#### **CHAPTER TWO**

### 2.0 METHODOLOGY

This research work essentially adopted content analysis and survey approaches. Survey research involves the collection of data by means of a questionnaire. Questionnaires have been widely used in this research study. The survey applied scientific procedures to accumulate and analyze reliable valid evidence on the "Monitoring and evaluation of HIV/AIDS health education and promotion in Kuala Lumpur, Malaysia." It has laid emphasis on the collection and analysis of data to discover meaningful relationships. Data were also secondarily collected from existing records in the form of weekly, monthly and annual reports, Government documents, journals, magazines, newspapers, textbooks etc.

The collection of documentary materials entail visiting relevant organizations like Malaysia AIDS Council (MAC), British Council, the United Nations office (UN), Malaysia National library, etc; for specific items or information on the area covered by the research.

Questionnaires were randomly distributed to chosen departments of various Universities and rehabilitation center: examples; University of Malaya, International Islamic University and Rehabilitation Center (Rumah Pengasih). Three hundred and fifteen (315) questionnaires were produced, out of which 15, 40, 75, 185, questionnaires were distributed to each chosen department of various institutions and rehabilitation center. Out of all the questionnaires produced and distributed, the same three hundred and fifteen questionnaires were realized from respondents for analysis. Finally an analysis of HIV/AIDS health education and promotion was undertaken and from the foregoing, it could be observed that

the nature of this collection are documentary, and historical, hence, a multi-dimensional methodological approach was considered suitable for the research to assemble all the relevant data,

### 2.1 METHOD OF DATA COLLECTION

The principal instruments for data collection in this research were the use of questionnaire, and library method as the focus of the investigation, a questionnaire was constructed. The data for this research study were collected from two main sources; primary and secondary sources. For secondary sources, data were collected from existing records in the form of weekly, monthly and annual report, government publications, textbooks, newspapers, and collection of documentary materials from Malaysia AIDS Councils, Malaysia National Library, British council and the United Nations Office in Damasara, while for primary sources, it included inter-personal discussions as well as through questionnaires.

# 2.1.1 Data collection through questionnaire

The questionnaire designed targeted two groups of audience; the Universities students and personnel of rehabilitation center. Our respondents were randomly selected through the administration of questionnaire. The first target groups were first-year undergraduate students of Department of Law, International Islamic University and also first-year undergraduate students of the Department of Anthropology and Sociology. The first-year undergraduate students of the Department of Social Administration and Justice were also targeted.

The age range of our student respondents ranges from 17-18, 20-22, 23-25 and 25 and above. The reason for choosing the undergraduate students was because they are fresh from their respective communities and homes. The research intends to find out how the knowledge acquired helped them to answer the questions posed to them. Therefore the dependent variables or object of focus are thus knowledge of HIV/AIDS, health education and promotion.

Another group, the personnel of Rumah Pengasih Malaysia (a rehabilitation Center) was selected. The study chose them based on the fact they were at the centre of mobilizing the public on the dangers of HIV/AIDS infection through organizing public seminars and musical concert. The age of Rumah Pengasih personnel ranges from 15-24, 25-35, 35-44, 44-54, 55 and above. The research intends to ascertain the problems militating against HIV/AIDS health education and promotion. The Rumah Pengasih departments include education, administration, finance, and mobile unit. Our dependent variables are thus funding, personnel and mobility, health education and promotion, which represent the objects analyzed in this work.

# 2.2 MEASUREMENT INSTRUMENT AND EXPLANATION

Our instrument of measurement is the questionnaire. Most researches in the applied social sciences are 'problem oriented'. In taking a research-based approach to problem-solving, the researcher is cognizant that solutions needed are to be based on empirical evidence i.e. data. The job of the researcher is to collect data that is accurate and that is relevant to a solution of the problem

### 2.3 METHOD OF DATA ANALYSIS

Analysis of data will focus on presentation of relevant descriptive statistics in the form of table. The instruments used in this research study are library method and questionnaire. First, questionnaires were randomly distributed to different respondents. The researcher produced a total number of three hundred and fifteen questionnaires (315) and distributed randomly to chosen departments of various Universities and Rehabilitation center: namely are the International Islamic University (IIU), University of Malaya (UM), and Persatuan rumah pengasih Malaysia, all in Kuala Lumpur. The researcher realized a total number of three hundred and fifteen (315) questionnaires for analysis from the respondents. See Data presentation, analysis and discussion in Chapter five.

Our second instrument is content analytical method based on the application of health education and promotion in the context of empowerment against HIV and AIDS in Malaysia. In content analysis, the researcher consulted relevant materials from the library in analyzing the issues at hand that were reflected in this research study.

## 2.4 OPERATIONALIZATION OF THE CONCEPTS

## 2.4.1 Health Promotion: A concept

Health promotion is the informing and motivating of people to maintain or adopt healthful behaviors. Suppose you become interested in taking steps to prevent heart disease. You learn that certain foods might affect your heart, you avoid those foods. You learn that exercise strengthens your heart; you exercise on a regular basis; you eat nutritious foods and get sufficient sleep each night. Each of these behaviors would be a part of health promotion program for a healthier heart. The goal of health promotion is optimum health. Optimum health is the best condition of health possible for you. You can achieve optimum health by choosing healthful behaviors and making the most of your heredity and environment<sup>3</sup>.

During the 1950s chronic diseases became the prominent causes of death. At this time, little was known about the complex causes of heart disease, cancer, diabetes and respiratory conditions. The 1960s witnessed a heavy investment in biomedical research, education of health professionals and specialization of therapeutic technology. These investments dramatically raised the cost of illness, care and led us to our present dependence on the medical model as the root to good health. The 1970s have been described as an era of fiscal restraint with regard to biomedical research, manpower development and public financing of health care. During the 1960s and 1970s epidemiological research began by unraveling the intertwined and complicated cases of morbidity. Gradually, it became apparent that many contemporary illnesses could be linked to a person's lifestyle. Health professionals, policy makers, economists, and most importantly average citizens began to

<sup>&</sup>lt;sup>3</sup> Meeks Mitchel Heit, Merril health A wellness approach. Taxas Special (edition) publisher, A Bell and Howell company, Columbus Ohio, USA, 1987, P.5.

consider the potential of disease prevention through personal activities that could actually raise ones level health beyond its present state.<sup>4</sup>

The concept of prevention has three distinct levels; each defined by the type of activity being conducted. Primary prevention also known as health promotion is represented by those activities designed to improve the well-being of an already healthy person or group. It is more than an attempt to prevent sickness. Primary prevention actually seeks to enhance well being by reinforcing healthy behavior and discouraging lifestyles that can eventually lead to illness. Using major causes of death as illustration, primary prevention consider the following: cardiovascular disease-choosing not to smoke cigarettes, to exercise regularly, to eat nutritious food without quantity of fat, sugar etc.

Secondly prevention consists of those activities that allow for early detection and treatment of a disease. Screening techniques conducted by a health professional among presumably healthy population often detect the presence of underlying sickness even before clinical symptoms appear, thereby permitting early intervention. Normally this intervention increases the probability of cure and at a lower financial cost. However, the individual must make the decision to seek further definitive treatment. To illustrate secondary prevention, the following were considered: Cardiovascular disease-periodic screening for hypertension, atherosclerosis, and cardiac arrhythmia.

Cancer-periodic breast self examination, papsmear, oral examination and continuous monitoring aid in the detection of changes in the body function. Accidents-periodic eye examinations recertify safety inspection. Secondary prevention is aimed at people who may

<sup>&</sup>lt;sup>4</sup> Laurna Rubinson et.al, Health education foundation for the future ibid pps 40 - 42

appear healthy but who because of age, sex, heredity or other personal characteristics might be identified as high-risk candidates for a particular condition."<sup>5</sup>

In 1979 report of the United States Surgeon General, five broad reasons were established for health promotion. It include

- reducing the number of low birth weight babies because infants below 5.5 pounds are 20 times more likely to die within the first year;
- maternal factors such as lack of prenatal care;
- 3. poor nutrition;
- smoking, alcohol, drug abuse; and
- age of the mother is associated with low birth weight.

Reducing the number of defects because it is responsible for about one sixth of all infant deaths. Nearly one third of all hospitalized children are admitted because of genetically determined or influenced disorders. Other important problems that need to be considered are injuries at birth, sudden infant death, accidents, inadequate diets and parental inadequacy. More than two thirds of all deaths among people were caused by motor accident etc. Alcohol and drug abuse were related to increased risk of accidents, suicides, homicides etc. So worksite appears to be the most appropriate setting in which to conduct health promotion programs. The people came together each day to work in factories, offices and shops. Workers share specific occupational health, the jobs play a major role in their lives, effects their work, home and family. These factors all contribute to making the worksite logical setting for health promotion."

<sup>5</sup> ibid

### 2.4.2 Monitoring

Monitoring literally means to keep close watch or observe rules, but Oxford Advanced Learner's Dictionary defines monitoring as "to watch and check over a period of time, monitor performance/progress, monitor a patient pulse". While Longman Dictionary described monitoring "as careful watch and a situation in order to see how it progresses or changes over a period of time". Taking cognizance of the above definition, Elizabeth Perkind noted that monitoring intervention takes several forms which include monitoring return to work, the majority of clients return to work after 6-8 only. The delay, the causes of the delay and changes to lifestyle were noted. The main changes monitored according to Perkins are cessation of smoking, dietary changes and uptake of regular exercise. Keeping a data base helped to monitor the demand for the service and to keep a record of attendance rates. The database also allows easy monitoring of the individual risk factor modification.

The sudden emergency of HIV/AIDS as a major public health problem has placed a considerable burden on already hard-pressed health system managers; requiring first the development of a medium-term plan including strategies, programs and a detailed plan of action, then the application of methods to ensure that the plan is implemented.

The complexity of an AIDS control program makes it a challenging opportunity for the exercise of management skills. World Health Organization (WHO) Global programs give feedback to staff and to solve problems before they cause delay. The role of monitoring aims at the development of a strong, comprehensive prevention program. Monitoring keeps track

<sup>&</sup>lt;sup>6</sup> The new shorter oxford English on historical principles, publisher, Oxford press, Amen House, London, 1959. p. 640

of achievements, staff movements and utilization, supplies and equipment, and money spent in relation to the resources available. So that if anything goes wrong immediate corrective measures can be taken. The continuous follow-up of activities was to ensure that they spread according to plan, this is known as monitoring<sup>7</sup>

### 2.4.3 Evaluation

The fundamental purpose of evaluation is to determine the value or worth of an activity. Laurna Rubinson defines evaluation as comparing of an object of interest against a standard of acceptability, stressing that there are three levels at which object of interest in health education program can be evaluated in relation to process, in relation to impact, and in relation to outcome."

Laurna stated that in a process of evaluating the object of interest, it demands professional practice as standard. Quality is monitored by various means including audit, peer review, accreditation, certification and government or administrative surveillance of contract and grants. Standard of acceptability are established professionally and administratively and are derived chiefly by means of consensus among health education specialist.

The impact of evaluation focus on the immediate impact of the program (or some aspect of it) has on knowledge, attitude and behavior. Have the pre-disposing enabling and reinforcing factors that influence the health related behavior been altered? Have the short-term goals of a program been met? In terms of behavior, planners will ask such questions;

World Health organization (WHO) Geneva. AIDS series; Monitoring of National AIDS prevention and control programs, guiding principles, printed in Switzerland 1989, p.3.

Does it take as long for members of the target population to seek medical care as it did before the program? Is there an increase in health enhancing behavior? Is disease being diagnosed earlier? Has exposure to risk been reduced? Has exercise been increased? Cost effectiveness is the most succinct standard of acceptability in impact evaluation.

The outcome of evaluation attempts to find out whether the incidence and prevalence of the condition been affected by a program? Have the rate length of survival following detection and treatment change? Again, lost effectiveness is one standard of acceptability. This standard can be expressed more humanely in terms of the number of lives saved or improved. Outcome of evaluation enable us to pass judgment on activity. The evaluator comments on its success or failure in respect of some value goals. The purpose of evaluation is bound in the broad values and goals of the program"

The pursuit of ever more believed sophisticated curriculum of learning continues in some societies, neglecting health education for healthy living without qualms. While forgetting that the ideal of health education engenders stimulus among people about health promoting activities like family life and sexuality, communicable diseases, anatomy and physiology, environmental sanitation, food and nutrition etc. But the progress in achieving institutionalize health education success has been slow and varying from country to country. The emphasis on basic subjects and demand for greater accountability has ultimate consequences for the development of health education.

As it is understood that health education take place within workplace, health care settings etc, taking cognizance of the fact that community is the context through which

<sup>&</sup>lt;sup>8</sup> Laurna Rubinson et.al The meaning and success in Health Education op .cit p.

significant proportions of people can to be reached. Within this all-embracing setting, many groups can be particularly difficult to reach and in many respect can be without the standard social recognition, such group as street children, homeless, young people etc, it is vital that health education fashioned for working within setting does not detract from getting these group of behavior.

Inequalities in health between and within countries have been extensively documented as having the difficulties in achieving significant reductions to public health related problems. Everyone, ideally have a fair opportunity to attain his/her fully health potential and more pragmatically that no one should be disadvantaged from achieving this potential. Achieving equity involves all elements of health promotion. As far as health education is concerned, it involves providing health education knowledge in response to defined needs, ensuring that its knowledge is shared and reaches those who are difficult to reach.

Monitoring the activity of those who are difficult to reach makes a difference, as they are part of human family. To neglect their lifestyle would further drift them into health problems. Evaluation of programs facilitates the production of fully comprehensive pictures of both process and outcome. The ultimate principles of research findings could be used for a wide range of purposes; such as to provide feedback to an activities and projects; for dissemination of information to others; for developing theory about activities and context studies and for accounting purpose, assessing the worth in terms of effectiveness, efficiency and equity etc.

<sup>&</sup>lt;sup>9</sup> Elizabeth Perkins (edited) Evidence based health promotion. Publisher, John Willy, West Sussex England. 1999. pps 127-129

### 2.4.4 Risk Behavior

The spectrum begins with risk behavior, which is defined as behavior, which can transmit the Human Immunodeficiency Virus from one person to another. In the past, this term was used, particularly by governmental agencies. However, being a member of a group does not necessarily place one at risk for HIV infection. For example, a needle drug user who has never shared his or her equipment with anyone has no more risk of HIV infection than someone who does not use needles: a gay man who does not participate in penetrative sex has no risk of HIV infection, and so on. Thus, it is not one's title or group that places one at risk, but one's specific behaviors. The Human Immunodeficiency Virus has no motive or intelligence. It will enter the bloodstream of anyone (if it can) and attempt to take hold and reproduce itself; the virus doesn't care if one is gay, straight, drug-free or saturated with drugs.

The major risk behaviors are unprotected penetrative sex and injection equipment sharing. Of course, being conceived is a risk behavior for some fetuses, however since there is no voluntary action on the part of the fetus involved; the behaviors are undertaken by the parents. Conceiving a child when one or both parents are at risk for HIV infection is a risk behavior. Similarly, mothers at risk for HIV infection who nurse their babies are engaging in risk behavior. The risk is to child being breastfed. Blood transfusions still carry a minor risk. It has been calculated to be lower than one's risk of being struck by lightening in the United States with the blood-screening program. Some people, particularly those involved in elective surgeries, choose to donate their own blood for autologus transfusions. In the case of an accident or emergency, people must put their faith in the screening process.

While participating in risk behaviors, one may become infected when the Human Immunodeficiency Virus enters the bloodstream in sufficient amounts to survive and take hold. In the Centers for Disease Control's new classification system, there is a period right after infection (2-14 days after infection) which they call the "Acute Initial Infection" stage wherein the individual is beginning the process of sero-conversion and may experience some transient symptoms. These symptoms disappear. It is usually by looking back from a diagnosis that the person will remember these symptoms, if at all.

The second stage of infection, is defined by CDC as the "Asymptomatic infection" Stage. This is the stage wherein the person is infected with the virus, but is asymptomatic. There are no symptoms. Many people may remain in this state for an undetermined time period.

No one can predict with accuracy whether an individual in this state will get symptoms at all, or when, or how severe they will be.<sup>1</sup>

## 2.4.5 Sexually Transmitted Diseas

Persistence of a sexually transmitted disease in a human population requires that the pathogen infect a person who is capable of transmitting infection to another susceptible host who is in turn capable of further transmission. This property, the reproductive rate Ro is the number of infections a transmitter spreads in a fully susceptible population. At equilibrium, Ro equals 1. When Ro is greater than 1, the prevalence of infection rises in the population. When Ro is

<sup>&</sup>lt;sup>1</sup> Springer Edith A.C.S.W, AIDS Education and Training Center, publisher, The University of Medicine and Dentistry, New Jersey 1996.p.12

less than 1, disease prevalence falls. Three variables determine the reproductive rate of infection in a population which the average probability of transmitting infection from an infected individual to as susceptible person, or the efficiency of transmission; the average rate of acquisition of new sexual partners

Thus, the following model reflects STD transmission dynamics in a population. These variables can seldom be measured directly. Epidemiologists have therefore used as proxies for a variety of other variables, such as "risk factors" and "risk markers" to determine risk and explain patterns of disease transmission.

In STD epidemiology the terms 'risk factor', 'risk marker' and 'determinant' have been used interchangeably without much attention to the existence of casual link between the relevant attribute or exposure and the disease. Many of the traditional STD risk factors appear to be correlated of the probability of encountering an infected partner, whereas others may influence the probability of infection if exposed, or the probability of disease if infected. Since the casual link between demographic variables and STDs is probably explained by coincidental differences in sexual behavior and/or disease prevalence, such variables are perhaps most accurately referred to as risk markers or risk indicator. For example, single marital status and inner-city residence fall into this category.

Other variables, such as sexual behaviors and health care behaviors, are directly related to the probability of exposure to STDs, to infection following exposure, or to complication once infection occurs, and can be referred to as true risk factors. Sexual behavior is the key determinant for incidence of incurable viral STDs, whereas both sexual and health care behaviors are important determinants of the incidence of bacteria STDS. The

major sexual behavior risk factors for STDs, appear to include a large number of sexual partners, high rate of acquiring new sexual partners within specific time periods, high rates of partner change, contact with casual sexual partners, sexual orientation, and specific sexual practices.

Health care behavior which can reduce the risk of acquiring or transmitting STDs include use of condoms for prophylaxis, early consultation for diagnosis and treatment, compliance with therapy, and partner referral. Absence of such behaviors can be regarded as risk factor for STDs. Alcohol and marijuana use have been linked with high-risk sexual behavior in many societies, and heroin use has been associated with prostitution in most industrialized countries. However, the crack cocaine epidemic, which became apparent in North America in the mid-1980s, was temporarily and dramatically linked with resurgent syphilis, chancroid and gonorrhea in communities that were hit hardest by the crack epidemic; and the phenomenon of exchanging sex for cocaine. Cocaine use has been directly linked with various STDs, inducing HIV infection, in more than a dozen case-control studies<sup>2</sup>.

<sup>&</sup>lt;sup>2</sup> Adora Adimora, Sexually Transmitted Disease. Companion Handbook 2<sup>nd</sup> Edition, publisher McGraw-Hill Inc. Health Profession Division, New york, 1994.p.2-3