main sources** of HIV/AIDS information.

b. Perception

The term perception is defined by the Oxford English Dictionary as a **"way of perceiving; a view."** Gibson (1968:527) observes that **"the study of perception is the attempt to understand those aspects of observation of the world of things and people that depend on the observer."**

In congruity with the above definitions, this reaercher uses the term perception to describe how the students view the AIDS billboards and their messages. The students' perceptions will be measured by inquiry into:

(i) whether the students perceive the billboards as useful and playing a significant role in the HIV/AIDS campaign in general, and with regard to their attitudes and knowledge vis-a-vis HIV/AIDS in particular; and,

(ii) how the students rate the billboards as a source of information among the other sources of HIV/AIDS information.

c. Billboard

As defined in one of the earlier sections, billboard is the term this researcher uses to denote the large outdoor boards with information on the subject of HIV/AIDS. In this study the term was also used to denote the wall paintings and drawings which contain HIV/AIDS information.

e. Urban

'Urban' refers to towns and cities. In Zambia 'urban' is commonly used to denote towns and cities along the line of rail. The three Zambian cities namely: Lusaka, Kitwe and Ndola were taken to represent typical urban life in the study, as is the case in other references.

f. Socio-demographic factors

The Oxford Dictionary (1976) defines socio-demographic as **"the scientific study of human population especially with reference to their size, distribution etc"** (Oxford Dictionary, 1982:346).

The researeher uses the term to describe any social, economic, cultural and psychological factors which can be used to classify the respondents based on some, if not all, of the these factors.

g. Knowledge

The Collins Concise English Dictionary defines knowledge as **"the specific information about a subject."** Its second definition of interest to this study suggests that knowledge denotes the

"facts or experiences known by a person or group of people" (Collins, 1982:724). In this study knowledge was measured by asking the respondents a series of questions on various issues pertaining to HIV/AIDS.

h. General awareness

Awareness is used to imply realization, consciousness, cautiousness or having knowledge of HIV/AIDS. This researcher distinguishes knowledge from general awareness by the fact that while knowledge denotes having more detailed, stored knowledged, awareness is much lighter and denotes only rough information which is not vividly kept in the mind of the information holder.

1.10 REVIEW OF LITERATURE

1.10.1 Attitudes: just what are they?

Attitudes are a phenomenon that attract a multiplicity of definitions. Despite the confusions that surround the perception of this term, writers and researchers have attempted to define it. According to Rokeach (1968), an attitude is **"a relatively enduring organisation of beliefs around an object or situation predisposing one to respond in some preferential manner"** (Rokeach,1968:450).

Rokeach's definition presupposes that the attitudes that people hold determine their behaviours and practices towards the attitude object.

Himmelfold and Eagly (1974) also offer a relatively similar definition that **"an attitude is a relatively enduring organisation of beliefs, feelings and behavioural tendencies toward socially significant objects, groups, events, or symbols."**

The two sets of definitions bring out the three major propositions that are generally appreciated about attitudes.

First, attitudes are considered to be relatively enduring which suggests that they are a relatively permanent feature in those who hold them. The second feature inherent in the two definitions is that attitudes are limited to events or objects that the attitude holder considers to be socially significant.

Davison (1969) broadens this second component by observing that **"people gradually accumulate and carry around with them a substantial quantity of information about those aspects of the environment that are important to them."**

The last proposition embodied in the two definitions is that attitudes are composed of three distinct components namely: cognitive or belief, evaluative or affection and the behavioural or connotative components.

The cognitive component represents a person's knowledge of the attitude object which is held within varying degrees of certitudes.

Kahn (1984) calls it the 'belief' component which he associates with what a person thinks about the attitude object as an individual. The affective or evaluative component constitutes what the attitude holder feels about the object (Kahn, 1984; Rokeach, 1969; Asch, 1952). The behavioural component can be best described in the words of Rokeach (1968) which contend that **"because the belief, being a response to a predisposition of varying threshold, must lend to some action when it is dictated strictly by the content of the belief. Thus, even a belief that merely describes is a predisposition to action under appropriate conditions"** (Rokeach, 1968: 458).

Although the majority of the researchers and theorists are generally agreed about the existence of the three attitude components as separate entities, there is yet another school of writers who believe that the distinction is purely academic.

Harding, for instance, observes that **"the relationship between these three components is**

so close that it makes little difference which ones are used to rank individuals with respect to their attitudes towards specific ethnic groups."

Rosenberg (1969) adds that **"man strives to maintain consistency between the cognitive, affective and behavioural components within a single belief, between all the beliefs entering into an attitude organisation, and between all the beliefs and attitudes entering into the total system of beliefs"** (Rokeach, 1968: 458).

Despite these isolated cases of divergent views, there is general consensus that the three components exist as distinct features. Two observations about attitudes by Rokeach (1969) and Himmefold and Eagly (1974) are worth discussing before winding up this section on the definitions of concepts. First, the writers describe attitudes as **"relatively enduring and as persistent and consistent organisation of predisposition which characteristically distinguishes attitudes from such temporary predisposition's as feelings."** Asch (1952) further clarifies that **"attitudes are particularly enduring sets formed by past experiences"** (Asch, 1952: 585).

The second striking observation is that attitudes are an organisation of beliefs. Rokeach (1968) describes a belief as **"a simple predisposition, conscious or unconscious, inferred from what a person says or does capable of being preceded by the phrase 'I believe that'..."**(Rokeach, 1968:451). The notable point in this second conceptual statement is that

attitudes are broader and more complicated than beliefs. They represent a combination of beliefs and that they can be measured by studying the statements of the attitude holder.

1.10.2 Functions of attitudes

Early functional theorists such as Smith identified seven broad and overlapping functions of attitudes. According to Smith (1947), the object appraisal function serves as the convenient guideline for interpreting and categorizing environmental objects and events and for deciding whether to avoid or approach these stimuli (Shaffer and Tesser, 1990:497). The knowledge function helps us to perceptionally organise and understand events and be able to differentiate one attitude object from another or others. Kahn (1984) observes that **"attitudes that serve the knowledge function provide a means for categorizing or classifying information, and should be particularly sensitive to consistency pressures"** (Kahn, 1984:82).

Attitudes also serve the instrumental function of providing the means to a goal such as when a person agrees with others to gain membership in a group (Shaffer and Tesser, 1990). Kahn (1984:91) also observes that:

> **"an attitude serves an instrumental function when the attitude object is associated with the desired goal (reinforcement) or with something one wishes to avoid. Through the ego-defensive function of a particular attitude we are assisted to distort or deny unacceptable impulses or external threats."**

The ego-defensive and the externalization functions identified by Kahn and Smith respectively ensure that one holds and expresses attitudes to cope with intrapsychic conflict (Shaffer and Tesser, 1990: 497).

These two functions are crucial in individual classification of acceptable and unacceptable information and they match well with the selective perception and selective retention theories of mass communication.

The value-expressive function helps to expose a person's inner feelings over an attitude object. Katz (In Sheffer and Tesser, 1990: 497) stressed the role of this function by proposing that **"attitudes are vehicles for expressing internalized values that are important to the self-concept"** (Sheffer and Tesser, 1990: 497).

Therefore, it is accepted that by doing something, somebody expresses altruistic values which are central to his self concept. Smith (1947) also identifies the social adjustive function, which refers to the role of attitudinal expression in the mediation of self-other relations. This suggests that attitudes help us to check behaviour and adjust it according to those attitudes we strongly hold (Sheffer and Tesser, 1990:497). Although attitudes serve different functions, we can by no means suggest that each attitude serves exclusively one function. One attitude can serve different functions because people are said to hold the same attitude for different reasons (Kahn, 1984:96). From the literature reviews of Katz, Kahn further argues that the function an attitude serves determines what type of persuasive message will be most effective (Kahn, 1984:96).

1.10.3 The process of attitude formation

Psychologists are unequivocally agreed that attitudes are relatively stable features of our social world and that they can be relied upon for stability (Kahn, 1984:88).

There is an equally unanimous consensus among the psychology researchers and theorists about the difficulty in determining exactly when attitudes begin to take shape in a person (Kahn, 1984, Reich and Adcock; 1974, Shneider, 1976). Kahn (1984), for instance, observes that **"sometimes an experience either questions or becomes more certain of an attitude"** (Kahn,1984:88).

By this analogy, a person who losses a close relation to AIDS is bound to develop strong negative attitudes towards the disease. Similarly, participation in an anti-AIDS campaign activity would make one believe that he or she is against the disease (Kahn, 1984, Reich and Adcock, 1974; Shneider, 1976). Kahn further clarifies that for a person who is already familiar with the attitude object, the experience itself is not the creation point for the attitude: **"But your attitude did not begin with the experience, the experience had the effect it had because you already had an attitude."**

He further observes that for as long as one has seen or heard about an object or issue they probably already had attitudes about them (Kahn, 1984:88).

In spite of the ambiguities surrounding the level at which attitudes are formed, the researchers and psychologists recognize a number of ways through which they are formed. The behavioural approach constitutes the major explanation to attitude formation.

The first process, classical conditioning, refers to the process in which human beings develop attitudes when the attitude object is associated with a stimulus that elicits an emotional response. To illustrate, if each time a growing child hears people weeping he learns that the victim died of AIDS, over a period the child is likely to develop the attitude that AIDS in a killer disease.

Similarly, if anybody who has suffered from AIDS in a particular family has died, the other members are likely to associate AIDS with death. The classical conditioning process rests on the premise that people develop attitudes passively (Kahn, 1984: 90). That is to suggest that when a stimulus in the environment becomes associated with response an attitude is formed.

Instrumental conditioning, in contrast with classical conditioning, is a process whereby attitudes are formed when we, as human beings, stimulate or operate the environment and cause it to react in a positive, negative or neutral way. As Kahn (1984) observes:

> **"If a behaviour is instrumental in bringing about a positive reaction we are likely to repeat the behaviour. If the reaction is negative we do not repeat the action"**
> **(Kahn, 1984: 90).**

This action-reaction process also explains how certain attitudes are formed. Observational learning is the last attitude formation process this chapter describes. According to Albert Bandura (1977), the observational learning process, also called social learning theory and socialization process by Reich and Adcock (1974), is the major process through which children in particular learn things and develop attitudes. Children are socialized into developing particular negative or positive attitudes about attitude objects by what they hear or see from close relations during their early stages of growth and from their peers at later stages.

Reich and Adcock (1974) describe it as **"the process whereby individuals attain the role expectancies, values and attitudes of society through interpersonal relationships"** (Reich and Adcock, 1974: 45).

1.10.4 How attitudes are measured

How do we know what attitudes people are holding and how strong they are? Unlike behaviour, attitudes are not directly observable. Therefore, they can only be measured indirectly. Attitude measures are necessary in order to compose variations between individuals and groups and to record any variations within an individual when he has changed his attitudes (Reich and Adcock, 1974; Shneider, 1976; Kahn, 1984).

Kahn (1984) classifies attitude measures into three broad categories namely: self-report, physiological and overt behaviour. Self-report constitutes the bulk of modern attitude measures and depends on people indicating their attitudes on a particular attitude object using such instruments as questionnaires.

The method of summated ratings which was developed by Remsis Likert (1932) is one of the most common self reporting attitude measures used in modern social researches. The method depends on an aggregation of the respondent's scores from a set of rated questions to measure the attitude strength.

Respondents are requested to indicate how much they agree or disagree with a statement they are exposed to regarding an attitude object. To measure the students' attitudes towards sticking to one sexual partner as a means of fighting HIV, for instance, the statement and response categories would appear as follows:

'We should all stick to one sexual partner to combat HIV'

5	4	3	2	1
Strongly agree	Agree	Neutral (Not sure)	Disagree	Strongly disagree

The respondent is instructed to tick or circle the response category he/she agrees with. If all the questions are worded so that agreement indicates favourable attitudes toward the course, a student's attitude would be measured by adding the scores circled or ticked on the questionnaire. Therefore, a 10-statements item would range from 10 for someone who strongly disagrees with all the items and 50 for someone who strongly agrees with all the statements (Reich and Adcock, 1974:32).

The second common attitude measurement device is what is referred to as the semantic differential. First developed by Osgood, Suci and Tennenbaum in 1857, the semantic differential is used to evaluate attitude concepts by presenting subjects with a set of semantic scales based on bipolar adjectives (Reich and Adcock, 1974; Kahn, 1984). With the use of numerical values the subjects are requested to rate words or attitude topics on a scale of opposite pairs such as good-bad or like-dislike. A measure of students' attitudes towards condoms would thus be presented as follows:

CONDOMS

+3	+2	+1	Neutral	-1	-2	-3
Good	-	-	-	-	-	BAD

The semantic differential has the advantage of being able to use the same adjectives to measure different attitudes and thus providing a way of comparing the strengths of different attitudes (Kahn, 1984).

The third self-report attitude measure worth mentioning in this section is the sociometry system which was developed by Moremo (1953). The measure works on the premise of leaving the stimulus object undefined and left to the respondent to indicate his/her preferred position or object. A typical question on HIV/AIDS, for instance, could be: **"What is your most preferred means of avoiding contracting HIV?"**

The overchosen object among the respondents automatically represents the general attitudes toward the object (Reich and Adcock, 1974). Although the test concentrates on preferences with regard to behavioural intentions, additional information can be obtained by asking a follow-up question. A follow-up question to the above example could read: **"What is your most preferred method of avoiding contracting HIV and why?"** This way both the affective and cognitive components of the respondent's attitude/s are obtainable (Reich and Adcock, 1974:33).

Most psychologists are agreed that self-report measures have three major weaknesses. First, the proximity of a given response to the actual (real) position of the respondent is dependent upon the honesty of the respondent. Reich and Adcock (1974:36) thus indicate:

"When we are dealing with social non-desirable attitudes, subjects' responses may be coloured by the need to not appear to be 'deviant'. Secondly, as the name suggests, the three are measures and nothing else. Unless with a series of follow- up questions they do not explain to the researcher why a person holds a certain attitude and makes it salient to him."

Psychodynamic psychologists also argue that the self-report measures do not always give a respondent's vivid attitude position because they contend that human beings are not always aware of the attitudes they hold especially the ones involving conflict and ambivalence (Reich and Adcock, 1974). By this argument, however honest, the respondent's replies will not always present his 'real' attitudes. The last weakness is associated with repeated attitude measures before and after intervention. It is generally feared that the subject's score in the second measure is influenced by his first reply purely for the sake of consistency. Reich and Adcock (1974) hence observe that **"having committed themselves in the first instance, it may affect a person's second response in a variety of ways"** (Reich and Adcock, 1974:36).

Despite these weaknesses self-report attitude measures have come a long way to establish themselves as the only conceivable measures of social phenomena.

A variety of physiological measures of attitudes have also been developed. These include skin resistance (Rankin and Campbell, 1955), heartbeat, heart cycle (Westie and Defleur, 1956), pupil dilation (Hess, 1965) and facial expression (Cacioppo and Richard, 1979). Cacioppo and Richard (1979) reasoned that by Charles Darwin's theory, people who agreed with a speech would display facial movements different from those who disagreed (Kahn, 1984:85).

A third way to measure people's attitudes it by observing their overt behaviour since their actions often times reflect the sort of attitudes that are resident in them. Although not strong as a measure of attitudes, people's overt behaviours are guided by the need to maintain an attitude-behaviour balance and consistency (Kahn, 1984; Schneider, 1976; Reich and Adcock, 1974).

From the three types of attitude measure we can as researchers establish people's behavioural intentions which in turn translate into what they are capable of doing all factors being equal. In the case of safe sexual behaviour vis-a-vis HIV/AIDS, we can extrapolate from the elicited attitude positions and/or behavioural intentions whether they are capable of practicing the safe sex methods being espoused by the media. However, at this level we may begin to ask to what extent we can depend on people's attitudes as a predictor of what they are capable of doing.

1.10.5 Attitudes and behaviour : are they related?

The question of whether attitudes can and do predict behaviour continues to generate a great deal of controversy among psychology researchers. The controversy over the attitude-behaviour relationship emanates from the fact that although the general assumption is that attitudes include a behaviour tendency component, and various consistency theories have emphasized that people should feel more confortable when their behaviour is consistent with their attitudes, some researchers have argued, with some evidence, that attitudes are not effective predictors of behaviours (Schneider, 1976:391 quotes Doop, 1947; Campbell, 1963; Festinger, 1964).

From the classic studies of La Pierre (1934), Kutner, Wilkins and Yarrow (1954), De Fleur and Westie (1958), Linn (1965) and Wicker (1969), a number of points have been advanced for the attitude behaviour inconsistency arguments. One such explanation is the **"spirit is willing but the flesh is weak"** syndrome which was first advanced by Wicker (1969). As Schneider (1976) observes, most people discover that when cherished attitudes compete with potential negative consequences or mediating factors for control of behaviour the consequences win (Schmeider, 1976; 391).

For instance, much as a person may in principle say he/she would use a condom each time he/she has extramarital sex, the lack of a condom when he/she is found in a compromising situation may lead him/her to have casual sex without it. Kahn (1984:129) thus concludes that **"there is nothing in the attitude-behaviour relationship which suggests that attitudes should lead to consistent behaviours come hell or high water."**

Another possibility for the attitude behaviour inconsistency is the presence of internal controls over behaviour. For any given behaviour there are many relevant but contradictory attitudes which can generally not be used to predict the same behaviour (Schneider, 1976:391; Kahn, 1984:132). The inaccuracies in the ways attitudes are conceived and measured also account for a great degree of inconsistencies. For instance, the delay between measurement of attitudes and the time of the behavioural act is invariably likely to result in inconsistencies (Schneider, 1976:391; Kahn, 1984:129; Cialdini, Petty and Cacioppo, 1981: 367).

Another problem is that the object of the attitude is often not well defined and may not be the same in the attitude and behavioural response. As it were, attitudes are qualified by situations (Cialdini, Petty and Cacioppo, 1981:367).

Despite these contradictory and pessimistic observations, most psychology scholars are generally agreed about the attitude-behaviour correlation. As Cialdini, Petty and Cacioppo (1981:366) observe:

> **"the attitude-behaviour problem has continued to generate a great deal of research, but no longer are researchers questioning if attitudes predict behaviour (e.g. Wicker, 1969), they are investigating when attitudes predict behaviour."**

A number of studies have been conducted in recent times with results that have supported the attitude behaviour relationship but the two cross-lagged panel analyses by the pairs of Kahle and Berman (1979) provided an optimistic answer to an old but important question - do attitudes cause behaviours or do behaviours lead to attitudes?

The two sets of researchers found that attitudes had causal predominance over behaviours which suggests that they do have an important degree of predictive utility (Cialdini, Petty and Cacioppo, 1981:366; Schneider, 1976:394).

The most influential on the attitude behaviour relationship since the 1967 Fishbein model was probably Ajzen and Fishbein's (1977) extensive literature review in which they concluded that attitudes were good predictors of behaviour only when the attitudinal and behavioural measures showed a high degree of correspondence (Cialdini, Petty and Cacioppo, 1981:366). Therefore,

attitudes are said to correspond to behaviour when they match on action, target, context and time dimension.

Claldini et al.(1981) thus observe that **"an investigator should not expect to measure attitudes towards an action element (e.g. driving) and predict whether a person will drive a two-tone truck (target) on a snowy highway (context) on New Year's Eve (time)"** (Claldini, Petty and Cacioppo, 1981:366). In the three studies demonstrating this point, Jaccard, King and Pomazal (1977) attempted to predict a single behaviour from attitude measures that varied in their level of specificity. The studies discovered that the more the attitude measure corresponded to the behavioural criterion, the better was the prediction (Kahn, 1984: 124; Claldini, Petty and Cacioppo, 1981:366).

In the Fishbein model (1967), it is assumed that behaviours result from behavioural intentions, which are considered to be the only systematic determinants of behaviour. Therefore, as was observed by Jaccard, King and Pomazal (1977), the evidence in the Fishbein model suggests that when the intentions are measured just before the behaviour and are specific to just that behaviour, there is a high correspondence between the two (Schneider, 1976:393; Claldini, Petty and Cacioppo, 1981:366; Kahn, 1984:126).

As was observed by Davison and Jaccard (1979) and Schwarz (1978), the greater the time separating the two measures, the greater the likelihood that attitudes will change in the interval, decreasing the utility of the initial (old) attitude measures as predictor. Gabranya and Arkin (1979) also found that attitudes were better predictors of interracial behaviours when the measures were taken under high commitment conditions i.e. subjects thought they would have to perform the behaviours (Claldini, Petty and Cacioppo, 1981:367).

There is also evidence to suggest that measuring attitudes and/or behaviours under conditions of objective self-awareness appears to enhance the attitude-behavior consistency (Claldini et al, 1981:367; Schneider, 1976:393; Reich and Adcock, 1974). Pryor et al (1977), for instance, had subjects rate their attitudes towards various puzzles either in the presence of mirror (self-awareness) or not (control). The attitude measure taken under self-awareness conditions predicted the actual proportion of time that the subject spent playing within the puzzles significantly better than attitudes measured under control conditions (Claldini et al, 1981:367).

Claldini et al., (1981) thus observe that **"the self-attention produced by the mirror presumably causes the person to be more introspective and accurate in reporting internal states. The greater accuracy enhances the consistency between attitudes and behaviours"** (Claldini, et al., 1981:369).

Bagozzi and Burnkrant (1979) have also produced evidence to support the notion that affectively oriented attitude scales (e.g. semantic differential) tend to predict behaviour more accurately than the more cognitively oriented ones (e.g. Thurstone) (Claldini et al. 1981:368).

Although there is now general consensus among psychology scholars that attitudes effectively predict behaviour when appropriate measures are taken, some investigators have attempted to enhance the behavioural predictions by looking at variables other than attitudes.

Thus the normative influences, effects of habits, direct experience with the attitude object or situation and personality factors have been accepted as some of the major factors that enhance the behaviour prediction (Cialdini et al. 1981:368; Schneider, 1976: 392; Kahn, 1984:123). To support the strength of normative influences Fishbein and Ajzen (1975, 1980) advanced the **"theory of reasoned action"** which postulates that the best predictor of behaviour is the actor's intention to perform the action.

The action is based on the person's intention towards the behaviour and his subject norm toward the behaviour (the extent to which one feels significant others think that the behaviour should be performed). The theory is associated with status conferral and role-playing in which our behaviours are dictated by what we feel society expects of us.

A number of studies found a strong correlation between behavioural intentions and actual behaviour in family planning (Davidson and Jaccard, 1979) and adolescent (Schlegel, Crawford and Hulin, 1979) and adult (Kilty, 1978) alcohol and drug use (Cialdini et al. 1981:368; Kahn, 1984: 124).

Fishbein and Ajzen (1975, 1980) also argue that all variables affect behaviour only through their effects on behavioural intentions. In a test of this notion against alternative causal paths, Bentler and Speckart (1979) found that college students' previous drug and alcohol use (past behaviour) accounted for a significant degree of variability in present drug and alcohol use that was not mediated by behavioural intentions. This finding is consistent with the behavioural intentions model of Triandis (1977, 1980).

Triandis (1977) proposed that future behaviours could be predicted from a combination of intentions (which are based on attitudes and norms) and habit (which refer to past behaviours) weighted against the person's psychological arousal (arousal enhances the likelihood of behaviour) and facilitating conditions in the environment (whether the conditions are favourable for the act's performance). Thus Triandis argues that the more a person has engaged in a behaviour previously, the less important is intention in predicting future behaviour and the more important is habit (Cialdini et al. 1981:369).

Cialdini et al. (1981) cite Regan and Fasio (1977) and Songer-Nocks (1976) as the first researchers to advance the notion that attitudes formed on the basis of direct experience with the attitude object are more accurate predictors of behavioural intentions than are attitudes that formed without such experience (Cialdini et al., 1981: 370).

Also an attitude formed by merely watching and empathizing with a person who is having a direct experience with the attitude object can increase the attitude-behaviour correlation for people who have had no direct experience with the attitude object themselves. By this theory, a person who has suffered from AIDS or has at least seen a person agonizing with the disease is likely to have strong negative attitudes about AIDS and, therefore, more likely to restrain from risky sexual behaviour.

Zuckerman, Siegelbaum and Williams (1977) are cited by Cialdini et al. (1981) as having found support for Schwartz's (1973) ascription of responsibility (measuring the tendency to assign responsibility to self) would be more likely to act on their behavioural intentions (as assessed by personal norms) than those who were low in their ascription of responsibility. Zuckerman

and Reis (1978) compared Schwart's ascription of responsibility model, Snyder's (1974, 1979) self-monitoring model, and Fishbein and Ajzen's intention model in an attempt to predict blood donations.

The self-monitoring notion postulates that people who are low self-monitors will show stronger attitude-behaviour correlation than high self-monitors because they tend to guide their behavioural choices on the basis of salient states than situational information (Cialdini et al, 1981:371; Schneider, 1979:394).

From all the above citations it is perceptible that attitudes are effective predictors of behaviours but this efficiently occurs only when the appropriate and more specific measures of attitudes are employed. Therefore, as long as no more appropriate predictors of behaviour are found, we shall continue to rely on attitude measures to help us forecast people's probable future actions.

1.10.6 The process and possibility of changing people's attitudes

The subject of attitude change is no longer the pre-occupation of theory and research in social psychology. It now embraces phenomena and problems that equally concern students of other areas such as personality, of culture, of political affairs, consumer preferences and many others.

As Smith (1960:458) observes:

> **"the moulding of public opinion through the processes of persuasion is a matter of attitude change but so also of prejudice and the socialization of the child to adhere to the sentiments of values of his culture. Even the modification of internal feelings and expectations during the course of personal acquaintance or in psychotherapy is a matter of attitude change."**

The advent of AIDS and the need to change people's sexual attitudes and habits adds to the already inexhaustive list of concerns that fall in the attitude change domain.

As it has already been pointed out in the earlier sections, the concept of attitude has come to be generally accepted as a concept that denotes an inferred predisposition, attributed to an individual according to which his thoughts, feelings and perhaps action (behaviour) tendencies are organised with respect to a psychological object (Smith, 1960: 458).

The topic of attitude change thus embraces the condition under which such dispositions are initially formed and subsequently modified in the course of the person's transactions with the physical, social and informational environment (Smith, 1968:458). As Smith (1968) further observes, change as a condition includes change in both relatively superficial and specific matters of 'opinion' and in 'deep-seated' sentiments of 'cathexes' that are properly regarded as constitutive of personality changes that occur in the natural course of maturation and experience as well as those that result from exposure to deliberate persuasion or propaganda (Smith 1960:458). The change in attitudes which is a result of deliberate persuasion or propaganda is the focus of this section.

From the literature reviews on the subject, it is clear that the question of how attitudes can be changed and the processes underlying attitude change has been a subject of active experimental inquiry. This inquiry has in part been directed toward formulation and refining empirical

generalizations about factors that influence attitudes. The theories of learning (Skinner, 1957), cognitive development (Asch, 1952) and personality (Adorn, 1950) all constitute themselves as general approaches under which the subject and practice of attitude change may be studied.

From these three approaches researchers today isolate what they consider as factors that have tendencies that influence people to either accept or resist persuasive messages (Smith, 1968: 458; Schneider, 1976:269).

Although numerous theories have emerged from researches on attitude change, this section will focus on factors that emanate from the four major theories namely: the hedonistic or functional, informational, personality or self-definition and personal commitment factors.

The functional approaches are oriented toward the personality as an empirical system and attempt a relatively comprehensive account of the function that a person's opinions and attitudes save in the on going economy of personality, on the assumption that knowledge of the motivational basis of attitudes should point to the conditions under which change is expected (Smith, 1968: 465); Schneider, 1976:270).

The starting point of functional theorists is that the vigorous resistance which persuasive efforts are commonly met with suggests that people have strong interest in maintaining their attitudes with as little change as possible (Smith, 1968: 465).

To drive the point home, Schneider (1976:270) observes:

> **"my desire to change may be increased if I come to feel that I will be better liked or accepted from changing. Conversely, resistance can be increased if a change in attitude is perceived to have negative implications for future behaviour."**

Smith's literature reviews of the works of Smith, Bruner and White (1956) suggest that the three researchers offer a classification in terms of three broad functions served by opinions and attitudes. The three broad functions are objective appraisal, social adjustment and externalization which are also cited in an earlier section of this thesis on the functions of attitudes.

The researchers contend that any persistent attitude is likely to be serving all the three functions to some extent although there is considerable variation from issue to issue and from person to person with respect to the function that predominates (Smith, 1968: 465; Kahn, 1984; Shaffer and Tesser, 1990: 497). Going by the above realization, the more we study and understand the function each attitude held by a person serves, the better chances we have to find a workable persuasive strategy.

The objective appraisal function implies that resistance or acceptance of in-coming messages is influenced by the fact that people scan and appraise the input of information from the external world for its relevance, values, and interests thus giving rise to the selective self-exposure and attention to information. When this function predominates, attitudes should be malleable in response to rational presentation of information that leads the person to reappraise the bearing of reality factors on his interests and enterprises (Smith 1968; 465).

Through the social adjustment function, which is also appropriately referred to as the mediation of self-other relations, our acceptance or rejection of persuasive messages is influenced by how other people whom we regard as important to us regard the object of attitude change i.e. the influence of reference groups. Thus, attitude changing is based on whether the new position will facilitate, disrupt or maintain our relationship with others (Smith, 1968: 465; Schneider, 1976: 270; Kahn, 1984: 103).

By this theory, peer AIDS education, which has been widely adopted in Zambia, may well be one of the effective supportive strategies to the media AIDS campaigns.

The externalization or ego involvement function involves responses to an external object or event in a way that is coloured by a person's unresolved inner problems (Smith, 1968: 465). Therefore, an attitude taken toward external facts is an overt substitute for covert attitudes taken in the inner struggle (Smith, 1968: 465). Schneider (1976) calls this function the mood function and further observes that moods often affect our rejection or acceptance of persuasive messages (Schneider, 1976: 270).

From his literature reviews of the work of Janis, Kaye and Kirschner (1965), for instance, Schneiner (1976) highlights that subjects who were offered food, and presumably feeling happy, during persuasive communication changed their attitudes more than the 'non eating' respondents (Schneider, 1976: 270).

This theory evokes the need for studying people's moods, temperaments, cultural values and the general timing of convenience before one indulges in the act of persuading people to change their attitudes over any subject, including AIDS and its victims.

The second class of functions, the informational, works on the premise that a person can desire to change because his/her need for a particular reality is great or because the appeal makes sense i.e. it is consistent with his existing values. In this case, resistance can be increased by the perception that the changed attitude would be inconsistent with other attitudes or behaviours (Schneider, 1976: 270; Smith, 1968: 465; Kahn, 1984: 103).

Thus, Schneider observes that **"it would be easier to convince a communist that a particular businessman exploited his workers than it would be to convince a conservative Republican"** (Schneider, 1976: 270).

Therefore, it has now come to be accepted that the need to maintain cognitive consistency and balance in persons is another important determinant of acceptance or rejection of persuasive messages. Heider's theory of balance, Rosenberg and Abelson's (1960) theory of cognitive consistency and Festinger's Cognitive theory have gained acceptability in the study of attitude change (Smith, 1968:465).

Although the extent to which logical and consistency factors influence attitude change is still a subject of further investigation, there is enough evidence to suggest that when people change their attitudes they seem to have done so because they have been exposed to new information or a new way of looking at a topic. Also, most attitude change attempts in everyday life in arguments or informal debates rely heavily on appeals to reason, logic and consistency (Schneider, 1976: 270).

From Schneider's literature review of the work of Eagly (1974), it is established that attitude change occurs when subjects are exposed to more arguments i.e. exhaustive information on the subject (Schneider, 1976: 270).

The degree of a person's commitment or self-definition on the subject of attitude change constitutes itself as the last consideration in analyzing persuasibility. The extensive literature review on this subject suggests that when the attitude - change attempts appeal to open-mindedness there is likely to be an increased desire to change. On the other hand, when the appeal is perceived as a threat to personal freedom, resistance is likely to be increased (Schneider, 1976:271).

Schneider's literature review of the work of Brehm (1966) and his reactance theory asserts that people will resist threats to attitudinal freedom by holding fast to their attitudes or even by moving away from the message as though to display independence (Schneider, 1976: 271).

Smith (1968) also observes that a person's attitudes on a controversial issue may be coordinated to the range of discriminable opinion positions that he finds acceptable. The person's latitude of acceptance will typically be narrower than the accompanying latitude of rejection when he is highly ego involved with the issue or when his position on the issue is extreme.

Smith (1960:462) observes:

> **"In responding to a persuasive communication that advocates some position on an issue, he places the message on a pro-con scale of favourability with respect to the issue. The effects of the communication on the recipient will depend on the distance between the recipient's stand and the position advocated by the communication as he locates it in his scale of judgments."**

This theory echoes the reinforcement or resonance theory of communication which postulates that on-coming messages are only capable of reinforcing the existing position in cases when the subjects have already made up their minds on a particular issue (Klapper, 1960: 18).

In all the cases highlighted, we can approximate acceptance or rejection of a communication by analyzing whether the person paid attention to the message, whether they comprehended it and whether he went along with the persuasive appeal.

We also depend on the assumption that a person who desires to accept the communication will attend to it, try to understand it, and be motivated to change his or her attitude toward it (Schneider, 1976: 271). Resistance, on the other hand, may be manifested by desires not to attend, understand or yield to the message.

Counter-arguing as suggested by Eagly (1974) constitutes another way of telling whether people accept the persuasive communication or not. While a person who accepts the communication may not argue, a resister is expected to marshal his or her forces for counterargument (Schneider, 1976: 271).

From the above decisions, we can conclude that we can manipulate attitude change by understanding the functions served by the attitudes that we are attempting to change, the information requirements of the subjects and by establishing a person's degree of ego (personal)

involvement with the attitude/s to be changed. Besides manipulating the functional, informational and self determination factors, there are a number of problem areas in what is considered the communication process which also need investigation.

As Lasswell (1948) put it, we must ask, **"who says what? to whom? through which channel? and with what effect?"** Using different terminology, we can investigate the effectiveness of the persuasion as a function of differences in (a) the source of the message (b) the message itself (c) the medium used and (d) the type of receiver (audience) of the message (Reich and Adcock, 1974:57; Schneider, 1976:271; Kahn, 1984: 97).

The remaining part of this section focuses on these factors which are related to the independent variables of the communication process in attitude change.

1.10.7 The source factors in attitude change

Weiss and Hovland (1951) conducted the first classical experiment to establish the effect of the type of source of information in attitude change. The experiment centered on the factors about the source of information, usually a person, which may increase or inhibit his or her ability to persuade others.

From subsequent experiments and the vast literature reviews of the work of McGuire (1969), the credibility, expertise, objectivity and attractiveness of the source of information are salient factors in determining how persuasive a person will be (Schneider, 1976: 271; Reich and Adcock, 1974:58; Kahn, 1984: 98).

Credibility is usually taken to consist of both trustworthiness and expertise. As the experiment by Weirs and Hovland (1953) and Cook (1969) showed, people easily get persuaded by a source they regard as credible while they get put off by information from a little regarded source (Schneider, 1976: 271; Reich and Ad cock, 1974:59).

In the AIDS campaign, for instance, a person who himself leads an exemplary life and one who has personal experience with the disease may be among the sources considered to be credible enough to effect change in others.

From Schneider's further literature review of the work of Hovland (1953), how a person is liked or disliked and familiarity (a factor which usually produces liking) are other factors that enhance or reduce somebody's persuasibility. Physical appearance, exhibited through the dressing, also enhances respect for the communicator as was found out in political propaganda between well-dressed and 'hippie' dressed campaigners in the United States (Schneider, 1976: 274).

Objectivity, the second component of credibility, is manipulated by the factors of bias, the side of the argument taken, intent to persuade and whether or not communicator forewarned his subjects (Schneider, 1976: 274; Kahn, 1984: 98).

In the vast literature reviews of Kahn (1984), Reich and Adcock (1974), Schneider (1976) and Cialdini, Petty and Cacioppo (1981), subjects who received unbiased communication were more likely to change than the subjects who saw the communication as mere propaganda. Also, one-sided messages were found to be less effective than two-sided arguments when the audience disagreed with the communication. A one-sided argument is only effective if the subjects know

little about the issue or if they are in agreement with the advocated position even before the communication (Kahn, 1984: 98; Schneider, 1977: 273; Reich and Adcock, 1974:64)

Intent to persuade or the level a person should make clear his or her advocated position is the other manipulation of objectivity. Although vast research has been conducted on this factor, the results continue to present contradictory results. Jack Brehm's reactance theory, which is based on his vast research, postulates that people do not want their freedom to be taken away hence change has been found to be negative when the persuader was too insistent on a particular position than one who made a 'softer' appeal.

On the other hand, other research findings suggest that 'harder' appeals effect considerable change when admired persuaders, such as beautiful ladies or handsome gentlemen, are used (Schneider, 1976: 273; Reich and Adcock, 1974: 59).

The last manipulation of objectivity is whether the subjects should be forewarned or not.

The available literature reviews are conclusive that forewarned subjects tend to change less than those who had not been forewarned as the forewarned subjects tend to prepare themselves against the on-coming persuasive messages (Schneider, 1974:273; Kahn, 1984: 98).

In summary, evidence is fairly clear that expert and prestigious sources tend to elicit more attitude change than non expert sources. The evidence on objectivity is, however, less clear. Most, but not all, of the available evidence suggests that a biased or obviously manipulative communicator elicits less change. It is supposed, on the other hand, that when the non objective communicator has benign intent or is perceived as a 'good' person, she or he may elicit as much or even more change than the objective communicator.

When, however, the communicator's intent is nonbearing or is perceived as manipulative or 'bad', the lack of objectivity may retard attitude change. This interpretation has not, however, been fully tested.

1.10.8 The message (content) factors

The message, or argument, that people use in order to persuade someone to change his or her attitude is to some researchers the core of the problem. After all, as Schneider (1976) observes, when we investigate 'who' persuades 'whom' the question 'with what' arises. In this regard, a number of factors relating to the presentation of the message may be investigated or manipulated.

Whether or not we use scare tactics, the choice of explicit or implicit messages, the extremity of the messages, the timing of presentation in the case of more than one speaker, confidence and uncertainty and whether the message is overheard or official are some of the manipulative message factors in attitude change.

Fear arousal is one major area which has attracted massive research but which all end up with conflicting results. Hovland and his colleagues reasoned that fear should increase the persuasiveness of a message in that people are expected to get motivated to do something when frightened by adopting the recommended course of action to reduce the unpleasant condition

(Schneider, 1976: 276; Kahn, 1984: 100; Reich and Adcock, 1974 63). The majority of the other researches, however, produce the reverse of the findings of Hovland and his team.

The vast literature reviews by Schneider (1976) and Kahn (1984) of the works of Irvin Janis and Seymour Feshbach (1953), for instance, suggest that students who had attended a lecture on how to brush their teeth changed more than the ones who had attended a lecture with colour photos of severe mouth infections designed to create high fear (Kahn, 1984: 100). In support of this work, Feshbach and Mewborn (1976) argue that reassurance, not fear, enhances persuasion. As Kahn (1984) observes, people who lack the resources to avoid the danger tend to argue against the recommendation and thus remain unpersuaded.

Kahn (1984) further observes that **"in fact, in such cases people will be more concerned about reducing the unpleasant experience of fear and will avoid thinking about the issue"** (Kahn, 1984: 100).

There is also sufficient evidence to suggest that people who fail to adopt the recommended course of action are left with high fear. As a result, they may try to minimize the dangers by convincing themselves that they will not be affected or, as a last resort, by not thinking about the issue altogether (Kahn, 1984: 100; Schneider, 1976: 273). It may be concluded from the foregoing, that scare tactics are successful only when the subjects have the psychological and material capacity to adopt the unpleasant condition with minimal loss of their self identity.

Presentation of the message explicitly or implicitly is another variable that has been a subject of investigation and manipulation. Reich and Adcock (1974) quote extensive literature of the work of McGuire (1968) and Hovland and Mandel (1952) and establish that explicit messages are more effective on non intelligent, less educated or less motivated subjects. Implicit messages, on the other hand, are found to be effective among subjects who are capable of interpreting the messages on their own (Reich and Adcock, 1974:66).

Apart from the danger that more distant things tend to be forgotten as more recent ones are remembered, there is strong research evidence to suggest that the first speaker on an argument has greater chances of swinging the audience to his or her side i.e. primacy. However, primacy effect overdoes recency effect only on conditions that both sides are presented by the same speaker and when the subjects are ignorant of the on-coming conflicting argument and when they (audience) are aware that their opinion on the issue will be published (Reich and Adcock, 1974: 65; Kahn, 1984: 99).

Confidence and officialness of the communication are the last two message factors that have attracted massive investigation. From available evidence, particularly of the work of Walster and Festinger (1962), overheard communication (rumours or grapevine) tend to be believed much more easily than the official versions. This assertion links up well with Jack Brehm's reactance theory which suggests that people resist when they are aware that they are being persuaded (Schneider, 1976: 273; Reich and Adcock, 1974: 59).

As would be expected, messages that are presented more confidently tend to persuade more than the messages that are presented with uncertainty. Reich and Adcock (1974:61) observe:

"a source is increasingly persuasive as his message increases in confidence whether expressed over linguistic or kinetic channels."

Besides the above psychological variables, the factors associated with the technical quality of the messages, although not given prominence by psychological researchers, need further investigation. From the point of view of communication theorists, the physical appearance i.e. presentation quality of the messages may play a significant role in influencing persuasibility (Mody, 1991: 107).

1.10.9 The receiver (audience) factors

Receiver factors are another element in attitude change. First, the stable individual differences which are usually referred to as personality differences are considered. Some people are generally considered to be naturally stubborn and thus refuse to be drawn into attitude change by marshaling counter-arguments (Schneider, 1976: 279). Other people, on the other hand, never seem to be able to hold their own; they cave in easily without resistance.

McQuire (1969) provides the most comprehensive way of analyzing individual differences as he suggests that these individual differences tend to affect attention, comprehension, and yielding stages of communication differentially (Schneider, 1976: 276; Reich and Adcock, 1974: 69). Intelligence, self-esteem and sex have been established as some of the determinant personality variables. Although more intelligent people easily comprehend communicated messages, they tend to yield less to persuasive messages they do not agree with. The less intelligent, on the other hand, have less comprehension, and thus less yielding too, on complex issues. It turns out, however, that such people are easier to convince on a number of issues due to lack of confidence for defence (Schneider, 1976: 279).

Sex and self-esteem are two most popularly studied individual differences. Schneider's literature reviews of the works of Hovland and Janis (1959) and Allan and Crutchfield (1963) suggest that females tend to conform and change their attitudes more than males do (Schneider, 1976: 279), though some studies have shown conflicting evidence (e.g. from Schneider's literature reviews of the works of Sistrunk and McDavid, 1971 and Allan and Newton, 1972).

The explanation for women persuasibility is that they receive more cultural training for conformity although, as in the studies of Sistrunk and McDavid (1971), this is dependent upon the kind of issues being raised (Schneider, 1976: 279).

Though the research results on self-esteem are mixed, it has been accepted, at least theoretically, that high esteem people tend to change less on simple matters but their persuasibility tends to increase on complex matters which they easily comprehend. Their particular attention on complex issues may also be explained by the fact that people who are high in esteem tend to pride in themselves and would, therefore, not like to be associated with simple issues. The low esteem recipients, on the other hand, tend to be easily persuaded generally due to lack of self-confidence but are less persuaded on complex subjects which they do not easily comprehend (Schneider, 1976: 281; Reich and Adcock, 1974:70). Other factors such as anxiety, dogmatism and prejudice are all seen as relevant variables in attitude change (Reich and Adcock, 1974:69).

1.10.10 The factors relating to context (situation)

Besides the variables associated with the communication process, a number of external factors - such as the speaker's style, the nature of the appeal and the medium or media used - affect the persuasiveness of the speaker and their messages (Kahn, 1984: 99). Kahn's (1984) literature reviews of the studies of Hall (1980), Hemseley and Doob (1978), Lind and O'Barr (1979) and Miller, Maruyama, Beaber and Valone (1976), for instance, suggest that looking directly at the audience and speaking quickly without hesitation or using qualified phrases enhances the speaker's persuasiveness.

Research has also shown that audiences are less critical of tape and video-recorded messages as they are of written communications.

There are yet other suggestions that complex messages are much more persuasive when presented in written form while simple ones create a greater impact when presented audiovisually. Although widely used, and currently being considered in the HIV/AIDS campaigns, the influence of humour has not been investigated. Scare tactics, on the other hand, have attracted a lot of interest among researchers (Kahn, 1984: 100). The influence of scare tactics has been discussed in the earlier sections of this chapter.

SUMMARY

Several theories about attitude change have been advanced, and the most dominant has been Carl Hovland's approach which is based loosely on reinforcement models and various consistency models, most notably cognitive dissonance theory. Three factors affect change. People may change because they see change as rewarding, because they get new information or because their self-image as open-minded members of society is at stake.

The variables associated with the communication process are also worth analyzing: the source or communicator, the communication or message, and the receiver variables. As regards the source, there is sufficient evidence to suggest that credibility enhances persuasibility. Of the two factors associated with credibility, expertise seems to have a more clearer influence than trustworthiness. Likeable communicators also get a more favourable change effect than unlikeable sources.

A number of message variables have been identified. Although most research findings suggest that fear arousal enhances attitude change, some studies find the reverse. This discrepancy has not been fully explained. The lessons learned from the HIV/AIDS campaigns up to the early 1990s, however, suggest negative (boomerang) effects of scare tactics on a subject that spells doom on the intended audiences. The extremity of the communication is another variable that requires serious thought when packaging AIDS messages.

Most research findings suggest that there is less attitude change for communications which are too close or too far from the recipient's own position, and a variety of models try to predict the intermediate point at which greater change occurs. A great deal of research has also looked at the influence of the individual differences of the recipients in attitude change. Such variables as sex, self-esteem and intelligence show some evidence of influence, albeit weak and inconsistent in some cases.

Besides these variables which are associated with the communication process, other factors associated with the context of the communication are worth taking into account. Although humour is widely used in persuasive campaigns, especially advertisements, there is little research back-up to suggest its effect on persuasion. The communication skills of the communicator, the medium used, the style of presentation of the message are all quite crucial, although not fully exploited by psychology researchers.

The points raised in this whole section on attitude change suggest that HIV/AIDS communications, like all the other types of communications, can only succeed to persuade if perceived as an active rather than a passive undertaking. Its success depends, to a large extent, on the communicator's ability to manipulate some crucial social factors. This now leads us into an inquiry into the usefulness of using the mass media as a means of propagating communication messages to change people's attitudes and behaviours.

1.10.11 The mass media factors in attitude and behaviour change

In the last section the author mentions, albeit in passing, that the mass media are considered a vital manipulative variable in persuasive communication. While appreciating the usefulness of mass communication and mass media such as television, radio, newspapers, posters and billboards under certain social climates, the amount of blind faith that media campaigners, especially change agents, have in them evokes a realistic evaluation and discussion.

The over-use of the mass media as persuasive artilleries in fields like politics, agriculture, health, AIDS, family planning and advertizing, gives a vivid impression that media practitioners are not moving at the same conceptualization pace as media researchers and theorists.

It is for this reason that this author finds it necessary to catalogue development of the theories of mass communication over the decades: perhaps that should go to show our media practitioners how far they are.

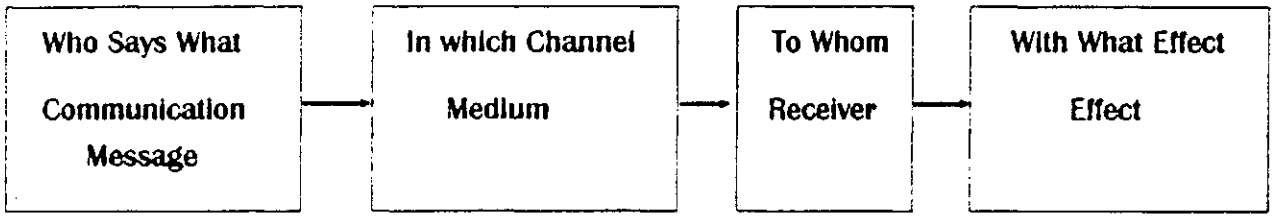
To a large extent though we blame Harold Lasswell and his team for having misled the whole world about media effects from his one-way model. Historians today consider the Spanish Wars at the turn of the century and the First World War as the watershed in mass communication theory and research (Melkote, 1991:65; Schramm, 1971:8).

With the advent of these wars, the libertarian theory of public communication, which believed that individuals were by nature rational, proved to be unworkable. In the West, people were being bombarded with war-inspired propaganda and leaders began to get concerned over the power of the mass media in mobilizing people to fight in the war and also in maintaining their morale under its conditions (Melkote, 1991:65).

Without any effort to delve into the circumstances under which war propaganda influenced the (terrified) audiences, Harold Lasswell, a political scientist, took advantage of the research vacuum at that time and came up with his own conceptualization of mass media effect which has had tremendous influence over media conceptions and practice. Lasswell's theory of mass communication effect, which was by and large influenced by Freudian theory, was in direct contradiction to the libertarian philosophy. His verbal model suggested the following question:

who says **what** in which **channel** to **whom** with what **effect** (Melkote, 1991:65; McQuail and Windahl, 1981:10).

Figure 2 : One-way Lasswellian model of communication



While the Libertarian School recognized the rationality of men and women, Lasswell in his model interpreted the Freudian theory to mean that human behaviour is essentially irrational. Based on this conceptualization, he developed a paradigm which has been called the **"Hypodermic needle"** model (Berlo, 1960) of mass communication effects. The theory is also called by other names: **'Bullet theory'** (Schramm, 1971) and **"Stimulus-Response Theory"** (De Fleur et al., 1975).

McQuail (1981) summarizes his evaluation of this model thus:

> **"the Lasswell formula shows a typical trait of early communication models: it more or less takes for granted that the communicator has some intent in influencing the receiver and, hence, that communication should be treated mainly as a persuasive process. It is also assumed that messages always have effects. Models such as this have surely contributed to the tendency to exaggerate the effects of, especially, mass communication" (McQuail and Windahl, 1981:11).**

Theoretical conceptions of the new mass society in which individuals were assumed to be acting only according to their personal interest with little societal influence were also developed to support the new media effect models. Influenced to a great degree by these conceptions, the early mass media effect models conceptualized the impact of the mass media as direct, powerful and uniform on individuals (Melkote, 1991:11; Schramm, 1971:7; McQuail and Windahl, 1981:11). This perception of mass communication was apparently reinforced by the apparent success of propaganda during the WWI and the Spanish-American wars. Historians, however, argue that the apparent media success was a result of exaggerated reports from newspapers owned by Pulitzer and Hearst (Melkote, 1991:66).

In the Bullet Theory, the mass media were conceptualized as guns and the messages were the bullets which were used to shoot at defenceless and passive audiences. In the Hypodermic Needle Theory, the media content were seen as medicine which was injected into the veins of passive audiences who offered no resistance (Melkote, 1991:67). The other models such as the Stimulus-Response and the SMCR also tended to derive their constructions from the work of Lasswell. In the Stimulus-Response model, every Stimulus S (or message) was thought to produce a definite response R in the receiver O (McQuail and Windahl, 1981:41). Berlo's SMCR model, which had tremendous influence among development communicators, conceptualized the communication flow as a simple, mechanistic process of message transmission (McQuail and Windahl, 1981:41).

All the models catalogued above upheld the stereotype view of the omnipotent source and the passive receiver (Melkote, 1991). The mass media, between the wars, were seen as powerful instruments which could be manipulated to influence people's opinions and attitudes, and possibly behaviours, in a relatively short period of time. These theoretical conceptions can be summarised in the words of Katz (1963) who notes that:

> **"the models in the minds of the early researchers seem to have consisted of: (i) the all-powerful media, able to impress ideas on defenceless minds; and (ii) the atomized audience, connected to the mass media but not to each other" (Melkote: 1991:67).**

As indicated earlier, these theoretical conceptions have had overwhelming influence in the practice of media campaigns despite the spurious evidence to support their validity. The good news is that they evoked further inquiry into their legitimacy. From these inquiries have emerged alternative mass communication theories which suggest that in fact, contrary to what Lasswell and his team perceived, the mass media are mere intervening variables which could not be depended on all by themselves.

1.10.12 The theory of minimal effects of the mass media

The second phase of studies into media effects attracted some best brains in the social sciences from the late 1930s: thanks to the provocation generated by the Lasswell team. Inquiry into media effect was not limited to the media scholars (in fact there seems to have been non-existent at that time) as other social scientists jumped onto the bandwagon.

Psychologists were concerned about the influence of the in-the-head variables, sociologists were concerned about the influence of social groups, political scientists in political campaigns and economists about the influence of advertising on consumers. New areas of inquiry began to open up and new questions regarding under what conditions the media would work effectively emerged.

From a series of studies, some performed under laboratory conditions and others in the social environment, the scholars began to shoot down Lasswell's Bullet Theory. As Schramm (1971:9) points out:

> **"It did not square up with facts. The audience, when it was hit by the bullet, refused to fall over. Sometimes the bullet had an effect which was completely unintended. For example, in the Mr. Biggott experiment when prejudiced people were fed with anti-prejudice propaganda, they actually used it to reinforce their existing prejudices."**

Studies from all angles had began to indicate that persuasive mass communications function far more frequently as an agent of reinforcement than an agent of change. When a given audience was exposed to particular mass communicated persuasion, reinforcement, or at least constancy of opinion, was found to be the dominant effect. Minor change or minimal effect, especially in the extreme of opinions, was found to be the next most common; and conversion was typically found to be the most rare (Klapper, 1960:15; Melkote, 1991:70; Schramm, 1971:9).

Based on these seemingly uniform results the researchers thus conclude:

> **"It would appear to be no exaggeration to say that the efficacy of mass communication influencing existing opinions and attitudes is inversely correlated with the degree of chang (Klapper, 1960:15).**

The scholars do appreciate, however, that we cannot completely rule out the fact that there a incidences and circumstances when conversion does occur. Rather, the general consens seems to suggest that by comparison conversion is rare, and that persuasive communicati normally tends to serve more heavily in the interest of reinforcement and minor change (Klappe 1960; Melkote, 1991; Schramm, 1971; McQuail and Windahl, 1981; Dexter and White, 1964

The first major sociological step in explaining why different people react differently to the sam communication was taken in what has come to be called the Category Theory - thanks to t advertisers who, because of their need to measure their audiences and tailor their commerci messages accordingly, led to financial support into consumer preferences. From the audien surveys designed to ascertain customer tastes it became apparent that consumers had differe tastes.

As Schramm (1971:9) observed: **"it became quickly apparent that most college-educat people had different tastes from those of elementary- school graduates, young peop from old, males from females, city people from rural people, rich from poor, and forth."**

As the theory was examined more carefully, it became clear that the groups people belonged had some considerable influence on their communication habits and their reactions to t commercial messages were tailored in a way that would defend the group norms. The influen of interpersonal communication was also identified (Schramm, 1971:9).

The works of Lazersfeld, Berelson and Gaudet (1948) and Berelson, Lazersfeld and McPh (1954) on political decision-making in the 1940 and 1948 US Presidential electior respectively, were the major studies which recognized the effect of the mass media from that powerful to minimal effect and, like in the consumer studies, the role of influencials or opini leaders in voter preference (Klapper, 1960; Melkote, 1991).

Besides insignificant influence of the mass media in influencing political decisions, compar to primary and peer groups combined, the study also discovered poor media exposure to ma media - a reverse of the Bullet Theory of uniform and powerful effects. The panel analysis voter preferences before and after media exposure in the two studies also found the power the mass media in reinforcement of values and opinions rather than conversion (Klapper, 196 *Melkote, 1991).*

Klapper (1960) thus observed that **"reinforcement, modification, and conversion wer found to have occurred with the same relative incidence as they had done in their earlie study"** (Klapper, 1960:16).

The tendency of the mass media to reinforce rather than change people's attitudes have als been documented by other researches on political and non-political topics. Klapper's literatur reviews of the studies by the Bureau of Applied Social Research, for instance, document tha

70% of the 560 adults that were interviewed after a week-long media and public relations campaign designed to improve their attitudes toward the oil industry had retained their original 'pro' or 'anti' classification. Thirteen per cent switched from 'anti' to 'pro', 9 per cent switched the opposite direction (Klapper, 1960: 17).

A study of limited scope by Schramm and Carter (1959) found that an election campaign telecast had changed only 1 per cent of the 65 viewers. Numerous laboratory studies also noted greater incidence of minor change as opposed to conversion (Klapper, 1960:17).

The work of Carl Hovland (1949) and his team inflicted the final punch on the Lasswellian conceptualization of the effect of mass communication in bringing about direct and lasting effects. Concerned about how and why individuals responded to persuasive messages, Hovland's work showed that the mass media were ineffective in improving attitudes of the soldiers toward aliens and increasing their motivation to fight. The study found that the social categories (for instance, level of education) to which the soldiers belonged and individual differences were in fact more predictive of certain effects than were the mass media (Melkote, 1991:71).

The configuration of the work of Hovland and colleagues and the earlier researches of people like Berelson, Lazarsfeld, Gaudet, McPhee, Katz and others gave rise to inquiry into the mediating forces or interventions into media effectiveness.

1.10.13 Mediating forces in media effectiveness

After decades of research it was resolved that communication works to reinforce existing opinions or values and that it cannot, all by itself, cause effect. Rather, it operates in the midst of other mediating forces and conditions which, although considered external to the communication itself, have great influence on how successful the communication will be on an individual.

This section will specifically focus on how reinforcement is supported by:

(i) Predisposition and related processes of selective exposure, selective perception, attention and selective retention;

(ii) How groups and their values affect communication;

(iii) The role of opinion leaders; and,

(iv) The role of interpersonal dissemination of content of communication.

(i) Predispositions and related processes: selective exposure, selective perception and selective retention

After decades of research it has been proved beyond doubt that the values, opinions and attitudes people hold before being exposed to communication have great influence on their reaction to the oncoming messages (Melkote, 1991; Klapper, 1960; Dexter and White, 1964).

People expose themselves to communication which is in accord with their existing psychological predispositions. Their dislike for unsympathetic messages makes them reject the messages or to recast and interpret such messages to fit their existing views, or to forget them more readily than messages that fit their views (Klapper, 1960:19). These processes have come to be known as 'self-selection' or 'selective exposure', 'selective perception' and 'selective retention'.

a. Selective exposure (attention)

Research has profoundly proved that people have a tendency to expose themselves relatively to communications that are consonant with their beliefs, ideas, values etc. (Melkote, 1991; Klapper, 1960; Dexter and White, 1964). Dexter and White (1964) thus observe:

> **"Human attention is highly selective. People learn to focus their attention on those aspects of their environment on which the satisfaction of their (immediate) needs is dependent" (Dexter and White, 1964:74).**

By this theory, it would be difficult, if not impossible, to entice some Catholics to pay attention to media messages on condoms in the HIV/AIDS campaign since the official teaching of the church does not support the use of condoms.

b. Selective Perception

Regardless of exposure to communications, our perceptions of an event, issue, person, or place are usually coloured by our latent beliefs, attitudes, wants, needs or other factors. As Sereno and Bodaken (1975) observe:

> **"Perception isn't the passive, object, camera-like recording of what's 'out there', as assumed in the Common Sense View. Our senses don't transmit objective, impartial copies of the external world to our brain. Rather our perception of the world is an active, creative blend of what's 'out there' and what's in us. Perception represents our inseparable involvement with the world. Thus we don't have different reactions to the same 'thing' for the 'thing' ins't the same for each of us" (Sereno and Bodaken, 1975:23).**

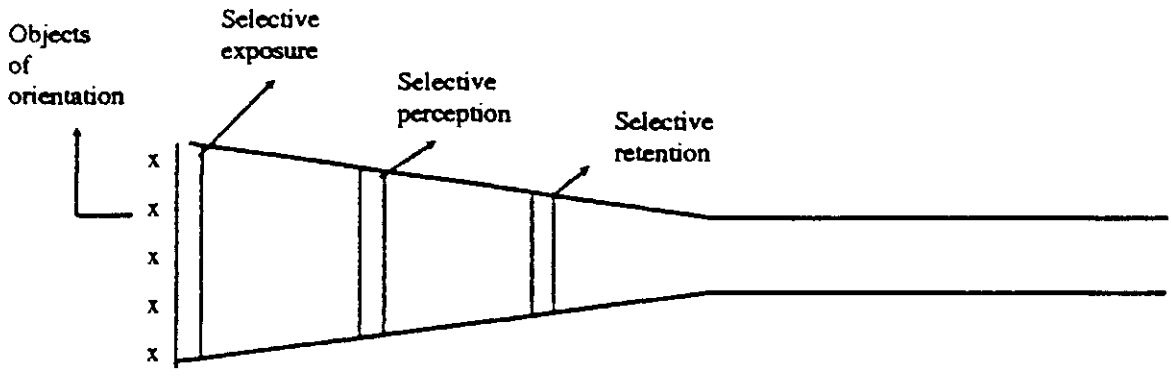
Thus all oncoming messages are recast or re-coloured to suite us. Klapper (1960) observes that a perceiver is likely to **"recast (the message) to fit not only his span of comprehension and retention, but, likewise, his own personal needs and interests. What was outer becomes inner; what was objective becomes subjective"** (Klapper, 1960:11).

c. Selective retention

Research has also showed that even the individual's retention and recall of information is influenced by factors such as his/her needs, wants, moods, perceptions, and so on (Melkote, 1991; Klapper, 1960). The selection of what to keep is justified by the fact that human mental files, like the computer bytes, are quite limited and thus call for selective storage.

From all these selective processes we learn that, contrary to the assertions of the Lasswellian School, the communication audiences are not defenceless targets to persuasive communication. Individuals are very active in receiving, processing, and interpreting information. As Melkote (1991) observes, the three selective processes constitute the first set of rings of defences for the receiver with selective exposure (attention) constituting the outermost of the three (Melkote, 1991:72). Graphically, Melkote (1991) represents the three processes as follows:

Figure 3: Rings of defence of receiver



(Source: Melkote, 1991: 72)

ii. The impact of group and group norms

Considerable research has recently focused on the influence of primary and peer groups in the processes of communication and how these groups exercise influence upon the perceptions, opinions, and attitudes of their members (Klapper, 1960:26).

Based on the host of researches on the subject, it has been concluded, with considerable evidence, that the groups to which we affiliate ourselves, and in the effort to maintain their norms, i.e. dos and don'ts, have considerable influence on our reactions to the communications we are exposed to (Klapper, 1960; Cialdini, Petty and Cacioppo, 1981). In an effort not to fall off from the group we make sure that on-coming messages are accepted only insofar as they are not in dissonance with the views of the other members of the group.

As Klapper (1960) observes: **"many ostensibly individual opinions and attitudes (are) primarily social (in) character, i.e. they are norms of groups to which individuals belong"** (Klapper, 1960:26).

By the findings of the various group influence researches, the social groups by and large serve as agents of reinforcement and may influence mass communication to do likewise (Klapper, 1960: 26).

The recognition of the group as an intervention in persuasion has two implications for the AIDS campaign, especially among the youth, in Zambia:

(1) there is need to identify the groups and the group norms which the youths are part of as a starting point of any persuasion; and,

(2) there is need, subsequently, to turn to, or strength in cases where it exists, peer education as a positive intervention in the AIDS campaign to support the mass communication campaigns.

iii. The role of opinion leaders

The potential role of opinion leaders in the service of reinforcement has been a subject of considerable research. The concept of opinion leadership or the 'two-step flow' of communication was first formulated by Lazersfeld, Berelson and Gaudet (1948). From their

analysis of the 1940 US presidential elections, the researchers observed that **"personal contacts appear to have been more effective than the mass media in influencing voting decisions"** (Klapper, 1960:32).

The role of opinion leaders in influencing the people's reactions to communication was also found in numerous other researches including agricultural communication. Their influence is based on the fact that opinion leaders are the most powerful in their societies, have more access to the channels of mass communication and are, usually, leaders of groups.

As Klapper (1960) observes: **"mass communication may enter this decision-making process at several points, but regardless of its port of entry, it is likely to become susceptible to the mediation of the opinion leader. It may, for example, provide the follower with information, define a point of view, or otherwise provide raw material which is later molded by the opinion leader"** (Klapper, 1960:33).

The fact that these 'influencials' are also leaders of groups, i.e. church leaders, politicians, the press, headmen or chiefs etc. in the case of Zambia, and, therefore, the definers of group norms, gives them the potential to re-define mass communication in the interest of the group and, hence, serve as agents of reinforcement.

The implication of the opinion leadership concept in persuasion is that there is need to identify the most influencial members of the audience communities of mass communication and work with these interventions at interpersonal level to prepare them for the opinions to be espoused by mass communication. The use of what are referred to as 'role models' in the AIDS campaign in Zambia may be a good starting point but there is need to penetrate all levels of society to identify more 'influencials' whose opinions about AIDS must be re-molded before mass communicating to them.

iv. The role of the interpersonal sources of mass communication

Klapper (1960) observes that the habit of telling friends about the mass communication which they themselves may have missed appears more likely to supplement the reinforcing capabilities of the original communication (Klapper, 1960:30).

Small group studies indicate that communications are likely to be transmitted and defined along social lines of friendship, by shared interest, and especially by shared opinion. This process has been found to create a secondary selective exposure in the sense that the supplementary communication from the second person are likely to originate from the persons that are sympathetic to the messages. In addition to that, the second person may have altered the communication to suite him/her (Klapper, 1960).

1.10.14 Emerging generalizations

From the theories advanced thus far about media effects on individuals, the author wishes to agree with, and revitalize, the generalizations espoused by Klapper (1960) that:

(i) Mass communication ordinarily does not serve as a necessary and sufficient cause of effects, but rather functions through a nexus of mediating factors and influence;

(ii) These mediating factors are such that they typically render mass communication a contributory agent, but not the sole cause, in a process of reinforcing the existing conditions;

(iii) When mass communication does function in the service of change, one of two conditions is likely to exist:

Either:

(a) the mediating forces will be found to be inoperative and the effect of the media will be found to be direct; or,

(b) the mediating factors, which normally favour reinforcement, will be found to be themselves impelling toward change.

(iv) There are many residual situations in which mass communication seems to produce direct effects, or directly and of itself serving certain psycho-physical functions; and,

(v) The efficacy of mass communication, either as a contributory agent or as an agent of direct effect, is affected by various aspects of the media and communications themselves or of the communication situation (including, for example, aspects of textual organisation, the nature of the source and medium, the existing climate of public opinion, and the like) (Klapper, 1960:8).

1.10.15 Conditions under which communication may effect behaviour change

It has been established over time that most human actions are sought in people's efforts to establish a relationship with their environment that is likely to satisfy their needs. By this way of thinking, a communication cannot confidently be said to produce behavioural effects itself since it merely serves to link the individual to some aspect of his environment, thus enabling him to react to it or manipulate it (Dexter and White, 1964:81).

This environment-communication-action relationship is thus explained as follows: a given situation exists in the environment; this situation is reported by a communication that comes to the attention of individual; the individual then adjusts his behaviour in a manner calculated to satisfy some want or need (Dexter and White, 1964:81).

In view of the weak position in which communication finds itself, it is necessary to identify the conditions under which effectiveness may be enhanced. Dexter and White (1964) identify three conditions under which communications may lead to adjustive behaviour.

First, they can report an actual or expected change in the environment, or a previously known fact about the environment, which is considered important by the person at the receiving end such as death from AIDS or the fact that abstinence makes a person prevent getting AIDS.

A second way is by pointing out an existing feature of the environment (not a change or completely new fact) and reminding the individual that his needs would be served if he adjusted his behaviour in a given manner such as reminding a person of the number of HIV/AIDS cases and reminding him of his own risk of catching the disease if he does not change his sexual habits.

The third way in which communication can lead to adjustive behaviour is by bringing to a person's attention a new pattern or patterns of relationships with the environment or providing alternatives

for serving their needs better than the original pattern. Education brings about that kind of reorganisation (Dexter and White, 1964:83).

If the information is found to be useful, communication, in all three instances, can effect immediate adjustive behaviour. If the adjustment is not immediate the information contained in the communication may be stored in the form of attitudes or remembered facts to guide future behaviour (Dexter and White, 1964: 83).

Summary

This section indicates that, contrary to the view espoused by earlier researchers of the Lasswellian School, mass media communication is a weak intervention which by itself is likely to act as a mere agent of reinforcement rather than change of attitudes and behaviour. The processes of selecting information, the role of opinion leaders and group norms and interventions of interpersonal interactions to mass communication are all factors that work in the service of reinforcing existing views and attitudes. There are, nevertheless, conditions under which mass communication can be positively manipulated to produce adjustive behaviour. As communicators, we need to identify and capitalize on these conditions.

1.10.16 Mass communication and the process of development

Talking AIDS, like talking agriculture, nutrition, general health, education and family planning, is talking development. This broad statement manifests the authors' agreement with the perception of development advanced by Nigerian Ogboghodo (1987) that development is any deliberate attempt at improving the living standards as well as the quality of life (QOL) of the masses, the majority of whom reside in rural areas, and making the process of the their development self-sustaining (Ogboghodo, 1987).

In a country like Zambia where resources are limited for physical (interpersonal) means of conveying development messages to the lot of the masses who, as indicated earlier, mainly reside in the rural areas, it is inconceivable that the social transformation espoused by Ogboghobo (1987) would occur without some means of mass communication.

As Emile McAnany (1980), refering to the role of extension workers, observes: **"In most Third World, these agents are in short supply that they can reach only a fraction of the farmers, yet there may be other ways such as the mass media of diffusing the same information to a much larger portion of the target population"** (McAnany, 1980:4).

Zambia, for instance, occupies 752,614 square kilometres with about 5,000 people involved in the AIDS campaign. Assuming that the campaign had been conducted only interpersonally, each AIDS counselor would have 8,000 people to deal with who, if the 752,614 square kilometres were stretched, would be separated by about 1,000 metres from one another.

In total each campaigner would thus need to walk a distance of about 17,000 kilometres per year. Clearly this is not humanly possible. More so, as McAnany (1980) observes, no developing country would have the time and resources to commit to such a venture.

It is for this reason that change agents have over the decades conceptualized mass communication, particularly through the media, as a convenient partner in the development process.

It should be noted, however, that the adoption of the mass media in modern development processes does not in any way suggest that these means of diffusing information are more effective than the interpersonal means - as the vast literature reviews on their effectiveness tend to suggest. Their use is, nevertheless, justified and inevitable given the limitations associated with the interpersonal forms of reaching out to the masses of people who need developmental information.

The partnership between development and communication has since seen the birth of three terms: development communication (DC), development support communication (DSC) and communication for development (CD) whose distinction is technical and not the interest of this section .

For the purpose of this section any reference to DC simply denotes the purposeful, planned and deliberate use of the mass media to support the process of improving the lives of the millions of people who need information to make their livelihood self-sustaining and emancipated from disease, hunger, poverty, ignorance etc.

Although mass communication, especially through the television and radio media, continue to excite development planners, it has over the years become apparent that this is not the best way of achieving the developmental goals.

To understand this argument we need to get to the archives so as to be able to analyze the performance of the mass communicated information and the institutions of such mass information, from the time they were first engaged in the development process. Only then can we understand where we have gone wrong, where we are and where we are going.

Media historians identify three major decades which symbolize differences in perceptions with regard to media performance and strategies. These are: the **first decade,** the **second decade** and the **decade of alternative strategies.** The rest of this section looks at how development and communication agents attempted to address the issues of poverty, ignorance, disease, hunger etc. in the least developed countries through these three decades.

i. Development and development communication theories: first decade

The advent of the first Overseas Development Assistance (ODA) after the Second World War and the subsequent creation of the World Bank and the International Monetary Fund (IMF) after the war heralded the beginning of organised Western-oriented development strategies and theories for the developing world (Melkote, 1991: 35).

The years during the 1950s and 1960s are referred to as the era of the dominant paradigm of development characterized by emphasis on externally-propelled development programmes (Melkote, 1991: 15).

The theories of both development and development communication emanated from researches of classical modernization theorists who perceived traditional societies as both the focus of change and locus of blame for lack of development. The problems in the traditional societies in the South were analyzed and explained with respect to the discipline of the researchers.

In as far as psychologists such as McClelland were concerned, the inhabitants of the folk societies of the South needed the in-the-head variables that were compatible with development such as education, empathy and the **"need for achievement"** feelings (Idid, 1990:36). The top priority for psychologists was the introduction of institutional and psychological factors that would reduce the 'laggardness' of the peoples of the South in order to produce modern men and women (Melkote, 1991:45).

The folk and urban societies to the sociologists were regarded as poles apart on the development continuum. The concern of the sociologists was the injection of pattern variables in the traditional societies that would encourage measurable industrialisation and urbanisation to reduce the North-South gap (Idid, 1990:37). The infusion of Western capital and technology was also seen as a necessary pre-condition for the growth in Gross National Product (GNP) and Per Capita Income which were regarded as measures of sustainable social change (Idid, 1990:38).

For the political scientists, political participation was regarded as an independent variable to development.

In his **"Stage of Economic Growth"** W. W. Rostow (1960), a classic economist, observed that societies were all moving in one path from traditional societies to highly sophisticated and urbanised ones at which stages it was anticipated that they would have reached a period, referred to as **"high mass consumption"**.

The characteristic feature of the development theories of the first decade were top-down, Western-initiated, persuasion-oriented and trickle-down type of development. (Melkote, 1991; Mody, 1991).

Communication theories of the first decade

On the other side of the horizon, communication scientists were busy postulating several approaches of how the mass media could be used to invigorate the process of developing the South.

The belief in the power of the mass media, which was supported by lopsided research findings of people like Lasswell and Schramm, created anxieties among development planners who saw the mass media as independent variables to change. The **"hypodermic needle" or "bullet theory"** convinced them beyond doubt that the **"all powerful"** mass media could accomplish their mission of modernizing the South.

The mass media were seen as a necessary factor to create political consciousness and participation (Idid, 1990; Lerner 1987; Inkeles and Smith, 1974). It was also believed that the mass media would enhance exposure and empathy among the inhabitants of the South by so doing reducing the South-North gap (Melkote, 1991).

With the perceived ability to widen the perceptial horizons of the people of the South, the media were seen as a catalyst for diffussion of knowledge, technology and innovation and that they instilled the attitudes appropriate for the creation of modern men and women (Idid, 1990:37).

In the **"theory of modernization"** Lerner (1958) and Mishra (1973) established a casual relationship between media and literacy (Idid, 1990). The other perceived roles of the mass media in this diffusionist approach included culturalisation, motivation and persuasion to change the Third World values along the Western path which was seen as synonymous to development itself. These perceived values of the mass media were considered as qualities of an appropriate agency of change (Idid, 1990).

Consequently, 100 newspapers, 50 radio sets, 20 television sets and 20 film sets were set as the minimum media requirement per 1000 people in the communities of the South.

The phenomenal factors of the media during this era were top-down, headquarter-centred and headquarter-produced programmes to an audience that was regarded as homogeneous in character and in its reaction to communication (Mody, 1991).

Emphasis was also on the mass media which were considered as magic multipliers of development benefits. This optimistic perception gave rise to what is termed as the **"revolution of rising expectations"**. With all these perceived positive attributes of the mass media, the development planners were convinced that they had found the necessary formula and facility for developing the South. These perceptions, however, turned out to be only wishful thinking as the second decade proved.

ii. The second decade of development - 1970s: development and development communication theories revisited

The decade, the 1970s, is regarded as the period of pessimism. Development agents, planners and leaders in the South were all disappointed with the rate of development in the newly-independent nations in the South. The perceived **"Revolution of rising expectations"** thus turned out to be a **"Revolution of rising frustrations"** (Idid, 1990; Melkote, 1991).

The much-publicized development of the South turned out to be negative development after all. The poor became poorer by the turn of this decade.

More than a quarter (1.5 billion) of the world's population were said to be living in poverty while 700 million had been reduced to destitution (Todaro, 1991). Poverty at national and individual levels had increased in comparative terms. The much preached urbanisation produced no more than slums full of disillusioned criminals. While only 275 million (38% of the 724 million of the global population) lived in urban cities in 1950, the figure had gone up to 2.4 million (about 50% of the global population) in 1990. Sixty percent (1.45 billion) of these urbanities were in the cities of the South (Todaro, 1991).

Also while urban population growth in two of the major cities of the world - New York and London - went up at the rate of 1% per annum growth in the African cities was going up by 7%. Urban population growth did not correspond with the social amenities. By 1990 Cairo, for instance, was struggling to maintain 10 million people with water and sanitary facilities built to service two million people. Under-employment and unemployment also went up contrary to the belief that capital infusion and industrialisation would create more jobs (Todaro, 1991).

The growth rates and per capita incomes were nothing to get excited about. India's per capita income was US $64 and US $100 in 1959 and 1973 respectively indicating a 34% rise while that of the United States was US$ 2100 and US $5015 respectively representing a 150% rise between the two periods.

Although food production levels went up by 3% they were almost swallowed up by the 2.2% population growth resulting in continuous importation of food and a vicious cycle of poverty (Idid, 1990).

Disappointed by the turn of events, development scholars of the modernisation school had began to re-assess their strategies. A new school of the dependency theory scholars such as Andrew Gaunder Frank emerged with a critique of the unfavourable relationship between the North and the South which they compared to a metropole-satellite relationship. The dependensia scholars blamed the rising poverty in the South on the capitalist and exploitative nature of the Western countries (Frank, 1974). The dominant paradigm approach to development was also criticized for neglecting the social, structural and political barriers to change and for placing too much emphasis on the individual as the focus of change and locus of blame (Melkote, 1991).

Media disappointments

The media were not spared in the outrage over lack of development during the first decade. The use of the mass media was perceived as the most plausible reason for the widening gap between the rich and the poor. The linear communication theories of researchers such as Lasswell and Schramm raised doubt as they tended to suggest that the mass media were independent variables when in effect they were mere intervening variables dependent on environmental and social factors (Idid, 1990; Melkote, 1991; Mody, 1991).

The transmission mentality of the mass media was regarded as having failed to account for the transactional and multidimensional characteristics of the media. The top-down approach was criticised for, among other things, being too authoritative, too persuasive, too producer-centred, for ignoring the traditional forms of communication and for placing too much faith in the power of the mass media.

The content of some of the messages that were purported to be meant for development were also found to be wrongly targeted with Western examples that bore no relevance to the countries of the South. The composition of rural information from the total programmes broadcast were highly questionable too. In India, for instance, 40% music, 24.8% news and only 5.8% was devoted to rural programmes (Idid, 1990).

The presence of advertisements of multinationals and their products coupled with the ownership of these media by capitalists raised suspicion especially in Latin America (Melkote, 1991). At the centre of assessment was the **"magic bullet"** theory which had been proved to be false.

Hence, the measures of fatalism and empathy vis-a-vis the South were all considered operationalizational artifacts of the researchers themselves (Melkote,1991). The issue at the turn of the second decade was that the communication and media strategies of the 1950s and 1960s had been a disappointment and, therefore, needed revisiting as well.

iii. The third decade of development: the alternative development theories

The bulk of criticism labelled against development and communication theories of the first decade necessitated a fresh start in both fields. Development planners began to emphasize growth-equity models, encouragement of self-determination and self-reliance of the local communities, freedom from external dependency and utilisation of the local material resources. The opening of China to the world and the lessons from its growth were a source of encouragement to the less developed countries (Idid, 1990).

The International Labour Organisation (ILO) developed what it called the Basic Needs Approach (Melkote, 1991). Clean water, food, shelter, security, basic education and participation substituted the more complex and quantitative indicators of development such as industrialisation, urbanisation and transfer of Western technology. The ILO approach was found to be in tune with the call by other scholars for new indicators to development such as institutional (Myrdal, 1970 in Idid, 1990), values, history and ethnicity (Yu, 1976) and other intangibles.

Emphasis was being placed on simple technologies, people-initiated and people-centred development with an intergrated approach. As Robert McNamara, former World Bank president, observed:

> **"No programme will help small farmers if it is designed by those who have no knowledge of their problems and operated by those who have no interest in their future" (Melkote, 1991:199).**

The participation of the people at the grassroots in identifying and implementing development programmes is taken as the key factor in the new development strategies.

iv. Alternative communication strategies: from sender-receiver to sender-cum-receiver.

Communication media in this new era of development are being treated as catalysts rather than the sole cause of change. Emphasis is now being placed on user-initiated communication messages, decoded by the communication experts and change agents and sent back to the users in a spiral shaped fashion (Mody, 1991).

The starting point of the new communication school is audience researches into what and how the grassroots people would like to be communicated to. Over-emphasis on producers which was the order of the day in the second decade is now being reversed by incorporating the intended audience on the production team consisting also of the media people and the subject specialists (Mody, 1992).

Schumacher's **"small is beautiful"** theorem has propelled the use of 'small', regional and localised media to support the mass media in the new integrated approach. The folk media or ora media, theatre, puppetry, drum sound, smoke screen etc. are all being encouraged in the development process (Rapanoel, 1990).

As an improvement on the communication strategies of the alternative strategies, the 1990s has experienced a proliferation of communication scholars who are espousing the application

of genuine audience participation at all levels of the communication process. Participation in development communication is defined as:

> **"A dialogue wherein senders and receivers of messages interact over a period of time, to arrive at shared meaning, after talking over their differences" (Nair and White, 1994:84).**

The participatory approach to communication demands that when designing communication programmes the producers or writers should work with the target communities to produce messages as co-equals. This audience-based approach to development communication is the basis for the proliferation of participatory rural newspapers (Kasoma, 1994), participatory radio (Mody, 1992), radio and television audience research (Mytton, 1992) etc. which are all being encouraged to enhance democratization in the information dissemination process.

The alternative theories of development communication of the second decade and the 1990s are perceived not only as the ideals but also the standards with which formative qualitative evaluation of any media involved with development communicated is undertaken. The amount of audience involvement in the choice of media and message is the fundamental yardstick for gauging the application of the new approach.

1.10.17 The mass media in the HIV/AIDS campaign

The Zambian press has become more sensitive to AIDS in the 1990s compared to the late1980s. In a follow-up to his 1987 content analysis of the treatment of AIDS issues in the Zambian print media, Professor Francis Kasoma's 1994 content analysis discovered that:

(i) Coverage of local HIV/AIDS issues had increased by 39% during the period between 1987 and 1994 and that there was more space allocated to HIV/AIDS stories;

(ii) There were more features (57%) than hard newsstories (43%) suggesting that Zambian journalists were increasingly providing more background information than just bare facts. Statistics for the 1987 ratios between the two types of stories were, however, not provided;

(iii) AIDS stories were beginning to be given prominence as 31% of stories were placed on the front pages compared to 22% in 1987; and,

(iv) There was a prominence of information about prevention (65%) over statistics (22%) and counseling (13%).

Prof. Kasoma concludes that Zambian journalists had improved their attitudes towards AIDS as a news issue (Kasoma, 1994). His two researches were, however, mere content analyses and, therefore, did not delve into impact evaluation of any of the Zambian media in question.

Television viewing is widely believed to have a positive impact in changing people's attitudes towards HIV/AIDS. However, Kwando Bosompra's longitudinal cultivation analysis (Bosompra, 1993), on a panel of respondents with different characteristics in the United States, to an extent supported the theory that media messages almost usually resonate with people's pre-message attitudes.

After establishing the panel's pre-media exposure and post-exposure attitudes in 1988 and 1991 respectively, Bosompra's study made a stunning discovery that for the college-educated respondents, who had positive attitudes before the barrage of AIDS messages on TV, increased

TV viewing tended to be related to an increase in their chances of having more than one sexual partner which characteristically differed from that of non college-educated respondents.

Bosompra concluded that until the 1980s, increased TV viewing tended to be associated with having more negative attitudes towards AIDS (i.e. endorsing more negative statements about AIDS).

Even among the groups that were relatively sympathetic towards AIDS while falling in the **"light viewing category"**, i.e. females, college-educated and the **"highly religious"**, increased TV viewing tended to cultivate in them more negative attitudes towards AIDS (Bosompra, 1993).

This study highlighted the fact that TV mainstreaming, and possibly resonance, occurs under specific conditions only. Bosompra's study was limited to the TV HIV/AIDS campaign. His use of the longitudinal method of data collection also raises the fear of spuriosity of his final result. It is not clear that the observed changes in attitudes over the period under review could be confidently attributed to TV messages alone and not other factors such as the interpersonal sources of information about HIV/AIDS.

The resonance effect theory, which suggests that media messages only reinforce rather than change people's attitudes as indicated in an earlier section, was also supported by another research by Lyttleton who evaluated the impact of the HIV/AIDS mass media information vis-a-vis ethnographic factors among villagers living in one village in northeast Thailand in the early 1990s.

Lyttleton's study discovered that AIDS information was primarily integrated with local conceptions of sexual behaviour and commercial sex. After assessing knowledge levels and behaviour change Lyttleton's study argues that **"community-based imperatives are essential for effective future campaigns"** (Lyttleton, 1994).

Well-focused AIDS campaigns and personal contact are supported as the most influential in increasing knowledge and changing attitudes by the results of a pilot study in three high schools in Jerusalem in 1990-91. The study demonstrated that medical students who had received extensive training in teaching about AIDS and its prevention were able to influence the level of knowledge and attitudes on this subject among high school respondents (details of authorship not provided).

The findings of the study show moderate to low knowledge levels in a sample of 241 students on all AIDS-related questions.

The principle source of knowledge on AIDS among the sample population was electronic media- 47% said their knowledge came from TV. After a series of four lessons in the **"Immune System and AIDS"** programme, there was a 13% improvement on the students' answers to various HIV/AIDS questions. The findings indicate significant success in clarifying for the students the degree of personal risk from contracting HIV but did not affect their fear of the disease as 70% said they were scared of being sick from AIDS.

Although the American adult population is generally said to know the modes of HIV transmission, it was discovered after a multivariate analysis of the effects of communication channel or information source about HIV/AIDS and the recipient characteristics that success of HIV/AIDS education was related to particular audience characteristics (LeBlank, 1993).

The results of the multivariate analysis of this American research suggested that persons of low socio-economic status, older adults, those from racial/ethnic minority groups and those living outside of metropolitan areas had slightly lower levels of HIV-related information. Men and those citing mass media (television and newspaper) as the primary source of information also fell in this category.

After decomposing the effects in a path analysis, LeBlank's survey suggested that the use of information sources or channels, as measured in the survey data, accounted for little of the observed variation in HIV-related knowledge.

This discovery also supports the current development communication theories which suggest that mass media effectiveness largely depends on psychographic, ethnographic, social, economic and other factors prevalent in the audience's milieu.

There also seems to be increasing consensus among media effect researchers in the AIDS campaign that while the mass media are good at creating general awareness, as was discovered in the American and Israeli researches, they are less potent as a means of providing detailed knowledge about the disease (LeBlank, 1993).

In the Nigerian state of Calabar, Isindi Ibia and Young M.U., both of the pediatrics department of Calabar Teaching Hospital, studied knowledge of and attitudes about AIDS of 738 secondary school youths in March 1991 (Isindi and Young, 1992).

The study discovered that most (92%) of the adolescents had heard about AIDS largely through the mass media (77.85%), with parents and teachers contributing less than 40%. About 30% did not know that AIDS existed in Nigeria. Most of them knew that promiscuity, blood transfusion and sharing injection needles and syringes are major modes of transmission. However, a number still incriminated toilet seats, eating utensils, hand-shaking and kissing. Only 31% were aware that condoms provide protection.

For self-protection the youth preferred abstinence (45%) and confinement to one sexual partner (19%). Only 3.6% said they would adopt the use of condoms. To prevent the spread of AIDS, the youths prescribed isolation (37%), treatment (34%) and killing (14%) of diagnosed cases. Most youths (77%) said they would stop seeing friends and 63% said they would reject their relatives who developed AIDS (Isindi and Young, 1992). Compared to the results of the Zambian studies, the Nigerian youths can be said to have been holding highly stigmatized and denial attitudes about the disease as at the time of this particular study.

Isindi and Young established that the mass media were only effective in creating general awareness about HIV/AIDS while detailed knowledge was riddled with misconceptions and confusion. The two researchers, therefore, recommended that physicians in the community should assist in disseminating accurate information with the support of parents, teachers and

the youths themselves. In short, the mass mediated messages needed to be supported by interpersonal sources of information.

The findings of Isindi and Young (Isindi and Young, 1992) were echoed by the observations by Evian and others (Evian et al., 1990) after a formative evaluation of an AIDS educational poster in South Africa (formative evaluation refers to the analysis of the media impact on an audience from an early version of a programme or media material aimed at improving the intended impact of the final version (Mody, 1991).

The poster, developed by the Johannesburg City Health Department, was adapted from a cartoon in the SOWETAN newspaper. The target group identified for the poster were black, literate, sexually active urbanised men and women. The objective of the poster was to present a message that AIDS is a new, life-threatening, sexually transmitted disease and that the use of condoms and single-partner relationships help in avoiding the disease.

The researchers observe general misunderstandings of the specific messages on the poster. The presence of a pregnant woman, for instance, was misconstrued to imply that only pregnant women get AIDS. As observed in Lyttleton's study, community conceptions were also observed to have negative influences on the success of the poster. The **"stick to one sexual partner"** caption, for instance, although well understood, was found to be impractical. The respondents indicated that multiple sexual relationships were regarded as acceptable and common because of migrant labour, single-sex hostels and previous influx control regulations. Condoms were condemned by 90% of the respondents, which indicated their rare use for AIDS prevention. Besides their unacceptability due to fear of suspicions among couples, condoms were said to be rare.

The researchers concluded that although the respondents were generally aware of AIDS, they had little detailed knowledge about the disease and its transmission. The educational poster under review did not help to clear the misconceptions (Evian et al., 1990).

The use of a small sample size (35), however, tends to minimize the external validity of this particular research; a bigger sample might have influenced the final result. The limitation to a qualitative method of data collection might also have negatively influenced the internal validity of the research by either demand characteristics (i.e. the respondents' giving of answers to please the researchers) or evaluation apprehension (i.e. the respondents' timidity to the research exercise).

The data from this evaluation of the poster is nevertheless vital to the study of billboards. Besides being physically similar, the billboards and posters carry more or less that same information in terms of quantity and structure.

The knowledge, attitudes, beliefs and practices vis-a-vis HIV/AIDS among 210 Copperbelt-based lecturers, teachers and instructors in 40 tertiary institutions were assessed by Chiboola (1990) to determine the impact of printed HIV/AIDS materials.

Chiboola discovered, like in many other cases cited in this literature review, a mixture of general awareness about HIV/AIDS and misconceptions. About 83% of his sample knew that AIDS is

caused by HIV, transmitted mainly through sex and that carriers, although healthy-looking, are capable of infecting others.

Though knowledge of these subjects was regarded as generally high, misconceptions of the modes of transmission of the disease were evident. Some respondents indicated a woman who had had an abortion, mosquitoes and casual contact. Reservations of the safety of condoms were expressed by 55% of the respondents. An average of 20% gave wrong answers to a number of questions. The use of condoms was regarded as low and a substantial number indicated having had sex with more than one partner at the beginning of that year, indicating high risk behaviour (Chiboola, 1990).

Chiboola concluded that:

> **"This survey suggests that a majority of people know about AIDS, its dangers and consequences, and how to prevent it. In spite of this knowledge base, it is evident that a number of people exhibit misconceptions and misplaced facts on AIDS. This is of crucial importance to the overall success of AIDS health promotion programmes."**

Although this survey evaluated the knowledge levels and attitudes about HIV\AIDS, albeit to a very limited degree, the researcher did not go further to assess the respondents' perceptions of the individual media being referred to. The impact of the media was, therefore, not evaluated.

In a similar survey, Sylvia Mudenda (1992) evaluated the needs and aspirations of secondary school pupils and their attitudes and advisers on selected issues of sexuality. On the subject of condoms, only 25% saw them as a means of preventing AIDS although a much higher number said they could be used against STDs in general.

Girls felt they had less to do with condoms which made the researcher wonder whether the belief that making girls know about them puts them under more pressure to engage in penetrative sex. Premarital sex received an overwhelming (90%) non approval for reasons of AIDS, STDs, pregnancy and religious taboo.

The pupils also expressed misconceptions and misplacements of facts about the subject of HIV/AIDS. These misconceptions about transmission in particular were not related to the sex, grade or whether the pupil was in a rural or urban school. Although the majority of the respondents rightly indicated sexual intercourse, sharp instruments and blood transfusion, a good number still incriminated coughing, bed bugs, mosquitoes, handshake, clothes, saliva and eating from the same plate as modes of transmission. About half the sample said only the promiscuous people (including beer drinkers and travellers) get AIDS.

A good 80% said there was no cure for AIDS, 50% did not know the virus, HIV, another 50% said they had seen a person suffering from AIDS and over half correctly knew the symptoms of the disease. Another important observation was that the majority of the wrong responses came from respondents who were not members of an AAC. Health workers and grandparents and health workers and AACs were most preferred for HIV/AIDS advice by the girls and boys respectively (Mudenda, 1992).

Mudenda (1992) observed that **"although these secondary school pupils know a lot about HIV transmission and avoidance, there are still important knowledge gaps in their**

knowledge which should be addressed by the relevant formal agencies - Ministry of Health, Ministry of Education, churches - as well as the less formal anti-AIDS clubs, girl guides and boy scouts."

Like Chiboola's study, Mudenda's too did not address the impact of any of the mass media involved in the anti-AIDS campaigns on the attitudes and knowledge she measured.

With regard the impact of billboards, a number of organisations in Zambia and elsewhere have adopted them among their HIV/AIDS IEC programmes. In spite of the increasing preponderance of billboards in the area of HIV/AIDS education, there is no evidence suggesting that their impact in enhancing knowledge, attitudes and behavioural tendencies vis-a-vis HIV/AIDS has been assessed anywhere. Under the circumstances, the results of evaluations on the other subliminal media, such as posters, may be used to generate hypotheses about the billboards. In particular, the formative evaluation on posters carried out by Evian (et al., 1990) - cited earlier - carries a number of observations which can be used to make credible generalisations about the factors that could negatively impact on the effectiveness of any subliminal media. For instance, the results suggest that any subliminal medium has the potential to effectively contribute in AIDS education but that the actualisation of this potential is dependant on the quality of design and display of billboard messages and billboard materials respectively.

From all the studies cited in this chapter, five major observations can be extrapolated about the mass media vis - a - vis HIV/AIDS campaign:

(i) The mass media, although increasingly being used for HIV/AIDS education, have in most cases only been useful in creating general awareness while hardly managing to clear confusions and misconceptions surrounding detailed knowledge of the pandemic;

(ii) The research findings so far echo the current development communication perception among prominent researchers and theorists in the field that the cultivation potency of the mass media is related to the audience's psychographic, social, cultural and other characteristics;

(iii) The electronic media, particularly radio, are the main sources of the HIV/AIDS general awareness information;

(iv) Well-focused and target-specific TV message designs, coming in series, have more chances of increasing knowledge and changing attitudes of people about HIV/AIDS;

(v) The subliminal media i.e. posters and billboards have the potential to be useful in AIDS education but the actualisation of this potential is dependent on factors relating to the quality of design of the messages and display of the meterials containing the messages; and,

(vi) Messeges and drawings presented on posters and billboards are prone to mixed interpretations if not explicitly presented.

The Zambian media researches by Prof. Kasoma only focused on the treatment of stories on the subject by Zambian journalists. The HIV/AIDS attitude and knowledge measurement studies by the two other Zambian researchers also did not evaluate the media effects and the media effect studies cited were conducted in countries with different socio-economic factors, had different focuses and conducted at different times of this AIDS era.

It was for these reasons that this researcher found it imperative to conduct the first-ever audience-based impact evaluation of the Zambian mass media AIDS campaigns in general, and the billboards in particular.

CHAPTER TWO

RESULTS OF THE STUDY

2.1 THE CHARACTERISTICS OF THE RESPONDENTS

Out of the 600 students who were sampled for the quantitative survey, 531 satisfactorily completed the questionnaire to the standard required for analysis representing a 88% response rate. Of these, 43% were based on the Copperbelt (Ndola and Kitwe) and 57% in Lusaka. The males constituted 57% and females 43% of the respondents. The ages of the respondents ranged from 10-14 years (5%), 15-19 (75%), 20-24 (16%), 25-29 (3%) and a small number (1%) above 30 years of age.

On the question of marital status, the majority (93%) of the students indicated being single, 3% married, 1% each for the widowed and engaged, 0.4% divorced while 2% were co-habitating with their spouses although not legally married. Not surprisingly, 94% of the subjects said they had had no children with the rest ranging from expecting (2%) to having more than four children (0.6%).

With regard to religiosity, 60% indicated high religious commitment by indicating that they go to church at least once a week, 37% indicated going to church only once in a while. The non-church goers constituted 3% of the respondents. On exact religion, 97% said they were Christians. Muslims, Buddhists and the ones harbouring other unspecified beliefs constituted the rest. Catholicism constituted the single most represented denomination taking up 37% of the respondents. The Protestants lumped together represented 54% with the self-confessed non believers constituting 5% of the respondents.

On social status, quantified on the basis of material possession, only 2% considered their families to be rich, 56% rated theirs to be in the medium category and 42% considered their families 'not rich'.

Television and radio family ownership were represented by 90% and 94% respectively which suggests satisfactory availability of these media although the question of access and attention were not addressed. As would be expected, radio and TV ownership was strongly related to social status.

The question of educational level was also raised to which 19% indicated that they were in junior secondary school, 66% in senior secondary and 8% and 7% at college and university levels respectively. Of all the respondents only 13% indicated membership to an AAC suggesting low possibility of these institutions being a significant source of information on HIV/AIDS in the type of learning institutions that were visited.

The extent of the spread of HIV/AIDS in the three cities was reflected yet again by the proportion of respondents who indicated having lost a close relation to the disease; 37% indicated having lost some member of their nuclear or not too distant extended family circles. Of the respondents who indicated having lost a close relation to AIDS 7% indicated having lost a brother, 12% a sister 4% each for mother and father and the majority (65%) indicated having lost a relation or relations other than the ones itemised above.

2.2 THE STUDENTS' KNOWLEDGE OF HIV/AIDS

2.2.1 Knowledge levels

The level of the students' knowledge of HIV and AIDS was ranked three-fold; satisfactorily high for the basic facts (common knowledge) of the disease, medium for certain categories of the disease and considerably low on more technical aspects.

Compared with results of previous studies on knowledge of disease among the youth (Mfune et al., 1990; Chiboola, 1990; Mkumba, 1992; 1993), this study found even higher levels of general knowledge. Almost all (99%) of the respondents had heard about HIV and AIDS. There was, however, a slight drop (97%) on the number of respondents who had heard about the condom.

In fact, although 94% claimed to know the price of a packet of condoms, only 25% indicated the correct price which suggests either less involvement in the purchase of this commodity or simply forgetting. A weak relationship ($p < 0.59$ at .005 significant level) was exhibited between where the students were located (i.e whether in Lusaka or on the Copperbelt) and knowledge of the price of a packet of condoms. Fewer respondents on the Copperbelt knew the exact price.

The results suggest a strong link between sex and knowledge of the price of condoms. While 34% of the male respondents knew the correct price of condoms, only 13% of their female counter-parts knew it. When deciding whether to regard a response as correct or wrong the coders took into consideration the price variations so much that only responses that fell completely out of the price categories were classified as wrong.

On the question of how they rated their knowledge of HIV/AIDS, 25% rated themselves in the 'Very good' category, 24% 'Good', 24% 'Average', 12% 'Very bad' and 6% were 'Not sure' how good their knowledge was. As a follow-up to these self-ratings the respondents were subjected to a series of questions aimed at assessing their knowledge of HIV/AIDS. On the question of what the acronyms AIDS and HIV stood for 50% and 31% respectively could spell them out perfectly.

Nineteen percent (19%) only had a vague idea what the letters AIDS stood for while 30% did not have an idea altogether. As with HIV, 59% had no idea what the letters stood for. On both variables there was no relationship with what the respondents indicated as the main and preferred sources of information. Strong relationships were, however, exhibited by age and education as the younger and lowly educated respondents performed comparatively badly on these two questions.

With regard to the question of what goes on in a human body that has been infected with HIV, 70% knew that the host would eventually suffer from AIDS and 51% knew the exact harm it does to the body of the host. Some 22% still believed that they could tell who is HIV positive by simply looking at him or her. The above variables were not significantly related to region but strongly related with age and educational level like in the first cluster of questions (more details of these relationships follow later).

The respondents were also subjected to a series of questions on the crucial aspects of the disease: prevention and transmission. Asked to list any four major modes of HIV transmission, 26% listed all the four i.e unprotected penetrative sex, mother-to-child, blood transfusion and unsterilised

sharp instruments. Thirty two percent (32%) knew three, 22% two, 10% one while another 10% did not know any. A close look at the lists, especially for the respondents who indicated less than four correct modes, suggests less knowledge of the modes related to sharp instruments compared with sex, blood transfusion and mother-to-child.

Table 3: Knowledge of modes of HIV transmission

Known modes	Frequency (no)	Percentage
Knows four	138	26
Knows three	170	32
Knows two	117	22
Knows One	53	10
Knows none	53	10
Total	531	100

On the question of any three major ways they could reduce the chances of getting HIV, 41% knew all the three (mainly abstinence, sticking to one sexual partner and use of condom), 28% and 19% knew two and one respectively with 12% being completely unable to list any. Unlike in the American study by Leblank (1993), no relationship could be established between social status and knowledge of transmission and reducing the chances of getting HIV and AIDS.

A weak ($p < 0.4$) relationship was established between sex and knowledge of modes of transmission and preventive measures with females being slightly more knowledgeable than the male respondents. For some reason, respondents who preferred television for source of information exhibited more knowledge of the common modes of transmission and preventive measures.

The question of AIDS symptoms was badly answered with only 31% being able to list four i.e the commonly accepted ones namely: unexplained loss of weight, unexplained chronic diarrhoea, persistent unexplained cough and herpes zoster or shingles. Twenty percent (20%) knew three, 13% two, 10% one and 26% were unable to list any of the four commonly accepted symptoms. A much stronger relationship ($p < 0.00$ at .05 confidence level) between this variable and the sex of the respondents was established: again females appeared to be more knowledgeable than the males. No relationships could be established with social status of the respondents, region (whether the respondents were from the Copperbelt or Lusaka) and the main and preferred sources of information about HIV/AIDS.

The questions regarding who they felt could get AIDS, the major target group of the disease in Zambia, the relationship between STDs and HIV/AIDS and the position about a cure showed some encouraging knowledge levels. Low knowledge was, however, exhibited on incubation period, the drugs being tested for AIDS, some possible ways of living a little longer with HIV and AIDS and the organisations the students could go to for more information on HIV and AIDS.

On the question of who could get HIV/AIDS, 79% (rightly) indicated that anybody could, 15% felt only people with many sexual partners, 3% rich people while 2% had no idea. No significant relationships were established with sex, region and preferred sources of information. Some reasonably significant relationship ($p<0.09$), however, manifested itself with the respondents who indicated that they get information from people. They tended to be more knowledgeable on this particular question.

Eighty two percent (82%) of the respondents were aware that HIV and AIDS in Zambia were much more prevalent in the age-group 15-45 years in which most of the respondents in fact fell.

Eighty two percent (82%) were aware of the STD-HIV/AIDS relationship and 83% appreciated the lack of a cure for AIDS. Six percent, however, believed there was a cure for AIDS while 11% simply said they did not know, indicating that they had no information on the matter.

Only 47% knew the HIV incubation period, 42% and 35% knew two and one possible ways of living longer respectively. On three major Western drugs under trial in Zambia and elsewhere, only 2% knew at all the requested three, another 2% knew two, 3% knew one and nearly all (93%) did not know any of them. Only the question on the possible ways of living longer showed a significant relationship ($p<0.04$) with the main and preferred sources of information among the variables discussed above.

Generally the respondents who indicated television as their preferred source of HIV/AIDS information tended to be more knowledgeable of various aspects of the disease. The ones who indicated preference for billboards, on the other hand, showed extremely low knowledge on the subject (to avoid biasness the students were not told that billboards were the main focus of the research).

Despite the massive HIV/AIDS media campaigns, the organisations responsible for these campaigns and to which the youth can go to for more information on the subject have not adequately made themselves known going by the results of this study.

Asked to name any five of these organisations, only 6% could list any five, 12% four, 15% three, 18% two, 20% one and 29% none. The AACs, which are supposed to feature prominently in these institutions, were least mentioned.

The respondents who indicated billboards as their sources of information were again among the least knowledgeable. As in the other clusters of knowledge, the television viewers exhibited higher knowledge levels on this question.

2.2.2 Sources of information on HIV/AIDS and media preferences

Of the total 531 respondents, about half (49%) indicated getting information on HIV and AIDS from the billboards. A strong relationship ($p<0.5$ at 0.05 level of significance) was established between this variable and region with more (54%) Lusaka respondents indicating having got information from these media against the 44% Copperbelt-based. Although weakly related ($p<0.5$), more females (52%) indicated getting HIV/AIDS information from billboards.

Almost three quarters (70%) felt billboards had a significant role to play. No significant relationships could be established between this variable and region, sex and status. That the

students generally felt that the billboards had a significant role to play in the fight against HIV/AIDS spurns the hypothesis made by this researcher at the beginning of the study that the students see billboards as useless media in this assignment.

On their main (first) source of information on the disease, which is taken to constitute main knowledge source as well, almost half (49%) indicated television with radio coming second with 12% of the respondents. Magazines followed with 8.5%, AACs (8%), pamphlets 6% and other people (5.5%).

The billboards and newspapers were jointly ranked 7th with 5% of the respondents indicating them as their main sources of HIV/AIDS information. The posters were the least sources with only 2% of the respondents indicating them as their main sources.

Table 4: Main sources of information on HIV/AIDS

Medium	Frequency (no)	Percentage(%)
Television	260	49
Radio	64	12
Magazines	45	8.5
AAC	42	8
Pamphlets	29	5.5
Other people	27	5
N/papers	26	5
Billboards	26	5
Posters	11	2
TOTAL	**531**	**100**

Radio ranked highest (34%) as the second main source of information. On the question of the preferred source, television (40%) was followed by AAC (12%), magazines (10%), newspapers (9%), radio and people (8%), pamphlets and billboards (5%) and posters (3%).

Table 5: Preferred sources of information on HIV/AIDS

Medium	Frequency	Percentage
Television	212	40
AAC	64	12
Magazines	53	10
Newspaper	48	9
Radio	42	8
Other people (including counsellors)	42	8
Pamphlets (leadlets and brochures)	27	5
Billboards	27	5
Posters	16	3
TOTAL	531	100

Contrary to another hypothesis made at the beginning regarding a relationship between social status and the rating of billboards as main and preferred sources, the results establish no such relationship. No significant relationships could be established between this variable and sex and region either.

The results clearly indicate poor performance of the billboards as main and preferred sources of information about HIV and AIDS - although the students had earlier indicated that these media have a significant role to play.

The results also consolidate the ones from earlier researches in Zambia and elsewhere which suggest that the electronic media are both the main and preferred sources of information on HIV and AIDS (Nzima,1995; Bosompra,1993; Lyttleton,1994).

On the interpersonal sources of information, which are crucial as media support interventions, 80% of the students said they got information from people. Of these, friends (peers) and parents seem to be the main interpersonal sources taking up 40% and 33% respectively of the respondents who get information from people. Teachers seem to be other important interpersonal sources with 25% of the respondents indicating so.

The other sources were ranked in the order of counsellors (19%), grandparents and unspecified others each with 9% of the respondents who get information from other people. Only 5% indicated getting information from churchmates despite the majority (60%) of the respondents having indicated being regular church-goers which insinuates that HIV/AIDS is still a no-go area among Zambian churches.

2.3 THE STUDENTS' ATTITUDES TOWARDS HIV/AIDS

The students' attitude positions were assessed on a number of HIV/AIDS issues which are considered crucial in the HIV/AIDS campaign on the basis of the extent of the disease and campaign strategies at national level. The attitude positions assessed in this study were about the amount of fear of the disease, attitudes toward various forms of safe sex, including the use of condoms, stigmatisation and denial. The amount of billboard influence on attitudes was also assessed.

2.3.1 Fear of AIDS

On the question of the extent of fear of the disease, i.e. being scared of the disease, 65% of the respondents indicated being very scared. For whatever reason the respondents from rich families indicated less fear of the disease. Although weakly related ($P<.28$), respondents who had lost close relations to AIDS showed more fear of the disease.

It would appear that fear is related to age ($P<0.03$) and sex ($P<0.04$); the female and younger respondents indicated more fear of AIDS. With regard to age, the results suggest a progressive fall of fear of AIDS with the youngest respondents (age-group 10-14 years of age) indicating more fear of the disease than the respondents in older age-groups, a factor most likely attributable to availability of information on how to contain the transmission of the disease.

2.3.2. Number of sexual lovers

On the number of lovers the respondents had penetrative sex with (itself an indication of degree of fear of AIDS), 19% indicated that they had only one, 6% two, another 6% three and 67% indicated not having any. The distribution insinuates a considerable degree of penetrative sex relationships. A significant relationship ($P<0.03$) manifested itself between age and the number of penetrative sex lovers with the youngest respondents indicating more abstinence and, though to a lesser degree, sticking to one sexual partner.

For the under 15s (U15s), 11% indicated one partner while 82% said they had no one with whom they had penetrative sex. With regard to the under 20s (U20s) i.e 15-20 years of age, 16% indicated having one sexual partner while 71% said they had no penetrative sex lovers. This distribution also suggests a progressive fall of abstinence and rise of penetrative sex with age.

2.3.3. Attitudes towards condom use

On the question of the frequency of condom use with their steady partners, 32% of the respondents with sex lovers indicated using a condom all the time, 38% use it but only sometimes while 30% indicated not using it at all. The older respondents (above 30s), the married and cohabitating respondents indicated less use of the condom use in preference for sticking to one sexual partner. The youngest respondents (U15s and U20s), on the other hand, showed less approval of condom use and more approval of abstinence. Seventy one percent (71%) and 64% of the U15s and U20s respectively indicated preference for abstinence. Again this distribution suggests a progressive fall of abstinence with age. The statistics also suggest that the respondents from rich families were both less scared of AIDS and tended to have more penetrative sex lovers, although with a condom.

On the question of condom use with non steady partners i.e person of opposite sex with whom one has had a relationship with for a considerable period of time, 19% indicated using it all the time, 6% only sometimes while the rest of respondents indicated not having sex with non steady partners. The findings insinuate less sex with non steady partners among the females (P<0.00 and, though the relationship is weak (P<0.11), the youngest respondents. Though less condom use would be expected among the Catholics in view of the fact that their church does no encourage condom use in HIV prevention, no such relationship was established in this study.

The results of this study on condom use with non steady partners suggest slightly lower condom use among students compared with older (married) people in Zambia (Osbourne,1993). As Osborne observes:

> **"Results of focus group discussions have shown that most women have poor safer sex negotiating skills and although 90 percent of men know that condoms can prevent STDs, a the most, 50 percent use them. Research has shown that the men who use condoms tend to use them with casual partners rather than with their wives and/or steady partners."**

However, the evidence from both this and Osbourne's studies insinuate low condom use with 'steady' partners by both the married and single coulpies in Zambia, probably due to trust in their 'steady' partners which is highlighted in this study.

Low condom use with non steady partners among the students compared with the older (married people in Zambia may be attributed to the fact that, as the results of both studies, the tendency to have non steady sex relationships tends to increase with age. Also, though not supported by this particular study on students, the common trend among Zambian married men is having another woman or women other than their wife or wivies which generally makes them have more non steady relationships than the younger males.

On the specific reasons for using the condom among its users, 50% indicated using it to avoid getting HIV, 44% to avoid pregnancies, 3% only because they were forced by their partner and another 3% indicated that they use condoms simply because they enjoy sex with a condom. Though one would expect women to be more concerned about the use of condoms to avoid unwanted pregnancies, more male respondents indicated using condoms for this purpose.

Condom use appears to be related to age (P<0.02) and social status (P<0.03) with more older and rich respondents having indicated using condoms to avoid pregnancies. Ideally condom use to avoid HIV would be expected among respondents who had lost a relation to AIDS but no such relationship was established.

On the question of under whose decision the condom was used among the condom users, 42% indicated that it was their decision, 13% their partner's and 45% indicated using the condom out of mutual consent. Ironically, though the female users indicated least enjoyment of sex with a condom and appear to be less involved in acquiring condoms as this researcher concluded in the last section, they seem to be the ones who impose the use of condoms during sex: more male users indicated being forced by their partner to use a condom and more females indicated using condoms out of their will.

Table 6: Under whose influence do you use a condom?

Whose decision	Frequency (NO)	Percentage(%)
Mine	223	42
My partner's	69	13
Mutual consent	239	45
TOTAL	531	100

On the specific reasons for non condom use among non users, 30% indicated trust in their partner, 2% non availability, 2% cost, 7% indicated not enjoying sex with a condom while 3% said that their partner hated condoms. Only 7% (including some catholics) indicated being constrained by their church beliefs and 10% were restrained by other unspecified factors. Generally more church-goers indicated church-dictated restraint though no significant relationship could be established with a particular denomination. In all cases, however, Copperbelt-based respondents displayed less condom use. Shops (30%), chemists (31%) and health centres (24%) were registered as the main sources of condoms for the condom users.

2.3.4 Preferred means of avoiding contracting HIV

On the question of the preferred means of preventing HIV other than condom use, 56% preferred abstinence and 26% sticking to one sexual partner. It would appear that abstinence does not only progressively drop with age, as was indicated earlier, but also with education: while 59% of the respondents at Junior Secondary level opted for it, only 39% of the college-educated saw it as an ideal means of preventing the spread of HIV. As with abstinence, more females than males gave approval (P<0.00) for sticking to one sexual partner.

Other non penetrative safe sex measures, including masturbation, got little approval from the students. Only 9% showed approval for masturbation (with less females than males), 5% for oral sex and 1% for lesbianism; masturbation as a means of avoiding risky penetrative sex has been pursued vigorously by Zambia's Minister of Health Dr Katele Kalumba.

Table 7: Preferred means for safe sex other than condom

Means	Frequency	Percentage %
Abstinence	297	56
Sticking to one partner	154	29
Masturbation	48	9
Oral Sex	27	5
Lesbianism	5	1
Total	531	100 %

On the question of whether sex outside marriage should be discouraged, 83% agreed (50% strongly) that it should be discouraged. That it is risky and immoral, leads to STDs including HIV/AIDS and unwanted pregnancies were the major reasons advanced by the **"agreeing"** respondents. The other respondents indicated that sex outside marriage was sinful and that it would lead to unfaithfulness in marriages. The **"disagreeing"** respondents, on the other hand, justified sex outside marriage with arguments that **"practice makes perfect"** and that some people can not do without sex. As shown in the frequencies, disagreeing respondents were only a minority.

Table 8: Attitudes toward sex outside marriage

Discourage sex outside marriage	Frequency	Percentage %
Strongly agree	276	52
Agree	202	38
Neutral	32	6
Disagree	16	3
Strongly disagree	5	1
Totals	531	100

Ninety percent (90%) agreed (52% strongly) that everyone must be encouraged to stick to one sexual partner. Most of the reasons given for avoiding sex before marriage were advanced for sticking to one sexual partner too. Though condoms are among the preventive measures advocated by the media including the billboards, only 61% of the respondents gave their approval (29% strongly) for the promotion of condoms in the media. The agreeing respondents cited the need for many people to be aware of and encouraged to use condoms as the major reason for agreeing with the idea of promoting condoms in the media.

The disagreeing respondents, on the other hand, consolidated the common fear in Zambia that promoting condoms would have a boomerang effect of encouraging promiscuity and immorality as many youths would want to try out sex. Generally the disagreeing respondents argued that condoms do not promote attitude change and, therefore, tend to work against the campaigns for sexual restraint. Disapproval of the promotion of condoms was strongly related to age and religiousity. The highly religious, as expected, disapproved of the condom option.

Although it has always been argued that discussing matters of sex and sexuality, under which HIV/AIDS fall, between parents and their children is a taboo in Zambia, 82% of the respondents agreed (45% strongly) that parents should openly discuss HIV/AIDS with their children (who may include themselves). While the agreeing respondents saw this as one of the effective ways of supporting media messages, the disagreeing respondents, on the other hand, upheld the common fear indicated earlier that such a suggestion is unworkable in Zambia given the cultural limitations.

2.3.5 Attitudes towards people with AIDS (PWA)

Stigmatisation against AIDS and its victims is another area which has been of concern to the AIDS campaigners. The findings of the study suggest that in spite of the current massive campaigns to eradicate stigmatisation against AIDS and the people with AIDS (PWA), some (15%) of the respondents still believed in condemnation of AIDS patients. Another 13% gave their approval for the separation of patients from the rest of society. The respondents supporting the condemnation of AIDS patients gave reasons such as that **"no one forced them to get AIDS", "they never paid attention to AIDS information", "they did not behave themselves" and that "they knew the full consequences of having unprotected sex".**

The passionate respondents (the ones whose responses suggested more sympathy towards people affected by AIDS), on the contrary, adduced that **"everyone can get AIDS", "some may not have got AIDS through sex", "some may have got it from unfaithful partners" and that "AIDS patients are like any other patients and they need everyone's love".**

Other passionate respondents argued that **"some patients may have got AIDS due to lack of information", "nobody wanted to get AIDS", "anybody can make a mistake" and that "condemning patients would make them die earlier".**

On the specific measures society should take on AIDS patients, 50% advocated caring for them at home, 19% each for letting them mix in society and keeping them in hospital, 8% suggested isolating them and 4% killing them.

Table 9: What should be done to AIDS patients?

Specific measure	Frequency (no)	Percentage
Care for them at home	266	50
Let them mix in society	101	19
Keep them in hospital	101	19
Isolate them	42	8
Kill them	21	4
TOTAL	531	100

On their reaction if a member of their nuclear family suffered from AIDS, 82% indicated that they would care for him or her, 6% indicated that they would accept him or her but being careful by keeping a distance, 2% would stay away altogether while 9% said they were not sure how they would respond to such a development. Fifty two percent (52%) indicated willingness to share a bed with a member of their family with AIDS.

On how they would react if they themselves developed AIDS, 54% said they would accept themselves and live positively, 12% said they would be miserable, 5% would kill themselves and 29% were not sure how they would react.

Over half (58%) indicated that they could tell others if they discovered they were HIV positive. Compared with the results of Kafulubitl (1993) on adults who visited George Health Centre in Lusaka, the findings of this study suggest that youths in age-group of the students used in the study would be less willing to share their results in the events of testing HIV positive than older people; 72.5% in Kafulubitl's study indicated willingless to share their results. Kafulubiti's study was, however, limited in terms of sample size and catchment area.

Table 10 : What would do if tested HIV positive

Reaction if tested positive	Frequency	Percentage (%)
I would accept myself and live positively	287	54
I would be miserable	63	12
I would kill myself	27	5
I do not know what I would do	154	29
TOTAL	531	100

2.4 THE STUDENTS' PERCEPTIONS OF THE HIV/AIDS BILLBOARDS

To establish the impact or effectiveness of the HIV/AIDS billboards and their messages, a combination of qualitative and quantitative evaluations was conducted.

Quantitatively the students were asked specific questions, through a structured questionnaire, designed to establish their perceptions of the billboards and the extent of retention of individual billboard messages. Qualitatively the respondents were taken to the sites of the billboards where they were requested to complete an evaluation form for each respective billboard.

After the site evaluations the groups converged for focus group discussions during which the photographs of all the billboards were circulated to help guide the discussions. The discussions were tape recorded and written down in some cases.

2.4.1 Results from the quantitative survey

Out of the 531 respondents who answered the questionnaires in all the three cities, 62% said they had seen an HIV/AIDS billboard. There was a relationship between region and exposure to an AIDS billboard. Fewer students on the Copperbelt indicated that they had seen one. Among the students who had seen an HIV/AIDS billboard, 24% had seen the billboards with both words and illustrations (drawings), 11% had seen the billboards without illustrations and 65% had seen billboards with a combination of both. The majority of the respondents who had seen pictorial billboards were based in Lusaka where such billboards are located.

Asked to list what they saw on the billboard/s they claimed to have seen, only 6% of the respondents who had indicated having seen one could correctly align what they had seen with the actual message/s on the particular billboard/s; the photograghs of the billboards were referred to during the coding exercise.

Fourteen percent (14%) could only partly remember what they had seen while the rest could not remember anything at all. This statistic confirms a low retention rate of the billboard messages among the students. On the question of whether they ever stop to look at the billboards, 72% of the respondents who had seen them said they **"never stop"**. Their reasons ranging from **"No time"** (47%), **"No interest"** (38%) to **"Not appealing"** (15%).

Among the respondents who said they had seen and bothered to get information from a billboard or billboards 45% said it took them less than one minute to read, 47% said it took them one to five minutes while 8% said it took them more than five minutes.

On the question of whether the respondents felt the billboards had a significant role to play in the fight against HIV/AIDS among the youth, 34% said they had, 39% said they did not while 27% were not sure about the contribution of those subliminal media. On the specific role/s played by billboards, 14% felt that they kept people reminded about HIV/AIDS. Only 7% felt that they educate and enhance knowledge of the disease and 3% felt that these media have a persuasive function. Twenty nine percent (29%) indicated that the billboards had no role to play in the anti-AIDS campaign. The majority (47%), although some were among the respondents who felt these media have a role to play, were not sure about the exact role that they played.

Table 11: Specific role of HIV/AIDS billboards

Specific role	Frequency	Percentage
They remind	74	14
They educate	36	7
They persuade	17	3
No role	156	29
Not sure	248	47
Total	531	100

On the question of whether billboards could be said to be generally an effective means of communicating information on HIV/AIDS, only 46% felt so. On their appreciation of the influence of billboards on attitudes, 41% felt that billboards had the potential to influence attitudes. Only 14%, however, indicated that billboards had some influence on their attitudes. As with knowledge, television came out as the medium that most of the students said had had more influence on their attitudes. To make them more effective, 30% of the respondents said the drawings should be improved, 52% recommended the adjustment of the messages contained on these media, 11% suggested the altering of the sizes especially on the Copperbelt where some billboards were said to be too small and 8% suggested that changing the locations of the billboards should be considered. More of these comments were repeated during focus group discussions and are contained in a later section. Only 24% indicated that they learnt something new about HIV/AIDS from the billboards.

Although the current theories of development communication demand for consultation with the intended beneficiaries when designing any communication strategy and messages, almost all the respondents (97%) indicated that nobody consulted them on how these billboards should be designed and what they should contain. Some 26% in fact stated that some of the messages on the billboards could not work because they were out of tune with local cultural beliefs. Ninenteen percent (19%) indicated that some of the messages were against their personal beliefs.

About 20% said that some of the HIV/AIDS messages were not in line with their religious beliefs. More information on these factors came out during the focus group discussions which follow in the next two sections.

For the future billboards, 98% of the student respondents preferred billboards with a combination of words and illustrations such as the current ones of the MOH through the NASTLP. With regard to the messages on future billboards, almost half (45%) suggested that there should be more information on cure, 11% on the HBC concept, 10% on the body effect of the HIV virus and 8% on the organisations responsible for information on HIV and AIDS.

In line with the demand among the AIDS campaigners that the question of who is responsible for the pandemic should no longer be an issue, only 4% suggested that there should be more information on the origin of HIV/AIDS. The results suggest little desire for information on the extent of HIV and AIDS as only 2% requested for latest statistics in future media messages.

It would appear that the respondents were content with their knowledge of the modes of HIV transmission; only 3% of the respondents requested for more information on the subject. Probably this is in line with the fact that most of them already know the common modes of transmission, though generally (unknowingly) less knowledgeable of the less common ones, as exhibited in the knowledge profile of this research.

2.4.2 Description of the billboards visited during site visits

To gather the students' qualitative impressions about the billboards, a fresh sample of 360 respondents, 10 per billboard, was systematically selected. However, responses from only six respondents per group were entered for statistical analysis; constraints of time and computer facility necessistated the reduction in the number of forms used for analysis. A form was designed specifically for this exercise with provisions for the description of the billboard and the perceptions of each student. The students were requested to indicate their perceptions regarding various aspects of the messages and the billboards themselves in terms of locations, design, size and other factors which were considered to be crucial in determining the effectiveness of these media.

All the 39 billboards, apart from three wall ones in Lusaka, were visited representing an evaluation of 92% of the total billboard population in Lusaka, Ndola and Kitwe at the time of data collection. Twenty-four of these 36 billboards were located in Lusaka and sponsored by the NASTLP (20) and AAP (4). The other 12 were located on the Copperbelt and sponsored solely by CHEP in Kitwe. In terms of size, nine were below one and half metres (width) by three metres (length) while 27 were above this size. The heights of the visited billboards ranged from 20

centimetres to more than two metres above the ground: 22 were less than one metre, seven between one and two metres and the rest were above two metres high.

Only one billboard was located right at an institution of learning, i.e. UNZA in Lusaka, although two were located by the roadside next and opposite to a school. These were, however, among the 24 billboards considered to be located along highways and roadsides. Eleven were located at bus stops and markets which are considered to be substantially crowded. In terms of materials on which the messages were printed, all, apart from two wall billboards at KMB and Kitwe Central Hospital in Kitwe, stood out on their own on metal boards.

The messages on each of the billboards were physically counted. The definition of message included anything written for the sake of saying something to the public. Hence, the names and logos of sponsors and authors or printers were all counted as messages. By this definition, eight had a total of one to two, 16 three to four, another eight had five to six while four had more than six messages each. Coincidentally, all the four with more than six messages were sponsored by AAP in Lusaka.

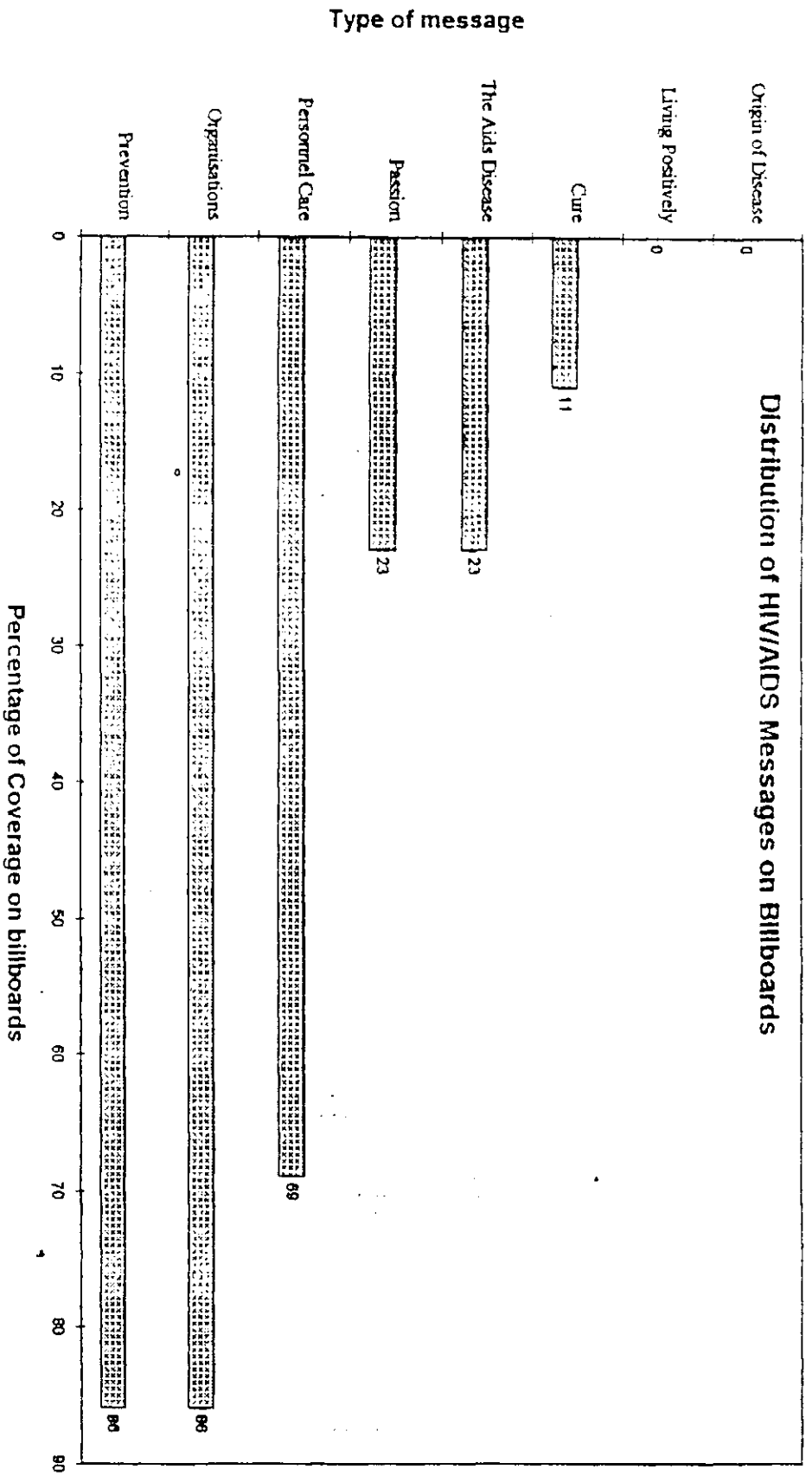
A content analysis of the subject matter/s addressed by each billboard was also conducted and the messages were classified accordingly in order to establish the general subject slant of these billboards. From these analyses, it was established that messages on prevention and the organisations responsible for the billboards ranked highest with 86% each (on 31 of the 36 billboards) containing something about them. Messages on personal care were the second most common with 69% (21) of the billboards having something on them. These messages included advice to people to look after themselves carefully in the light of HIV/AIDS.

The need for passion and community care for people affected by HIV/AIDS and the ones merely describing what AIDS is were each given attention by 23% (8) of the billboards. Eleven percent (4) had something on cure. Characteristically all of them were simply emphasizing the point that there is no cure for AIDS. None of the 36 billboards gave coverage to the origin of AIDS and how to live with HIV or AIDS (living positively) in spite of the estimate that close to a million Zambians could be infected with HIV and a good number of these are already living with AIDS.

Table 12: Distribution of HIV/AIDS messages

Type of message	No of billboards covering	Percentage (%)
Prevention	31	86
Organisations	31	86
Personal care	21	69
Passion	8	23
AIDS - what is -	8	23
Cure	4	11
Origin	0	0
Living positively	0	0

Table 13: Percentile distribution of HIV/AIDS billboard messages



2.4.3 The students' perceptions of the HIV/AIDS billboards and billboard messages from the site evaluation forms

A wealth of the students' views about the HIV/AIDS billboards which were visited was elicited on a number of questions about the actual billboards and their messages. On the question of comprehension, 87% of the 216 respondents felt that the messages on these billboards were generally easy to understand.

Some 85% felt that the messages of the billboards were generally relevant and necessary with the remaining 15% indicating that most of the billboard messages were too obvious and a **'repetition of the same old song'**. Although such an overwhelming majority felt that the messages were relevant and necessary only a quarter (25%) indicated that they learnt something new from them which correlates with the feelings expressed by the larger sample in the quantitative survey.

Table 14: Learnt anything new from billboard messages

Value	Frequency	Percentage (%)
Nothing	161	74.5
Learnt something	55	25.5
TOTAL	216	100

Less than half (46%) of the respondents said that they had seen at least some of the visited billboards before. The remaining 54% were either not sure or had not seen any of the billboards in question before which confirms the low exposure of the students to these media. Among the respondents who indicated that they had seen an AIDS billboard before 49% had seen one less than a year ago, 43% below two years ago and 10% more than two years ago. The validity of these responses to the question is, however, only dependent on the recall ability of the respondents.

The gender and cultural sensitivity of the HIV/AIDS billboard messages were also discussed. On gender sensitivity 85% of the respondents saw nothing wrong although some billboards such as the one calling on the Zambian women to **"work with men to fight AIDS"** in Lusaka were overwhelmingly criticized for insinuating that only men were working toward the eradication of the disease. Eighty-nine percent (89%) felt that the messages were culturally tasteful although some interesting counter arguments came up during focus group discussions and are highlighted in the next section.

On the question of the attractiveness of the general design, 56% found them to be generally attractive although there were serious concerns about the quality of the artwork on the drawings for the pictorial billboards in Lusaka. Only 60% of the respondents were attracted by the colours of these billboards as the rest of them found some colours to be generally dull and not attractive enough to raise public curiosity.

It would appear the question regarding how much information a billboard should contain has never been an issue of serious thought among the HIV/AIDS billboard designers in Zambia. From among the 36 billboards studied by the 216 respondents, 32% of them were found to be too overcrowded with messages to be easily read at any normal walking or driving speed. All the four billboards of the AAP in Lusaka were among those found to contain too much information. On count, the AAP billboard at UNZA, Young Men Christian Association (YMCA) in Libala and Young Women Christian Association (YWCA) by the University Teaching Hospital had twelve different messages and two drawings which is too much by any standard; experts on posters and billboards recommend that the messages on them are seen and comprehended within a fraction of a minute. As the World Book Encyclopedia (1962:432) suggests:

> **" Facts need to be clear, graphic symbols ought to be forceful and messages need to be so brief as to be read or visualized and understood within, preferably, 30 seconds."**

To validate the argument regarding the graspability of the messages on some of the billboards, the students were made to walk past the billboards felt to be potentially for walking audiences and to drive past the ones felt to be potentially for motorists and passengers. The locations were used by the groups to determine the type of readership that potentially could see each billboard.

At the end of the **"walk past"** or **"drive past"** exercise the respondents were asked to indicate whether or not they could read or see everything on each of the billboards. To confirm their responses they were also asked to reproduce what they saw or read immediately after each **"walk past"** or **"drive past"** exercise. From the **"walk past"** exercise only 47% said they could read everything, 35% could read or see only some of the messages while 18% could not read anything at all.

The percentage of readability was much lower during the **"drive past"** exercise with 28% and 48% being able to read or see everything and only some messages respectively. Asked to reproduce the impressions they read or saw on each billboard while walking and driving combined only 44% could reproduce everything, 38% could reproduce only some and 18% could not reproduce anything closely resembling the exact impressions.

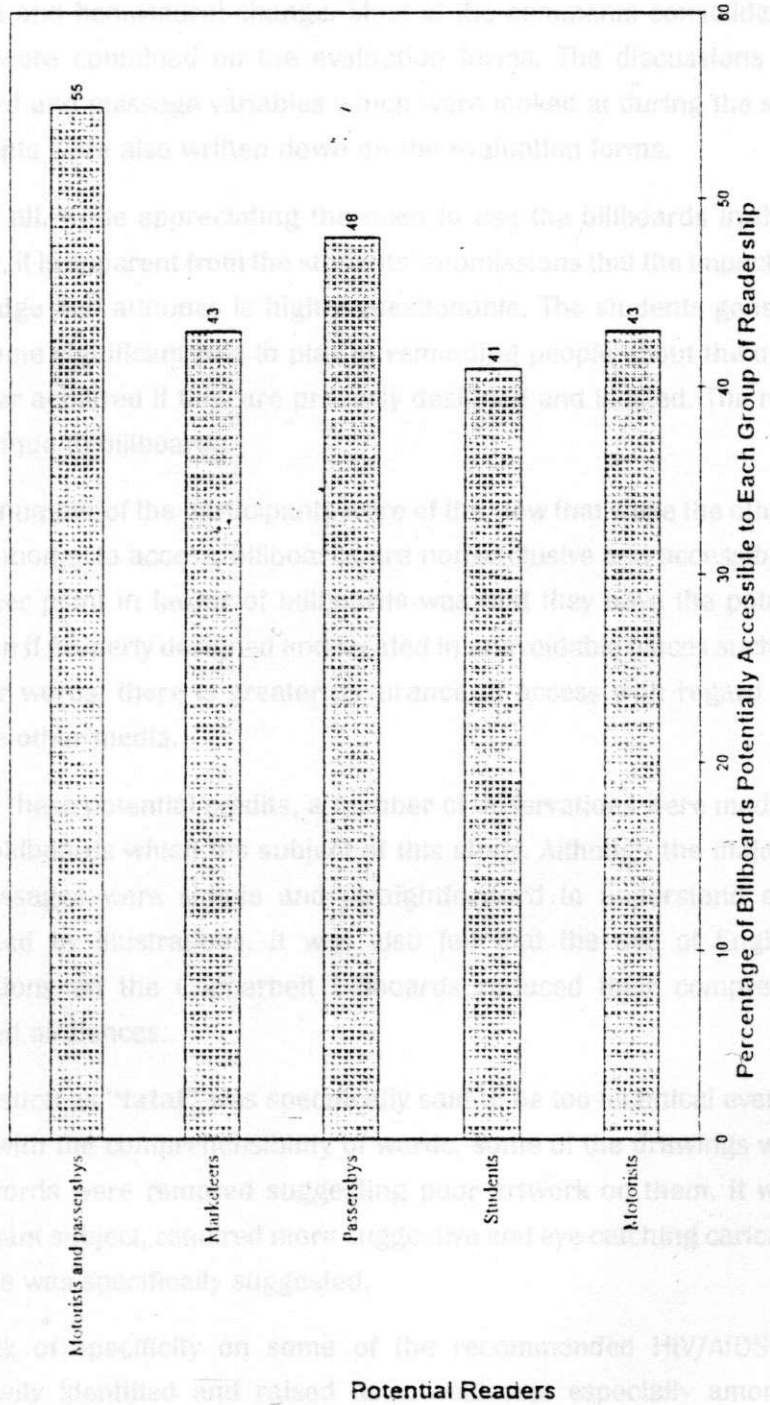
The sizes of the billboards were found to be generally ideal with 75% of the respondents saying so. Eleven percent felt some of the billboards were too big and 14% felt some billboards were too small. It should be noted that the **"too small"** and **"too big"** responses came from the Copperbelt and Lusaka respondents respectively. Some respondents felt that the 1.2 x 2.5 metres billboards along highways on the Copperbelt were not big enough especially considering that their audiences were expected to read them from a moving vehicle.

On the question of the visibility of the actual billboards at normal walking or driving speeds, 37% were found to be visible enough, 31% not so visible and 32% were found to be obstructed or simply not easily seen due to various factors. Competing billboards were found to be the major obstructions. Although 52% (or 19) of the billboards were found to have no competitors, the rest were found to have at least one billboard significantly obstructing them. More precisely 26% (9) had one or two competitors, 13% (five) had three to four and 8% (3) had more than five competitors, within about 20 metres, in front which was considered to be too high.

It was also found out during the site visits that some of the billboards, especially in Lusaka's town centre, had been almost completely masked by market stalls (popularly known as tuntemba) which were not there at the time of erecting the billboards. Some of the low ones have since been blocked by grass. The wall one at KMB in Kitwe is a victim of rubbish dumping and burning to the extent that it has been discoloured and some impressions are no longer easily visible.

The locations of the 36 billboards were found to be generally not ideal for student readers. Fifty three percent (53%) of the respondents found most locations not ideal for them. As a follow-up question regarding whom they felt were the potential audiences of each of the visited billboards, only 41% (or 15) were found to be potentially accessible to the student population. Forty three percent (43%) were found to be potentially accessible to motorists who may not necessarily be students, 48% (or 16) for passers-bys and another 43% for marketeers. The majority (55% or 20) were found to be potentially accessible to both the motorists and passers-bys.

Table 15: Percentage of billboards potentially accessible to each group of readership



On the question of whether they felt the billboards visited could effect attitude change towards HIV/AIDS vis-a-vis sexual habits, only 39% appreciated the potential of these billboards in this area. Twenty-six percent (26%) felt that they were incapable while another 35% were equally sceptical and indicated that the effect, if any, would be very insignificant. These distributions almost match with the ones in the quantitative questionnaire survey cited earlier.

2.4.4 Results from the focus group discussions and tape recorded comments

The focus group discussions, conducted immediately after each site visit, produced a wealth of information which gave a picture of how the students view the billboards' role on knowledge, attitude and behavioural change. Most of the comments consolidated the response categories which were contained on the evaluation forms. The discussions were centred on the same billboard and message variables which were looked at during the site evaluations. Some of the comments were also written down on the evaluation forms.

First of all, while appreciating the need to use the billboards in the fight against HIV/AIDS in Zambia, it is apparent from the students' submissions that the impact of these media in cultivating knowledge and attitudes is highly questionable. The students generally felt that the billboards have some significant role to play in reminding people about the disease but that this role can be better achieved if they are properly designed and located. The reminding role was felt to be very unique to billboards.

A good number of the participants were of the view that while the other media are hidden indoors or cost money to access, billboards are non-exclusive and accessible to everyone without a fee. The other point in favour of billboards was that they have the potential to capture everyone's attention if properly designed and located in unavoidable places such as entrances to institutions. In other words, there is greater assurance of access with regard to the billboards compared with the other media.

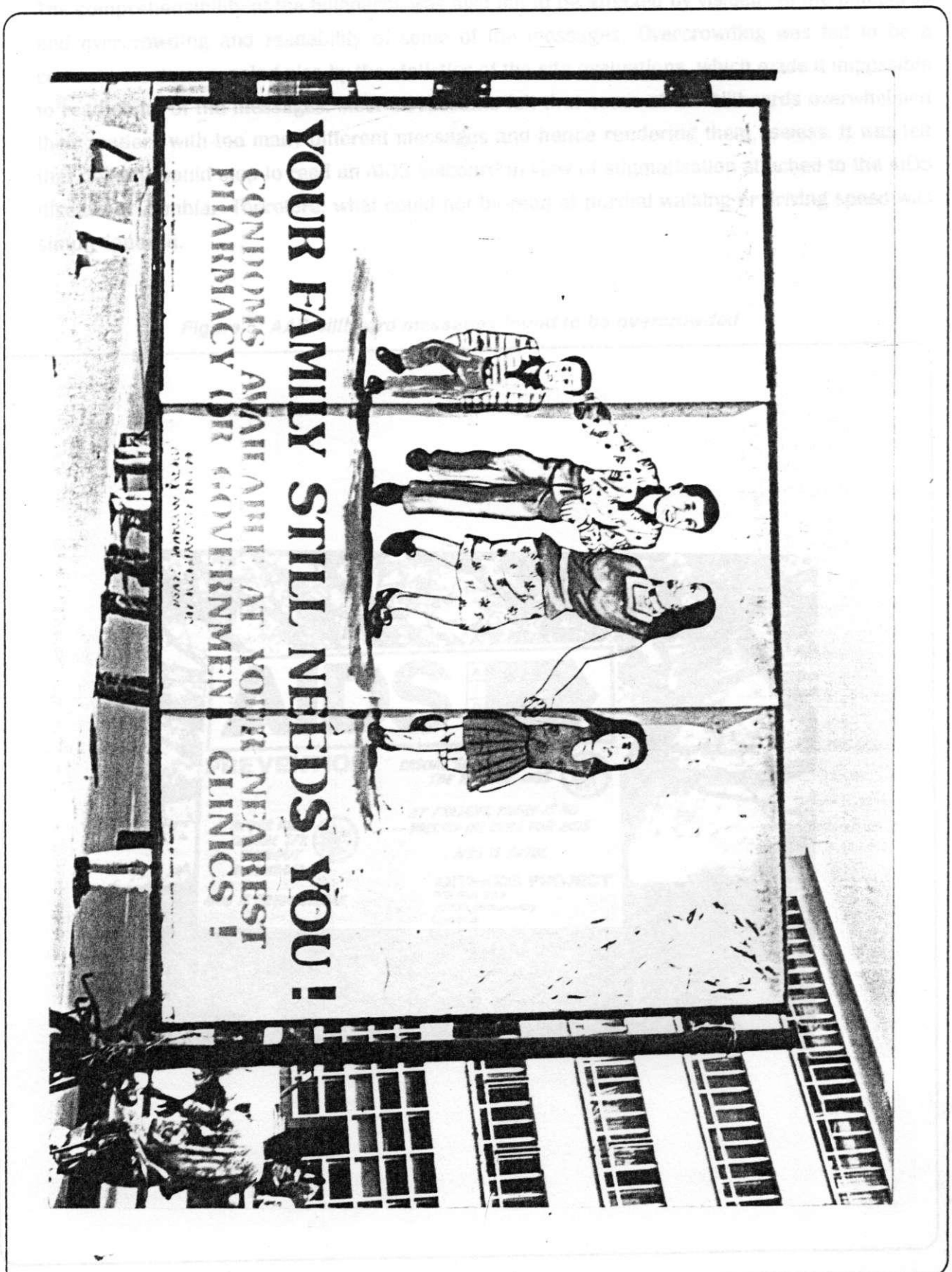
Despite these potential credits, a number of observations were made regarding the weaknesses of the billboards which the subject of this study. Although the majority of the students felt that the messages were simple and straightforward to understand especially where they were supported by illustrations, it was also felt that the use of English combined with lack of illustrations on the Copperbelt billboards reduced their comprehensibility among the less educated audiences.

A word such as **"fatal"** was specifically said to be too technical even for the learned audiences. In line with the comprehensibility of words, some of the drawings were said to be meaningless if the words were removed suggesting poor artwork on them. It was felt that AIDS, being an unpleasant subject, required more suggestive and eye-catching caricatures. The use of humorous cartoons was specifically suggested.

The lack of specificity on some of the recommended HIV/AIDS preventive measures was specifically identified and raised as a weakness especially among some billboards on the Copperbelt. Statements such as **"behave responsibly", "stay healthy"** or **"lekani ukulasalanganya akashishi akaleta AIDS"** (a Bemba translation for "stop spreading the virus which causes AIDS"), which are common among the Copperbelt billboards, and **"Your family still needs you"** and **"Condoms available at your nearest pharmacy or Government**

clinics" on some Lusaka billboards were said to be prone to mixed interpretations and, hence, saying nothing in terms of knowledge and attitude change to a student who knows little about AIDS.

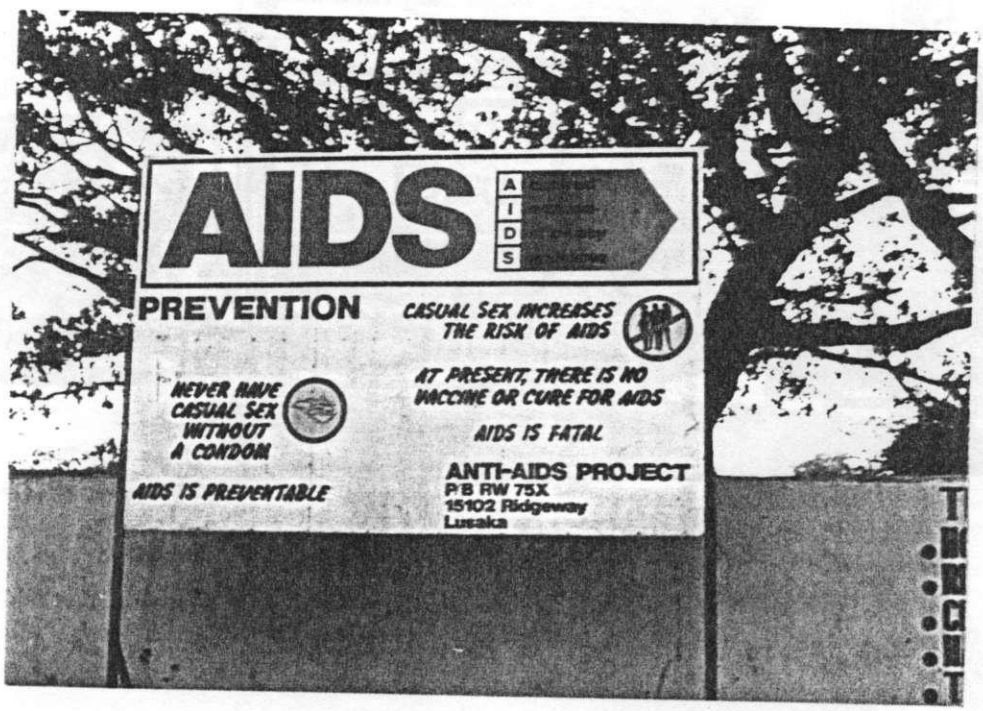
Figure 4 : Example of messages found to be ambiquous and prone to mixed interpretations



It was suggested that to be effective, the billboards ought to be more specific on the dangers and measures to abate such dangers. The Copperbelt billboards in particular were criticized for avoiding the condom option which the students felt was a much more practical solution than abstinence or sticking to one sexual partner, though the results of the study with regard to actual habits is generally in contradiction with these expressions.

The comprehensibility of the billboards was also felt to be affected by visibility of the billboards and overcrowding and readability of some of the messages. Overcrowding was felt to be a common weakness, going also by the statistics of the site evaluations, which made it impossible to read some of the messages. Most discussants felt that some of the billboards overwhelmed their readers with too many different messages and hence rendering them useless. It was felt that nobody would stop to read an AIDS billboard in view of stigmatisation attached to the AIDS disease in Zambia. Therefore, what could not be read at normal walking or driving speed was simply ignored.

Figure 5: AAP billboard messages found to be overcrowded



As found out during the site visits, a good number of the billboards were obstructed by other billboards, structures, grass and trees. It was the feeling of the discussants that lack of follow-ups by the sponsors to ensure visibility and readability rendered some of the billboards useless. This is related to the fact that none of the billboards visited had had their messages renewed since the first prints.

Figure 6: Example of billboards found to obstructed by other structures

The discussants felt that the fact that most of the billboards were along highways where vehicles were expected to be moving at high speed gave little assurance of readability which is also cardinal to any enhancement of knowledge and attitudes. That most of the billboards were in fact parallel to the roads made it even more difficult for a driver or his passengers to read them especially when they are not prepared for such an exercise. The gender and cultural sensitivity and relevance or necessity of the messages were also subjects of discussions. As shown in the

site evaluation results, most students felt that most of the messages were relevant and necessary because they reminded some people about HIV/AIDS. It was also felt that the messages were a check on promiscuity, taught people about condoms and warned about the dangers of casual sex. The billboards as a type of medium were said to be adding to the list of HIV/AIDS information media.

It is worth noting, however, that another high number of the discussants in all the three group discussions found the HIV/AIDS billboard messages **"boring"**, **"too obvious"**, **"vague"** and a **"repetition of the same old story."** In line with these expressions, most of the discussants indicated that billboard messages were not offering them anything new which they did not already know.

Although generally the discussants did not find anything particularly wrong with most of the billboard messages with respect to Zambian cultures, a few billboards were criticized for suggesting solutions which the students felt were unachievable given the cultural beliefs in the country. The billboards urging parents to discuss HIV/AIDS with their children were particularly identified as falling in this category. Some students observed that by the general Zambian culture, it is a taboo for their parents to talk about sex and sexuality to them. Since talking AIDS is talking sex and sexuality, the billboards advocating a parent-children dialogue were felt to be a non-starter. Some discussants in fact observed that talking about sex through such open media as billboards and posters was in bad cultural taste.

As regards gender sensitivity, most billboards were found to have a fair gender representation. However, as indicated in the results from site evaluations, some messages on specific billboards were found to be gender insensitive. One such type of billboard is the one asking women to work with men to fight AIDS which the discussants felt was suggesting that women were passive with regard to the AIDS fight.

Illustrations such as the ones showing only women taking care of the AIDS patients were also criticized for suggesting that only women should carry the burden of care-giving of AIDS patients.

On the question of whether they felt the messages were addressing them personally, most discussants observed that some messages, through both words and illustrations, were addressing couples and families and generally older people. Since most students are not married and have no families to protect, which is a call of a good number of billboards, the discussants indicated that most, if not all, of them were switched off by such messages.

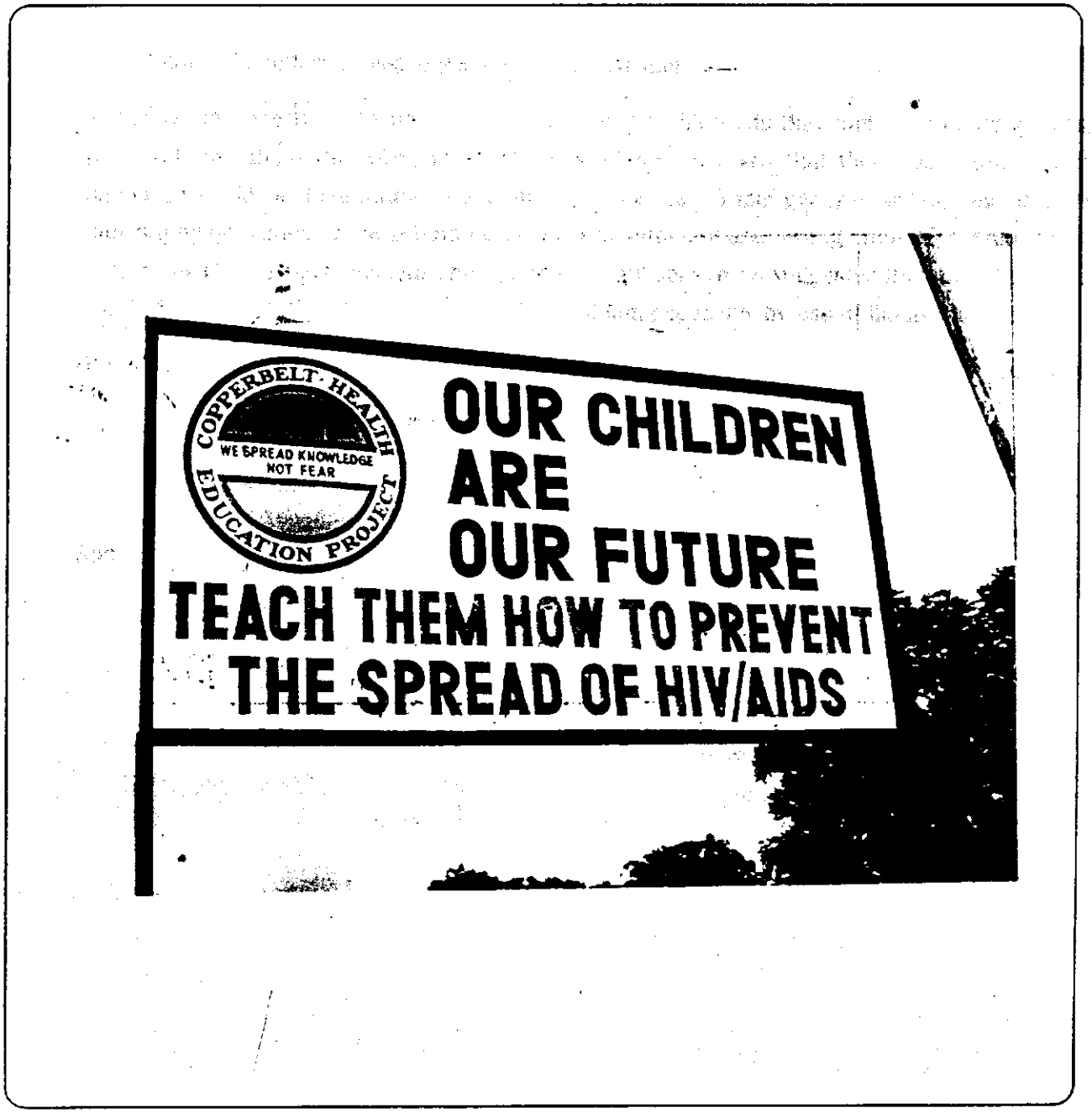
Another issue which concerned some discussants was that the messages of preventive nature were by far the most covered (86% of the billboards had something on prevention as indicated in the content analysis results in 2.4.2) by the billboards in both Lusaka and the Copperbelt. In a country like Zambia where the current statistics project close to a million HIV infected persons and over 30,000 PWAs, it was felt that most of the billboards were leaving out vital information for a considerably large constituency of the potential audiences.

A more critical observation was that since over 95% of the students already knew the major modes of transmission and the preventive measures, more information on these was offering nothing new to their existing knowledge statuses and, therefore, useless.

It was also the feeling of a number of discussants that the limited amount of detail on specific issues contained on a billboard rendered these media less useful in enhancing knowledge, attitude and behaviour change. The information on condoms and the organisations responsible for the billboards were cited. The major argument advanced was that merely advising people to use condoms without a demonstration or much more details regarding how a condom is used was like ending the journey in the middle of the road. The information on the organisations responsible for the billboards (i.e their contact addresses) and to which the students can go for more information on the disease was equally found to be confusing and vague.

In all cases there were no further details regarding how to locate that particular organisation let alone an indication of why the name or logo appears in the first place. Most discussants felt that this information was ultimately subject to mixed interpretations and, therefore, less useful altogether.

Figure 7: The CHEP logo which was found to be confusing and prone to mixed interpretations



The general design of the billboards was another factor that raised a number of concerns. While appreciating the use of illustrations to accompany messages among the Lusaka billboards, some of the illustrations were said to be **"too dull"**, **"too dry"** and **"unattractive"**. Some of the colours used for the illustrations were also said to be less eye-catching. It was observed that a combination of the above concerns and lack of humour made some billboards less attractive and, thus, easily ignored. It was, therefore, generally observed that the lack of illustrations on all the Copperbelt billboards made them less captivating, which is a critical factor in ensuring exposure.

The locations, another critical factor in ensuring access and exposure, were generally found to be inappropriate for the student audiences. Most of the discussants in all the three groups regarded the placing of billboards along highways and markets as a limiting factor to access. It was observed that most youths in Zambia do not drive and when they are being driven in public buses their attention cannot easily be drawn to looking out through the windows. It was argued further that even for the billboards implanted within their visual range such as the one at UNZA, the amount of information contained on them made the students withdraw their concentration: the current billboard at UNZA, which bears the same messages as the ones at YMCA and YWCA, has a total of 12 different messages and two illustrations.

Finally, on the question of whether they felt that the billboards they had seen could enhance their attitudes about HIV/AIDS, most of the students observed that there was little that the billboards could do in attitude and behaviour change. Their general feeling was that the information contained on most billboards was not sufficient and strong enough to make people see the need for sexual behaviour change. In this light some even suggested that these billboards should find a way of making people see the problem especially by use of illustrations.

Other students, especially Christians, in fact felt that messages about condoms and sex were, on the contrary, causing curiousity among the youth to try out the advocated messages. Such discussants proposed the use of interpersonal forms of communication, especially in the learning institutions, as a back-up to the media messages. It was felt that only this integrated approach would guarantee an enhancement of knowledge and attitude cultivation and change. Faith in God and living religiously were suggested by the religious discussants as expected.

CHAPTER THREE

DISCUSSION

3.1 THE STUDENTS' KNOWLEDGE OF HIV/AIDS

This researcher begun the inquiry into the knowledge levels of the youth in general, and the Zambian students in particular, about HIV/AIDS on a number of premises. The major theories and hypotheses that partly guided the inquiry with regard to knowledge were as follows:

(i) That the knowledge levels are considered generally high among the youth, ranging from 80% to 92% as recorded in other researches and that a number of misconceptions and misrepresented facts are still identifiable. The misconceptions are based mainly in the areas of modes of transmission, people who can get HIV/AIDS, origin, symptoms and preventive measures which are all considered crucial factors in the campaign against the disease in Zambia and other Sub-Saharan countries (Chiboola,1990; Mudenda, 1992;Isindi and Young,1992);

(ii) That the mass media, especially the electronic media, are the main sources of HIV/AIDS and related information;

(iii) That knowledge of various aspects of the disease is associated with social status;

(iv) That the students perceive the billboards as less useful media in the HIV/AIDS campaign; and,

(v) That the billboards are less preferred as sources of information on HIV and AIDS.

The results of this research confirm and disapprove some of the above assertions. A number of new theories have emerged too. The results present ranges of knowledge levels from low to high with medium levels and misconceptions down the line. Most of the misconceptions presented in this study were identified in the 1992 Nigerian study on 738 students, and local ones of Chiboola (1990) and Mudenda (1992). As hypothesized at the commencement of this study, knowledge levels tend to be higher on general awareness (basic) facts about the disease but tend to drop on information this researcher considers technical.

High Knowledge

On the positive extreme the results highlight high knowledge on the existence of HIV and AIDS, condoms and what they are for. Compared to the levels highlighted in the Nigerian study of Isindi and Young (1992), and the local ones by Chiboola (1990) and Mudenda (1992), these general awareness levels are quite encouraging. That the students have been exposed to information about the disease is a good starting point. The question is whether they have gone beyond mere exposure to attention which is a crucial stage in the knowledge acquisition process.

The AIDS campaigners should also feel respited that their messages that there is no cure for AIDS and that anyone can get HIV and AIDS seem to have sunk well among the youth, or at least the learned ones. That most of the students are even aware that they are in the most affected age-group (15-45 years) is encouraging and so is their knowledge that (casual) sex is the major mode of HIV transmission and that abstinence and condom use are the most effective preventive measures.

It is always said that modes of transmission and preventive measures are the basic facts that every youth must be equipped with. However, as it shall be noted later, the students' knowledge of the modes and preventive measures is to a great extent limited to the commonly known ones

transmission is equally comforting. It can be conveniently assumed that high avoidance of STDs will consolidate the HIV/AIDS campaign messages although, as this researcher notes in the attitude-behaviour literature review, the knowledge-attitude-behaviour relationship is a weak one.

Medium Knowledge levels

High knowledge is followed by medium or average knowledge levels ranging from around 45% to 75% of the frequency distributions. Besides their self-rating, knowledge of the AIDS acronym, the HIV-AIDS relationship, HIV incubation period and actual bodily harm resulting from HIV infection all fell in this category.

Although appearing less significant, some of the pieces of information falling in this classification are crucial in attitude and behaviour change. Low knowledge of the HIV incubation period, for instance, creates wrong assumptions in students about their HIV status if they do not fall sick of AIDS within a period believed to be the HIV incubation period. The letters AIDS are written in full only on some campaign materials. Poor knowledge of what the letters stand for would affect attention among the respondents with low knowledge on the subject when the letters HIV/AIDS are only written in full.

Low Knowledge

As noted earlier, knowledge levels tended to drop on more technical information about the disease. The modes of HIV transmission other than the common ones of sex, blood transfusion and mother-to-child and the corresponding preventive measures other than abstinence, sticking to one sexual partner and condom use fall in this category. Also falling in this category are possible ways of living longer with HIV/AIDS, the drugs being tested on the market, the exact price of a packet of condoms, the organisations that they can go to for more information on HIV and AIDS and what the letters HIV stand for.

With regard to condoms, although the respondents knew what they are for, the low knowledge of the price suggests either low use or simply that most of the students do not buy condoms. The fact that less females knew the condom prices also confirms the common fear in this country that making condoms available during sex is still regarded as the responsibility of the male participant. The AIDS campaigners need to take note of this fact if the crusade to empower women with the skills for negotiating for safe sex is to succeed.

This researcher finds it's worrisome too that while knowledge of the common modes of transmission and preventive measures is high, the less publicized and uncommon modes of transmission are hardly known to the students. This researcher finds low knowledge of such modes as domestic sharing of sharp razor blades unhealthy considering that a good lot of HIV transmissions may not have occurred through heterosexual contacts since there is nothing to suggest that there is more sex in Sub-Saharan Africa than elsewhere; it is generally speculated that most transmissions in Africa occurred through sex.

This goes with the preventive measures too. Other than the use of condoms, abstinence and sticking to one sexual partner, uncommon means of safe sex such as any form of non-penetrative sex, 'wet sex' and the use of spermicidal creams such as nonoxynol-9 also have to be highlighted in order to create a wider spectrum of options for the youth. Admittedly these are not 100%

degree.

After all, it is only a fact that despite the massive campaigns against it, casual sex still goes on. Therefore, any measure that can reduce the probability of infection, by whatever degree, has to be made known to everybody.

The low knowledge of the AIDS drugs being tested on the market seems to correspond with the high knowledge that there is no cure for AIDS. Although helpful in a way that it may be consolidating messages on more personal care, lack of official information on the numerous AIDS drugs being distributed by the traditional healers and clinics here and elsewhere in the world may be the mainspring for some of the misconceptions about cure for AIDS: rumours are doing the rounds that some of these drugs have been effective on some patients.

The vast literature reviews on the impact of rumours and unofficial sources of information suggest that there is a strong relationship between knowledge gaps and misconceptions resulting from information from unofficial and often ill-informed sources. In his vast literature reviews on the subject, Schneider (1976:273), for instance, observes:

> **"From the available evidence, particularly of the work of Walster and Festinger (1962), overhead communication (rumours or grapevine) tend to be believed much more easily than the official versions. This assertion links up well with Jack Brehms's reactance theory which suggests that people resist when they are aware that they are being persuaded."**

With specific reference to the available Western AIDS drugs - which do not provide a complete cure and are beyond the reach of an average African family anyway - the views of the researchers on the subject suggest that the lack of official information, especially through the media, may be responsible for the misconceptions with regard to the question of the availability of an effective cure for the disease.

The established means of living longer with HIV and AIDS is the area of low knowledge worth noting too. In a country like Zambia with an estimated 700,000 infections and tens of thousands with full-blown AIDS Msiska et al., 1993), information on living positively is very crucial. In fact by leaving out information for this growing constituency of potential audiences the Zambian media are not only orchestrating denial and stigmatisation of the disease but also alienating themselves from the people affected by HIV and AIDS.

The low knowledge on the organisations responsible for the HIV/AIDS campaigns is not surprising. Going by their very campaigns, there is little information suggesting that their services of producing and supplying materials and information about HIV and AIDS is in itself message worth packaging for communicating separately. As the results of the evaluation of the billboard messages point out, even when the names and addresses of these institutions are included among the messages they are presented in a way that leaves readers wondering what they mean.

The logo of CHEP on some of its billboards, for instance, was read with numerous interpretations. During focus group discussions some discussants thought that the logo was meant to inform its readers that CHEP was responsible for the production of the billboards. Others yet felt it was

did not understand it altogether.

Based on extensive studies on the role of mobilizing information (MI) i.e any information that allows people to act on the attitudes they already have such as addresses and hours of business, recipes, TV listings, fashion advice etc. lack of MI is often caused by insufficient information. Giving an example of a fundraising letter, Lemert and Ashman (1983:661) observed:

> **"Almost by definition, a fundraising letter will have locational MI (e.g., a return address plus a deadline), identificational MI (e.g.,the organisation's letterhead with address/ phone number) and, often, tactical MI (e.g., instructions concerning the benefits of writing a check.**
>
> **"In other words, we can plausibly assume that providing a lot of MI to others in a quasi-mass communication mailout has generally been a psychological and financially rewarding experience."**

Misconceptions

Although misconceptions were not part of the original mission of this study, a close look at the responses in the open-ended questions brings out a number of such misconceptions as were identified in the Nigerian (Isindi and Young, 1992) and Zambian studies (Chiboola, 1990;Mudenda, 1992). Worth noting and requiring immediate attention are misplaced facts on ability to tell an HIV positive person, modes of transmission and who has the potential of getting HIV and AIDS. The others, though held by minority groups, are on cure for AIDS and on the AIDS symptoms.

That 22% of the respondents, who in fact constitute the enlightened segment of the youth population, still believe they can tell whether or not a person has HIV is cause for concern. There is real danger that such respondents are indulging in unprotected sex on the grounds that they think that they are able to tell the HIV status of their partners. In fact these misconceptions may be confirming the belief that fat and healthy looking people are automatically considerd HIV negative.

With regard to symptoms, the majority of the respondents showed having the right information. However, the results suggest that diseases such as TB and diarrhoea are taken for granted as AIDS symptoms. This may be causing victimisation against anybody suffering from these diseases. Some of the respondents in fact indicated malaria, sore throats, fever, loss of voice and sneezing which may not always have anything to do with AIDS.

There is also evidence of misplaced facts on modes of transmission and preventive measures. On the former, some respondents still believe they can get HIV through any form of kissing, sharing a bed with an AIDS or HIV infected person, any form of donating blood, sharing a toilet and plates, playing together, mosquitoes, living in the same house, casual contact and lesbianism. On prevention some suggested not having sex before marriage, not sharing beds and plates or playing together with an HIV or AIDS infected person, reading AIDS materials and simply "not going out" i.e. to discos, movies, etc.

about the disease were insignificant in most cases, there is need for concern that after over a decade of HIV/AIDS campaigns such misinformation still persists.

Besides being sign-posts for knowledge gaps, some of the misconceptions unfolded in this study may have implications against the campaign to slow down the spread and reduce the stigma surrounding the disease. The stigmatisation thus created can have far-reaching consequenses on people as the Panos Institute (Panos, 1990:51) observes:

> **"People respond negatively to the HIV/AIDS for a variety of reasons. Some are afraid that casual contact leads to infection; they think that they catch HIV by being in the same room or shaking hands or touching the clothes of someone who has the virus. Others see AIDS as evidence of some form of behaviour which they disapprove; in their eyes to show sympathy for someone with AIDS would be to signal approval of his/her sexual behaviour or injecting drugs."**
>
> **"Others are simply embarrased by the whole situation, influenced by society's attitudes more than their own convictions. In cultures where many find it difficult to respond to someone's impending death, the general belief that AIDS is invariably and swiftly fatal often causes people to withdraw in embarrassment and distate."**

In all the clusters of knowledge identified in this research, the respondents of low education status and the younger ones tended to be devoid of the right information about the disease. Apart from low knowledge of the prices of condoms, the female respondents showed generally more knowledge particularly on the modes of transmission and preventive measures. The establishment of the relationships between television viewing and knowledge of many aspects of HIV/AIDS supports the assertions made by other researchers regarding the strength of the electronic media in AIDS education. The other relationships are, however, spurious.

Sources of information and media preferences

The results of this study reaffirm the findings of the previous researches with regard to the media preferences among the educated youths. It would appear from the results of this particular research, not dissimilar to the results of the Israeli and Nigerian studies, that the electronic media - radio and television - constitute both the main and preferred sources of information on HIV/AIDS. If these results are anything to go by, it can be theorised that there is high attention to the television and radio HIV/AIDS programmes to justify the high ownership (90% for television and 94% for radio) indicated by the respondents.

With regard to the billboards, their low rating both as main and preferred sources of information qualifies the hypothesis made at the beginning of the inquiry that these media are less preferred as a means of communicating information on HIV/AIDS.

Although effective as means of communicating, especially in support of the mass media sources, the interpersonal sources were poorly rated both as preferred and main sources of information. It is, however, important to note that friends (peers), parents and teachers were rated highly as the major sources of information for the students who get information from other people. These

confirming the weakness of the AACs in learning institutions.

The need for the strengethening of interpersonal information sources in general, and peer education in particular, in preference for the current over-emphasis on the mass media HIV/AIDS strategies, is also supported by the findings of the extensive studies in mass media effect which overwhelmingly suggest that these forms of communication are effective only in creating general awareness and that they are less obeyed because they are managed by authorities whom the audiences usually fail to identify themselves with. As Panos Institute (1990:33) observes:

> **" The consensus, from both North and South, is that the national campaigns can give people the basic facts about how AIDS is transmitted and to protect oneself, but they have little influence on actual behaviour. In general, people are less willing to obey the voice of authority than the voices of their peers, the society within which they most closely identify. It is becoming clear that if AIDS prevention messages are to work, they must come from the people who are most trusted and respected."**

The inquiry into the students' attitudes was centred around establishing the students' attitude positions on selected features of the disease and its implications. The selected attitude positions are considered crucial to the Zambian society with regard to HIV/AIDS; the selection of the attitudes for consideration was based on the extent of the pandemic in the country and the direction of the campaigns against it at national level.

In particular the attitudes towards personal care, denial and stigmatisation about the disease and PWAs have been the major pre-occupation of the HIV/AIDS campaigners in recent times.

With regard to fear i.e extent of being scared of the disease, the results suggest that though highly aware of HIV/AIDS as was shown in the knowledge profile, the students are not too scared of the disease. The statistical distribution of the correlation between age and fear insinuates that fear of the disease drops with age.

The fall in the level of fear of AIDS with age may be said to be related to the knowledge and acceptance of the use of condoms as a means of avoiding getting HIV. Generally, the results indicate negative attitudes and low acceptance of condoms not only among the youths and their steady partners but also, though to a limited extent, with non steady partners in preference mainly for abstinence.

Although generally low across the board, the statistical distributions display much less approval of condoms among the youngest (U15s but slightly picks up with U20s) who preferred abstinence. The older (above 30s), the co-habitating and married respondents also seemed to prefer sticking to one sexual partner to abstinence and condom use. It would appear, therefore, that the use of condoms is slightly prevalent in the age-group 20 - 30 years.

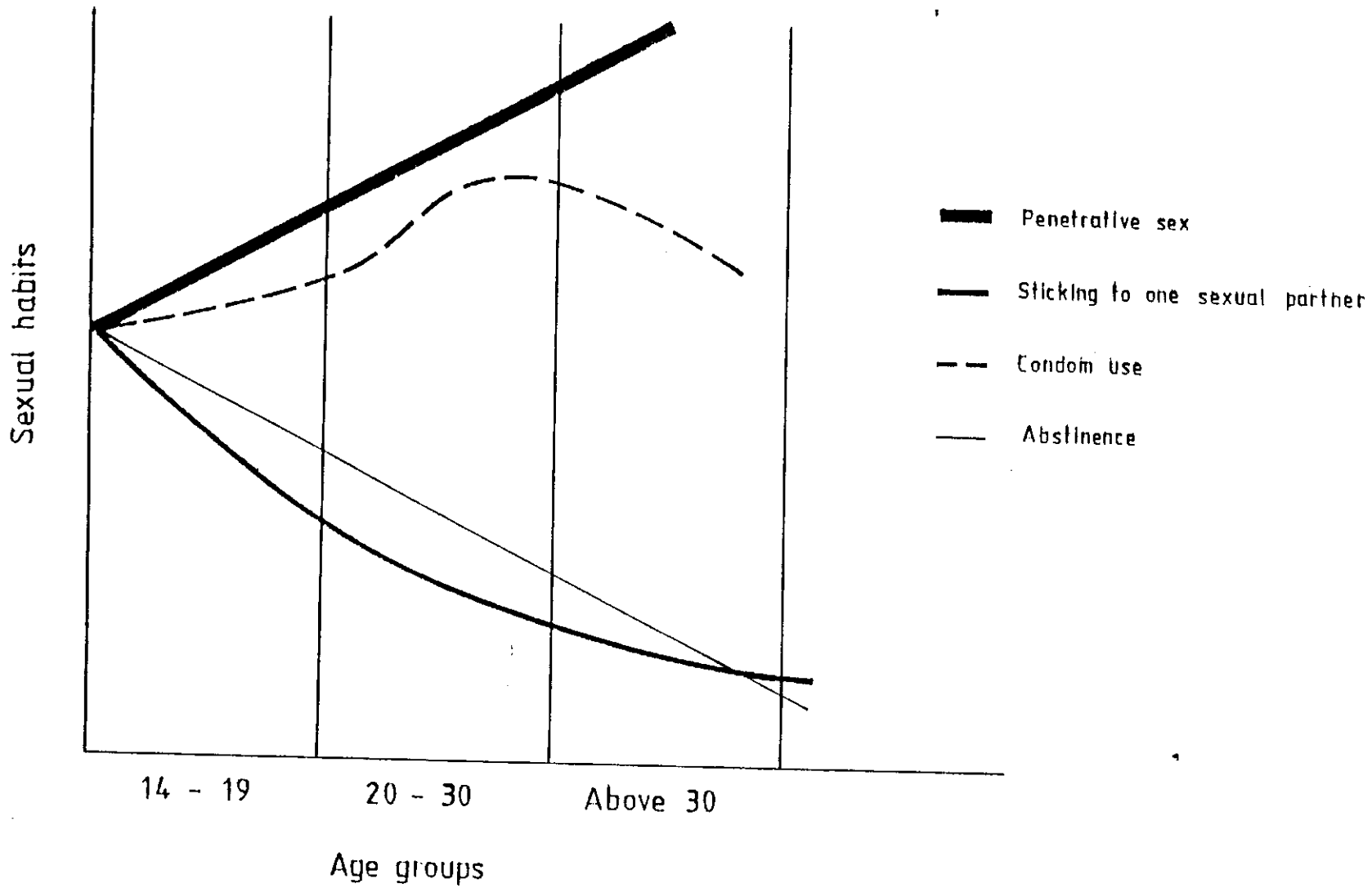


Figure 8: Graphic presentation of the students' expressed sexual habits

students. First, the results indicate that only half of the already small number of condom users use the condoms to avoid catching HIV while almost the other half (44%) use them only as a means of preventing pregnancies. This distribution insinuates that condom use would easily further drop by 44% if the couples who use them to avoid pregnancies adopted other means of contraception.

Second, the combination of the fact that respondents who indicated using condoms out of pressure from their sex partners (only about half indicated using condoms out of mutual consent) and confessions of non enjoyment of sex with a condom presupposes that sustainability of condom use among a good number of relationships is weak. As it has always been argued by AIDS campaigners, strong sustainability of condoms can be achieved only in situations where the condom is adopted mutually.

Third, the results suggest that the female users of condoms are less involved in acquiring the condoms and, though they seem to be genenally the ones who demand for condom use during sex, they are the ones who least enjoy sex with a condom.

This scenario creates an impression that given a situation where the male partner has excited the female sexually, even when he is not carrying a condom, the demand for condom use would be easily compromised: unfortunately whether or not a condom is available is often unknown until the couple has sexually excited itself after pre-sex romantic activities.

As this researcher notes in the literature review, the relationship between attitudes and behaviour is situational. Ajzen and Fishbein (1967), quoting extensive literature, indicate that attitudes correspond with behaviour only when they harmonise with action, target, context and time dimension. Cialdini et al. (1981:366) thus observe:

> **" an investigator should not expect to measure attitudes towards action (e.g driving) and predict whether a person will drive a two-tone truck (target) on a snowy highway (context) on New Years Eve (time)."**

Furthermore, though the results suggest that the demand for condom use among users comes from the female partners, this scenario can not be taken as an infallible assurance for safe sex in the light of the weak position of the Zambian females to negotiate for safe sex, as has been observed in other Zambian studies. A configuration of economic and deep-rooted cultural factors, which have been passed on from generation to generation, places most Zambian female youths in a position where they are passive implementors of the decisions of their male partners. Writing about the Bemba tribe of Zambia with whom she spent over 10 years of anthropological work, Dr Richards (1939) observes:

> **"Men are expected to take the initiative in sex affairs. Women are married (ukuupwa, the passive form) while men marry (ukuupa, the active form). Girls are taught to please their husbands and are considered responsible for giving the pleasure in sex relations."**

Richard's observation, though made over half a century ago, applies to the situation of modern male-female sex relationships in Zambia, irregardless of tribe, as a number of more recent

AIDS Conference Chanda et al. (1994), for instance, observed:

> **"HIV testing and counselling raises women's awareness about HIV and safer sex practices. Some women were able to insist on condom use, however, many women are often unable to negotiate safer sex with their partners both steady and non steady because of cultural factors and financial dependance."**

The re-affirmation - in the light of other studies - that a substantial number (30%) of non condom users did not use them because they trusted their partners is another set of attitudes that may be risky in the light of HIV/AIDS. Voluntary HIV testing is uncommon among the youth yet, on the other hand, there is evidence of premarital sex in the process of looking for a life-long partner. It is, therefore, most plausible to confer with the generally held perception that a number of infections may be occurring during this search for the right partner for marriage, mainly in the age-group 20-30 years in the Zambian context, though one may maintain one sexual partner at a time.

As indicated earlier, responses on the preferred HIV preventive measures suggest preference for abstinence (56%) and sticking to one sexual partner (26%) against condom use and other means. With regard to condoms, the results suggest that condom use picks up, while abstinence and sticking to one sexual partner drop, with age. It appears, however, that sticking to one sexual partner picks up again in the older (above 30s) age-groups and with marriage. The assertions of low use of condoms, which the users obtain mainly from chemists, shops and health centres, are supported by low knowledge of condom prices especially among the younger and female respondents.

The results additionally hint that the other means of avoiding HIV, including masturbation, are less known and popular among the youth.

It has also been argued that the official teaching of some of the churches, such as that of the Catholic Church, are a factor in the low acceptance of condom use among their followers. This study has not established such a relationship. The fact that churchmates are in fact among the least sources of information on HIV/AIDS invariably suggests their minimal effect on the students' attitudes. On the whole the results on HIV preventive measures suggest that while condom use picks up with age, abstinence and sticking to one sexual partner fall. Abstinence falls much more rapidly than sticking to one sexual partner in the 20s.

With regard to sex outside marriage, which is another attitude domain of concern to the AIDS campaigners in Zambia, the results suggest strong disapproval among the students. Correlated with age, sex and source of influence, it would seem that the younger respondents, females and television viewers have stronger disapproval of sex outside marriage.

As indicated earlier, the eradication of stigmatisation and denial (which refers to non acceptance of the presence of HIV/AIDS) of the disease and people affected by it are also among the domains of concerns among AIDS campaigners and MOH officials in Zambia. The results show considerably low stigmatisation going by the fact that over three quarters (85%) of the respondents indicated that AIDS patients should not be condemned and isolated from the rest of the society and that they would look after (care) family member/s affected by AIDS.

and another one in 1993 by Baggaley and Phiri (1994) on UNZA students has remained stable. This suggests that a lot more effort is required in this area too.

To a great extent the results evoked generally positive attitudes towards AIDS patients. This should be some shot in the arm for the AIDs campaigners and MOH who are promoting the idea of home-based care (HBC) of AIDS patients in view of limited hospital capacities to cater for the growing demand for care of AIDS patients.

However, that only about half (52%) indicated willingness to share a bed with an AIDS patient insinuates that although they can take care of the patient, they would rather do it cautiously to avoid catching it themselves. This too is an important approach to the disease though, on the other hand, it suggests a wrong notion that AIDS can be exchanged casually as noted earlier. It should be pointed out, however, that the number of students (average 20% or one in every five) who hold stigmatised attitudes is high enough to be of concern: it is quite tempting to suggest that the stigmatised attitudes are related to the knowledge gaps and misconceptions on modes of transmission identified in the section on knowledge.

The results on the questions about how the students would react if they themselves had HIV or AIDS imply that though the students would generally accept others with AIDS, at least half of them would have a problem if they themselves tested HIV positive or developed AIDS. This result suggests that denial of the disease is still rife among these youths. Such a scenario is likely to be linked to the fact that the students have little contact with AIDS counsellors, as established on the question of their sources of information on HIV/AIDS. On a positive note, however, the majority of the respondents gave approval for a dialogue over the disease between children (perhaps themselves) and parents.

If Zambian parents accept this stand too, a starting point may be established for penetration into this crucial interpersonal intervention which has for long been problematic in Zambia.

With regard to the influential sources of information, the results suggest that television has greater influence on the students' attitudes about HIV/AIDS. This discovery is in line with the findings of other researchers in Zambia and elsewhere. In his report on media preferences among the urban OSYs in Zambia, another Zambian researcher Nzima (1995:1), for instance, observes:

> **"Surprisingly the study reveals that television conveys information better than any other source, though radio was the most preferred."**

Matched with the fact that television and radio are highly accessible to the respondents - 90% and 94% of them indicated that their families owned a television and radio set respectively -the results suggest that the eletronic media are not only the most influential but also the most easily accessible to the students. Finally, as this researcher hypothesized at the beginning of the study, the students do not perceive the AIDS billboards among the major sources of influence on their various attitudes about HIV/AIDS and AIDS patients.

AND ATTITUDES ABOUT HIV/AIDS

This researcher began the inquiry into the impact of the HIV/AIDS billboards on knowledge and attitudes among the urban students in Zambia with a set of hypotheses. It was hypothesized that: the billboards were only useful in imparting general awareness rather than detailed information of HIV/AIDS and, given this fact, that the students' exposure to them had no significant impact on their knowledge and attitudes. It was also hypothesized that the students perceived the billboards as less useful and preferred as sources of information on HIV/AIDS.

The results of this research from both the quantitative and qualitative evaluations have to a great extent validated two of the three above hypotheses. Two extremes of positive and negative values in billboards generally, and the ones visited and analyzed in particular, emerge from the results. On the positive side, it is apparent from the set of responses that the students do not downrightly spurn billboards as useless media under whatever circumstances. The students appreciate the potential values of these media as a means of disseminating information.

The ease with which information can be accessed, the costless access and the capability to captivate their audiences if properly designed were all identified as the sleeping values of billboards.

Based on the above points, the students seem to realize that the billboards have a potentially significant role to play as a means of communicating HIV/AIDS information but that the realization of this potential is conditioned by such factors as design and location.

The responses and discussions among the students suggest that reminding people about the disease and being signposts for more information are the major roles that billboards are supposed to play. These roles are facilitated by the fact that, depending on their location, billboards and posters guarantee express access and exposure to their messages not alike the other media, such as radio and television, which subject their messages to a selective process. For instance, a person tuned to Radio Phoenix on 89.50 FM Stereo would automatically miss an HIV/AIDS programme or advert on Radio One of the Zambia National Broadcasting Corporation. This is not the case with billboards when they are appropriately located and designed to capture their audiences at all costs.

Going by the students' preferences, it would appear that the power of the billboards to trap their audiences is enhanced when they are designed in such a way that the words are combined with illustrations. The preferences for pictorial future billboard designs and that most students who indicated having seen a billboard before had seen a pictorial one both support this supposition.

Other than these general potential strengths, a number of the 36 billboards evaluated were found to have a couple of actual strong points going by the findings from both the questionnaires and discussions. The results suggest that most of the messages could be comprehended with little difficulty and most of the messages were generally appreciated as necessary. It would appear that these are the two major positive scores of the current billboards.

readability of the messages when one considers that the respondents, students, are a special group who in the first place are what they are because of their abilities to comprehend issues. Whether the OSYs, who constitute the majority of the youth population, find the messages on billboards easy to comprehend too requires further inquiry.

Some of the messages on the current billboards have been said to be an affront to the cultural values or simply suggesting solutions which are unachievable given the country's cultural factors. From the responses in this research, it would appear that apart from a few, the current HIV/AIDS billboards are not seriously affected by the cultural values. This is an important positive attribute considering that taboos have been proved to be working against a good number of the HIV/AIDS campaign programmes.

Like in most other African countries, culture in Zambia is a crucial intervention in determining the success or failure of any programme delving into sex and sexuality. Therefore, though the billboards that were felt to be carrying culturally insensitive messages are in the minority, the observations raised by the students provide a basis for serious thought about cultural sensitivity on future billboard designs. Communication devoid of cultural sensitivity can result in dissonance as Kivikuru (1990:27) observes:

> **"Through values, norms, and sanctioned behavioural patterns, a culture manages to keep its integrity by exercising a certain degree of authority over its members. It is a continous process of accepting, integrating, and rejecting stimuli for change. Culture includes manifestations of man's attempt to relate meaningfully to his environment."**

The issue of culture sensitivity was also raised during the qualitative evaluation of an AIDS education poster by the Johannesburg City Health Department (Evian et al., 1990). Evian et al. observed:

> **"AIDS is still a new and unfamiliar disease. Health education programmes need to gain an understanding of community attitudes and behaviours and deal with these sensitively and respectifully. This understanding must be built into the health education programme."**

Gender imbalance or associating one sex with HIV/AIDS is another thorny issue in media messages. A number of women's groups in Zambia have raised this concern. The results of this research have found only little evidence of gender insensitivity in the current billboard messages. However, the few billboards which were identified as being gender insensitive should evoke serious consideration about gender sensitivity in future designs.

Neither women nor men respond lightly to any insinuations of doing little to prevent the spread of AIDS or being a cause for the spread of the disease in a country like ours with so much stigmatization and sensitivity over the disease.

As a medium that depends on visibility to its audiences, the size of a billboard is an equally crucial factor to exposure and attention. This factor is even more critical to the Zambian billboards which, as the research reveals, are mainly single glance and aimed at audiences who are either walking or in moving vehicles. The results of this research suggest that size is not an issue to at least three quarters of billboards particularly for the ones which were found to be

were found to be not big enough especially when placed along highways where vehicles are expected to be moving at not less than 80 kilometres per hour.

That two thirds of the billboards were found to be not overcrowded is also good news although one third is big enough a number to occasion concern. The amount of information a billboard should contain is one consideration which should inevitably occupy the minds of the designers in future.

Although billboards generally have potential strong attributes and the results of the 36 which were evaluated in Lusaka, Ndola and Kitwe indicate some strength in the areas of comprehension, size, amount of information and gender and cultural sensitivity, the set of weaknesses evident in the same results tend to eclipse the strong points and considerably make their impact, if any, less significant.

First of all, it seems that although the students said they found the billboard messages easy to read and understand, it can be argued that these messages have no significant, if any, impact because they are not offering the students anything new in terms of knowledge. Having established that knowledge is a necessary ingredient to any attitude formation or change, it is reasonable to conclude that these media are equally less useful in the attitude formation and change domain.

That three quarters of the respondents found nothing new to learn from the billboard messages is by and large explained by the fact that 98% of these messages were of a preventive nature, specifically the common measures such as condoms, abstinence and sticking to one sexual partner which by now are mere common knowledge to an average youth of the stature of the respondents. The knowledge profile earlier discussed in fact indicates that 98% of the student respondents already know the common modes of HIV transmission and the common preventive measures.

The fact that the billboards are supplying only the common knowledge type of information proves right the hypothesis made at the beginning of the inquiry that the billboards are only useful in supplying general awareness rather than detailed information of HIV/AIDS. It is worth noting, however, that though they found the billboard messages too obvious, the students still found it necessary that such information should be communicated to society a perception which would sound like: **"well we know but perhaps let others know too"**.

Most of the respondents indicated that the current billboard messages are simply a repetition of what they had already read or heard about from the other media and interpersonal sources of HIV/AIDS information. To a large extent this accounts for the expressed low exposure and retention of these messages going by the percentage of respondents who said they stop to look at billboards.

The vast literature reviews on minimal effects of the mass media suggest that the little mental capacity and time to attend and process on-coming messages and social phenomena makes human beings exercise selection on what to expose themselves to, pay attention to and retain in the limited mental files. As Dexter and White (1964:74) observe:

of their environment on which the satisfaction of their (immediate) needs is dependent."

Having seen or heard the billboard messages before, and the ones on HIV transmission and prevention in particular, the students simply turn away and divert their attention to other issues over which they have no information when they come across billboards carrying these messages.

As with limited new information, the evidence of limited exposure leads to the argument that the HIV/AIDS billboard messages have limited impact on attitudes too. Exposure to information is considered the first and necessary stage to any information effect process namely: access, exposure, attention, retention and action.

Increasing access and exposure to billboard messages will, therefore, be the starting point for any future attempts to increase the impact of the billboards on knowledge, attitudes and, hopefully, behaviour change. It should be pointed out, however, that a mere increase in access and exposure does not guarantee express attitude and behaviour change as the messages still have to be subjected to other rings of defence of a more serious nature which were outlined in the literature review.

There are also indications from the results that exposure to the billboard messages is affected by four other crucial factors: namely visibility of the billboards, readability, design and location. With regard to location, this research has established that most of the billboards are located along highways, at town centres and bus terminals which are all generally considered not ideal for students. Most students in Zambia do not drive and even when they are travelling to and from school they are often too pre-occupied with other issues to pay attention to billboards.

Moreover, billboards, like all print media, are so passive that they depend on the audience's anxiety to see and read them. Given this reality, stationing billboards along the students' view paths will have to be considered in future billboard strategies.

The question regarding access to the billboards carrying HIV/AIDS information was not raised by the respondents. Nevertheless, it would appear quite strongly that the physical number of billboards (39 in all the three cities) against the total population (1,451,653 (CSO, 1990) in all the three cities) is not enough to assure adequate access; the current billboard-population ratio suggests that each billboard is supposed to be accessible to 37,222 readers.

McAnany (1980:25) defines access as:

> **" the essential physical potential for exposure - the situation where there is a newspaper, radio, television, or other mass medium within reasonable range of the potential audience."**

The number of billboards per population is another factor that will require serious thought in future displays of these media.

Although location is not a problem for some billboards, exposure and access to their information is affected by poor visibility due to obstruction from competing billboards or other structures. In fact, the fact that some of the billboards were deliberately obstructed or defaced presupposes

often been a cause for low attention to billboards historically as the Encyclopedia Americana (1962:431) observes:

> **"If a poster (billboard) defaces architecture, if it intrudes rudely on historical sites, or if it spoils natural beauty it will certainly defeat its purpose and be remembered as a visual offence rather than a pleasurable experience."**

In some cases, although the billboard may be visible alright, the general design and colour, especially for the pictorial ones, tend to put off the audiences or simply fail to agitate enough anxiety.

It has also been established that the power of any written communication is to a very large extent dependent on the ability of the intended readership to read the impressions. It appears from the results that though the messages were generally found to be simple to comprehend, their readers are not able to read most of them at normal walking and driving speeds.

In this regard, the most plausible explanations for their low readability at the readership speeds for which they were intended are over-crowding and the small size of the print, especially for the logos and names and addresses of the sponsors and printers: although the sizes of the print was not a variable on the site evaluation forms, many discussants raised the issue during focus group discussions.

At this point a contradiction between the students' perception of overcrowding and their ability to read all the messages during the **"walk past"** and **"drive past"** exercises becomes evident. Over 68% of the respondents considered the billboards to be generally not crowded with messages. However, the fact that only a quarter of them could read and reproduce all the messages seen on each billboard tends to suggest that the messages were in fact more crowded than they thought. An additional consideration is that if defined by location, most, if not all, of the billboards visited are of the single glance type.

This researcher posits that the sizes of the letters and the amount of information or number of messages the billboard should contain are other important considerations to be taken into account to guarantee readability in future.

There is also strong evidence of mixed interpretations of some of the words and illustrations (drawings) on some billboards which invariably reduces comprehension and the overall impact of such billboards as sources of information on HIV/AIDS. Mixed interpretations also applied to addresses of the sponsoring organisations and to which the youth can go to for more information and protective materials. Most of the misinterpretations are based on insufficient information (MI in the case of addresses of sponsoring organisations) or simply wrongly presented messages.

Similar observations were made by some participants during the focus group discussions to analyse the Johannesburg AIDS poster (Evian et al., 1990) on some of the messages including, as was the case among some billboards looked at in this study, the address of the sponsoring organisation. With regard to the latter, Evian et al. thus observe:

> **"The statement 'issued by the City Health Department Johannesburg Tel. 330-1048' was also examined. Respondents understood that the statements refered to the organisation that had**

source of advise on AIDS"

Ability to recall what the respondents saw or read was another factor that was considered during both qualitative and quantitative evaluations. The results suggest that less than half of the respondents could recall the impressions they saw on the billboards under investigation. Apart from insinuating low readability, low recall bespeaks low retention which is another critical factor in attitude and behaviour change.

As pointed out in the literature review on attitude change, the decision about the attitude or behaviour position to take are mainly based on the amount of information at one's disposal at the time that such a decision is required.

Besides suggesting less preference, the evidence of low billboard information on HIV/AIDS in the students' mental files leads to the conclusion, with some considerable degree of confidence, that any influence on the students' attitudes could not have significally been as a result of their exposure to the billboard messages. With regard to the application of the selective process at the level of recall of information, Melkote (1991:72) observes:

" Research showed that even recall of information was influenced by factors such as the individual's needs, perceptions and so on."

It was hypothesized at the beginning of this research that the students perceive the billboards as useless and less preferred as means of communicating HIV/AIDS information to them. The rank orders on media preference overwhelmingly prove the hypothesis right. The billboards were placed 7th and 8th as main sources and preferred sources respectively which attests poor performance among the other media used in HIV/AIDS campaign. The question of whether or not the students perceive billboards as useless media in the HIV/AIDS campaign, however, evokes antithetical propositions. On one hand the students indicated in both the quantitative and qualitative surveys that these media have a significant role to play and that their messages are generally necessary.

On the other hand, the billboards emerged among the less preferred and least sources of HIV/AIDS information. A synthesis of the two contradictions strongly suggests that the students see potential in the billboards as a means of communicating HIV/AIDS information but that for a number of reasons, most of which emerge from the results and are catalogued in this thesis, the potential has not been actualized. This should be food for thought for the billboard sponsors and designers.

Finally, proponents of the alternative approach to development communication assert quite vehemently that audience participation at all levels of the communication process is a major determinant to the success of any development programme or message. This research has established that almost none of the students who participated in both its qualitative and quantitative parts were consulted during the process of planning and designing the billboards.

Although no further inquiry has gone into this aspect in this particular research, there is sufficient past research evidence on the participation-recalcitrance relationship to support this researcher's postulation that the lack of consultation contributed to the low interest, exposure,

little attention to messages they fail to identify themselves with.

As Shirley White (1994), writing on the subject of audience participation with regard to the Tanzanian experience observes:

> **"In recounting the Tanzanian development programme, it was noted that response to development programmes was greater when people were involved at all stages of the process: identification of problems, in planning, finding possible solutions, and drawing upon programmes which were intended to solve a specific programme."**

In a paper at a communication seminar held in Nairobi, Kenya, in November 1990, another writer, Nancy George (1990), observed:

> **"Involving members of the society itself in the decision-making about message-design and delivery will increase the effectiveness of the campaign better than any other anthropological survey, however good it is."**

CHAPTER FOUR

CONCLUSIONS AND RECOMMENDATIONS

The results of this study vis-a-vis the knowledge of HIV/AIDS among the urban-based students in Zambia hold out evidence of four different knowledge clusters: high, medium, low knowledge and misconceptions. On the encouraging end the students have displayed high knowledge about the existence of HIV and AIDS, the common modes of transmission and the corresponding preventive measures.

The results also lead to the conclusion that the students are generally aware that anybody can get AIDS and that they are in the high risk age-group.

The evidence of high awareness that there is no cure for the disease and frequent STD incidences may facilitate the HIV transmission is equally conclusive. (Casual) sex is the mode of transmission commonly known to the students. Correspondingly, abstinence, sticking to one sexual partner and the use of condoms are the preventive measures commonly known to the student youths. Though, as this researcher notes in the literature review, the relationship between knowledge and attitude and behaviour change is a spurious one, high knowledge about the existence of HIV/AIDS and the common modes of avoiding them is an important starting point upon which to build more intensive attitudinal and behavioural interventions.

Though generally aware that the use of condoms is a preventive measure, very few students are conversant with the prices of the local condoms. With the evidence from the attitude profile in the next section that there is no distribution of free condoms and that the few condom users buy their condoms mainly from shops and chemists, the low knowledge on prices as highlighted earlier itself insinuates that these student youths are low condom purchasers. The strong relationships between sex and knowledge of condom prices invariably epitomizes the fact that female students are even much less of condom purchasers.

This relationship creates a strong impression that though there is a strong crusade to empower the Zambian women with the necessary skills and devices for negotiating safe sex, our young females still regard the acquisition of condoms as the sole responsibility of their male partners.

Despite being highly knowledgeable that sex is the major mode of HIV transmission, the results suggest that the students are less knowledgeable about the other modes such as ordinary sharp instruments, which are common for domestic purposes, blood letting, love bites, blood donation and parenteral i.e mother-to-child- and the corresponding means of avoiding transmission via these modes.

This is a crucial observation because though it is widely theorised that much of HIV transmission occurred through sex acts, this researcher holds a contrary view that some cases of transmissions may have occurred through other blood exchanging activities other than sex. There is nd evidence to suggest that there is more sex in Africa than elsewhere but there is a strong case that over 70% of patients in Sub-Saharan Africa are attended to traditionally: until recently the traditional health attendants were either ignorant of AIDS or simply denied its existence as a new disease. Comparing knowledge between traditional healers (THs) and family health workers, Ndovi-MacMillan et al. (1995) observe:

there are still some misconceptions, particularly by THs. Eighteen THs claim(ed) that there is a cure for AIDS."

With regard to the non sexual transmissions, the Panos Intitute (1992:8) also observes:

" Contaminated syringes - syringes re-used without sterilisation - can transmit HIV and other diseases from one person to the next in drug injecting and medical or quasi-medical settings. The efficiency of transmission - close to 100% according to some experts - explains the rapid spread of the virus where drug users and medical practitioners do not sterize syringes."

In specific reference to Sub-Sahara Africa Panos (1992:8) further observes:

"Where blood is not screened before transmission, many people have been infected by this means; in parts of Sub-Saharan Africa, where donors are often family members, it has been a factor in transmission from parents to children."

The students showed much less knowledge regarding the acronyms HIV and AIDS, the Western drugs being attempted and the organisations, including the AACs, which they can go to for more information on AIDS and for protective materials such as condoms. This low knowledge is suggestive of both little contact by these organisations (itself indicating weakness and ineffectiveness) and poor publicity on their part, which is largely attributable to incomprehensive MI.

Low knowledge of the possible means of living longer with HIV, in spite of the reported high HIV incidence in Zambia, means that these youths would not know how to look after themselves in the event that they some day tested HIV positive. The researcher is aware that a number of organisations offer pre and post-HIV testing services. However, as the results on knowledge of organisations suggest, not many students know about these organisations.

On the more negative extreme the results suggest the existence of confusion and misconceptions about the disease, especially on transmission and prevention, among these student youths. In line with the findings of the Nigerian study (Isindi and Young,1992) and Mudenda's (1992), the students still believe they can get HIV through means that have long been ruled out such as toilet seats, casual contact, sharing plates, any form of kissing, any form of donating blood, playing together and sharing a house which could all be leading to unnecessary stigmatisation and solitude.

The misconception held by some students that they can tell that a person has HIV should be taken more seriously as it may be said to be the cause for the casual sex presupposed in this study.

There are also indications that sticking to one sexual partner is taken simply as sticking one sexual partner at a time even if one may be changing partners frequently. This particular message may be saying little to these youths who are still in the process of trying out partners before settling with one for life.

suggest that knowledge of HIV/AIDS tends to drop from high to low on more technical details about the disease though the general awareness of some aspects are considerably high.

To a great extent this reality confirms the hypothesis this researcher made at the beginning of the inquiry that the students are more knowledgeable about the general than the technical issues of the disease. Ultimately low knowledge and misconceptions also expose the existence of knowledge gaps among these youths.

The consistent relationships between age and education level and knowledge invariably suggest that knowledge of HIV and AIDS tends to rise with age and education. It is tempting, therefore, to insinuate that the out-of-school youths (OSY) would manifest much less knowledge and more misconceptions about HIV/AIDS.

In a related study Feldman (1995) observed about the OSYs:

> **"A subset of the 60 out-of-school females interviewed, but generally not the in-school males, the in-school females, or the out-of-school males, were found to be having atypical high risk sex, including unprotected anal intercourse."**

The vast literature reviews on the attitude-behaviour relationship suggest a generally inconsistent interconnection in the sense that people's actions are not all the time guided by what they know. Nevertheless, Feldman's observation is an important basis for speculation that knowledge of HIV/AIDS among the OSYs in Zambia is still low.

Though there are a few traces of female respondents being more knowledgeable of selected aspects of the disease particularly on modes of transmission and preventive measures, the relationships are not conclusive and consistent enough to be a basis for generalization. However, the relationship between television viewing and knowledge as seen in this study is conclusive enough to support the conclusions of the other researchers that the electronic media are much more effective in AIDS education. This researcher also hypothesized correlation between social status and knowledge. No such relationship has been established in the study.

With regard to the sources of information about HIV/AIDS, there is conclusive evidence suggesting that the electronic media, radio and television, are both among the main and preferred sources.

Though regarded significant, the billboards were neither among the main nor the preferred sources of information which pre-supposes insignificant impact of these media on knowledge (more information on billboard follows in the section on billboard perception).

The poor ranking of the billboards among the main and preferred sources qualifies the hypothesis made at the dawn of the research that these media are less preferred as sources of HIV/AIDS information. However, that the students feel billboards are significant suggests that the students see potential in these media and, hence, disqualifies the hypothesis that they regard the billboards as useless altogether.

Among the interpersonal sources it would appear that friends, parents and teachers are the major interpersonal sources of information. This distribution again strongly suggests that the

among the youth.

4.1.1 Recommendations

This study has brought out evidence of knowledge gaps among the student youths on more technical and detailed aspects of HIV/AIDS. The evidence of the existence of knowledge gaps is based on the low knowledge and misconceptions exhibited particularly by the younger and less educated respondents. It is also evident from the results that the billboards and the interpersonal sources of information, including the AACs which are presumably students' organisations, have contributed little in enhancing knowledge.

Future attempts to enhance the knowledge of HIV/AIDS among the students will have to take the following forms:

(i) More accurate identification and filling up of knowledge gaps to pre-empt filling up of these gaps by unofficial and often unreliable sources of information. Though this study has identified some of the gaps, there may be need for more broad-based and conclusive youth KABP surveys. However, the results of this study suggest that there is need for more information on modes of HIV transmission other than sex and their corresponding preventive measures - which are the basic facts every youth requires as a starting point.

(ii) Strengthening of the interpersonal sources of information, including the AACs, which are crucial as supportive interventions to the mass media sources of information. The general awareness type of information which the mass media are known for often result in misconceptions which can be more effectively cleared by the interpersonal sources. The evidence that teachers are among the major sources strongly supports the case for HIV/AIDS curricula in learning institutions.

(iii) The organisations responsible for the dissemination of HIV/AIDS materials, including condoms, should provide more information (MI) about themselves and their services to facilitate the need for their closer interaction with the youth.

(iv) More focused information campaigns among the younger and less educated members of the youth population who have consistently exhibited less knowledge of HIV/AIDS.

The results of this study strongly suggest that though the students are highly aware of the disease, their level of fear of the disease seems to be low. There is significant evidence to lead to the conclusion that fear of AIDS reduces with age and that knowledge and acceptance of the use of condoms as a means of protecting themselves from contracting HIV seems to be the most plausible explanation for the reduction of fear as the youths get older.

The results on HIV preventive measures suggest that generally the students prefer celibacy, especially before marriage, and sticking to one sexual partner while only one in every five approve the use of condoms. The other non penetrative sex measures such as oral sex, lesbianism and masturbation are least preferred by the students. There is conclusive evidence of negative attitudes and habits regarding the use of condoms especially among the younger and female students who seem to give much more approval for abstinence and, though to a lesser degree, sticking to one sexual partner.

The evidence of non approval of condom use suggests a contradiction between billboard messages and actual behaviour and attitudes: most of the current billboards advocate the use of condoms as a preventive measure. From extensive literature on media effectiveness on knowledge, attitudes and behaviour, this scenario triggers a dissonance effect which renders the information from the billboards ultimately useless. As Davison (1964:71) observes:

> **"Communications serve as a link between man and his environment, and their effects may be explained in terms of the role they play in enabling people to bring about more satisfying relationships between themselves and the world around them."**

The results also suggest that condom use and multi-partner relationships go up with age: they are particularly higher in the age-group 20 - 30 years when the students are very sexually active. Abstinence, on the other hand, drops with age: again the youths in the age-group 20 - 30 years seem to least approve celibacy as an ideal HIV preventive measure.

Trust in their partner and non enjoyment of sex with a condom seem to be the major reasons for low condom use especially among the females who, ironically, are the ones who mainly demand for condom use during sex. This scenario presupposes low sustainability of condom use even among the "using" students and it can be reasonably attributed to the low condom use among steady partners as suggested in this and other studies.

Unfortunately, generally a relationship attains the levels of "trust" and "steady" not on the account of present and past conduct of the partners but rather on the length of time of having penetrative sex. Therefore, it is highly plausible that a couple that has had sex for a considerable period, say six months, would assume to be steady enough to warrant compromise on the (**"non enjoyable"**) condom.

There are also strong pointers that stigmatisation against AIDS and its patients is generally lower, especially among the older, females and students who have lost a close relation to the disease. If these attitudes are consolidated and strengthened they could serve as a good anchor for HBC programmes and a generally positive approach to the disease and people affected by it in Zambia.

which is in line with the findings of other studies (such as one by Baggaley, 1994). To this effect, there is conclusive evidence that though they would have little difficulty to deal with other people with AIDS, most of the students would find it hard to come to terms with a situation where they themselves tested HIV positive or developed full-blown AIDS.

It is highly plausible that the uncertainty regarding a positive HIV result is related to low contact between the students and AIDS counsellors as the findings on sources of information in this study strongly suggest; only 14% indicated getting information from AACs and other people involved with HIV/AIDS. Counselling to reduce denial of the disease is another area which will certainly require strengthening especially through the training of more peer educators among the students themselves.

As this researcher hypothesized at the beginning of the inquiry, the billboards have little influence on the students' attitudes elicited in this study. This supposition is based on the fact that billboards were not listed among the students' main sources of influence on their attitudes about HIV/AIDS. Also, most of the billboards, particulary in Lusaka, are advocating the condom as the main preventive measure which most of the subjects in the study seemed to disapprove of (more comprehensive analyses of the impact of billboards follow in the next section). Extensive literature on media effectiveness strongly suggest that mass media such as the billboards work mainly in the service of reinforcement and minor change as Klapper (1960:15) observes:

> **"This is no way to say that major changes and conversations do not occur, nor that under particular conditions they may not be widespread. It is rather to say that by comparison they are rare, and that persuasive mass communication normally tends to serve far more in the interests of reinforcement and minor change."**

The low ranking among the main and preferred sources of information on both knowledge and attitudes also bespeaks of the poor effectiveness of the billboards as IEC media in HIV/AIDS.

4.2.1 Recommendations

The recommendations on the students' attitudes may take the following forms:

(i) Providing more information and counselling to reduce denial of the disease by the students. Training of more peer educators among the students should be considered in the light of the limited numbers of professional counsellors;

(ii) Providing more information targeted at further reduction of stigmatisation, and the consolidation of the present positive attitudes, related to the disease and people affected by it;

(iii) Providing more information aimed at enhancing the positive attitudes towards abstinence from sex, or sticking to one sexual partner in the age-group where total celibacy may not be attained;

(iv) Related to the above, there will be need to improve the students' attitudes towards the use of the condom not only as a means of avoiding pregnancies but also, and more importantly, as a means of preventing the spread of HIV especially among the younger and female

considered;

The recommendation for special sessions on the use of condoms among the female students is based on the fact that the results of the study suggest that, though they seem to want to use the condom, the females are not empowered enough to be able to acquire and insist on using a condom. The evidence from focus group discussions also suggests that girls feel intimidated and ashamed to discuss all aspects of a condom in the presence of their male counterparts;

(v) Realising that the mass media are often inadequate as means of enhancing attitudes, there will be need to strengthen the interpersonal forms of persuasion particularly the AACs, teachers, peers, churches and parent-children dialogues; and,

(vi) Appreciating the effectiveness of visual communications in attitude change, there will be need for well-focused AIDS programmes on television, video and other means of making the youths see the AIDS problem.

AND ATTITUDES ABOUT AIDS

This research has provided sufficient evidence in support of a number of hypotheses made at the beginning of the inquiry regarding the low impact of the billboards on knowledge of and attitudes about HIV/AIDS among the urban students in this country. Though by and large having presented a low or minimal effect, the results also point out a few positive values of the billboards in the fight against AIDS. From the results, this researcher concludes that most of the billboard messages, which were mostly of a preventive nature against HIV and AIDS, were found to be necessary and easy to understand technically.

Apart from a few, the messages were well balanced and sensitive to the cultural and gender values. The sizes of the boards, especially the ones above 1.5 (width) x 3 (length) metres, were generally found to be ideal. The ones below this size were found to be not big enough particularly when located along highways, where the audiences are expected to read them at driving speeds of not less than 80 kilometres per hour. In addition to these positive attributes, the billboards as a medium of communicating AIDS messages were found to have a potential to be useful in their own way. Therefore, there is need to maintain their place among the other media.

Though with these actual and potential strengths, the weaknesses of the billboards visited ultimately overshadow the strong values. First of all, this researcher draws the conclusion that despite the ease with which they could be comprehended and their being found to be carrying generally relevant messages, the current messages do not offer the students anything new. The majority offer information of a preventive nature, the common preventive measures for that matter, which from the knowledge profile are by now common knowledge to the students.

It would also appear that the designers of the current billboards turned a blind eye to the reality of the many Zambians who are either potential or already affected by HIV or AIDS who need information too. This fact alone is sufficient to reduce the size of the readership.

That the billboards are offering little unfamiliar information to the students leads to the conclusion that they have no real significant role to play in enhancing the students' knowledge about the disease AIDS. This assertion is anchored by the strong evidence of low exposure, attention and retention of their messages which, like currency or newness of the message, are crucial factors in the knowledge acquisition process.

This researcher notes that exposure and attention to the current billboard messages is affected by poor visibility, unideal location, small size, unattractive artistic quality and poor readability of the billboards. Retention of the few messages that manage to escape the exposure ring of defence is affected by lack of newness or currency of these messages.

The fact that most of the billboard messages are a repeat of what the students already know about HIV and AIDS leads to the conclusion that storing such messages is tantamount to replication of what already exists in the students' memory bytes.

There is also strong evidence of mixed interpretations of some messages and illustrations (drawings) on some of the billboards. The available literature reviews on poster and billboard

comprehension and overall impact of these media.

As the vast literature reviews on attitude change overwhelmingly suggest, making decisions about an attitude position to take in the process of attitude change or formation is a function of the information available to a person at the commencement of such a process. The near absence of information from the billboards in the students' mental files leads to the conclusion that the students' attitudes exhibited in the attitude profile have had little, if any, influence from the HIV/AIDS billboard messages. The low ranking of billboards as sources that influenced the students' held attitudes in the attitude profile supports this proposition.

It is important to appreciate, as a closing remark, that though weak in the knowledge and attitude domains, the fact that students see necessity in billboards and even suggest more information of preventive nature supports the conclusion this researcher is making that the roles of these media is by and large that of reminding the students about various aspects of the disease as well as being sign-posts for detailed information which should be made available through other sources. This realization should serve as guide to future billboard designers on the type and amount of information a billboard should contain.

- It should be noted as a word of caution, however, that the evidence of the value of such repetitiousness of messages is still inconclusive.

4.3.1 Recommendations

- This research brings out low impact of billboards on both knowledge and attitudes on the students. The main reasons for the low effectiveness of these media have been found to be low exposure to the billboards and little attention and retention of their messages. Any future moves aimed at improving the impact, therefore, will rest on improving the above three interventions in the following ways:

A. IMPROVING ACCESS

Access, refered to as the essential physical potential for exposure or bringing them within reasonable range of exposure will have to be improved through:

i) Increasing the number of billboards and placing them in locations within the easy reach of the students.

B. IMPROVING EXPOSURE

Exposure will have to be improved through:

(i) Improving the visibility of the boards by placing them in places which are free from obstructions by other billboards or any other structures. The billboards should also be located in places where the students will have more and easy access such as entrances to their respective institutions. This will also make the billboards more audience-specific. Making the billboards audience-specific ('de-massifying' them), by way of locating them in places where the intended audiences can identify themselves with them should be seriously considered when choosing the sites for future billboards. Therefore, any moves to renew the current billboards should not only be about changing the **messages** but also their **locations.**

ness of the boards in the midst of other structures and objects that require the students' visual attention. The use of humour, through cartoons, should also be exploited;

(ii) The print or letter faces of the messages, especially the logos and names and addresses of the sponsors and printers, should also be made much bigger. There is also need to indicate in full the purposes for having the names of the sponsors. If the purpose of having the names of the sponsoring organisations is to inform the students that they may go to them for more informations and condoms, for instance, this should be clearly stated. Lessons from the current billboards suggest that most students could not make out exactly the rationale behind including the names among the messages. The size of the boards should be taken seriously because by location most of the billboards are of a single glance nature;

(iii) Some billboards considered to be for motorists were affected by the distance between the road and their exact locations and the fact that the faces of some of them were parallel to the roads. Therefore, there is need for future billboards to be brought close to the drivers' view paths. The idea of having overhead billboards over highways should be considered since when driving, especially at high speed, the drivers tend to look forward rather than sideways; and,

(iv) As indicated earlier, audiences take interest in media programmes that they can identify themselves with. Sponsors should, therefore, take a more participatory approach in future billboard designs. Besides making the messages more audience relevant, involving the students at the levels of designing the billboards will create interest and, as a result, increase exposure and attention which have been identified as central to any media impact.

Therefore, shot-cuts, where the sponsors think they know what the perceived audiences need in terms of messages, goals and means, when designing the billboards and their messages should be avoided.

Any future attempts to design HIV/AIDS billboards should involve the following audience-based processes:

1. Learning everything possible about HIV/AIDS in Zambia i.e. the level of the disease and the direction of the campaign at national level. This should be done as a collaborative effort between the specialists on AIDS and the producers of the billboards;
2. Taking deliberate steps to understand everything about the people i.e analyzing the lifestyle, cultures, beliefs and communication preferences of the different potential and intended audiences in the Zambian communities;
3. Assessing the information needs about HIV/AIDS among the various groups of the intended Zambian audiences. This will require carrying out information needs assessments (KABP) surveys on populations on which none have been carried out before;
4. Drawing up specific measurable goals i.e what the billboards messages should achieve in terms of knowledge, attitudes and behaviour with regard to HIV/AIDS over a specified period of time;

billboard designs and display;

6. Writing up message specifications based on the information requirements;
7. Pretesting (formative evaluation) of the billboards and their messages on small samples of the intended audiences; **Pretesting** is particulary important in the light of an observation made by Dexter and White (1964) that:

" By understanding the habits, stereotypes, attitudes, maxims, generalisations, and facts that human beings accumulate in their course of their experience we can begin to analyse why people have opinions."

8. Modifying the messages and changing the locations where necessary;
9. Mass production and display; and,
10. Monitoring for exposure and attention. This will have to be done through regular visits to the communities and audiences with the view to changing the messages from time to time to meet changing information needs and tastes. Impact evaluations will have to be conducted on a more regular basis.

The above steps will require collaborative efforts among the **subject (HIV/AIDS) specialists, media experts (formative evaluators), billboard writers** and the **intended audiences.**

C. IMPROVING ATTENTION

Attention will have to be improved through:

(i) Making the billboards more eye-catching as suggested above;

(ii) By improving readability of the impressions by placing only sufficient messages and improving the print as suggested under exposure. The question of the amount of information or number of messages a billboard should contain should be taken much more seriously. From the results, only one or two messages and one caricature per billboard are recommended;

(iii) Presenting on billboards only messages which are considered new and current on the subject of HIV/AIDS on the students. Hence, there is need for future sponsors to identify knowledge and attitude gaps and work to fill up these gaps if the billboards are to increase their impact, especially as conveyors of knowledge.

A lot of effort should go into audience surveys and pre-testing of the messages as described under exposure; and,

(iv) Participation, as outlined under exposure, is crucial for the success of future billboards. It is only through their participation that the youths' emotions and information preferences will be catered for which in turn will increase their interest and attention.

Storage of information from the billboards, which is crucial for their future decisions, should be enhanced through:

(i) The billboards' venturing into virgin information areas as indicated under attention;

(ii) Making the messages more impactful on the emotions of the students. Including human interest on the messages will have to be considered;

It should be noted as a closing remark, that the success of all the above recommendations will depend on the amount of audience participation and surveys that will be invested into future billboard programmes.

In this thesis the knowledge and attitudes of the urban-based students in Zambia on various issues about HIV and AIDS were investigated. The impact of the billboards on the students' knowledge and attitudes was also a subject of inquiry. The idea behind investigating knowledge was to establish knowledge gaps, manifested through misconceptions and low knowledge, and to establish the students' main sources of information with the view of strengthening them in future.

With regard to attitudes, the researcher felt that understanding the students' attitude positions on various aspects of the disease, among them safe sex, stigmatisation and denial of the disease, would help predict habits vis-a-vis HIV/AIDS and determine strategies for future campaigns.

The billboards, on the other hand, are among the latest media in the AIDS media strategies in Zambia. The driving force behind investigating their effectiveness was, therefore, the need to find long-term billboard communication strategies in the AIDS campaign with particular regard to design, display and their messages in terms of what and how to present.

The report generally suggests high knowledge of the basic (common) facts about HIV/AIDS particularly on common modes of transmission and preventive measures. However, there are strong indications and suggestions that the students hold low knowledge and misconceptions on more technical aspects of the disease. Identifying knowledge gaps and filling them up is the suggested solution to the problem of low knowledge and misconceptions which were elicited in the study.

Concerning the students' attitudes, the findings suggest low stigmatisation about the disease and its patients which may be a positive point for the HBC programme in Zambia. However, there are indications of generally high feelings of denial of the disease which require attending to.

On safe sex and HIV preventive measures, the findings suggest a high preference for abstinence and sticking to one sexual partner, especially among the female and younger students, and negative attitudes and habits towards the use of the condom as an HIV preventive measure. There are strong indications that a lot of penetrative sex takes place in the age-group 20 - 30 years either with many partners or a string of partners coming one at a time, in the process of searching for a life-long one. The thesis suggests more well-focused persuasions to reduce the negative attitudes of stigmatisation, denial and condom use.

The conclusion on the impact of the billboards in AIDS education and information is a pessimistic one; though the students appreciate the need to use billboards in HIV/AIDS education, the current ones in Lusaka, Ndola and Kitwe are hardly paid attention to. The inappropriate designs, messages and locations make the students' exposure to them, attention to and retention of their messages considerably low. The report makes specific recommendations on how exposure, attention and retention can be improved. The three are critical determinants of the impact of out-door media.

REFERENCES AND BIBLIOGRAPHY

"Acquired Immunodefficiency Syndrome: adolescence attitude to health and health education." (YEAR ANONYMOUS).

Anti-AIDS Project (1992). **AIDSLINK.**Lusaka: Anti-AIDS Project.

Asindi A.A. (1993). "Examining HIV-related knowledge among adults in the U.S." **Journal of Health and Social behaviour.** 34(1):23-36, 1993 March.

Baggaley, R and Phiri,M.(1994). "Knowledge and attitudes to HIV and AIDS and sexual practices amongst university students at the University of Zambia." Paper presented to the 4th National AIDS Conference, Lusaka, March 1994.

Bekalo, Isaac (1992). **Participatory approach to rural AIDS education: a workshop manual.** Silang: International Institute of rural reconstruction.

Bosompra, Kwando (1993). "Television, sexual behaviour and attitudes towards AIDS: a study in cultivation analysis." **Africa Media Review.** Volume 7, Number 3. Nairobi: African Council of Communication Education.

Chanda,C. et al. (1994). "Does counselling help to empower women to negotiate for safe sex?" Paper presented to the 4th National AIDS Conference, Lusaka, 1994.

Chewe, Luo (1991). "HIV Infection among hospitalized Children of UTH Lusaka: diagnosis and risk of transmission through therapeutic practice." MA Thesis. Lusaka: University of Zambia.

Chiboola, H.(1990). "Knowledge, attitudes, beliefs and practice (KABP) survey on AIDS." Unpublished.

Colle, Royal D. (1990). "Some frontiers of development communication." **The Journal of development communication.** Volume one, Number one. Selangor: AIDCOM.

Cialdini, Robert B et al. "Attitude and attitude change." **Annual Review of Psychology.** California: Annual Reviews.

Dexter, Antony Lewis and White, David Manning eds. (1964). **People, Society and Mass Communication.** New York: Free Press.

Evian, C.R. et al. (1990). **"Qualitative evaluation of an AIDS health education poster: a rapid assessment method for health education materials."** South African Medical Journal. 78(9): 517-20, November.

George, Nancy (1990). "The dilemma of appropriate media selection for dissemination of development information." **Communication processes: alternative channels and_strategies for development support.** Selected papers presented at the seminar held in Nairobi, Kenya in November 1990.

Goonasekera, Anura (1990). "mass media campaigns for development: some practical guidelines." **The Journal of development communication.** Volume one, Number one. Selangor: AIDCOM.

Gordon, Gill and Kloudo, Tony (1989). **Preventing a crisis: AIDS and family planning work** (Revised edition). London.MacMillan.

Idid, Syed Arabi (1990). "Theories of communication and theories of development: some possible relationships." **The Journal of development Communication.** Volume one, Number one. Selangor: AIDCOM.

school students in Nigeria." Abstract.

Jeffres, Leow (1986). **Mass media process and effects.** Illinois: Waveland.

Jensen, Klaus Brohn and Jankowski, Nicholas W. (1991). **A handbook of qualitative methodologies for mass communication research.**London: Routledge.

John, Arnold ed (1984). **Social psychology.** Iowa: Brown.

Kaplan, Abraham. **The conduct of inquiry. methodology for behavioural Science.** New York: Harper and Row.

Kasoma, Francis P (1990). "Rural newspaper forums: another model of communication for development." **The Journal of development communication.** Volume one, Number two. Selangor: AIDSCOM.

Kasoma, Francis P (1994). "Content analysis of AIDS stories in the Zambian press" (Research paper). Lusaka: University of Zambia.

Kasoma, Francis P (1991). "The Zambian media and the AIDS crisis."**The Journal of Commonwealth Association for Education in Journalism and Communication.** Volume 3.

Kivukuru, Vilamaija (1990). **Tinned novelties or creative culture? a study on the role of mass communication in peripheral nations.** Helsinki: Department of communication.

Klapper, Joseph (1960). **The effects of mass communication.** New York: Free Press.

Le Blank, A.J. (1993). "Examining HIV-related knowledge among adults in the U.S." **Journal of health and social behaviour.** 23-26, March (ABSTRACT).

Lemert, James B. and Ashman, Marguerite Gemson (1983). "Extent of Mobilising Information in opinion and news magazines." **Journalism quarterly.Winter 1983.** California: Wadsworth.

Lyttleton, C (1994). "Knowledge and meaning: the AIDS education campaign in rural northeast Thailand." **Journal of education campaign of social science and medicine.**38(1): 135-46, January.

McAnony, Emile (1980). **Communication in rural Third World: the role of information and development.** New York: CBS.

Macquail, Denish (1987). **Mass communication theory: an introduction.** Second edition. London: Sage.

Macquail, Denis and Windahl, Sven (1981). **Communication models for References: the study of mass communication.** London: Longman.

Melkote, Srinivas (1991). **Communication for development in the Third World: theory and Practice.** New Dehli: Sage.

Mody, Bella (1991). **Designing messages for development communication:an audience participation-based approach.** New Dehli, Sage.

Mudenda, S.J (1992). "The needs and aspirations of secondary school pupils and their attitudes and advisors on selected issues of sexuality." Lusaka:UNZA.

students in Zambia. Paper presented at the IXth international Conference on AIDS, Berlin.

Mfune et al., (1990). Students' **Perception of AIDS in Zambia.** Unpublished. Lusaka: UNZA

Msiska, Roland et al. (1993). **Zambia: the HIV/AIDS situation and demographic impact.** Lusaka: MOH.

Mytton, Graham(1992). **Handbook on radio and television audience research.** London: UNESCO.

Ndovi-MacMillan et al. (1995). "Knowledge, attitudes and practices about traditional healers (THs) and formal health workers(FHWs) in Lusaka, Zambia." Paper presented to the 2nd International Conference on Home and Community care for people living with HIV/AIDS, Montreal, 1995.

Nzima, Masautso (1995). **Media preferences of the youth in urban Zambia.** Lusaka: MOREHOUSE.

Osbourne, M.C. (1993). "Sexual and reproductive health in Zambia." Unpublished paper.

Panos Institute (1990). **The third epidemic :the repercussions of fear of AIDS.** London:Panos.

Rapanoel, Didier (1990). **Contribution of oral traditions and mother tongues to communication strategy in rural areas.** Nairobi.

Reich, Ben and Adcock, Christie (1976). **Values, attitudes and behaviour change.** London: Oxford.

Rokeach, Milton (1968)."The nature of attitudes." **Encyclopedia of the social sciences.** Volume one and two. New York: MacMillan.

Rooney, Michael ed. (1992). **HIV project: information file. London:NWTRHA.**

Schramm, Wilbur (1977). **The process and effects of mass communication.** Revised edition. Urban:MacMillan.

Schneider, David (1976). **Social Psychology.** London: Addison-Wesley.

Sereno, Kenneth K and Bodaken, Edward M (1975). **Trans-perunderstanding human communication.** Boston: Houghton.

Sills, David ed. (1968) **International Encyclopedia of the Social Sciences.** New York: MacMillan.

Smith, Brewster (1968). "Attitude Change." **International Encyclopedia of the Social Sciences.** Volumes one and two. New York: MacMillan.

Sommers, Robert and Sommer Barbara (1986). **A practical guide to behavioral research tools and techniques.** Second edition. New York, Oxford.

Swets, Davjd and Kristofferson, Alfred B (1970). "Attention." **Annual Review of Psychology.** Volume 21. California: Annual Reviews.

Tesser, Abraham and Sheffer David (1990). "Attitudes and attitude Change." **Annual Review of Psychology.** California: Annual Reviews.

The Encyclopedia Americana: **The International reference work.** Volume 23. New York: Americana Corporation.

Longman

Webb, Douglas et al. (1995). **HIV/AIDS research in Zambia:** an annotated bibliography. Lusaka: UNCEF

White Shirley (1994). **Participatory communication: working for change and development.** London: Sage.

Whiteside, Allan (1995). **"The HIV/AIDS analysis Africa.** Volume 6, Number 3 October/November.

The World Book Encyclopedia (1968). Volume 20. Chicago: Field Enterprises Educational Corporation.

Abdool, Karim S.S. el. at. "Reasons for lack of condom use among high school students." **South African Medical Journal** 82 (2): 107-10. August 1992 (Abstracts).

"AIDS vaccines: will media reports KO upcoming real life trials?" **SCIENCE.** 264(5166): 1660. June 1994. (ABSTRACT).

Akhtar, R. "Diffusion of AIDS in Africa (as reported by newspaper media)." **Geographia Medica.** 20:85-9. 1990 (Abstract).

Author anonymous. "Assessment of broadcast media arigins of AIDS related public service announcements in the U.S. 1987-90." **M M W R - Morbidity and mortality weekly report.** 40(31): 540-6. August 9, 1991.

Barr, K. and Warshar, L.J. "Worksite AIDS education: a case study of the New York City police." **AIDS Education Prevention** 6(1):53-6. February 1994 (Abstract).

Bell, P.F. et. at. (1993). "HIV/AIDS knowledge and attitudes of accident and emergency health care professionals." **Journal of the Association of Nurses in AIDS care.** 7-14. (Abstract).

Bray, F. and Chappman, S. (1991). "Community knowledge, attitudes and media recall about AIDS. Sydney 1988 and 1989." **Australian Journal of Public Health.** 15(2): 167-75. June. (Abstract).

Bush, A.J. Krebs, D.L. & Carpendale, J.D. (1993). "The Structural consistency of moral judgement about AIDS." **Journal of genetic psychology.** 154(2):167-75. June. (Abstract).

Bwayo, J.J. et. al. (1991). "Long distance track drivers: knowledge and attitudes concerning sexually transmitted diseases and sexual behaviour." **East African Medical Journal.** 68(9):714-9. September. (Abstract).

Cline, C. J. and Engel, J.L. (1991). "College students' perception of sources of information about AIDS." **Journal of American College Health.** 40(1): 55-63. September. (Abstract).

Crowsnaw, R. (1990). "The media and the AIDS crisis: a Conference of Oregon Journalists." **Journal of Clinical epidemiology.** 43(5): 523-6. (Abstract).

Dexter, Lewis Antony and White David Manning (1964). **People, society and mass communication.** London: MacMillan.

Flaskerud, J.H and Uman, G. (1993). "Directions for AIDS education for Hispanic women based on analyses of survey findings." **Public Health Report - Hyattsville.** 108(3): 298-304. March-June. (Abstract).

Hallet, M.A. and Cannella, G. (1994). "Gate-keeping through media formats: strategies of voice for the HIV positive via human interest news formats and organisations." **Journal of homosexuality.** 26(4): 111-34. (Abstract).

Hedegaard, M. et al. (1992). "Pregnant women's knowledge about HIV and AIDS." **Ugeskrift for laeger.** 154(32): Z 191-5. August 3. (Abstract).

Ijsselmuidsen, C.B. et al. (1990). "Knowledge, beliefs and practices among black gold miners relating to immunodeficiency virus and other sexually transmitted diseases." **Medical Journal.** 78(9):520-3, November 3. (abstract).

Jason, J. et al. (1993). "Potential use of mass media to reach urban intravenous drug users with AIDS prevention messages." **Journal of the addicts.** 28(9) 837-51. July. (Abstract).

men's perceptions of AIDS." **Journal of consulting and clinical psychology.** 61(5):887-91. October. (Abstract).

Keiser, N.H. (1991). "Strategies of media marketing for 'American responds to AIDS' and applying lessons learned." **Public health reports hyattsville.** 106(6):623-7. November-December. (Abstract).

Livingstone, I.L. (1992). "HIV/AIDS crisis in developing countries: the need for greater understanding and innovative health promotion approaches." **Journal of National Medical Association.** 84(9):55-70, September. (Abstract).

Lurie, P. et al. (1994). "Ethical, behavioural and social aspects of HIV vaccine trials in developing countries." **JAMA.** 271(4):295-301, January 26.

Melkote, Srinivas R. (1991). **Communication for Development in the Third World: Theory and Practice from 1950s to 1990s.** London: Sage.

Mody, Bella. (1991). **Designing messages for development communication: an audience participation-based approach.** London: Sage.

Moore, J. (1993). "Striking the happy media." **Nature.** 863(6438):391 2, June 3. (Abstract).

Norishita, T. et. al. (1993). "AIDS-related knowledge among nurses in Mie Prefecture, Japan." **Japanese Journal of Public Health.** 40(4):323-9, April. (Abstract).

Nakyonyi, M.M. (1993). "HIV/AIDS education participation by the African Community." **Canadian Journal of Public Health.** 84 supplement. L:9519-23, January-February. (Abstract).

Nicoll, A. et. al. (1993). "Lay health beliefs concerning HIV and AIDS: a barrier for control programmes." **AIDS Care.** 5(2) 231-41. (Abstract).

Olukayo, A.A. (1990). "Approaches to AIDS education for the grassroots in Nigeria." **Hygie.** 9(4):32-33, December.

Pitts, M and Jackson, H. (1993). "Press coverage of AIDS in Zimbabwe: five-year review." **AIDS Care.** 5(2):223-30. (Abstract).

"Psychosocial predictors of reported HIV-preventive behaviour change among adults in Bulawayo, Zimbabwe." **Central African Journal of Medicine.** 37(7):196-202. July 1991.

Reardon, K.K. and Richardson, J.L. (1991). "The important role of the mass media in the diffusion of information about AIDS." **Journal of Homosexuality.** 21(1-2):63-75. (Abstract).

Ross, W.W. et al. (1990). "The effects of a national campaign on attitudes towards AIDS." **AIDSCARE.** 2(4):339-46.

Scott, C. (1993). "Media coverage about health care workers with AIDS." **Nursing Standard.** 7(2):43, March 24-30.

Sheenhan, E.P. et. al. (1990). "An examination of change in reports of AIDS-related knowledge and attitudes in 1986 and 1988." **Psychological reports.** 677 (3 part 1):723-9, December.

Soni, S.D. and Windgassen, E. (1991). "AIDS panic: effects of mass media publicity." **ActaPsychiatrica Scandinavian.** 84(2):121-4, August.

AIDS awareness campaigns." **Canadian Journal of Public Health.** 84. Supplement, 1:552-4, February.

Wagman, L.M. (1993). "A health development's response to AIDS/condominia: a public health education intervention." **Canadian Journal of Public Health.** 84 supplement 1:562-5, January to February.

Wassif, O.M. et. al. (1993). "Effects of health education programmes on knowledge about AIDS and HIV transmission in paramedical personnel working in Benha hospitals." **Journal of Egyptian Public Health Association.** 68(1-2):143-59.

White, Shirley ed. (1994). **Participatory communication: working for change and development.** New Delhi: Sage.

APPENDICES

APPENDIX 1

THE UNIVERSITY OF ZAMBIA

SCHOOL OF HUMANITIES AND SOCIAL SCIENCES

DEPARTMENT OF MASS COMMUNICATION

QUESTIONNAIRE TO ESTABLISH THE IMPACT THE ANTI-AIDS BILLBOARD MASS MEDIA ON KNOWLEDGE OF AND ATTITUDES ABOUT HIV/AIDS AMONG URBAN STUDENTS IN ZAMBIA

RESEARCHERS: PARKIE SHAKANTU MBOZI

(MASTER OF MASS COMMUNICATION RESEARCH STUDENT)

GENERAL INSTRUCTIONS:

THE QUESTIONS IN THIS QUESTIONNAIRE REQUIRE THAT YOU TICK WHERE EVER THERE IS A BOX OR SHORT LINE AND EXPRESS YOURSELF IN WRITING WHERE EVER THERE IS A LONG LINE OR LINES.

a) QUESTIONNAIRE IDENTITY .....

b) REGION: i) CB ..... ii) MIDLANDS .....

SECTION A:PERSONAL DETAILS

1. Which age group do you fall in? (Please tick)

a) 10-14..... b)15-19.....

c) 20-24..... d) 25-29.....

e) Above 30 .....

2. Sex: .....

a) Male..... b) Female .....

3. Marital Status: .....

a) Married ..... b) Single .....

c) Widowed ..... d) engaged .....

e) Divorced . . . . . .

f) Leaving with lover but not officially married .....

4. How often do you go to church?

a) Every week ..... b) Once in a week .....

c) Never .....

5. What is your eact religion?

a) Christian ..... b) Muslim .....

c) Buddhist ..... d) Hindu .....

e) African acensctor ..... f) Any other specify

6. If you are christian what is your exact denomination?

a) Catholic ..... b) Protestant .....

c) Not applicable (Non believer)

7. How many children do you have?

a) 1 -2 ..... b) 3 - 4 .....

c) Above 4 ..... d) expecting ..... e) Not applicable (zero)

8. How rich would you say your family is?

a) Very rich..... b) Medium.....

c) Not rich.....

9. Please state your present level of education.

a) Junior Secondary School.....

b) Senior Secondary School.....

c) College level.....

d) University level.....

e) Primary level.....

10. What type of institution is yours?

a) Single sex..... b) Co-education.....

11.Are you a member of an Anti-AIDS Club (AAC)?

a) Yes..... b) No.....

12.What is your HIV status?

a) Positive..... b) Negative

c) Unknown..... d) Do not want to know.....

13. Have you lost a close member of your family to AIDS?

a) Yes..... b) No.....

14. If your answer to the above question is yes, who was it?

a) Brother..... b) Sistser.....

c) Father..... d) Mother.....

d) Any other (specify).....

15.Does your family own a TV set?

a) Yes..... .... b)No.....

16. Does your family own a radio set?

a) Yes..... b) No.....

SECTION B: HIV/AIDS KNOWLEDGE PROFILE

17. Have you ever heard of AIDS? a) yes ..... b) no .....

18. Ever heard of HIV? a) Yes..... b) No.....

19.Have you ever heard of a condom?

a) Yes..... b) No.....

20. Do you know what a condom is for?

a) Yes..... b)No.....

21. What is the price of a condom?

a) ..... b) I do not know.....

22. How would you rate your knowledge of HIV and AIDS?

a) Very good..... b) Good.....

c) Average..... d) Bad.....

e) Very bad..... e) I am not sure.....

23. What do the letters AIDS stand for for?

a) ..... b) I don't know.....

24. What do the letters HIV stand for?

a)..... b) I don't know.....

25. What virus lead to AIDS?

a) ..... b) .....

26. What harm does the HIV inflict (do) on a person's body?

a) ..... b) I don't know.....

27. Can you tell that a person has HIV?

a) Yes..... b) No.....

c) I don't know.....

28. List any four main ways you think a person can get HIV

i) .....

ii) .....

iii) .....

iv) .....

29. List three ways you think you can avoid getting HIV

i) ..... ii) .....

iii) ..... iv) I don't know.....

30.What are the four possible major symptoms of AIDS?

i) ..... ii) .....

iii) ..... iv) .....

v) I don't know.....

31. Who can get HIV and AIDS?

a) Anybody..... b) Rich people.....

c) The poor..... d) Only people with many sex partners.....

e) I don't know.....

32. Which group is most affected by the AIDS Pandemic?

a) Children..... b) The young adults (15-45years) .....

c) Older people (above 45).....

d) I don't know.....

33. Normally a person would have HIV without developing full-blown AIDS up to:

a) 1-2 years..... b) 3-4 years.....

c) 5-10 years..... d) I don't know.....

34. What two major ways do you think can make an HIV positive person live longer?

a) .....

b) .....

35. Is there an effective cure for AIDS?

a) Yes..... b) No.....

c) I don't know.....

36. List any three western AIDS medicines that are being tried.

i) .....

ii) .....

iii) .....

iv) I don't know.....

person more at risk of getting HIV?

a) Yes..... b) No.....

c) I don't know.....

38. List any five organisations you can go to for information about HIV and AIDS.

a) ..... b) .....

c) ..... d) .....

e) ..... f) I don't know of any.....

39.The following are the main surces of information about HIV and AIDS:

a) Television b) Pamphlets

c) Radio d) Anti-AIDS Clubs

e) Posters f) Other people

g) Bill boards i.e large boards

h) Magazines i) Books

QUESTION:

Which of the above have helped you gain knowledge of HIV and AIDS. Your main sources should be listed first. Your list may include even sources not listed above?

.....

.....

.....

.....

.....

None of these:.....

40.Which of the above sources do you prefer to get information about HIV and AIDS and why?

.....

.....

.....

.....

.....

.....

.....

.....

41. Do AIDS billboards i.e large outdoor boards, play any significant role in increasing your knowledge of HIV and AIDS?

a) Yes..... b) No .....

42. If your sources are other people, please specify who they are:

a) Parents..... b) Grand parents.....

c) Teacher/lecturer..... d) Friends.....

e) Counsellors..... f) Any other (specify).....

g) Not applicable (Don't get information from other people).....

SECTION C:HIV/AIDS ATTITUDE PROFILE

43. How much does AIDS scare you?

a) Very much..... b)Not so much.....

c) It does not..... e) I am not sure.....

44. How many lovers of opposite sex do you have?

a) One ..... b)Two.....

c) More than two..... d)None.....

45. How many lovers of opposite sex do you have penetrative sex with?

a) One..... b)Two.....

c) More than two..... e)None.....

46. How many lovers do you have sex with without a condom?

a) One..... b)Two.....

c) More than two..... d) None.....

47. How often do you use a condom when having sex with your steady lover/s?

a) Always..... b)Sometimes.....

c) Never.....

d) Not applicable (I never have sex).....

48. How often do you use a condom with non steady sex partners?

c) Never.....

49. If you use condoms, why exactly do you use them?

a) To avoid getting HIV.....

b) To avoid pregnancies.....

c) I am just forced by my partner.....

d) I just enjoy using them.....

e) Any other reason? (specify).....

f) Not applicable (I never have sex).....

50. Do you find sex with a condom enjoyable?

a) Yes..... b)No.....

c) Not applicable (Never have sex).....

51.Who decides you should use a condom?

a) Myself..... b) My partner.....

c) Both of us..... d) Not applicable (I never use it).....

52. If you don't use condoms please state why:

a) I trust my partner.....

b) They are not available.....

c) They are too expensive.....

d) I simply don't enjoy them.....

e) My partner does not enjoy them.....

f) My church discourages their use.....

g) I never have sex.....

h) State any other reason.....

i) Not applicable (I use them).....

53. If you use condoms, where do you get them?

a) Shops..... b) Chemists.....

c) Health centres..... e) Sate any other.....

f) Not applicable (I don't use them).....

54. If you don't find condoms favourable, what other means of safe sex do you prefer?

b) Sticking to one seual partner.....

c) Oral sex (exciting of sex organs by the use of mouth and tongue) .....

d) Lasbianism (female to female sex).....

e) Masturbation (stimulation of own sexual organs)...

f) Please state any other.....

PLEASE RESPOND TO THE FOLLOWING QUESTIONS:

55. Sex outside marriage should be strongly discouraged.

a) Agree..... b) Strongly agree.....

c) Disagree..... d) Strongly disagree.....

e) Neutral..... Why do you think so.....

56. Condoms should be publicly promoted for use in the media?

a) Agree..... b) Strongly agree.....

c) Disagree..... d) Strongly disagree.....

e) Neutral..... Reason.....

57. Everyone must be encouraged to stick to one sexual partner?

a) Agree..... b) Strongly agree.....

c) Disagree..... d) Strongly disagree.....

e) Neutral .....

Reason.....

58. Couples must test for HIV before they get involved in sex.

a) Agree..... b) Strongly agree.....

c) Disagree..... d) Strongly disagree.....

e) neutral.....Reason.....

59. AIDS patients must be strongly condemned.

a) Agree.....b) Strongly agree.....

c) Disagree..... d) Strongly disagree.....

e) Neutral..... Reasons.....

a) Agree..... b) Strongly agree.....

c) Disagree..... d) Strongly disagree.....

e) Neutral..... Reasons.....

61. Parents should openly discuss AIDS issues with their children.

a) Agree..... b) Strongly agree.....

c) Disagree..... d) Strongly disagree.....

e) Neutral.....

62. What spesific measures do you think should be taken about AIDS patients?

a) Kill them.....

b) Keep them in isolation.....

c) Care for them at home.....

d) Keep them in hospital.....

e) Let them mix in society.....

63. What would you do if a member of your family suffered from AIDS?

a) Avoid her/him.....

b) Accept him/her but keep a distance.....

c) Care for her/him.....

d) Any othr (Specify).....

e) I do not know.....

64. Would you share a bed with a member of your family who has AIDS?

a) Yes ..... b) No .....

f) .....

.g) .....

h) .....

i) .....

j) Nothing new.....

64. Would you share a bed with a member of your family who has AIDS?

a) Yes..... b)No.....

c) Not sure.....

a) I would kill myself.....

b) I would accept myself and live positively.....

c) I would be miserable.....

d) Any other (specify).....

e) I am not sure.....

66. Would you tell others if you discovered you were HIV positive?

a) Yes.....b)No.....

c) I don't know.....

67. Which among the sources of information listed in Q.39 would yoy say influenced your attitudes about AIDS and HIV in general and safe sex in particular? List in the order of your main sources first.

(A) Not applicable (never seen any) .....

a) Yes..... b)No.....

c) I don't know.....

67. Which among the sources of information listed in Q.39 would yoy say influenced your attitudes about AIDS and HIV in general and safe sex in particular? List in the order of your main sources first.

.....

.....

.....

68. How much do you think AIDS billboards have contributed to changing your attitudes about risky sexual habits?

a) Very much.....

b) Not so much (Average).....

c) Nothing.....

SECTION D:PERCEPTION OF AIDS BILLBOARDS PROFILE

69. Have you ever seen an AIDS billboard i.e large board or drawing on a wall with AIDS messages?

a) Yes..... b)No.....

70. Where exactly did you see it?

.....

b) Not applicable (Never seen any).....

71. What sort of billboard was it or were they?

a) With drawings of people.....

b) Without drawings.....

c) Both (with drawings and without).....

d) Not applicable (never seen any).....

72. Please describe what exactly you saw on the billboard/s

a) .....

b) The message (list the various messages you saw i.e what the billboard were saying)

i).....

ii).....

iii).....

iv).....

v).....

vi).....

vii).....

A. Can't remember .....

B. Not applicable(Never seen any).....

73. Do you ever stop to look at the AIDS billboards?

a) Yes..... b)No.....

c) Not applicable (Never seen any).....

74. If you don't, why don't you?

.....

75. If you do, how long does it take you to get all the messages?

a) Less than one minute.....

b) Between one and five minutes.....

c) More than five minutes .....

76. How would you rate the performance of the billboards in increasing your knowledge of AIDS/HIV?

a) Very good (effective).....

b) Good.....

c) Bad (ineffective).....

d) Very bad.....

e) No idea.....

77. How would you rate the perormance of the billboards in changing your attitudes towards unsafe sexual behaviour?

a) Very good (effective).....

b) Good.....

c) Bad (Ineffective).....

d) Very bad.....

e) No idea.....

78. What would you say about the **drawings** (if any) of the AIDS billboards you saw?

.....

.....

.....

79. What would you say about the **messages** of the AIDS billboards you saw?

.....

.....

80. What would you say about the **location** of the AIDS billboards you saw?

.....

.....

81. What would you say about the **general design?**

.....

.....

82. What would you say about **organisations** responsible for their production?

.....

83. Do you think billboards have a significant role to play in the fight against HIV/AIDS?

a) Yes..... b)No.....

c) Not sure (never seen any).....

84. If your answer is yes, state what specific role you feel they play.

.....

b) Not applicable (I said No).....

85. If your answer is no, state why you think so.

.....

.....

b) Not applicable (I said yes)..... .....

86. If you feel the billboards are not as effective as they should be what do you think should be done to make them more effective?

.....

.....

87. What new information (if any) about HIV/AIDS did you gather from the anti-AIDS billboards?

a).....

b).....

c).....

d).....

e).....

f).....

g).....

h).....

i).....

j) Nothing new.....

k) Not applicable (never seen any).....

88. If the AIDS messages on billboards have not been appealing to you, state the reason why?

a) They are not in conformity with my religion.....

b) They are not in conformity with my culture.....

c) They are not in conformity with my personal beliefs.....

d) My parents do not agre with them.....

e) Please state any other reason/s)

f) Not applicable (I have no problem with them/never see any).....

89. Were you consulted over the design and messages on the AIDS billboards?

a) Yes..... b) Yes.....

90. How would you like billboards to be in future ?

a) With pictures..... b) Without pictures.....

91. What information would you like them to address in future.

.....

.....

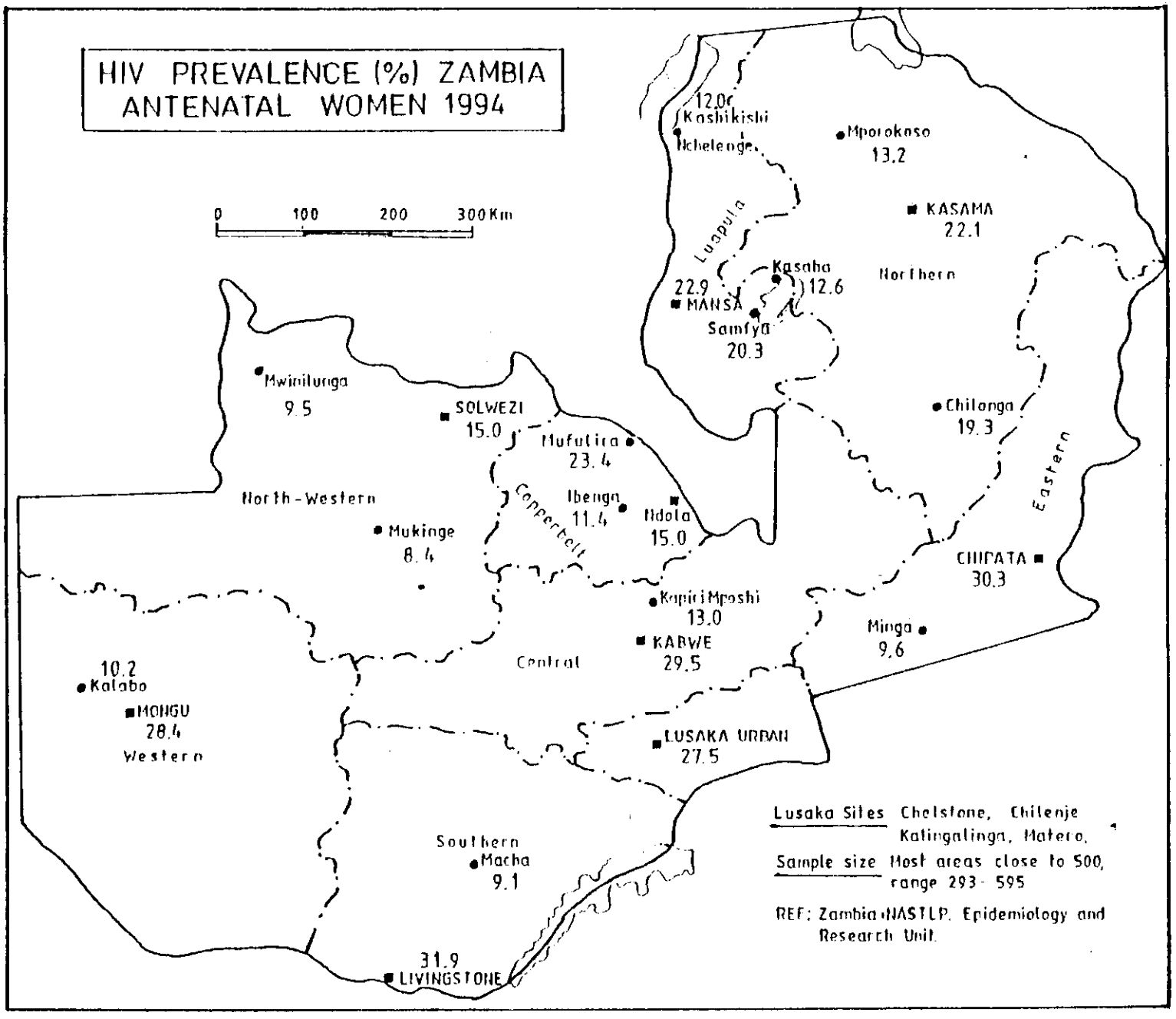
END OF QUESTIONNAIRE

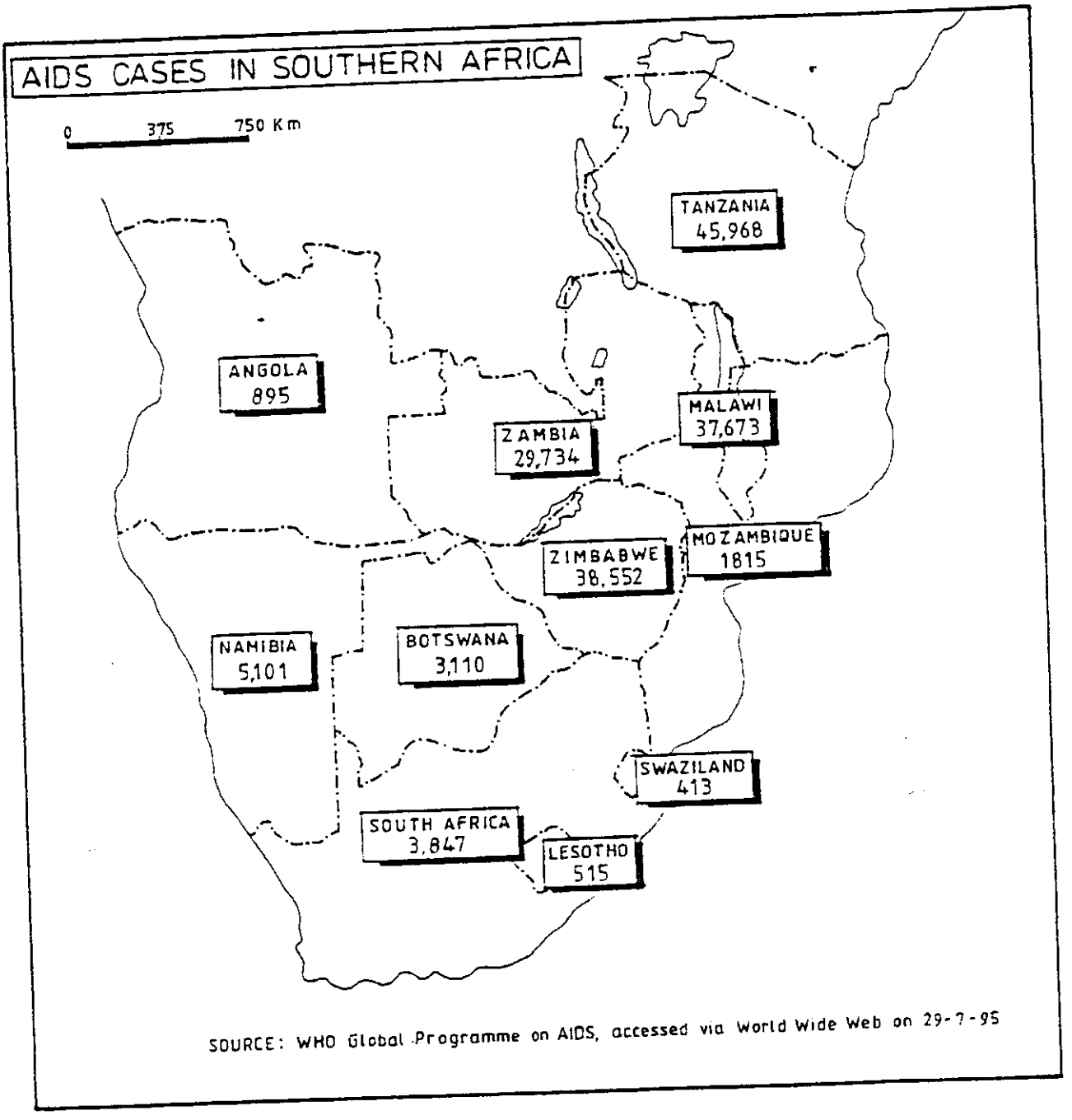
THANK YOU

SITE/BILLBOARD	No. OF MESSAGES	TYPE OF MESSAGES	RELEVANCE	ANY NEW MESSAGES	COMPREHENSION	ARE MESSAGES	HOW LONG SEEN THE MESSAGE
DESCRIPTION MESSAGES		(i) Prevention ... (ii) Cure ... (iii) Care ... (iv) Organisations ... (v) Passion ... (vi) Origin ... (vii) The disease ... (viii) Living positively...	(i) Relevant ... (ii) Irrelevent ... (iii) Too Obvious ... COMMENT	(i) Nothing ... (ii) Something new ... COMMENT	(i) Easy to understand ... (ii) Difficult to understand COMMENT	(I) Over-crowded ... (II) Okey... COMMENT	Less than 1 year Less than 2 years More than 2 years Can't remember
	GENDER SENSITIVITY	COLOUR	CULTURE SENSITIVITY	SIZE OF BILLBOARD	POTENTIAL AUDIENCES	No. Of Other Billboards In front	
AUTHOR	i) Okey ii) Not Okey COMMENT	(i) Attractive ... (ii) Unattractive ...	(i) Okey (ii) Offensive COMMENT	(i) Ideal ... (ii) Too big ... (iii) Too small ... COMMENT	(I) Students ... (ii) Motorists ... (iii) Marketeers ... (iv) Any passers by ... (v) Motorists & Passers by ... (vi) Others ...		

SIZE	IS LOCATION IDEAL FOR STUDENTS	COMMENT ON DESIGN	VISIBILITY	COULD YOU READ/SEE EVERYTHING	SEEN IT BEFORE	LIST WHAT YOU SAW	CAN SUCH BILLBOARD MAKE YOU CHANGE YOUR ATTITUDE ON CASUAL SEX
HEIGHT OFF GROUND	(i) Yes... (ii) no ... COMMENTS	(i) Attractive ... (ii) Unattractive ... COMMENTS	(i) Very visible ... (ii) Not visible ... (iii) obstructed by ... COMMENTS	(A) WHILE WALKING (i) yes ... (ii) No ... (iii) Only some ... (B) WHILE DRIVING (i) Yes ... (ii) No ... (iii) Only some COMMENTS	(i) Yes ... (ii) No ... (iii) Not sure ...	(A) WHILE WALKING (B) WHILE DRIVING	(i) Yes ... (ii) No ... (iii) Not sure ... COMMENTS

APPENDIX 3


HIV PREVALENCE (%) ZAMBIA
ANTENATAL WOMEN 1994
0 100 200 300 Km
12.0
Kashikishi
Nchelenge
Mporokoso
13.2
KASAMA
22.1
Northern
Luapula
Kasaba
12.6
22.9
MANSA
Samfya
20.3
Mwinilunga
9.5
SOLWEZI
15.0
Mufulira
23.4
Chilonga
19.3
Eastern
North-Western
Copperbelt
Ibenga
11.4
Ndola
15.0
Mukinge
8.4
CHIPATA
30.3
Kapiri Mposhi
13.0
Mpika
9.6
KABWE
29.5
Central
10.2
Kalabo
MONGU
28.4
Western
LUSAKA URBAN
27.5
Southern
Macha
9.1
31.9
LIVINGSTONE
Lusaka Sites Chelstone, Chilenje
Katingalinga, Matero.
Sample size Most areas close to 500,
range 293 - 595
REF: Zambia NASTLP. Epidemiology and
Research Unit.

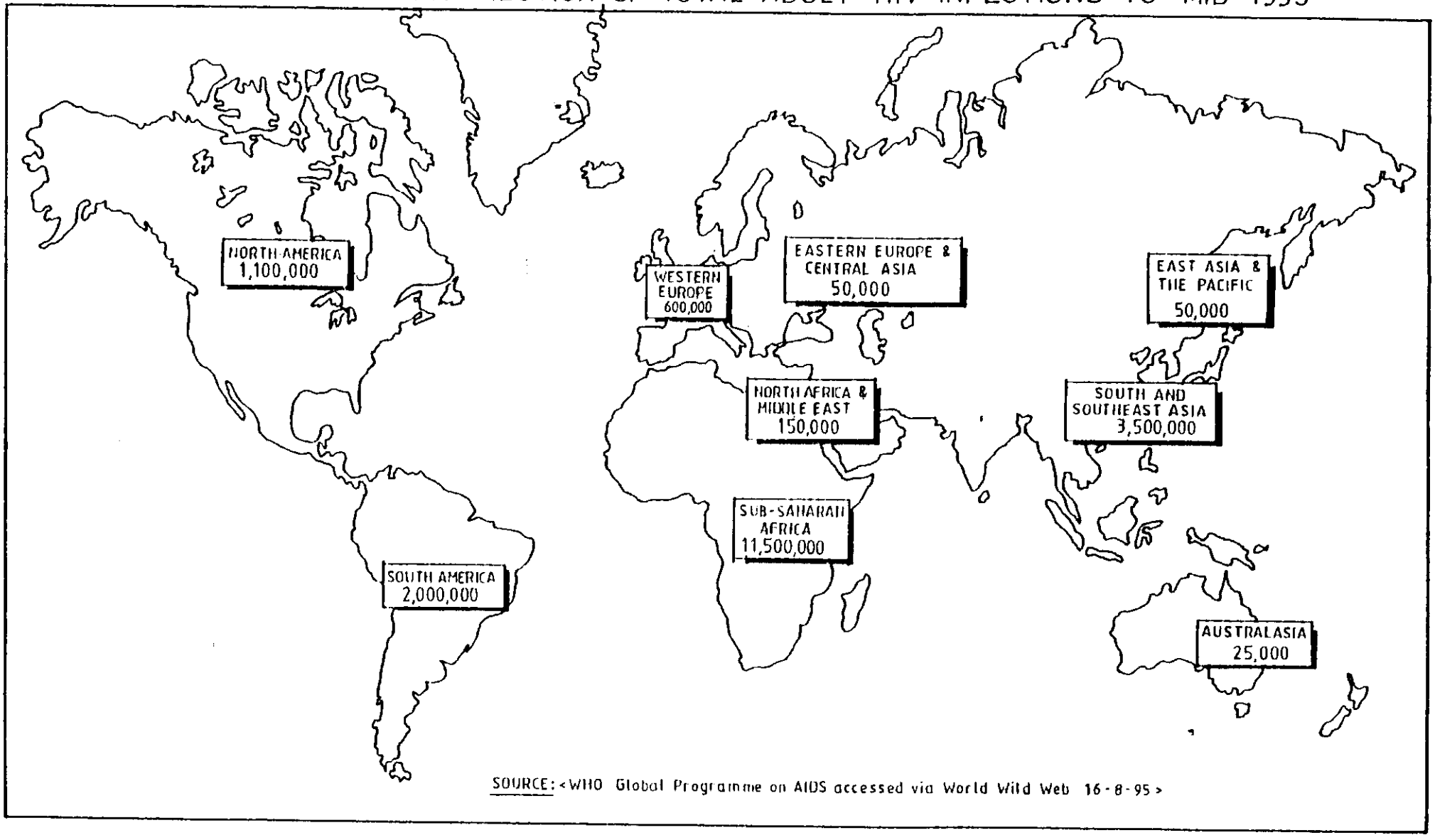


SOURCE: WHO Global Programme on AIDS, accessed via World Wide Web on 29-7-95

APPENDIX H

APPENDIX 5

ESTIMATED GLOBAL DISTRIBUTION OF TOTAL ADULT HIV INFECTIONS TO MID-1995

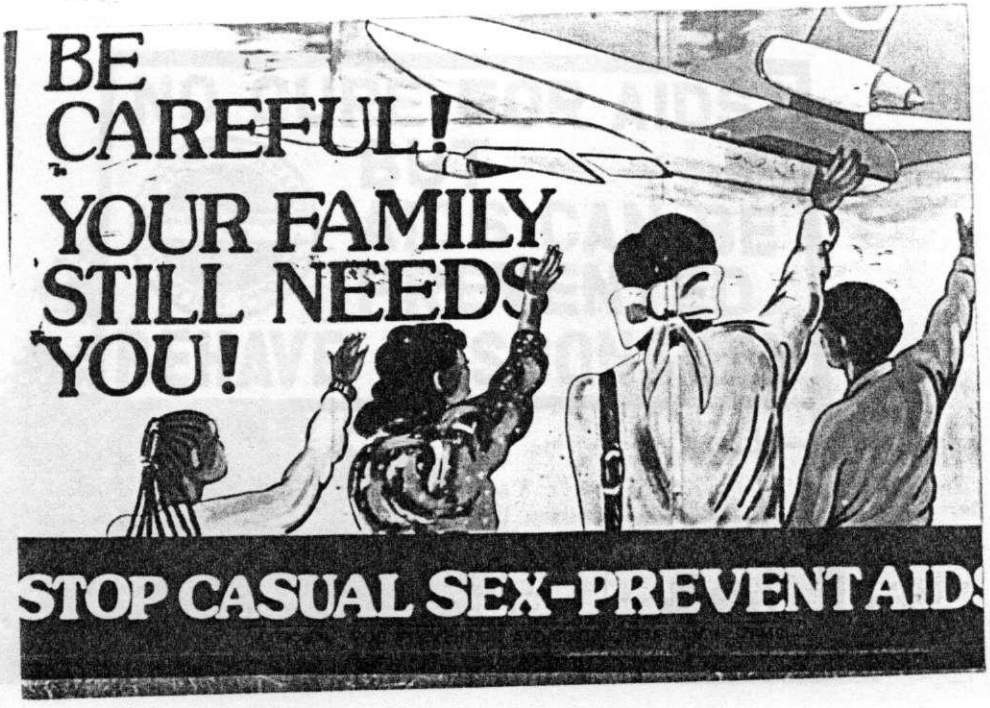


SOURCE: <WHO Global Programme on AIDS accessed via World Wild Web 16-8-95>

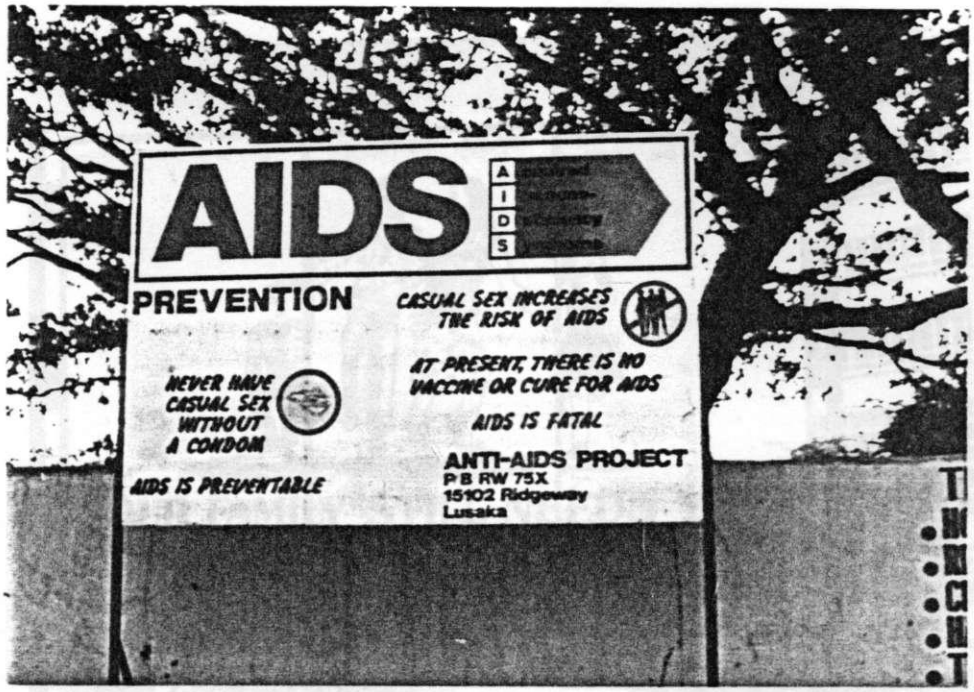
APPENDIX B

REPRODUCED PHOTOGRAPHS OF SOME OF THE BILLBOARDS

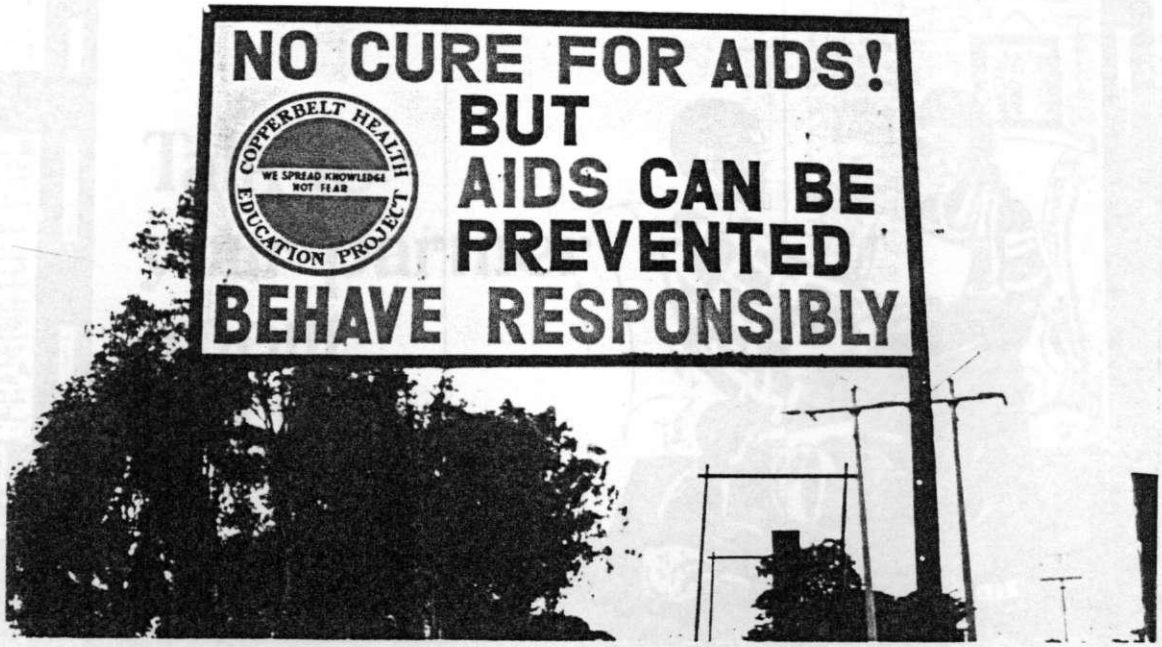
NASTLP billboard in Chelstone, Lusaka



NASTLP billboard along airport road, Lusaka

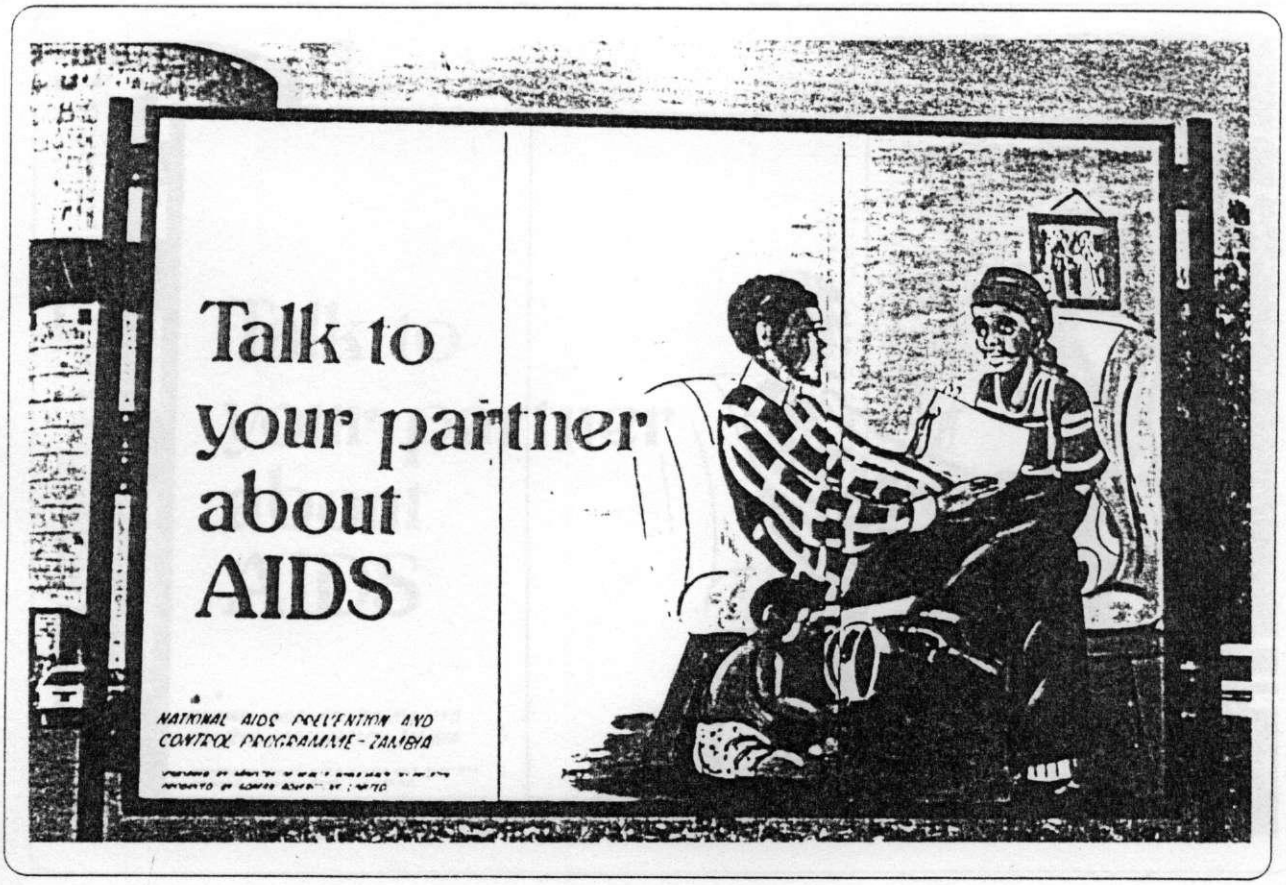


AAP billboard at UNZA YMCA and YWCA in Lusaka

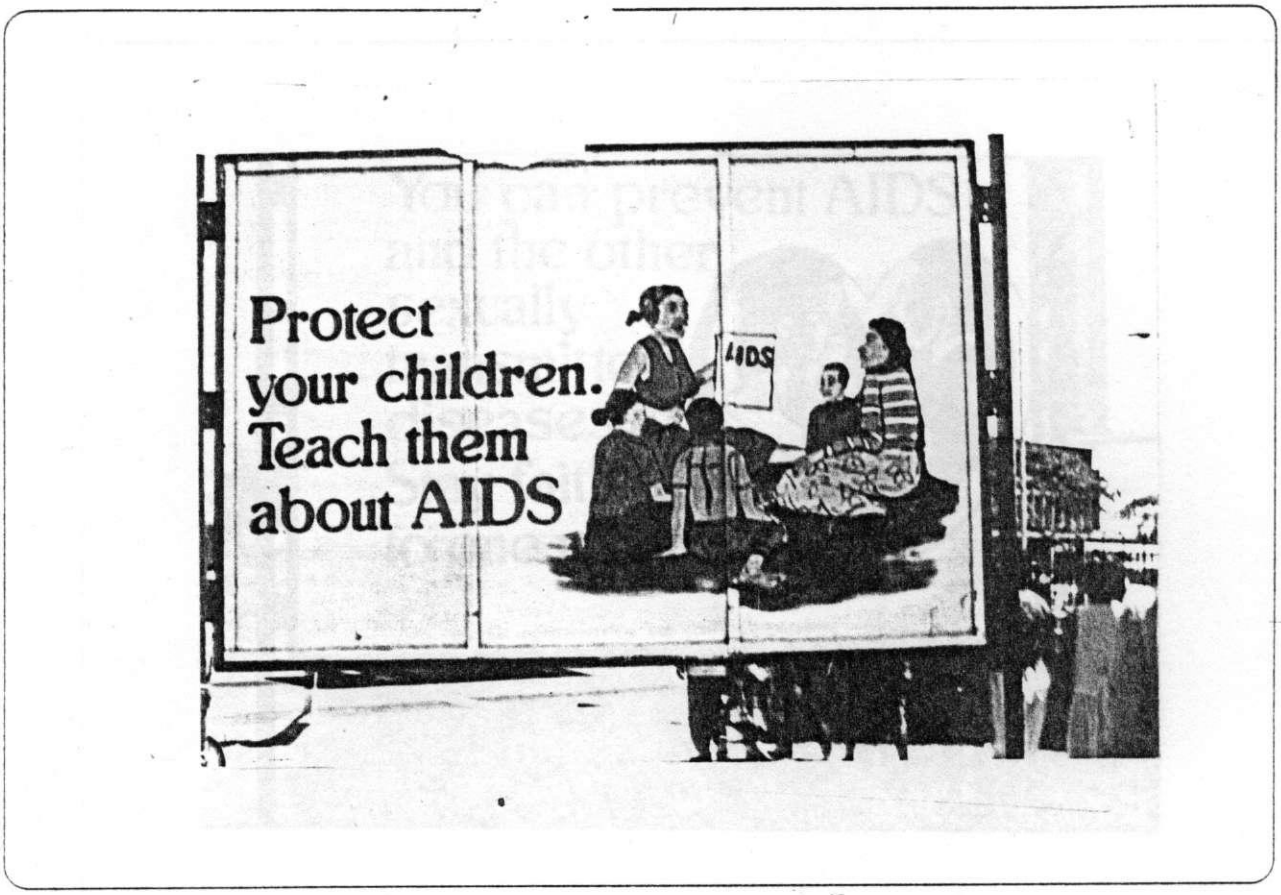


CHEP billboard along Ndola - Kitwe road in Kitwe and Ndola

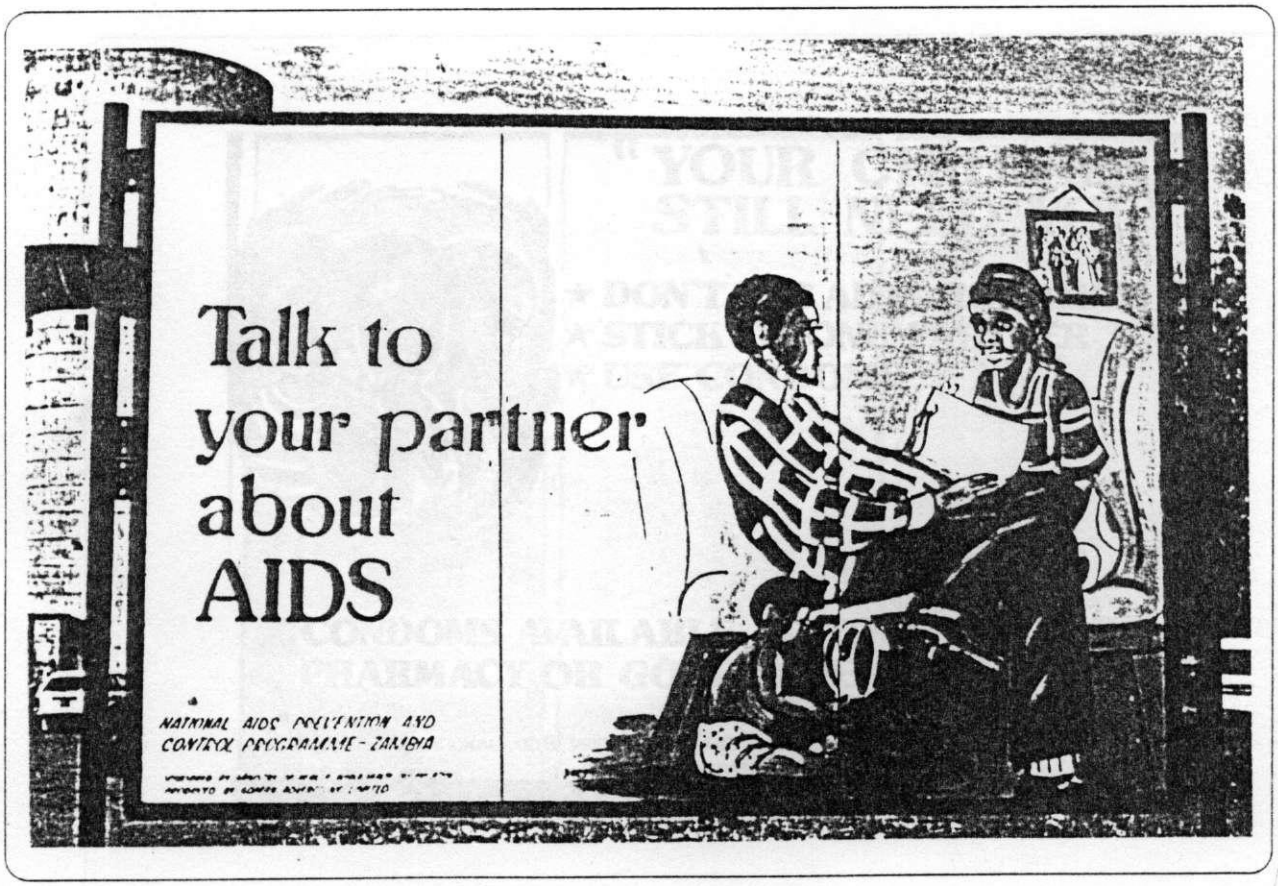
NASTLP billboard opposite main post office, Lusaka



NASTLP billboard in Chelstone, Lusaka



NASTLP billboard opposite main post office, Lusaka

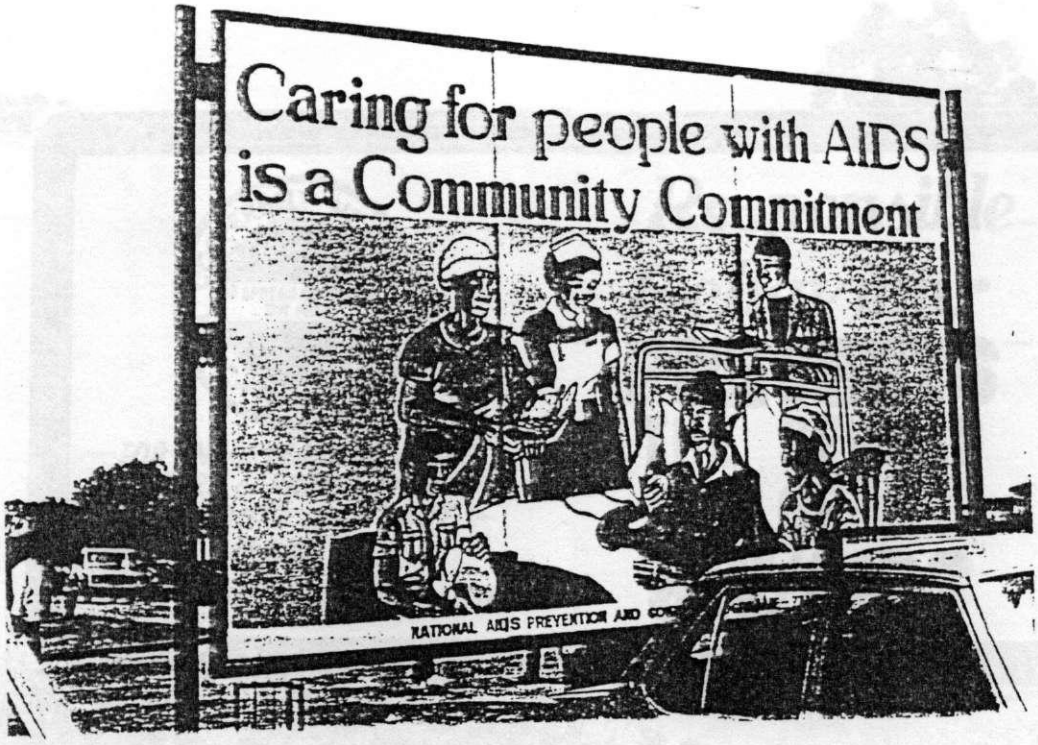


NASTLP billboard in Chelstone, Lusaka

NASTLP billboard at Kabwe roundabout, Lusaka

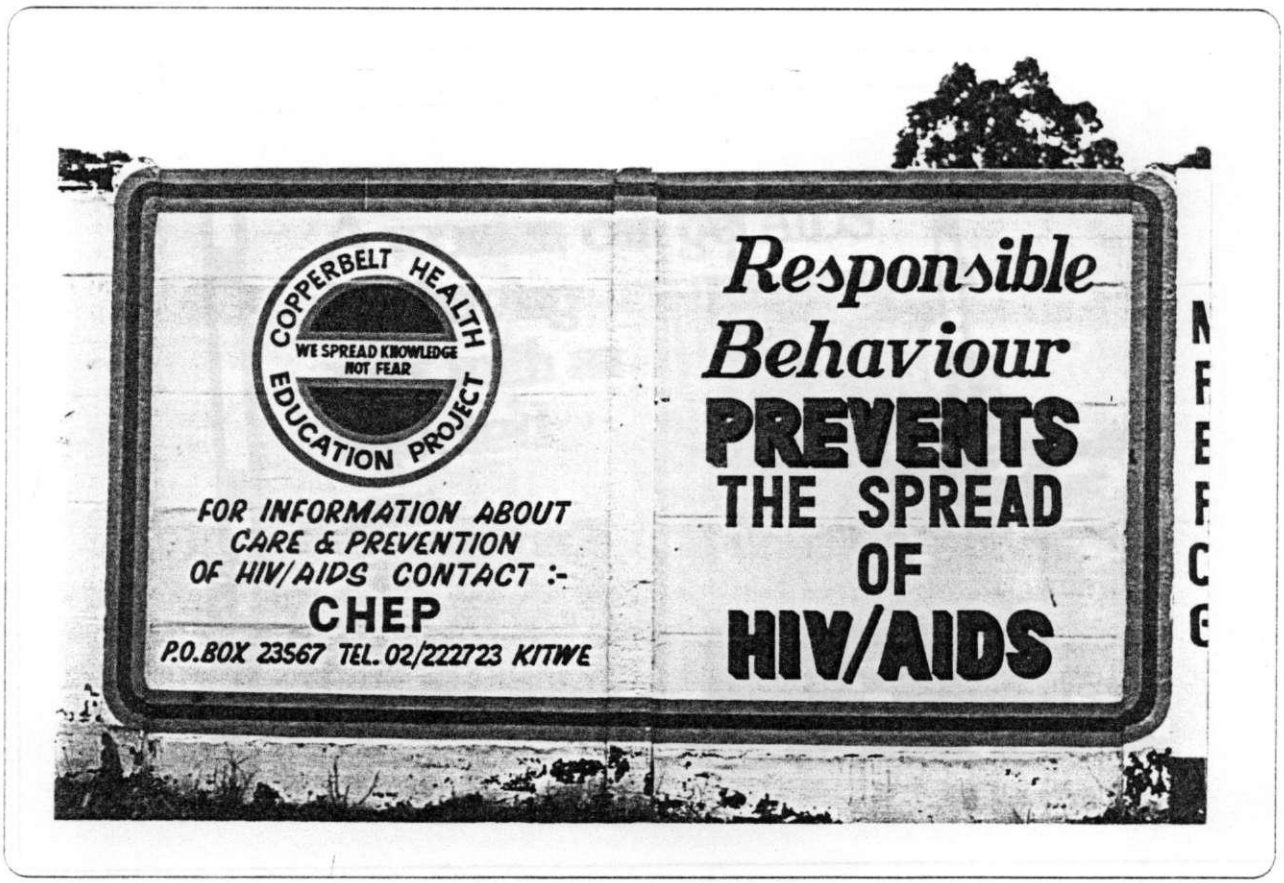
NASTLP billboard at Kabwe roundabout, Lusaka

NASTLP billboard at Soweto market, Lusaka

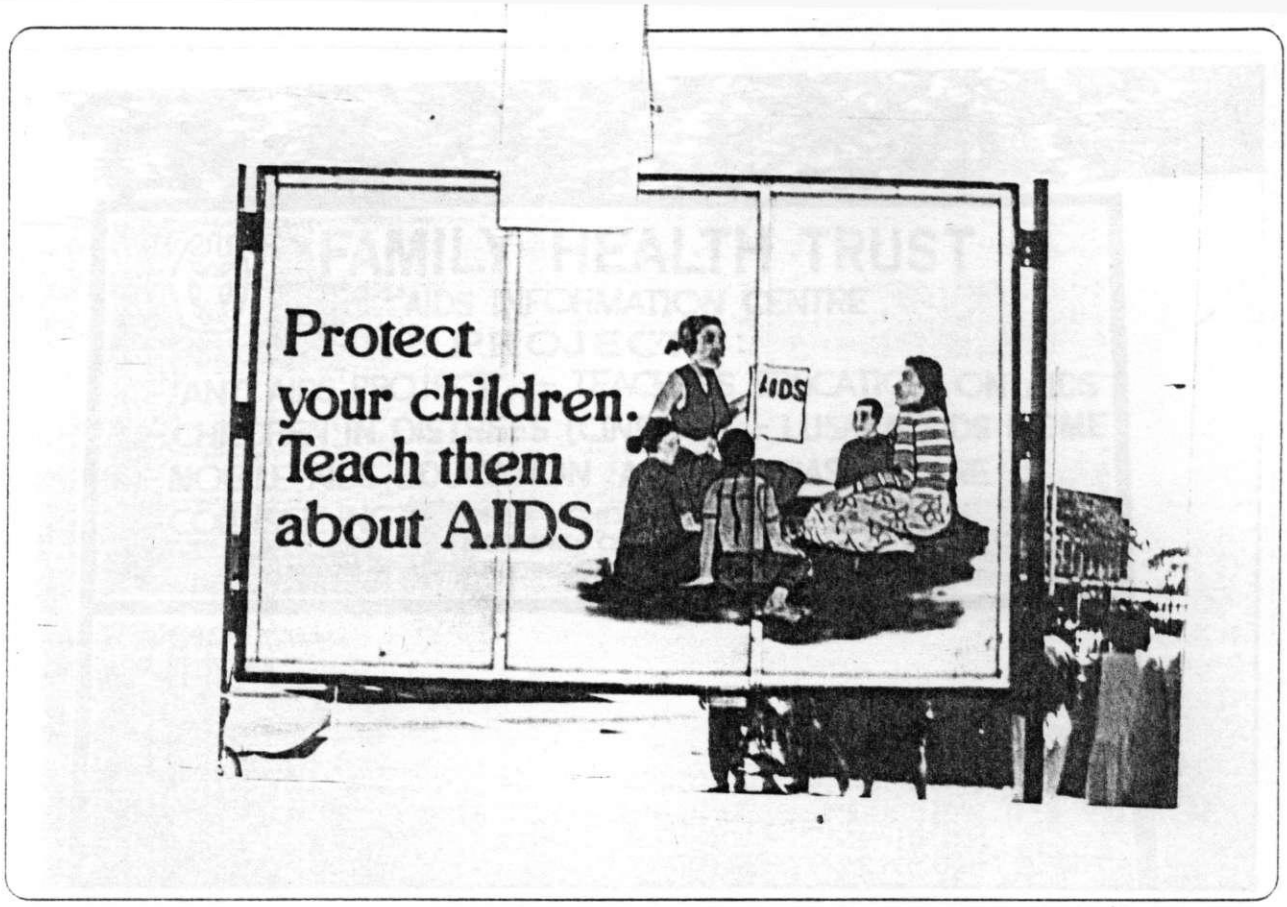


NASTLP billboard at Lusaka bus terminus, Lusaka

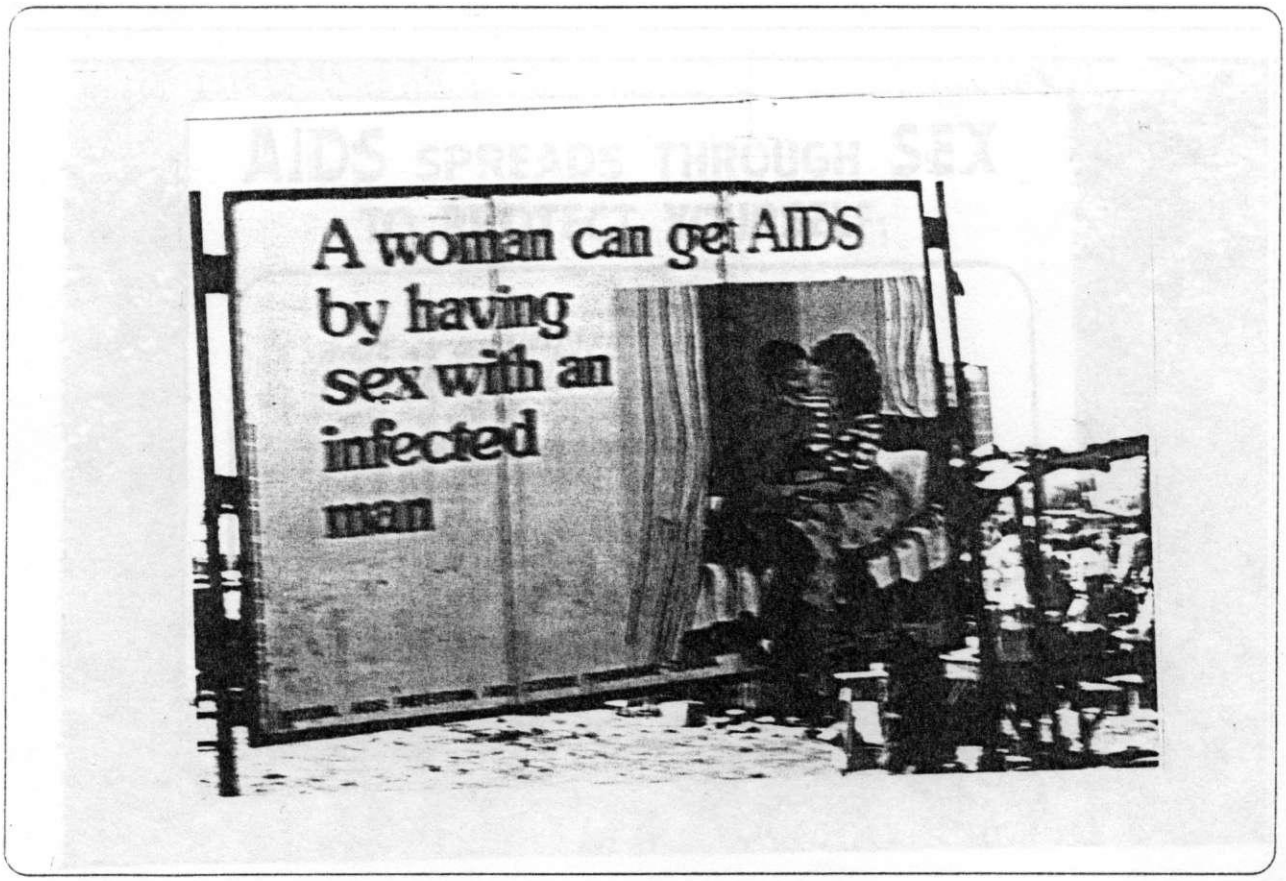
AAP billboard a long Kalulushi - Kitwe road in Kalulushi and Ndola Lusaka and Ndola - Kitwe road



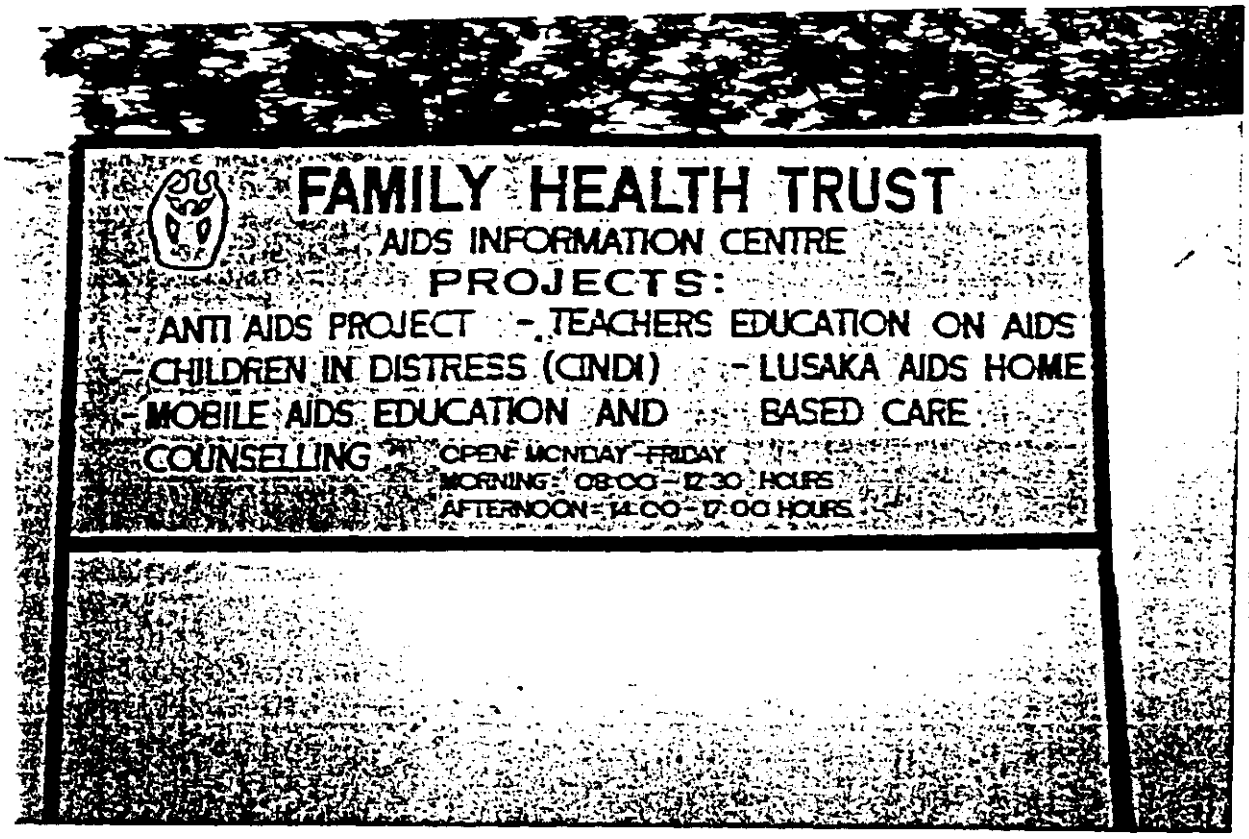
CHEP wall billboard in Kitwe Central Hospital, Kitwe



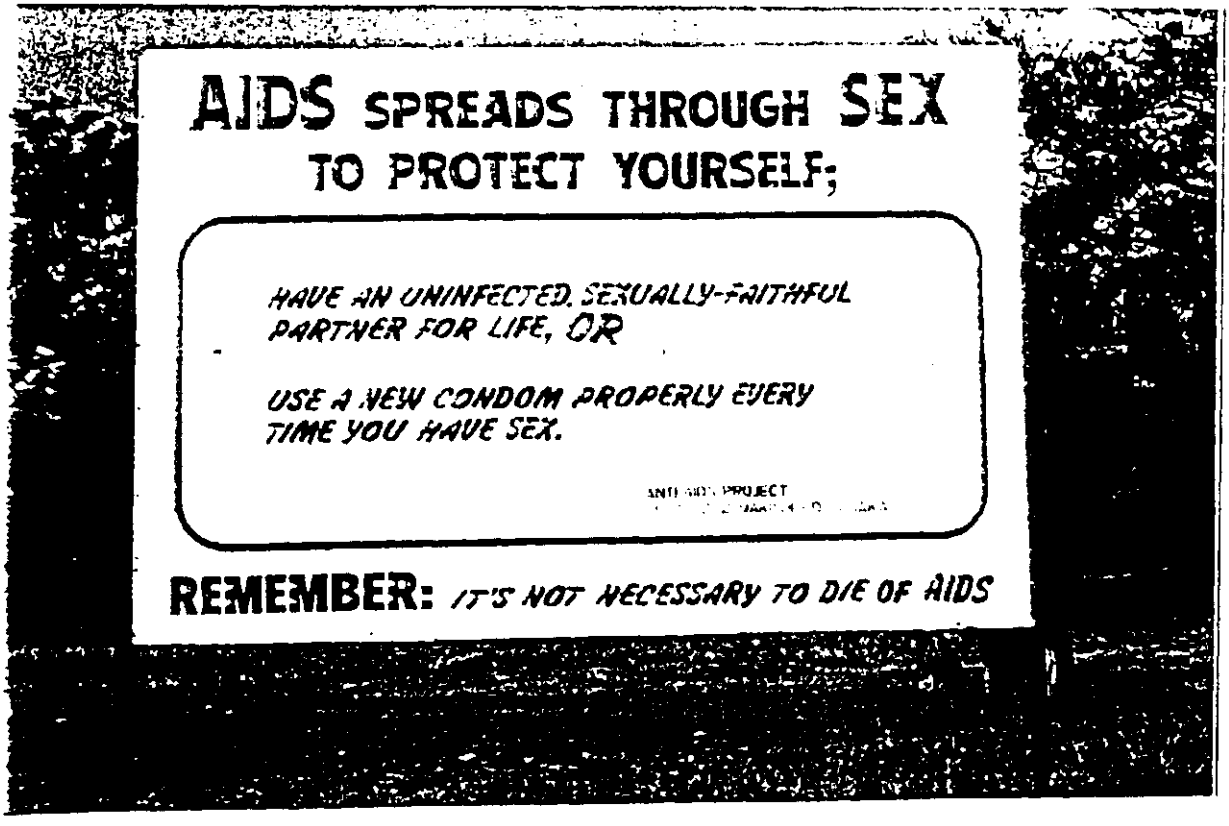
NASTLP billboard opposite main post office, Lusaka



NASTLP billboard at Soweto market, Lusaka

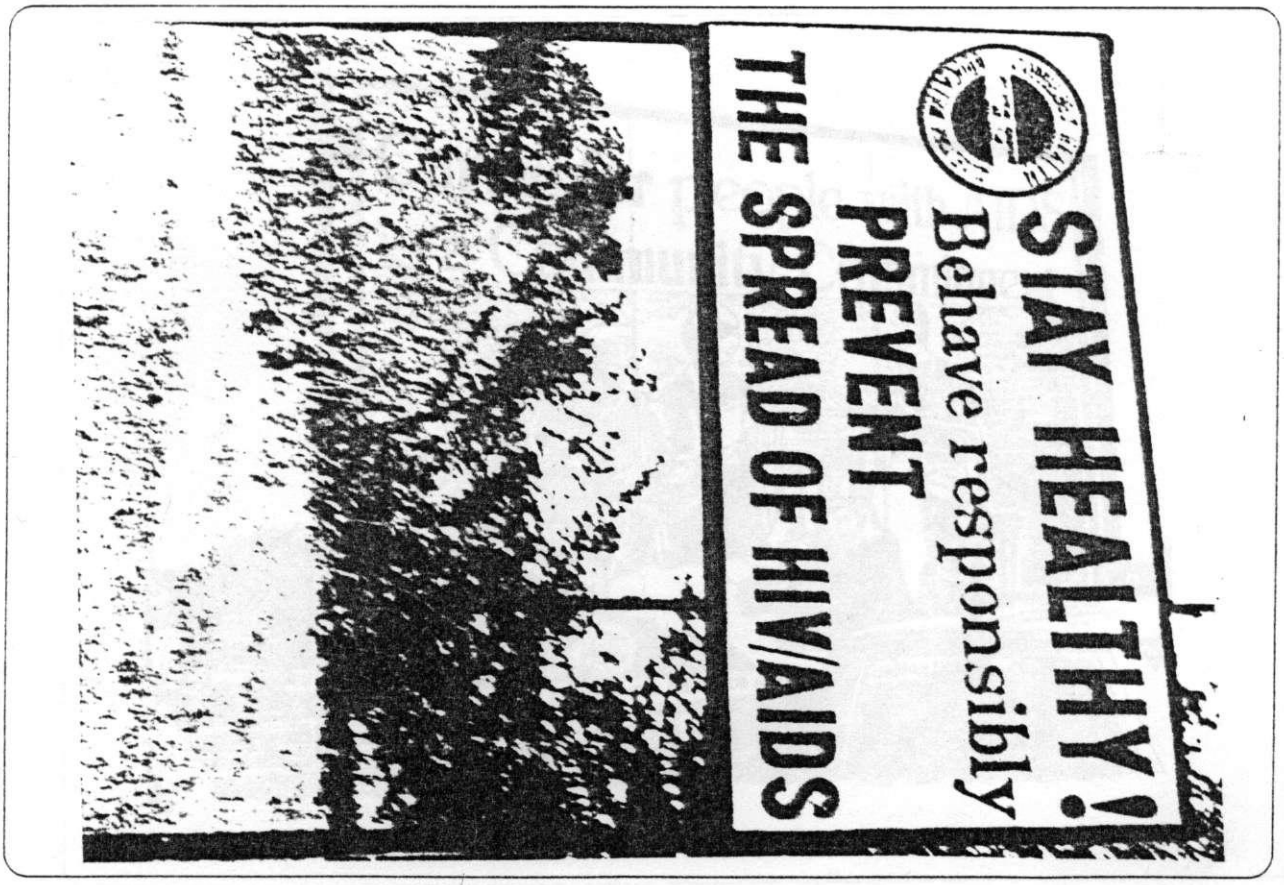


AAP billboard at family Health Trust offices, Lusaka

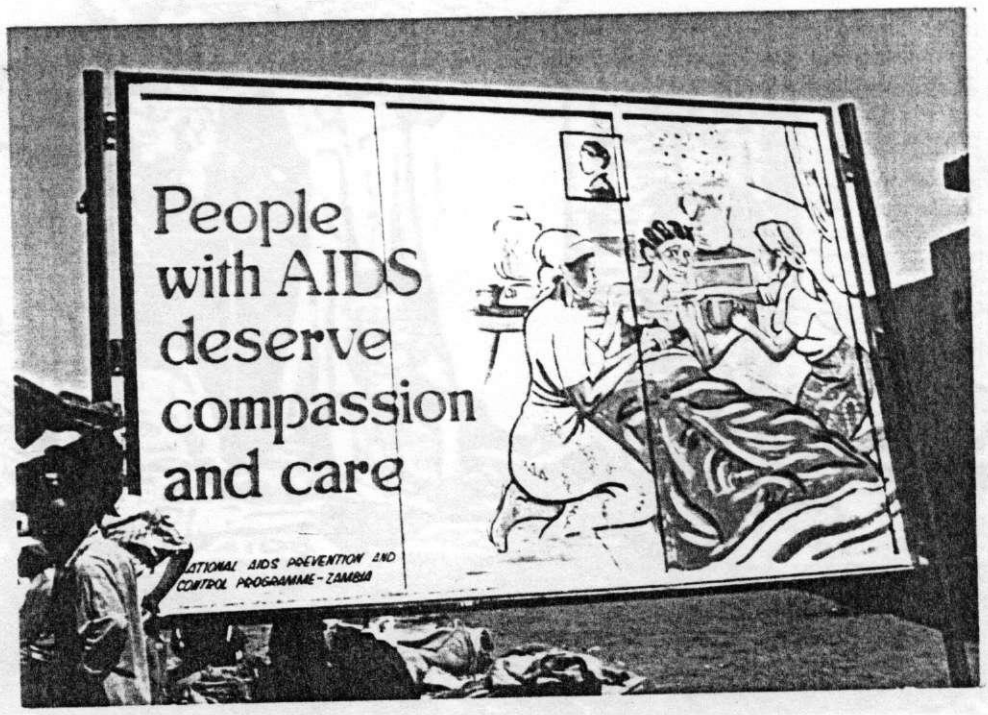


AAP billboard at Munali Secondary School along Great East Road, Lusaka

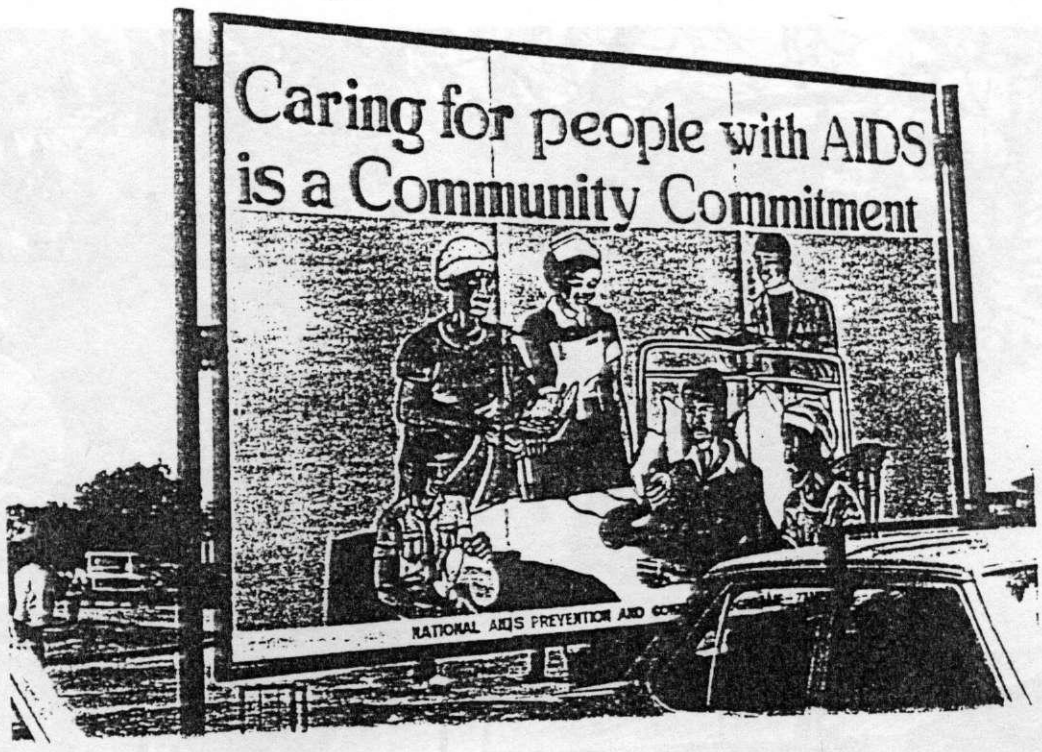
CHEP wall billboard at KMB bus stop in Kitwe



CHEP billboard along airport road in Ndola

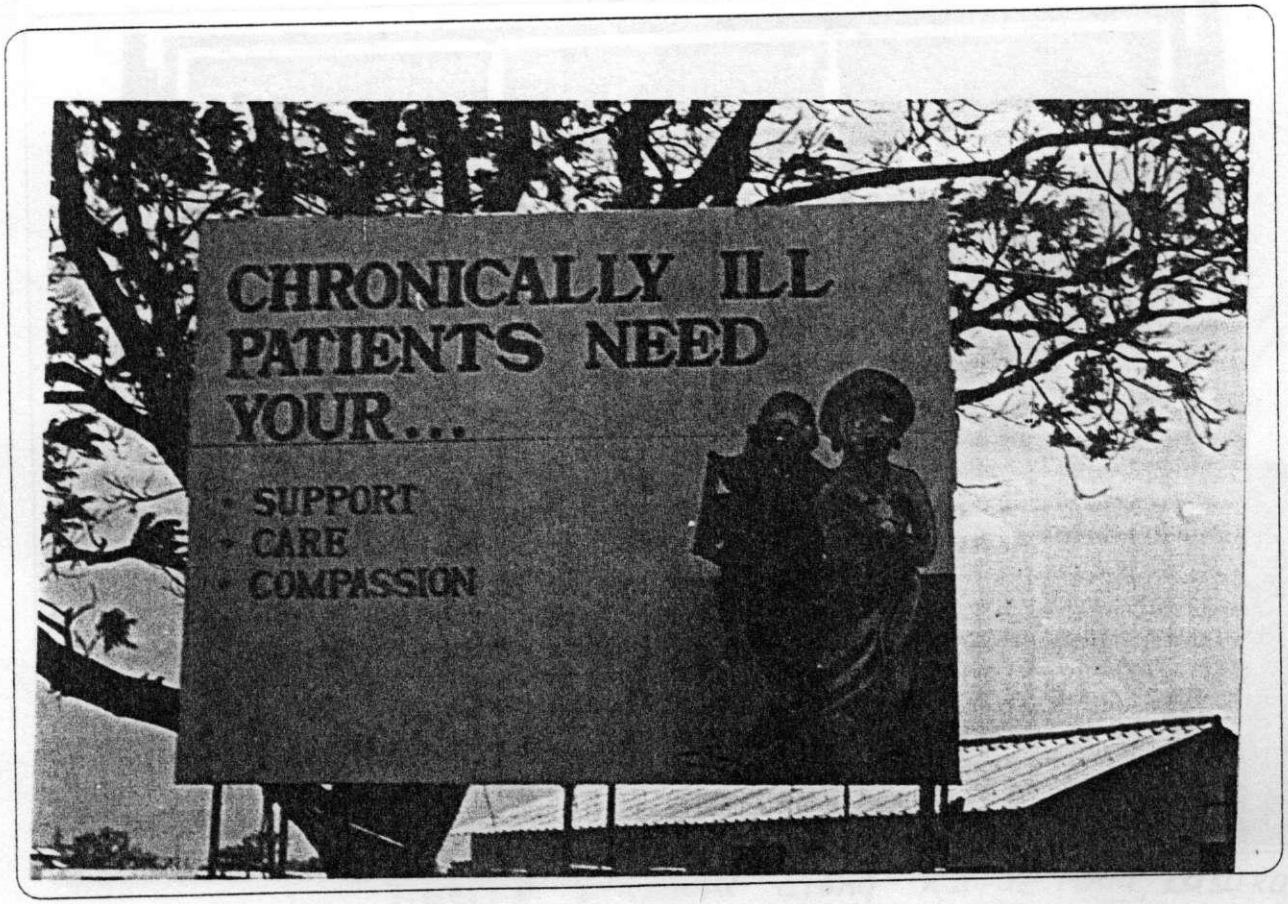


NASTLP billboard at Soweto market, Lusaka

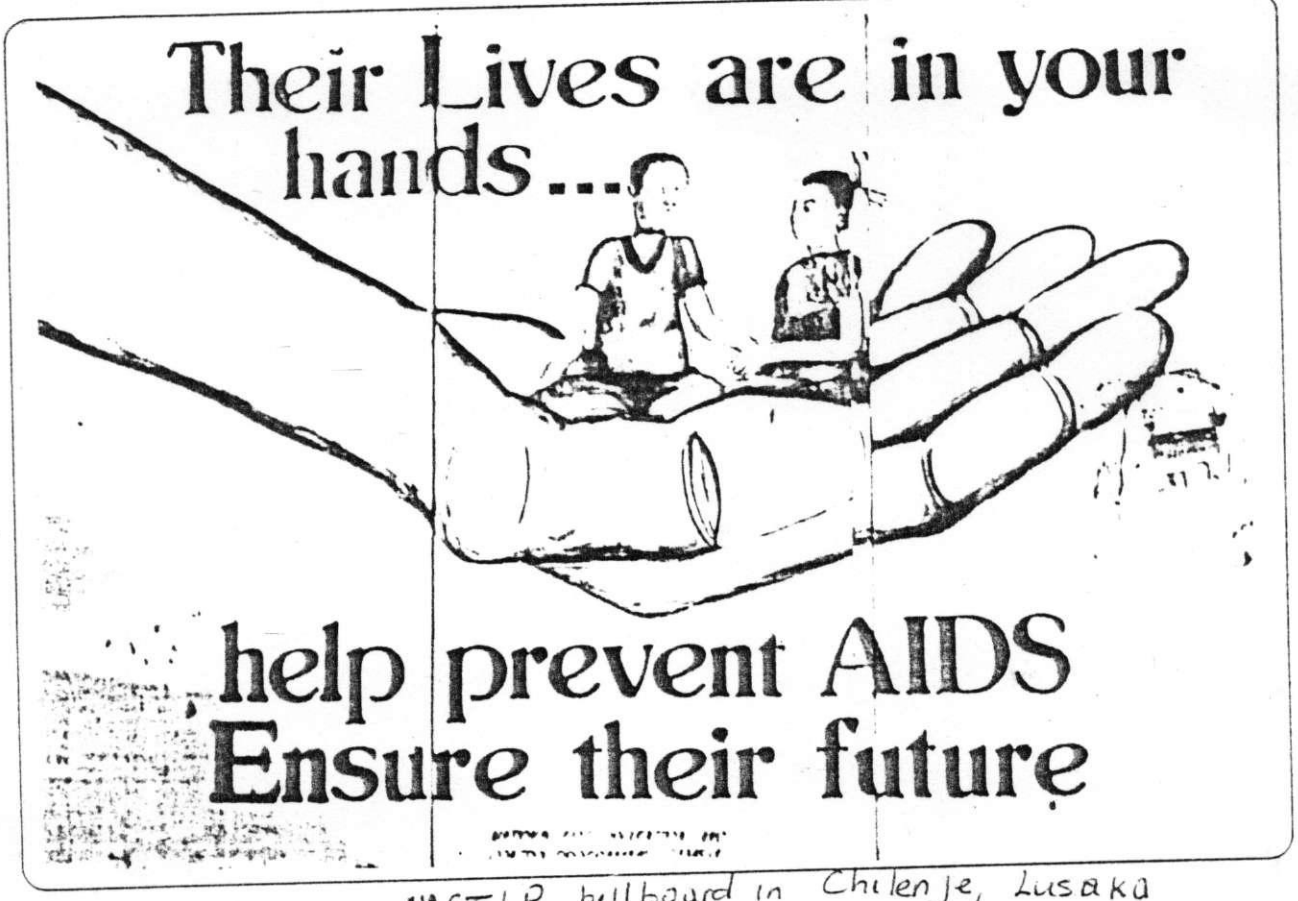


NASTLP billboard at Lusaka bus terminus, Lusaka

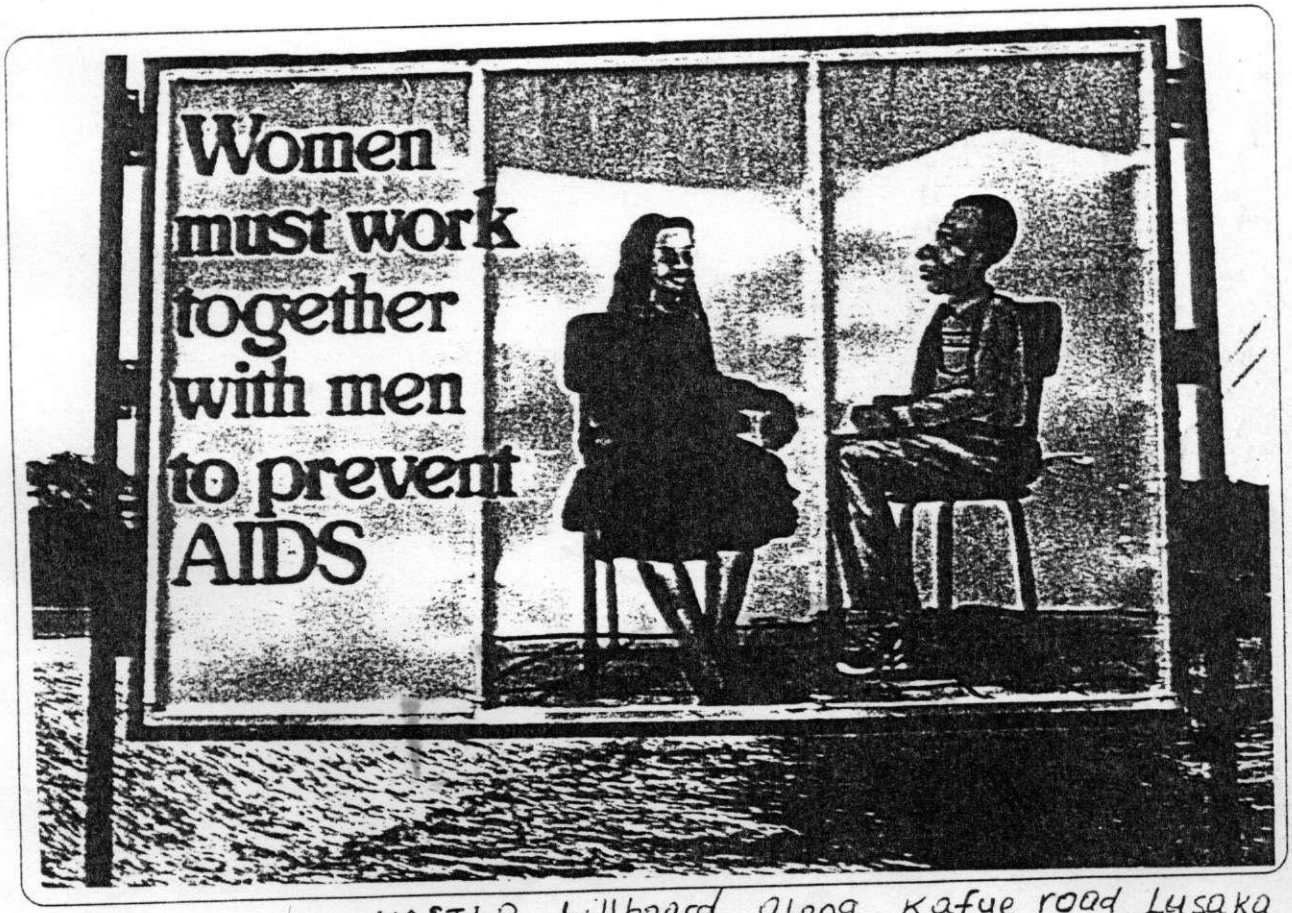
AAP wall billboard at Showgrounds, Lusaka



NASTLP billboard at Kafue roundabout, Lusaka



NASTLP billboard in Chilenje, Lusaka



NASTLP billboard along Kafue road, Lusaka