

**Health Communication and Health Literacy: Participants
Perspectives on the PROSTAR Health Promotion Programme**

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*This thesis is dedicated to my wife and son.
Many thanks for your unconditional love and support
during all the stages of this research.*

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ABSTRACT

After presenting a model looking at the relationship between health communication and health literacy the nature of this relationship is examined in the context of the PROSTAR programme, a peer education HIV programme in Malaysia for healthy adolescents. The programme is currently delivered in the context of national health promotion strategies largely framed by biomedical and bureaucratic principles within a state dominated by Muslim values but with a multicultural and multiracial population. Using qualitative methods the perspectives of the health promotion, health practitioners delivering the programme and the experiences of the adolescents receiving the programme were explored. In depth interviews were undertaken with 16 practitioners in Malaysia. Meanwhile, 110 adolescents who were part of the PROSTAR programme took part in 14 focus group interviews separated by gender in the same areas, both urban and rural, in Malaysia. The data were analysed using content analysis. The PROSTAR programme was delivered in a didactic manner and focussed on raising awareness. Adolescents were seen as passive recipients of an expert driven programme. It was however perceived by the adolescents as serving a wider social purpose than merely conveying knowledge about HIV/AIDS. However overall health practitioners were constrained in implementing social health promotion theories and principles and struggled with the cultural complexity of the population and the constraints of local culture with its emphasis on stigma and taboo in relation to talking about sex and sexual activity in general. A revised model of the relationship between health promotion and health literacy is presented to reflect the reality in Malaysia and recommendations are made on how the relationships could be enhanced in that context through culturally appropriate application of health promotion principles including participation and empowerment.

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CHAPTER ONE

INTRODUCTION

1.0 Introduction

Health communication is a term used within health promotion and public health that includes strategies such as advocacy for health issues, marketing health plans and products, educating patients about medical care or treatment choices, and educating consumers about healthcare quality issues. It also includes the use of mass and multi-media and other technological innovations to disseminate useful health information to the public, increase awareness of specific aspects of individual and collective health, as well as the importance of health in development (Nutbeam, 1998). The term 'health communication' is necessarily broad as it covers a range of specific yet divergent approaches. It refers to programmes or activities where the primary output is communication rather than the provision of services, treatments or commodities such as condoms.

Health communication strategies are seen as playing an important role in the prevention of Human Immunodeficiency Virus and Acquired Immunodeficiency Syndrome (HIV/AIDS), often forming part of a comprehensive health education programme. While traditional health communication has taken the form of information being passed from the expert to the learner, in more recent years, it has been recognized that emphasis on information dissemination alone is not sufficient

without addressing the health literacy of the target audience. It is often assumed by health professionals that the message they have delivered has been understood and taken on board because the receivers can recite the information given accurately (Jahan, 2000). However, this has been found to be erroneous (MacDonald, 1998) and there is no guarantee that knowledge leads to compliant action. The latter is dependent on what has come to be known as health literacy, i.e. the ability to act on the knowledge.

This thesis examines health practitioner perspectives of health communication and the experiences of adolescents with regard to health promotion programmes with particular reference to the PROSTAR health promotion programme in Malaysia. The aim is to examine the interface of health communication and health literacy. The PROSTAR programme (*Program Sihat Tanpa AIDS Untuk Remaja* or 'Healthy Youth without AIDS Programme') has been chosen as a subject for study because it is a programme devoted to protecting adolescent's sexual health. Malaysia was chosen as a place of study because of its diversity in terms of ethnicity, culture, norms, values and languages, which makes it an interesting area for communication research. Furthermore the researcher himself is from Malaysia, familiar with the place and has pre-existing knowledge of the differences between Malaysian culture, languages, religions, etc. so as to make it easier to conduct the research and to acquire the data. It is an advantage for the researcher because qualitative research requires the researcher to spend considerable time to build a rapport with the group under study, to develop contacts with key respondents, to

learn the language, norms, values and attitudes of a group, and to build a trusting relationship (Sterk-Elifson, 1993). Because of the pre-existing relationship with the respondents, especially health practitioners, the time needed to build rapport and trust is reduced.

This introductory chapter begins with a brief background of Malaysia from its historical and socio-political perspective. Secondly, it is followed by a discussion about the HIV/AIDS situation in Malaysia and the response of the Malaysian health authority towards protecting the public from the consequences of HIV/AIDS. Thirdly, the PROSTAR programme will be introduced and discussed. Fourthly, this chapter presents the aim and objectives of the research and, finally the overall structure of the thesis.

1.1 Background: Malaysia and HIV/AIDS

1.1.1 Malaysia in brief

Malaysia was formed in 1963 through a federation of the former British colonies of Malaya, Singapore and the East Malaysian states of Sabah and Sarawak on the northern coast of Borneo (see Appendix 1, p.306). Malaya gained independence from British colonial rule on the 31st August 1957. Sabah, Sarawak and Singapore were added in 1963 but Singapore left in 1965. Administratively, Malaysia consists of 13 states and three federal territories (Kuala Lumpur, Labuan and Putrajaya) and upholds the principles of parliamentary democracy. It is organised along a three-tier

type of government; federal, states and local government. Parliament is bicameral; it consists of the *Yang Di Pertuan Agong* (the King) in Parliament, the *Dewan Rakyat* (the House of Representatives) and the *Dewan Negara* (the Senate). The Cabinet or Executive Council is a council of ministers appointed by the King to advise him in the exercise of his functions and chaired by the Prime Minister. The Cabinet is collectively responsible to Parliament. The country's development and administrative machinery is managed by ministries, which are overseen by a minister. Each ministry is divided into a number of departments and agencies, spearheaded by a Director-General at the Federal level. The latter also include public enterprises, statutory bodies and corporations.

The Malaysian government projects itself as a well-managed parliamentary democracy. It claims to be ruled "by consultation and consensus" among parties in the governing coalition, the *Barisan Nasional* (National Front). The *Barisan Nasional* consists of the dominant Malay party, United Malay National Organisation (UMNO), the Chinese Party, Malaysian Chinese Association (MCA) and the Indian Party, Malaysian Indian Congress (MIC) and some other smaller ethnic-based parties. Since independence (1957), the government had never been overturned, although challenged from time to time by the opposition. Opposition and organisation, either in the form of political parties or community organisations is very weak and has little effect on government policies and decisions (Crouch, 1992).

The total population was estimated to be 24.53 million in 2002. The country is made up of many ethnic groups with Malay and other indigenous groups (categorised as *Bumiputera* – ‘son of the soil’, comprising more than 28 ethnic groups) forming a large portion of the population (58%), followed by Chinese (24%), Indian (8%) and others (10%). By age group, 33.1% of its population are aged under 15 years, 62.9% are between the age of 15 – 64 years and 4.0% above 65 years of age. Islam is the State religion which forms the largest single religious group in Malaysia, practiced by around 60% of the population (Department of Statistics Malaysia, 2003). All Malays are required to be Muslims, but other ethnic groups are free to practise other religions such as Christianity (Chinese, Indians and indigenous), Buddhism (mainly Chinese), and Hinduism (mainly Indians). The Malay language is the national or official language of the country and English the second language is widely used in business. However, the people are free to use their mother tongue such as Chinese (Mandarin, Hakka, Hokkien), Tamil and other ethnic groups in Sabah (Kadazan, Dusun, Murut) and Sarawak (Iban, Bidayuh, Kayan, Kenyah, Berawan, etc.). Malaysian television programmes are aired in six languages, namely Malay, Mandarin, Cantonese, Tamil, Hindi and English. These programmes are aired at different times of the day. The news is broadcast on television in Tamil, Mandarin, Malay and English. The same applies to the radio programmes too, with the addition of some ethnic programmes such as Kadazan, Iban, Bidayuh, Kayan-Kenyah, etc.

As a multi-racial society, ethnicity colours all aspects of politics, social and economic life. Each ethnic group has its own set of values, rituals, symbols and heroes. However, values common to all Malaysian ethnic groups include a focus on collectivity, respect for elders, loyalty, social hierarchy, religion, harmony, and saving face (Abdullah, 1996). Social relations are often viewed in terms of Muslim and non-Muslim perspectives. In reality, culture and religion go hand in hand. For instance, the Advertising Code for Television and Radio (1990) was heavily influenced by the government's effort to promote Islamic values throughout the country. This includes the imposition of stricter regulations on mass media content based on Islamic principles and values. However, in some respect, the different ethnic groups continue to be differentiated by their own particular areas of influence and occupation as they had been under British rule¹. The Malays controlled the government and agriculture, while the Chinese dominated commerce and industry. The civil service in Malaysia clearly shows that it was dominated by the Malays. For example, as of June 2005, there were 899,250 public servants, of whom 77.04% or 692,736 were Malays. The rest were, 84,289 Chinese (9.37%), 46,054 Indians (5.12%), 69,282 Bumiputeras (7.7%) and 6,337 other races (0.70%) (The Star, 2006a). With Malays dominating the civil service, the government has

¹Under British colonial rule, the ethnic Malay population was encouraged to concentrate on subsistence agriculture, serving the military, or working as civil servants. Ethnic Chinese were already present in what is now Malaysia and usually worked in the commercial sector. More Chinese were brought in to work on the rubber plantations and in the tin mines. When the Chinese were found to be unsuitable for this sort of indentured labour, and unwilling to work under close supervision, they were replaced by Indians. Malaysia still retains a degree of separation in the economy. Malays still dominate the government and the security forces such as the army and police force. The Chinese are mainly focused in the private sector. This has had an impact on the issue of National Integration. Some ethnic Malays have not felt they can trust the other communities and vice versa. Many people from the other communities are reluctant to serve in a Malay-dominated institution like the government bureaucracy, defense force and police force.

often resorted to “islamicisation” of Malaysian government institutions as part of social re-engineering policies.

Malaysia, like most countries in Asia, is also experiencing a population phenomenon characterised as the “youth bulge” (Huang and Hussein, 2004). Young Malaysians are being threatened by the twin epidemics of drug use and HIV/AIDS. According to WHO/UNAIDS classification (WHO/Ministry of Health Malaysia, 2001), Malaysia is considered to be a country with a concentrated epidemic, mainly among intravenous drug users (IDUs) – who account for 76.3% of people living with HIV/AIDS (PLWHA).

1.1.2 HIV/AIDS in Malaysia: the response

AIDS (Acquired Immune Deficiency Syndrome) is a disease caused by a deadly virus, HIV (Human Immunodeficiency Virus). HIV can remain in the body for years, perhaps even decades, before any damage shows up as visible symptoms. Once AIDS develops, in all known cases, it has always proved fatal. At present, there is no cure for AIDS, and no vaccine is available to protect against it (Panos Institute, 1988). Sexual transmission is one of the most common modes of transmission of HIV. This type of transmission is enhanced by the presence of sexually transmitted infections (STIs), especially ulcerative ones such as chancroid, syphilis or herpes simplex. Meanwhile, parenteral (intravenous injection) transmission of HIV occurs mostly among the intravenous drug user (IVDU) when

infected needles are shared. Parenteral transmission can also occur by the transfusion of infected blood, organ or semen. Contaminated needles for injections and needle-stick injuries among health professionals are another source of infection. Mother-to-child transmission is believed to be responsible for more than 90% of HIV infection among children worldwide. The infections occur in utero, at delivery and during breast feeding (Morison, 2001).

In Malaysia, the first case of AIDS was reported in December 1986. Since then, the epidemic rose abruptly during the early nineties, but the upsurge slowed over the last four years of the twentieth century (Department of Health Malaysia, 2005). As of December 2004, a cumulative total of 64, 439 HIV infections have been reported to the Ministry of Health Malaysia, with a total of 9,442 AIDS cases and 7,195 deaths (Department of Health Malaysia, 2005). However, the true figure may be much higher because HIV testing is only regularly carried out among drug users and sex workers rounded up in police raids. More than two thirds of the reported HIV infections are among young people aged 20 to 39 years (78.9%), followed by those over 40 years (17.6%). A substantial proportion of HIV infection (72.6%) occurs within the Malay community of which the majority is Muslim. The highest recorded numbers infected by the disease were men (93.1%). Malaysia is a country with an HIV epidemic primarily affecting 48,369 IDUs (injecting drug users)² (75.1%), followed by heterosexual (13.6%) and homosexual routes of transmission

² In January 2006, Ministry of Health Malaysia began a six-month pilot programme to distribute hypodermic needles and condoms to 1,200 injection drugs users at selected locations in four cities namely, Kuala Lumpur, Johor Baharu, Penang and Kuantan, Pahang. After six months the programme will be evaluated. The programme was part of the efforts to curb HIV transmission among IDUs because 75% of those HIV-positive are IDUs (The Star, 2006b).

(1.3%), while 0.7% of infections are attributed to vertical transmission. Only 25 cases were attributed to blood transfusion. The use of contaminated needles and sharing of needles among IDUs is the main mode of HIV transmission (Department of Health Malaysia, 2005). From the data above, there are unequal distributions both in ethnicity and gender of HIV/AIDS sufferers, where the vast majority of cases are among Malays and are men.

Due to the growing public concern about AIDS, the Ministry of Health Malaysia developed a plan of action for the control of HIV/AIDS in 1998 (Senan, 2002). This plan started with an awareness programme, where the purpose was to educate all people concerned with prevention and control of HIV/AIDS, especially health care workers, politicians and religious leaders, and the general public. Generally, the focus is on changing behaviour, practising healthy lifestyles and awareness of the issue of HIV/AIDS. Didactic approaches such as talks remain the predominant forms of information dissemination. The implementation of these activities is carried out by agencies and organisations involved in HIV prevention and the prevention of drug abuse, mainly by government agencies such as the Ministry of Health and the Ministry of Home Affairs through the National Drugs Agency and Non-governmental Organisations (NGOs) such as IKHLAS, PENGASIH and Malaysian AIDS Council (Malaysian AIDS Council is the umbrella organisation for all NGO working on AIDS issues and it receives its funding from the government). Current programmes reflect the Ministry of Health Malaysia's

concern to address the problems that affect specific groups as well as the general population. These are;

- a. Healthy Living Without AIDS for Youth (PROSTAR – *Program Sihat Tanpa AIDS Untuk Remaja*),
- b. Programmes targeted at woman,
- c. Programmes targeted at the public at large, and
- d. Programmes for political and religious leaders.

Educational and promotional activities were carried out to inform and educate the public. A nationwide campaign on HIV/AIDS was launched in 1991 and to date hundred of thousands of pamphlets, posters and leaflets on HIV/AIDS have been produced. However, Malaysia has no specific policies on HIV/AIDS or sexual health in schools although the Malaysia AIDS Council refers to schools in the Malaysian AIDS Charter (which does not bind the government). Meanwhile, family health education aims to preserve the family institution, grounding itself in a presupposition that young people will not engage in sexual activity until married, despite evidence to the contrary (Smith et al., 2003).

The vulnerability of young Malaysians towards HIV infection is evident from a study by Zulkifli and Low (2000) among unmarried adolescents aged between 15 – 21 years. This study found that the proportion of adolescents who have experienced sexual intercourse was about 13%. A substantially higher proportion of the working respondents (28.57%) had sexual intercourse compared with those still studying

(9.72%). Being away from parents or family, perhaps related to employment, seems to free adolescents from parental control. Peer group pressure and influences of social interaction may contribute to premarital sexual activities and also other high risk behaviours such as drug abuse.

In a conservative culture like Malaysia adolescents encounter significant barriers to accessing sexual health services. Hence, they face higher risks of HIV and STIs, unwanted pregnancy and illegal abortion (Zulkifli and Low, 2000). A small scale study was conducted in the capital city of Malaysia, Kuala Lumpur in 1996 among 326 youths aged 13 – 25 years old. Of those interviewed, 5.0% were involved in drug abuse, and 6.0% of them had experience of sexual relationships prior to marriage (Abdul Aziz, et al. 2002). Although, the percentage of those surveyed indicates an overall low involvement in drug use and sexual activities, it is felt that such low involvement should be maintained. In other words, ‘prevention is better than cure’.

In response to both the global situation and trend of HIV/AIDS within the country, the Malaysian government adopted a programme targeted at adolescents that aimed to promote healthy attitudes and behaviour, hence controlling the spread of HIV infection particularly among the younger generations. The heart of the programme lies in encouraging and nurturing behavioural change instead of forcing and imposing it on the adolescents. The key concepts in the approach are the promotion of understanding and development of healthy behaviour. After much deliberation

and careful planning, in 1996 the Ministry of Health Malaysia in collaboration with UNICEF (United Nation Children Fund) launched a programme targeted at young Malaysians. Named PROSTAR, the programme was seen as a form of community mobilisation effort aimed at stimulating young people to face up the challenges and threats of HIV/AIDS (Ministry of Health Malaysia, 2000). As discussed above the driving force for the existence of the PROSTAR programme was the thinking of the public health professionals supported by the epidemiological evidence on HIV/AIDS and, ultimately, it will benefit the population as a whole and specifically the adolescents responding to the programme.

Although statistically, it has been shown that drug users are the most affected by HIV through injecting drugs with needles contaminated by HIV, this hard to reach group is not, however, the focus of the PROSTAR programme. This is because, using, keeping and selling illegal drugs such as heroin, morphine, cannabis, to name a few, is an offence under Malaysian law. Anyone caught drug using or dealing will be prosecuted and severely punished, being sent to jail, rehabilitation centres and even sentenced to death under Malaysian drug related law. That is why drugs users (high risk groups) will never expose themselves to the public or people in authority because they could be arrested, prosecuted and punished or sent to rehabilitation centres. This makes them (drug users) a particular hard to reach group for HIV/AIDS prevention in Malaysia. Furthermore, drug users are often rejected by the public and even family members because of embarrassment to both the family and the community. Even if they have become clean of drugs after

rehabilitation, some are still rejected because of the stigma attached to drug users, which is related to crime such as robberies, stealing, mugging, etc.

Dealing with high risk groups, such as drug users and prostitutes or commercial sex workers has never been easy in Malaysia because of the conflicting of interests between laws of the country and social norms within public health management. In the eyes of the laws and social norms, these groups had become the social ills which affect the country's economy and society. Therefore, they are supposed to be caught and punished. Meanwhile, for the public health management, drug users and prostitutes are seen as high risk for HIV/AIDS and STIs and need to be dealt with. Because of this 'conflict', for decades the HIV/AIDS programme in Malaysia has adopted the population approach. It could be suggested that this intervention is making the 'healthy healthier'. This notion can be described as utilitarian grounds or reduced monetary cost. The major assumption was that by preventing HIV/AIDS in the masses would reduce government expenditure in the long run, because to treat AIDS patients could be very costly. In particular, adolescents tend to be viewed as passive objects that must be protected from risk factors (Green, 2002). In this study, the concentration was on how the PROSTAR programme was delivered to the target audience with regard to health communication and the experiences of the adolescents with this programme. At the same time, the adolescent's health literacy also examined.

1.2 The PROSTAR programme

This section is based in part on the researcher's pre-existing knowledge of the PROSTAR programme. The researcher has worked as a health practitioner for 8 years with the Ministry of Health Malaysia and has direct experience of the PROSTAR programme.

The nationwide PROSTAR programme was launched in 1996 by the Ministry of Health Malaysia. PROSTAR is the acronym for "*Program Sihat Tanpa AIDS Untuk Remaja*" which means "Healthy Youth without AIDS". It was launched as a response to the HIV/AIDS epidemic, specifically targeting young people between the ages of 13 to 25 years old. The objectives of PROSTAR (Ministry of Health Malaysia, 2000) are to:

- a. Increase the level of awareness and knowledge on HIV infection, its prevention and control measures;
- b. Inculcate positive values among youths so that they are able to stay away from behaviours that risk HIV infection;
- c. Encourage youths to lead healthy lifestyles and uphold good moral values to protect themselves from the risks of HIV infection as well as to influence peer members to do the same, and;
- d. Produce a pool of PROSTAR facilitators who can mobilise youths to participate in an effort to curb the HIV/AIDS epidemic.

The activities target young people at secondary schools, university students, youth associations and factory workers. To achieve nationwide impact, activities are implemented from district to state to national levels. At the state level, the States AIDS Officers, Health Education Officers, Health Inspectors and other paramedical personnel such as Medical Assistant carry out the activities. Using the concept of “Action By Youth, Through Youth, and For Youth” (Ministry of Health Malaysia, 2000), this programme aims at creating young motivators to plan, organise and carry out motivational and educational activities on matters related to the prevention and control of HIV/AIDS to their peer groups. Training of facilitators is the main activity, conducted with a structured module or manual. This manual has become a guideline or reference for any training to be conducted.

In order to achieve its objectives, the PROSTAR programme established the PROSTAR Clubs at district and school levels as an avenue to sustain the programme, and has its own magazine as a medium for information dissemination. These Clubs carry out AIDS education among the young and their peers. The scope of activities carried out by the clubs include HIV/AIDS preventive and awareness activities, training of facilitators or peer-educators, and the production of a newsletter and maintaining WebPages. Certain schools have recognised PROSTAR Clubs as a co-curriculum activity. In Malaysia, students are encouraged to join any clubs or associations as part of their co-curriculum activities in their school. Once a week these clubs or associations are given some time to organise a meeting or activities for their members. These activities are a platform for the students to share

ideas, experience, learn leadership skills and work as a team. The school's PROSTAR club is normally under the supervision of the teacher appointed by the school authority. Meanwhile, at the district level, clubs are under the supervision of the health workers such as Health Education Officers, Health Inspectors and nurses. The members meet at the District Health Office or PROSTAR Club house. Annually, National PROSTAR Club organises a PROSTAR Convention, where the representatives from district and school PROSTAR clubs meet. Activities such as exhibitions, drama and games are organised during this meeting. Poster presentations on activities implemented by the district PROSTAR Clubs are also presented and judged to find the overall winner. This competition aims to motivate the district and school PROSTAR Clubs in their activities. This platform gives the opportunity to the participants to share their knowledge, experience and meet new friends.

Based on the researcher's personal experience with the PROSTAR programme from 1998 to 2002, implementing the PROSTAR programme is dependent on funding provided by the Ministry of Health Malaysia. The management of the public health programme has set certain targets to be achieved in their health programmes, including promotional activities with an emphasis on performance achievement. The emphasis on national target achievements is seen as not encouraging the identification of local needs and flexibility in setting local targets. This is because the implementers of the health programme have to work to achieve the targets as set by their management. This is later used as an indicator for the

officer's performance evaluation at the end of a particular year. A progress report from the district has to be sent to the state for compilation before it is sent to the national level to compile as a national achievement and published in the annual report for that particular year. This approach emphasises more the monitoring of the progress of the programme rather than evaluating its effectiveness. To achieve the target, health practitioners are struggling and facing certain difficulties from the local setting. For example, selection of participants as recommended in the training manuals is too ideal to follow and it is difficult to get the participants. But because peer-educator or facilitator training has been set a target that has to be achieved, the implementers have had to abide by the rule of 'what had to be done, had to be done.' Therefore, the target audiences are sometimes not carefully identified and contribute to the trained facilitator or peer-educator failing to perform as expected.

Based on the researcher's experience working for the PROSTAR programme, in some areas where it is hard to get the adolescent to participate or attend the training, health practitioners tend to get the adolescents they know, or close relatives, or from the surrounding schools. Selection of participants from these schools is normally done by the teacher and health practitioners have no control on the criteria of selection even though it is stated in the training module. It is normal practice for the school to select the student based on academic success or smart appearance. This might exclude or alienated some people, especially adolescents with "negative" behaviours such as smoking who are not selected because they are not considered to be a good example or role model for the others. Health

practitioners also face some difficulties in following the guide in the training manual and tailor it to their local needs. Therefore, they have to modify it based on their creativity and available resources. This leads to a difference in methods and approaches used in different places or locations, with some seeming to be more effective than others. This can be seen during the poster presentation and competitions during the national convention held every year, where some districts perform very well whilst others are struggling.

As of December 2004, a total of 930 PROSTAR Clubs have been established throughout the country. In the year 2004 alone, 1,280 PROSTAR facilitator training sessions were carried out involving 78,643 youths from all over the country. Through them, 600,666 young people aged between 13 to 25 years have been exposed to 5,652 HIV/AIDS activities (Department of Public Health Malaysia, 2005).

Rahim and Pawanteh's (2001) study found that the AIDS education efforts through PROSTAR activities have directly and indirectly increased the level of HIV/AIDS knowledge among young adults, with more than 90% having accurate knowledge on AIDS. While they understand and demonstrate knowledge about HIV prevention, the young still hold stigmatising attitudes towards people with HIV/AIDS. The authors claim that the PROSTAR activities at the grass roots level are not known by young adults who are non-members of the PROSTAR Club and some who do know about it do not have an interest in becoming Club members.

Many Club members stated that there were a wide range of needs and skills that still had to be developed and encouraged such as organisational skills, counselling, budget planning and public speaking, other than knowledge on AIDS.

In summary, the management of public health in Malaysia is based on a top-down model. Health practitioners have to follow directions, procedures and to achieve the targets as set by the management. Health promotion and education programmes such as PROSTAR have been developed based on epidemiological data alone. The aim is to inculcate healthy behaviour and attitudes amongst the adolescents so that they can live a healthy lifestyle and stay away from the risk of HIV infection. This is because young people are valued as the future leaders, therefore they must be free from getting infected by the disease, and are encouraged to lead a healthy lifestyle. An educational model of health promotion has been adopted with an aim to give the right information and knowledge on HIV/AIDS, so that the target audience are well informed and act upon the recommended health action.

1.3 The research

The quantitative survey by Rahim and Pawanteh (2001) failed to explore in detail the perspectives of those providing and experiences of those receiving the PROSTAR programme. Thus, this research explores the relationship between health communication and health literacy with particular reference to the PROSTAR health promotion programme in Malaysia. Drawing on the ideas from

social constructionism, the focus of this research is vested upon how the PROSTAR programme has been understood by health practitioners and through the experiences of adolescents. Thus to gain an insight into the participants on the PROSTAR programme, a qualitative approach was used.

1.3.1 Aim of the research

- To examine the interface between health communication and health literacy within the PROSTAR programme.

1.3.2 Research questions

- What are the health practitioner perspectives on PROSTAR as a health communication programme?
- What are the experiences and perspectives of adolescents on the PROSTAR programme?

1.3.3 Objectives

1.3.3.1 Stage 1: Health practitioner's perspectives of health communication

- To examine the practice of health communication from the perspective of the health practitioners. For example,

- To explore health practitioners' understanding of health communication.
 - To identify the methods and channel of communication used.
 - To identify the objectives and rationale for the sexual health communication programme.
- To explore the perspective of health educators about HIV/AIDS programmes for adolescents. For example,
 - To identify what they see as relevant for the adolescents.
 - To identify barriers to the communication of sexual health information.

1.3.3.2 Stage 2: Adolescents' perspectives of health communication and health literacy

- To explore the experiences of the adolescents towards the PROSTAR programme. For example,
 - To identify what they think is relevant.
 - To identify the acceptability of the programme.
 - To identify the preferred method and channel of communication.

- To explore the self-efficacy and self-esteem of the participants. For example,
 - To identify how they might use their knowledge on HIV/AIDS to the exercise given during the focus group discussion.
 - To identify how they negotiate and make decisions based on the exercise given in the focus group discussion.

1.4 The structure of the thesis

Chapter Two is dedicated to presenting the existing state of knowledge on health communication and health literacy in the literature. In this chapter, the focus of discussion will be on the adolescents' sexual risk behaviour and various theories and approaches used for sexual health communication. These theories and approaches are drawn from various disciplines such as psychology, sociology and anthropology. In the second section of the discussion the notion of health literacy as a missing part of the equation in health communication will be discussed. This section emphasises on the importance of addressing health literacy in the health promotion programmes. Chapter Three will provide the theoretical context by outlining the basic tenet of social construction and explaining how content analysis is used within the context of the research reported in this thesis. This chapter will explain in detail the process used for the research. Chapters Four and Five will present the findings from the qualitative study for Stage 1 (health practitioners) and

Stage 2 (adolescents) respectively. The presentation of the results will be based solely on the qualitative method. Chapter Six will then offer a discussion of the findings, which became the backbone of this thesis. Finally, Chapter Seven will make some recommendations for further research and the interface of health communication and health literacy, and will conclude the overall discussion.

CHAPTER TWO

LITERATURE REVIEW: ADOLESCENCE SEXUAL HEALTH

COMMUNICATION AND HEALTH LITERACY

2.0 Introduction

The discussion in this chapter draws upon the existing literature of health communication and health literacy with particular reference to sexual health programmes for adolescents. This chapter begins by exploring adolescent personal development and sexual risk behaviour towards HIV/AIDS and STIs. Secondly, the issue of health education, promotion, social marketing and health communication will be discussed. This section of the chapter will explore the ways and means of delivering health messages to the target audience, and some of the challenges faced in getting the message across in relation to HIV/AIDS and STIs. Thirdly, the issues of health literacy will be presented. Health literacy is seen as the missing part of the equation in health education and promotion programmes. Finally, this chapter outlines the theoretical framework for this research which is based on the PROSTAR programme in Malaysia.

2.1 Adolescence sexual risk behaviour toward HIV/AIDS and STI

The threat of HIV has highlighted the need to prepare young people so that they can manage competently the emotional and biological challenges inherent in forming

romantic relationships, and living safe and satisfying sexual lives. These challenges are especially acute for young people living in a media-permeated society in which the commercialisation of sexual semiotics is commonplace (Wight et al., 1998). Sexual appeal and sexual relations are the focal attraction in the most popular and accessible newspapers, magazines and other media designed for young people (McRobbie, 1996; Wellings, 1996).

Adolescence is recognised as the transitional phase between childhood and adulthood, characterised by experimentation and rapid change. It is a time of great physical, psychological and social flux (Rich and Ginsburg, 1999). Adolescence is a time of experimentation, making major strides toward discovery of self or search of identity (Collins, 1991). Passing through the inter-related stages of cognitive, emotional and physical development of adolescence requires considerable adaptation, and failure to negotiate these development hurdles successfully may have far-reaching consequences (Department of Health, 1994).

According to Erikson (1968), an identity crisis is a temporary period of confusion and distress in which teenagers experiment with alternatives before settling on a set of values and goals. Those who are able to resolve the crisis will reach an identity status, which is labelled identity achievement, in which an individual is committed to a formulated set of self-chosen values and goals. They know who they are and they know where they are going. In this search for identity, dealing with sexuality is a crucial task. Those who fail to resolve the crisis can end up with identity

diffusion, lacking in clear direction, not committed to values and goals, nor actively trying to reach them. Part of the search for an identity encompasses experimentation with new behaviours and ideas (Heaven, 1996). If young people are successful in their search for an identity, they will have a sense of who they are, where they have been and where they are going. So, the more positive the outcome of the earlier stages of their lives, the more likely it is that the adolescents will achieve an integrated psychosocial identity (Gross, 1996).

Similarly, DiClemente (1992) has explained that adolescence is a time of growth and experimentation, a period marked by establishing autonomy and confronting new challenges. It is a time of turmoil (Compas, 1987) or a period of storm and stress linked to biological changes and their behavioural correlate (Aggleton and Campbell, 2000). As Nadarajah (1992) has succinctly put it;

“Adolescence is a period of psychosocial development in which teenagers begin to separate from their parents by shifting emotional ties to others ... adolescents suffer a great deal from the physical problems associated with puberty, e.g. ‘Puppy fat’, spots and physical changes ... [they] have rapid mood swings – they become easily upset and emotional. Confidence and self esteem are very fragile at this early stage in social development.” (in Aggleton and Campbell, 2000: p.285)

Hill (1983) identified five life tasks that take on special importance during adolescence: (1) identity – discovering and understanding the self as an individual, (2) intimacy – forming close relationships with others, (3) autonomy – establishing a healthy sense of independence, (4) sexuality – coming to terms with puberty and expressing sexual feelings, and (5) achievement – becoming a

successful and competent member of society. A major task of adolescence is establishing autonomy, and parental controls tend to fall away rapidly during this period. Miller et al. (1986) found that the most sexually active adolescents were those who experienced a lack of parental rules and discipline, and considered to be at the greatest risk for pregnancy.

Young people have emerged slowly as a risk group for HIV/AIDS and STIs (Shayne and Kaplan, 1988; Koyle et al., 1989). It is known that a high proportion of people with AIDS are diagnosed in their twenties. It is also known that the incubation period of HIV can be many years (can range from 4 to 11 years). If these two figures are conflated then it seems reasonable to assume that a great many people diagnosed with the virus in their twenties probably became HIV positive as adolescents (Boyer and Kegeles, 1991; Sherr, 1997; Rogers et al 1998; Seiffge-Krenke, 1998). Since the current HIV/AIDS case ascertainment mechanisms depend on reporting by health care professionals and facilities, the actual number of HIV cases amongst adolescents cannot be known. Adolescents' inadequate access to health care may result in further underestimation of actual HIV infection (Rogers et al 1998). Moreover, adolescents are especially reluctant to take the HIV test, in part because of their low awareness of the increased risk for this age group (Seiffge-Krenke, 1998). Inadequate provision of confidential health services for young people can also inhibit them from accessing appropriate health care and advice (Ross & Wyatt, 2000). Young people who are denied access to the information and services they need to prevent pregnancy and STIs,

including HIV, stand a far higher chance of becoming pregnant or acquiring an infection than those for whom services are more readily available (Kane and Wellings, 1998).

The leading causes of morbidity and mortality in this age group (young people) are behaviourally mediated (He et al., 2004). As seen, the lives and well-being of adolescents are disproportionately jeopardised by behavioural choices (Rich and Ginsburg, 1999). For example, several studies on adolescents have noted that alcohol is associated with sexual behaviours known to transmit HIV infection (Flora and Thorenson, 1988; Hingson et al., 1990; Harvey and Spigner, 1995). Sexual contact appears to occur after drinking and the use of alcohol or drugs appears to reduce the likelihood of engaging in safer sexual practices (Hingson et al., 1990).

Adolescents are particularly at risk of STI because of their high levels of sexual activity, sexual experimentation, often with multiple partners, and their failure to use condoms consistently, or even at all (Moore & Rosenthal, 1994). The more adolescents engage in casual sexual activity, the greater the risk of spreading infectious diseases. Also, inconsistent use of condoms during sexual intercourse and sharing of infected needles for injecting drugs increases the risk of being infected by HIV and other STIs. The sexual and drug activities associated with increased prevalence of HIV infection often begin during adolescence. Adolescents who become sexually active at earlier ages are more likely to have

multiple sex partners and STIs than older adolescents (Centres for Disease Control and Prevention, 1998; Kost and Forest, 1992; Miller et al, 1997; Santeli, et al, 1998).

Popular notions about adolescents' risk behaviour are that (a) they do not have adequate knowledge or experience to appreciate the risks involved in their actions, and (b) their cognitive limitations make it difficult for them to learn from the experiences of others (Beyth-Marom et al., 1993; Quadrel et al., 1993). Hence the epidemic of HIV poses a significant threat to this population. Even though studies have revealed that there have been increases in adolescents' HIV/AIDS-related knowledge, this information has had little effect on their sexual behaviour (DiClemente et al., 1986; Reader, et al., 1988; Reardon, 1988; Weisman et al., 1989; Turtle et al., 1989; Roscoe and Kruger, 1990; DiClemente 1990; Carabasi et al., 1992; Holtzman et al., 1994; Rosenthal, 1997; Seiffge-Krenke, 1998; Zulkifli & Low, 2000) and is reported to be unrelated to safe sexual behaviour (Svenson and Varnhagen, 1990; Carmel et al., 1992; Oswald and Pforr, 1992; Greenlee and Ridley, 1993). Thus, lack of knowledge may not be a sufficient cause of adolescents' risky sexual behaviour. It is likely that the gap between HIV/AIDS knowledge and appropriate behaviour may be due to the fact that adolescents do not perceive themselves as vulnerable to HIV infection or they construct the risk of HIV infection in such a way that they minimise their chances of practising preventive behaviour (Heaven, 1996), also known as social construction of sexuality. According to Moore and Rosenthal (1993), adolescents

develop scripts of appropriate sexual behaviour by listening to their peers and later, through their own experience.

In the United States, those who have dropped out of school or go to juvenile rehabilitation centres are considered an important target group because they appear to be more vulnerable to STIs and HIV transmission than other teenagers (Godin et al., 2003). The frequency of sexual activities is also higher among these adolescents, and they are more likely to have multiple sexual partners (DiClemente, 1991; DiClemente et al., 1991). They are expected to be less knowledgeable about AIDS and show a higher degree of risk behaviour as compared with their school-attending peers. A study by Rahim and Herman (1996) among 885 juvenile from drug rehabilitation centres in Malaysia found that 54% of them were involved or active in sexual activities. Nader et al. (1989) reported that compared with high school students, youth in a detention facility knew less about AIDS, perceived less personal threat of AIDS, felt less confident about preventing AIDS, and reported engagement in high-risk sexual activities. For dropout adolescents, Vogels et al. (1999) found that a higher proportion of dropouts had intercourse at least once, as compared with students and youths with lower levels of education and they are more sexually experienced than those with higher levels of education. In terms of knowledge there are only small differences in knowledge between these two groups. Because some dropouts are employed, they are assumed to have money, making bars and discos more accessible. Sexual activity has been shown to be highly related to visiting bars and discos and to

drinking alcohol (Flora and Thorenson, 1988; Hingson et al., 1990; Harvey and Spigner, 1995). The situation depicted above calls for STD and HIV preventions that are appropriate to the context of adolescents with social adaptation difficulties. These studies show that adolescents in juvenile rehabilitation facilities are important to be considered as a target group for HIV/AIDS prevention programmes because these adolescents are difficult to reach because they often become school dropouts and street youths.

Buzi et al. (2003) found that having a history of sexual abuse substantially increased sexual risk-taking behaviours. Adolescents reporting a history of sexual abuse, compared to those who did not report such a history, were significantly more likely to have initiated sexual activity before age 14, to have three or more sexual partners and to have had a history of sexually transmitted diseases and have a greater difficulty practising safe sexual behaviours. Similarly, Fergusson et al. (1997) found that exposure to child sexual abuse was associated with the increased rates of sexual risk-taking behaviours among 520 young women, aged 18 in New Zealand. Further, Brown et al. (2000) also found that those with a history of sexual abuse were three times more likely than their peers to report inconsistent condom use. They demonstrated significantly less condom self-efficacy, less knowledge of HIV, and significantly higher rates of sexually transmitted diseases. From a social learning perspective (Bandura, 1977), child sexual abuse may lead to maladaptive behaviours, beliefs, and attitudes. Through

modelling and reinforcement by the perpetrator, the child may learn inappropriate sexual behaviours (Buzi et al., 2003).

In many countries sex education is not fully provided, either in schools or in other settings, placing adolescents in vulnerable situations during a period of life when experimental activity is normal. In practice, too many young people receive their first exposure to sex education after they have become sexually active (Aggleton and Campbell, 2000). Concerns about providing sex education derive from the view that it encourages early sexual activity (Green, 1998). However, Baldo et al. (1993) found no evidence that exposure to sex education led to earlier sexual activity and identified a number associated with a delay in the onset of sexual activity. Welling et al. (1995) found that those for whom school was the main source of information about sex were more likely to use some form of contraception during first sexual intercourse and no evidence that school sex education results in earlier sexual experience. These two studies are similar to that of the WHO (1993) survey on sex education in schools which found that sex education delays the onset of sexual activity, increases safer sexual practices by those already active and showed that programmes advocating both postponement of sexual intercourse as well as condom use were more effective in preserving health than those that only promoted abstinence. This evidence clearly shows that school sex education can contribute positively to the development of informed and responsible attitudes to sexuality. Grunseit (1997) has concluded that;

“School based sex education can be effective in reducing teenage pregnancy especially when linked to access to contraceptive services. The most reliable evidence shows that it does not increase sexual activity or pregnancy rates.” (p.1)

In Malaysia, the Ministry of Education imparts knowledge on adolescence reproductive and sexual health education through its programme on Family Health Education. Specifically, it aims to enable students to understand the reproductive system and process, and relate it to building healthy relationships, and make responsible decisions regarding their sexual behaviour. However, sexual health education has not been taught as one subject. Instead, elements of the Family Health Education curriculum have been incorporated into different subjects, namely, Science, Additional Science, Biology, Physical and Health Education, Islamic Education and Moral Education. Taught in this manner, adolescents receive fragmented sexual health information from various sources, in which the knowledge is left to the ingenuity of the teachers (Huang, 1999).

Traditionally in Malaysia, the common assumption is that information about sex and sexuality should be transmitted within the family, thus allowing for maintenance of moral values and understanding. Adolescents' attitudes are more strongly related to values learned at home and with the attitudes of their peers (Raquel and Jorge Diaz, 1996). Unnecessary emotional stress is created by the lack of information and understanding about issues to do with sexuality, bodily changes and functions, and emotional feelings. Research indicates that adolescents whose parents talk with them about sexual issues are more likely to

delay sexual onset, and when sexually active, are more likely to use contraceptives, use condoms, and have fewer sexual partners than those adolescents for whom this communication does not occur (Fox and Inazu, 1980; Wilson et al., 1994; Pick and Palos, 1995; Holtzman and Rubinson, 1995; Jaccard et al., 1996; Miller et al., 1998; Hutchison and Cooney, 1998; Whitaker et al., 1999; Whitaker and Miller, 2000; DiClemente et al., 2001). In reality, however, many parents are reticent or embarrassed to talk to their children about the 'facts of life'. Thus adolescents are caught in the dilemma of wanting to know about sex - what is happening to their bodies and what sexual activity entails - and often rely upon their peers, who are often equally misinformed about sex (Signorielli, 1990). Studies including those by Sanders and Mullis (1988), Masawanya et al. (1999), Masawanya et al. (2000), Schatz and Dzvimbo (2001) and Li et al. (2004) have shown that parents are not a popular source of sexual health information for the adolescents compared to mass media, peers or friends. It is not surprising therefore, that adolescents search out other sources of information than parents (Chapin, 2000).

As can be seen, much of the literature in English mainly from the United States and the United Kingdom on adolescence and sexual behaviour refers to studies undertaken largely within a western context and in a few instances in African countries particularly the sub-Saharan. The extent to which the findings are transferable to a Malaysian context remains a matter of debate. Literature also shows that the much lower level of sexual activity reported by Malaysian young

people highlights the possibility of a different behavioural norm. Nonetheless, some elements of the research do highlight the universal experience of adolescence and the vulnerability of this group to HIV/AIDS including STIs. This makes them an appropriate focus for sexual health promotion and education, especially about HIV/AIDS and STIs. Given the importance of adolescent lifestyles and risk behaviours to their health, adolescent health choices are full of potential application for qualitative research.

2.2 Tackling sexual health behaviour change

2.2.1 Models and approaches within health education and health promotion in Malaysia

The terms 'health education' and 'health promotion' are often used interchangeably and to be seen as 'overlapping spheres' (Green and Kreuter, 1991). However health education is generally viewed as an essential component of a multi-tiered health promotion approach (Lupton, 1995). Thus health education activities can form part of a health promotion strategy. Contemporary health education has been defined as:

"... any activity which promotes health-related learning, i.e. some relatively permanent change in an individual's capabilities or dispositions. It may produce changes in understanding or ways of thinking; it may bring about changes in belief or attitude and facilitate the acquisition of skills; or it may generate changes in behaviour and lifestyles." (Tones, 1986, p.6)

Health education therefore can be described as a set of planned opportunities for people to learn about health and make changes in their behaviour.

During the 1980s and 1990s the term 'health education' was most widely used to describe the work of health practitioners such as nurses and doctors in promoting health (Naidoo and Wills, 2000). It was during this period that the conceptualisation of health and health promotion took place. The Ottawa Charter for Health Promotion (WHO, 1986) defined health promotion as 'a process of enabling people to increase control over and to improve their health'. It identified five priority action areas namely: build healthy public policy, create supportive environments, strengthen community action, develop personal skills and reorient health services. To reach a state of complete physical, mental and social well-being, an individual or group must be able to identify and to realise aspirations, to satisfy needs, and to change or cope with the environment. Health is therefore seen as a resource for everyday life, not the objective of living (Nutbeam, 1998). Health is a positive concept emphasising social and personal resources, as well as physical capacities. Health promotion is not just the responsibility of the health sector, and goes beyond lifestyles to include well-being. Indeed Tones et al. (1990) define health promotion as:

"Any combination of education and related legal, fiscal, economic, environmental and organisation interventions designed to facilitate the achievement of health and the prevention of disease." (p.4)

The key principles of health promotion are; Firstly, health promotion involves the population as a whole in the context of everyday life, rather than focusing on people at risk of specific diseases. Secondly, health promotion is directed towards action on the determinants or causes of health. Health promotion requires the close cooperation of sectors beyond the health services, reflecting the diversity of conditions that influence health. Thirdly, health promotion combines diverse, but complimentary methods or approaches, including communication, education, legislation, fiscal measures, organization change, community development and spontaneous local activities against health hazards. Fourthly, health promotion aims particularly at effective and concrete public participation, and finally, health promotion is basically an activity in the health and social fields, health professionals – particularly in primary health care – have an important role in nurturing and enabling health promotion (Tones and Green, 2004: p.15).

Health promotion is often said to be multi-disciplinary, incorporating perspectives from fields as diverse as epidemiology, sociology, education, economics, marketing and communication. Thus health promotion can be seen as an umbrella term incorporating aspects of health education, policy advocacy, and range of communication approaches. The key feature which distinguishes health promotion from health education is that it involves broader environmental and political action rather than just focussing on the individual.

Through the years, several models and approaches of health promotion have been created and used. However, in Malaysia, with specific reference to the PROSTAR programme the predominant model or approaches are bio-medical and educational. Therefore, the following discussion will place emphasis on these models and approaches – bio-medical and educational – with the awareness of the existence of other health promotion models for HIV/AIDS such as the environmental model, behavioural model, empowerment, social change, etc. In Malaysia, Tannahill's model of health promotion is widely accepted by the health promoters. This model (Figure: 2.1) identifies three overlapping spheres of activity, namely, health education, health protection and prevention. This model shows how the different approaches relate to each other in an all-inclusive process termed health promotion.

1. Preventive services, e.g. immunisation.
2. Preventive health education, e.g. smoking cessation clinic.
3. Preventive health protection, e.g. fluoridation of water.
4. Health education for preventive health protection, e.g. lobbying for smoking legislation.
5. Positive health education, e.g. life-skills for young people.

6. Positive health protection, e.g. smoking policy.
7. Health education aimed at positive health protection, e.g. ban on tobacco advertising.

Behavioural change, life-skills acquisition and adopting healthy lifestyles are highly emphasised in this type of health education and promotion. It includes raising awareness of health issues and factors contributing to ill health, providing information, motivating and persuading people to make changes in their lifestyles for their health, and equipping people with the skills and confidence to make those changes. For example, it is argued that people need the skills to negotiate for safer sex, and need to have attitudes which make the adoption of certain behaviours seem worthwhile (Aggleton and Campbell, 2000).

The dominant approach for health promotion in Malaysia is biomedical. The biomedical approach to health promotion is popular because (as in Naidoo and Wills, 1994: 84);

- It has high status because it uses scientific methods, such as epidemiology.
- In the short term, prevention and the early detection of disease is much cheaper than treatment and care for people who have become ill.
- It is an expert-led, or top-down, type of intervention. This kind of activity reinforces the authority of medical professionals who are recognised as having the expert knowledge needed to achieve the desired results.
- There have been spectacular successes in public health as a result of using this approach, for example, the eradication of smallpox as a result of vaccination programmes.

The biomedical approach reinforces not just the medicalisation of life but also the medical hierarchy, where medical professional become authoritarian. Therefore, it is the health professional who decides if there is a health need and the adequacy of an individual's lifestyle, who decides the nature of the intervention and the most effective means of communication, who tries to ensure compliance, and who will decide if the intervention has worked (Naidoo and Wills, 2000). This, as will be seen, is the basis of the PROSTAR programme. The assumption is that if people are told what they should do by health educators they will then proceed to follow those instructions, resulting in improved health for the individual, and that as long as the 'message' is sent and successfully 'received' often enough, then the state of 'health' will be accomplished (Lupton, 1995).

The other approach that is being practised within the context of health promotion in Malaysia is the educational approach. The educational approach is based on the view that the world consists of rational human beings and that to prevent disease and improve health, health professionals merely have to inform or educate people about remedies and healthy lifestyles because, as rational human beings, they will respond accordingly (Davies and Macdowall, 2006). The educational approach is based on a set of assumptions about the relationship between knowledge and behaviour; that by increasing knowledge, there will be a change in attitudes which may lead to changed behaviour (Naidoo and Wills, 1994). Besides that, the educational approach can also be used to raise competence in using the health

care system, and raise awareness about the political and environmental factors that influence health (Weare, 1992).

In summary, health promotion within the Malaysia context, particularly the PROSTAR programme, draws on individual-focused and expert-driven approaches as those discussed above. Thus reflecting only a limited version of the Tanahill model which any way in its style reinforces disease prevention rather than health promotion. It could be suggested that, in seeking guidance to an effective health promotion programme, health promoters can turn to a number of disciplines, including education, medicine, social psychology and communication theory. Another obvious source of insights is commercial marketing, mostly in the form of advertising – the so called social marketing.

2.2.2 Social marketing as a health promotion approach

Social marketing draws on the principles of commercial marketing to bring about behaviour and social change. Social marketing is an orientation to health promotion in which programmes are developed to satisfy consumers' needs, have strategies to reach the audience(s) in need of the programme, and managed to meet organisational objectives (Lefebvre and Flora, 1988). It is an organised approach to promoting acceptability of a social idea. As defined by Kotler et al., (2002),

"... social marketing is the use of marketing principle and techniques to influence a target audience to voluntarily accept, reject, modify, or abandon a behaviour for the benefit of individuals, groups, or society." (p.5)

Based on this definition the change agents or the marketers sell behaviour change for the sake of improving the health of individuals, groups or society. Under this model, health becomes a commodity and members of the public 'consumers' must be persuaded to acquire it at some cost to themselves, whether it be giving up behaviours they currently enjoy, for example smoking. Thus, marketing is the voluntary exchange of resources between two or more parties, and includes processes of information dissemination, public relations, lobbying, advocacy, and fund raising (Fine, 1981).

Social marketing is the exchange of an intangible for an intangible: accepting a new idea and discarding an old custom or adopting a new behaviour and giving up a habit (Lefebvre, 2002). The fundamental principle of social marketing is to apply a customer orientation to understand what the target audiences currently know, believe, and do. In health promotion, the parallel process has been to form a more traditional 'top-down' approach in which authorities prescribe, or proscribe, health and social behaviours, and perhaps launch information campaigns to support the programmes. These are in contrast to 'bottom-up' efforts where the needs and wants of the people are actively solicited, attended to, and acted upon in programme planning, delivery, management, and evaluation

(Lefebvre, 2002). Lefebvre and Flora (1988) proposed eight characteristics of social marketing programmes.

- Consumer orientation
- Exchange theory
- Audience segmentation and analysis
- Formative research
- Channel analysis
- Marketing mix
 - Product
 - Price
 - Place
 - Promotion
 - Positioning
- Process tracking
- Management system

However, these components are not necessarily displayed by every programme professing to be focussed on social marketing. Even though social marketing is said to have a consumer orientation, it does not mean that all health promotion programmes are grassroots efforts or built from citizens' concern (Lefebvre, 2002). Many health programmes are in fact launched because of epidemiological data gathered by health authorities that identify health problems that need attention. The typical example is the PROSTAR programme launched by the Ministry of Health Malaysia.

Social marketing is a relatively sophisticated and expensive strategy. It is a systematic approach, designed to convince the audience or 'consumers' that an appropriate (healthy) behaviour is more appropriate than other (unhealthy) behaviours. As Lefebvre (1992) explains;

"[It] is a method of empowering people to be totally involved and responsible for their well-being; a problem-solving process that may suggest new and innovative ways to attack health and social problems." (pp. 154)

Social marketing's four Ps, also known as marketing mix refers to the establishing of a clear set of campaign activities and media (products) that promote the objectives the audience members need so that they can adopt them with minimal economic and psychological cost (price). The health campaigns are presented in an attractive manner likely to reach the target audience (placement) and provide audience members with information about how, when and where they can access campaign information and programmes (promotion) (Kreps and Kunimoto, 1994). The marketing mix has been applied extensively with the aim of increasing the desirability of prevention technologies such as condoms (Airhihenbuwa and Obregon, 2000). However, social marketing only employs a simple solution (such as condom distribution) to a complex problem without addressing the social conditions that cause the spread of HIV (Freimuth, 1992). Even though social marketing has been used widely and praised, relatively little effort has gone into behaviour social marketing (using social marketing to change and maintain behaviour change) and almost nothing has been done in the area of policy social

marketing with regard to influencing policy to support HIV research and the protection of persons living with HIV/AIDS (Smith, 1998). Social marketing therefore,

“... is simply the old simplistic health promotion approach to persuasion, dressed up in marketing jargon about products and consumers.” (Lupton, 1995, p.112)

The next section presents the core element of this thesis, which is health communication.

2.2.3 Health communication

The use of the term “health communication” has been adopted in the United States to describe a field of endeavour directed towards disseminating information about health and illness to members of the public. It also conveys this meaning of ‘health’ as a phenomenon that may be ‘transmitted’ through communicative processes as if it were a message. As for health itself, health communication carries various definitions. Kreps and Thornton (1984) defined health communication as human interaction in the health care process. Cassata (1980) described health communication as the study of communication parameters (levels, functions, and methodologies) applied in health situations and contexts. Meanwhile Northouse and Northouse (1985) defined health communication as health related transactions between individuals who are attempting to maintain health and avoid illness. Health communication is a subset of human

communication that is concerned with how individuals in a society seek to maintain health and deal with health related issues. In short, it can be defined as the art and technique of informing, influencing and motivating individual, institutional, and public audiences about important health issues (U.S. Department of Health and Human Services, 2000).

Health communication can also be described as the crafting and delivery of messages and strategies, based on consumer research to inform and influence individual and community decisions that enhance health. The effectiveness of health communication has intrinsic as well as extrinsic benefits (Ratzan, 1993). This expanded definition of health communication carries increased ethical responsibility of all those agents involved in the health communication process. The reception of persuasive and relevant health information is the primary social process that can empower individuals to take charge of their own health. Hence, health communication is a critical element to a preventive approach to public health (Reardon, 1988). In this respect, health communication becomes an increasingly important element to achieving greater empowerment of individuals and communities (Nutbeam, 1998). Through this process, information is shared, new knowledge is created and mutual understanding is generated.

The above definition of health communication can be summed up as an area of theory, research and practice, which focuses on the relationships between communication and health, health attitudes, and health behaviour. The scope of

health communication includes disease prevention, health promotion, health care policy, and the business of health care as well as enhancement of the quality of life and health of individuals within the community (U.S. Department of Health and Human Services, 2000). Communication, essentially, involves the exchange of information between two or more people (Stiles, 2000). Most communication attempts are concerned with doing more to ensure that the message has been correctly interpreted and understood. In reality, the purpose of communication is to generate some learned outcome such as the acquisition of new information or understanding, a change in belief and attitude, the learning of a new skill and even the adoption of a new practice or change in lifestyle (Tones and Tilford, 2001), or in short, it is a purposeful attempt to bring about changes in people's lives (Guttman, 2003).

Cliff and Freimuth (1995) suggested that health communication is effective because messages are grounded in the target audience's knowledge, attitudes, and practices. When used appropriately, health communication can influence attitudes, perceptions, awareness, knowledge, and social norms, which will act as precursors to behaviour change. Health communication is said to be effective at influencing behaviour because it draws on social psychology, health education, mass communication, and marketing to develop and deliver health promotion and prevention messages (Polard and Kirby, 1999 in Barnes, et al., 2001).

It is argued that health communication can contribute to all aspects of disease prevention³ and health promotion and is relevant in a number of contexts, including health professional-patient relations, individuals' exposure to, search for, and use of information, individuals' adherence to clinical recommendations, the construction of public health messages and campaigns, the dissemination of individual and population health risk information, that is, risk communication, images of health in the mass media and the culture at large, the education of consumers about how to gain access to the public health and health care systems, and the development of tele-health applications (U.S. Department of Health and Human Services, 2000).

2.3 The characteristic of an effective communication strategy

The main challenges in designing an effective health communication programme is to identify the optimal contexts, channels, content, and reasons that will motivate people to pay attention to and use health information. Success is a matter of getting the audience to both attend to and act upon these messages (Murray-Johnson and Witte, 2003). For example, the promotion of responsible sexual

³ To prevent means "to forestall or thwart by previous or precautionary measures, provide beforehand against the occurrence of (something), make impracticable or impossible by anticipatory action, stop from happening" (New Shorter Oxford English Dictionary – Oxford University Press, 1997). Prevention in health, according to the classic work by Leavell and Clark (1976:17), "calls for action in advance, based knowledge on natural history in order to make it improbable that the disease will progress subsequently." Preventive actions are defined as interventions directed to averting the emergence of specific diseases, reducing their incidence and prevalence in population. It aims to control the transmission of infectious diseases and reduce the risk of degenerative diseases or other specific ailments. 'Preventive' health is said to incorporate three levels of prevention: primary prevention – refer to preventing illness before it occurs, secondary prevention – early detection of disease, and tertiary prevention – treatment of illness and rehabilitation (Lupton, 1995).

behaviour will require a range of information, education, and advocacy efforts. If people believe health to be primarily a personal rather than a social issue, then support for a public policy oriented approach will likely be limited, while approaches reinforcing the responsibility of the individuals will be favoured (Wallack, 1990). As patients and consumers become more knowledgeable about health information, services, and technologies, health professionals will need to meet the challenge of becoming better communicators and users of information technologies. Health professionals thus need a high level of interpersonal skills to interact with diverse populations and patients who may have different cultural, linguistic, educational, and socio-economic backgrounds. The use of media differs significantly by gender, family life, social economic status, and education (Roe, 2000).

Atkins and Arkin (1990) have suggested that there are seven necessary conditions for health campaign effectiveness. These, firstly, develop high quality messages, sources, and channels through needs assessment, application of theory, and formative research. Secondly, they involve disseminating the stimuli to target audiences frequently and consistently for a sustaining period. Thirdly, they attract the attention of the potential receivers. Fourthly, they encourage favourable interpersonal communication about the issue. Fifthly, they change the awareness, knowledge, opinions, attitudes, feelings, normative beliefs, intentions, skills, and/or behaviours of individuals. Sixthly, they cause societal change with supplemental community and government changes, and finally accumulate

systematic knowledge about the conditions of maximum impact through summative evaluation.

Meanwhile, according to Campbell and Williams (1998), successful sexual health programmes need to cover the individual level, interpersonal level and community level.

- Increase individuals' level of perceived self-efficacy and control over their own lives and health (individual level).
- Provide opportunities to renegotiate sexual identities and social norms in the peer group (interpersonal level).
- Develop community contexts that enable and support sexual behaviour (community level).

The U.S. Department of Health and Human Services (2000) suggested that there are several factors that can attribute to effective health communication. These factors are as presented in Table 2.1.

Table 2:1 Factors for effective health communication

Characteristic	Requirements
Accuracy	The content is valid and without errors of fact, interpretation, or judgment.
Availability	The content (whether targeted message or information) is delivered or placed where the audience can access it. Placement varies according to audience, message complexity, and purpose, ranging from interpersonal and social networks to billboards and mass transit signs to prime-time television or radio, to public kiosks (print or electronic), to the Internet.
Balance	Where appropriate, the content presents the benefits and risks of potential actions or recognises different and valid perspectives on the issue.

Consistency	The content remains internally consistent over time and also is consistent with information from other sources (the latter is a problem when other widely available content is not accurate or reliable).
Cultural competence	The design, implementation, and evaluation process that accounts for special issues for select population groups (for example, ethnic, racial, and linguistic) and also educational levels and disability.
Evidence base	Relevant scientific evidence that has undergone comprehensive review and rigorous analysis to formulate practice guidelines, performance measures, review criteria, and technology assessments for tele-health applications.
Reach	The content gets to or is available to the largest possible number of people in the target population.
Reliability	The source of content is credible, and the content is continued or repeated over time, both to reinforce the impact with a given audience and to reach generations.
Timeliness	The content is provided or available when the audience is most receptive to, or in need of, the specific information.
Understandability	The reading or language level and format (include multimedia) are appropriate for the specific audience.

Meanwhile Lavarack (2004) suggests that the public get involved in the programme development, implementation and evaluation through participation. The characteristics of participation in empowering programmes he suggests are, firstly, a strong participation base involving all stakeholders, including marginalized groups, but sensitive to the cultural and social context. Secondly, that the participants are involved in defining needs, solutions and actions. Thirdly, that the participants are involved in decision-making mechanisms at planning, implementation and evaluation stages of the programme. Fourthly, that participation goes beyond the benefits and activities of the programme, for example, it extends to broader issues such as the structural causes of AIDS and of poverty. Fifthly, that the free flow of information exists between the different

stakeholders in the programme and finally, that community representatives are appointed by its members and do not only represent elite groups.

To add to the above characteristics, needs assessment is a key for informing the planning process. Needs assessment has been defined as the process of measuring the extent and nature of the needs of a particular target population so that services can respond to them (Hooper, 1999). Needs exist when a benefit can be achieved from an intervention, and a measurable improvement can occur as a result of a change. Needs assessment is said to offer health professionals a sound ethical basis for determining the scope and direction of a health promotion programme, but it is muddied by the potential professional-lay conflict (MacDonald, 1998). Ultimately, needs assessment has to focus on the needs of the target population rather than on the needs of service providers.

In reality, however the above are only ideal characteristics of health communication and are very difficult to implement, besides being too expensive. For example in Malaysia, with differences in language, level of education, socio-economics status, norms and values, it is very costly to produce a specific health programmes to suit all the needs of these specific groups. Furthermore, top-down communication is seen as not encouraging any element of participation. Even if participation is adopted, the need has been predefined by the health professionals and the participants were professionals selected from i.e. the education department, as is the case in PROSTAR programme development.

2.4 Methods of communication

As has been argued, communication takes place in many forms, indeed almost every aspect of human behaviour can be a form of communication conveying a message to someone. Interpersonal communication strategies that involve face-to-face interaction are said to have greater potential for changing the individual's attitude and behaviour. Interpersonal communication has been widely used to communicate health information to the target population or public. In this interpersonal communication process, human-to-human interaction allows not only the sharing of information or the content, but also the simultaneous experiencing of a human relationship. This process allows for continuous feedback and the opportunity for the recipient to ask questions and even challenge the accuracy of the information (Stiles, 2000). In addition, the communicator can probe to discover sources of resistance to change, emphasise that someone like the receiver shares salient beliefs, modify message delivery to ensure that the receiver attends to the message, provide rewards for agreement, and facilitate constructive interaction between the message source and receiver (Leventhal, 1973).

Mass media channels have proven capable of reaching and informing large audiences, but interpersonal channels have been more successful in influencing attitudes and behavioural change (Backer et al., 1992; Rogers & Storey, 1987). Despite research which has shown the growing popularity of interactive, electronic technology to deliver health information, interpersonal communication

will continue to be a vital and significant process by which health professionals deliver persuasive health messages (Gauntlet, 1995). The result to individuals for whom the media campaign had been supported with interpersonal contact was generally stronger than those for the media-only subject. Indeed, there was considerable success when mass media was supplemented by intensive instruction, although the media campaign alone was not able to effect significant changes in almost all of the knowledge measures (Gauntlet, 1995).

For many years, health communication has focused on the ways to deliver messages about good practice and policy to a variety of audiences such as health workers, patients, community members, opinion leaders, and policy makers. However, the focus of health communication has moved away from the channel or medium being used and the message or product being conveyed to the process of dialogue and discussion that is fundamental to communication. This development suggests that researchers and health practitioners move beyond traditional practices of information transfer (based on one-way monologues) and toward a more useful and appropriate notion of information exchange (based on two-way dialogues) (Lee and Garvin, 2003). As a result, more attention is being paid to the social and political environments in which people live and work and the influence those environments have on behaviour change.

2.5 Getting the message across in relation to HIV/AIDS and STIs

The presentation of AIDS as a disease of high-risk groups such as homosexuals, sex workers and drug users can be seen as the a result of a social process defined by empirical reality that was shaped by ideologies of health and sexuality (Frankenberg, 1994). AIDS metaphors – as death, as horror, as punishment, as guilt, as shame, as ‘otherness’ – have exacerbated the fears, reinforcing and legitimising stigmatisation and discrimination. Public reaction toward AIDS in western countries has moved universally through stages of denial, making scapegoats and blame, before any constructive response to the epidemic occurred. This is because the tapestry of meanings of HIV/AIDS have been woven with the threads of drug use, unwanted and teen pregnancy and other sexually transmitted diseases and constructed in the public’s mind (Cline, 2003). This societal response has been tenacious even in the face of intense educational campaigns and growing awareness of the nature and spread of the virus. The tendency to view HIV/AIDS as something which happens to other people, and particularly to people who are ‘different’, either in their behaviour or their sexual orientation, can lead to a stigmatising response (Carlisle, 2001) and negative stereotypes within a particular culture (Guttman, 2003).

2.5.1 The role of culture⁴

Considering that there is no effective technique for vaccinating the public against HIV/AIDS, strategic health communication campaigns have been seen as

⁴ Social scientists generally agree that culture is learned, shared, transmitted inter-generationally, and reflected in a group’s values, beliefs, norms, practices, patterns of communication, familial roles, and other social regularities (Krueter and McClure, 2004).

currently the best available public health strategy for curtailing the spread of the disease (Edgar, Hammond and Freimuth, 1989; Nussbaum, 1989; Reardon, 1990; Brown, 1991; Bonell and Imrie, 2001) where modern medicine was caught off guard, and so far has been unable to solve the problem medically.

Communicating HIV/AIDS information in the way advocated by the approaches outlined above, however, can be difficult because of the taboo topics such as sexual practices and illegal drug use and the stigma that it often entailed. This has resulted in cryptic public health messages, with the result that many campaigns in this area have been criticised for their lack of explicitness (Watney, 1988). The fact is that the early history of HIV/AIDS was closely associated with already discriminated-against groups within society, such as homosexual men, drug users, and sex workers. This led to a societal response, which was based on judgemental attitudes and further discrimination (Pollack, 1992). Parker and Aggeleton (2002) called this a vicious circle of stigma and discrimination (Figure 2.2). HIV/AIDS is associated with marginalised behaviours (such as sex worker, IVDUs, etc.), because of their risk behaviour they can be infected by HIV and people with HIV/AIDS (PLHA) are stigmatised because they are assumed to be from these marginalised groups. Already marginalised groups are further marginalised because they are assumed to have HIV/AIDS.

In Malaysia and Indonesia, for example, parents, religious leaders and government officials were reported to have objected strongly to discussion about condoms within classrooms as a means of preventing disease transmission (Smith et al., 2003). Several studies also show that teachers are uncomfortable talking with students about sexual relationships because of cultural and social inhibitions (Klien et al., 1994; Kuhn et al., 1994; Scott and Thomson, 1992). Certain messages about sexual practices are likely to be perceived as inappropriate and in bad taste by members of the public. Also particular messages regarding safe sex behaviour or the use of clean needles and syringes may be perceived as condoning or encouraging sexual practices by young adults (Stryker et al., 1995) and promote intravenous drug use (Sixsmith et al., 2000), although research in the Western countries strongly suggest that this is not the case (Grunseit and Aggleton, 1998).

In a diverse and multicultural society, there are different perceptions, symbols, meanings, rules, habits, values, and patterns of communication that co-exist and may contribute to a lack of shared meaning, especially when one attempts to communicate technical health information. The most effective communicators of health information are those who understand the history, culture, current needs, and perceptions shared by their recipients, without at the same time reducing individuals to stereotypes. No matter how familiar health promoters are with the culture and characteristics of those with whom they work, they should not underestimate the complexity of each person and the unique situations he or she faces (Stiles, 2000). Understanding what motivates people's behaviours, knowing how to address these motivations appropriately, and taking into consideration peoples' culture when developing programmes addressing HIV/AIDS, are imperative in the fight against the pandemic. In Malaysia, for example, the majority (60%) of the population are Malays. The Malays are Muslim and the laws of the country can be described as consistent with conservative Islamic customs. This means that laws are directed towards traditional family values of marriage and monogamy for women and against alternative life-styles such as homosexuality, drug use, prostitution, premarital and extramarital sexual activities. This context makes AIDS education very difficult since the lifestyles that put people at risk are illegal, particularly in a society who views drug users as criminals to be rejected rather than people with health problems (Low et al., 1995; UNAIDS and UNDCP, 2000).

Judging people of other cultures on the basis of what seems 'normal' or 'appropriate' leads to misunderstandings, misjudgements and failures of health communication. Within every culture there is a range of norms. They are not all the same and do not live the same way. But there is also a tendency for most people to be grouped around the middle, sharing key cultural values and characteristics, and for smaller numbers of people to differ to a lesser or greater extent, rather like the normal distribution of a bell curve in a statistical chart (Trompenaars, 1993). Since culture shapes and influences the way people think about gender, sexuality, health and illness, a programme's ability to deliver services in a culturally competent manner has serious implications for access to and quality of prevention services and care (Bok and Morales, 2001; Brach and Fraser, 2000; Ginzberg and Ostow, 1991). Cultural and language barriers compound the difficulties of addressing the inherently sensitive content areas surrounding HIV transmission, such as sexual behaviour and drug use (Ramirez et al., 2000). For example, Stevenson and White (1994) conducted a pilot study with 29 administrators and counsellors from AIDS-related community-based organisations, asking the question: what are the top five hurdles to providing AIDS education in the African American, Hispanic and Asian communities? The respondents identified linguistic differences and the lack of cultural sensitivity among the top barriers. Thus, working in a community comprising culturally and linguistically non-mainstream people, it is important for health professionals to know not only about the prevailing cultural practices and languages in the area, but also the differing beliefs about health and illness.

Differences based on race, ethnic background, family traditions, age, religion, gender, or other demographic variables can create misunderstanding. Effective communication occurs when two or more people create a mutual and shared cultural environment, which is respected and understood by all parties involved (Stiles, 2000). In multi-cultural settings, one may need to reconcile different conceptions of values and beliefs. Some may prefer an emphasis on values of personal responsibility and capability, whereas others may want to stress social solidarity, respect for elders, or harmony with nature. The incorporation of cultural values, symbols, and themes in health messages can serve as a source of pride, increase identification with the message, enhance attendance to it, and increase the likelihood of the adoption of the health recommendations (Guttman, 2003). Therefore, for health communication planners, the values of a culture can be used as the foundation or building blocks of a health promotion programme.

In summary, it is important to recognise the role of culture as a factor associated with health and health behaviours, as well as a potential means of enhancing the effectiveness of health communication programmes and intervention (Krueter and McClure, 2004). With this recognition, health practitioners need to be culturally sensitive to their approach, such as using culturally sensitive health education materials for HIV-related interventions with racial and ethnic minority groups (Herek et al., 1998). Health communication programmes therefore need to be culturally appropriate.

2.5.2 Persuasive health messages: fear appeal

Fear appeal is one of the strategies used to promote better health. Fear appeals are persuasive messages that emphasise the harmful to physical or social consequences of failing to comply with message recommendations. Evidence has shown in other countries that education about risk factors, rather than fear, is much more effective in slowing the transmission of AIDS (Osteria and Sullivan, 1991). As a theory, fear appeal explains how fear can be used as a motivator for positive behaviour, a reaction, or even lifestyle change. This theory is very useful among those who must persuade others to make changes in their life when they really do not want to (Hale and Dillard, 1995). The use of fear to illustrate very real consequences to destructive behaviour is at times the only way to encourage change. For example condom usage to prevent HIV/STIs, smoking cessation, reduction of alcohol usage while driving, breast self-examination, and so on.

If fear appeal is to be used in the messages, the messages however, have to be accompanied by efficacy messages that make the target audience believe they are able to perform a recommended health action (Witte and Allen, 2000). Messages have to be pre-tested to ensure the relevancy of threat and efficacy perceptions. Hale and Dillard (1995) pointed out that,

“if the message predicted a negative outcome from AIDS (i.e. certain death) but the target did not feel vulnerable or at risk for the negative outcome, then the fear appeal would not be persuasive. If a message depicted a negative outcome and the target audience felt vulnerable to the outcome, but the recommended means to avoid the

outcome was ineffective, the fear appeals would not produce compliance with the recommendation.” (p.69)

And also AIDS-prevention messages that arouse too much fear may be ineffective because viewers must concentrate on controlling their fear rather than thinking about behaviour that would help them avoid the threat of AIDS (Witte, 1992).

2.6 Peer education approach

Peer education programmes have grown in popularity internationally and have targeted a wide range of youths in a variety of settings (Caron et al., 2004) such as HIV/AIDS prevention using peer social networks as an important starting point to change behaviour (Latkin, 1998). Peer education has been defined (Sciacca, 1987, in Green, 2001: 65) as, “the teaching or sharing of health information, values and behaviours by members of similar age or status groups.” The assumption is that young people often share information which they draw from a variety of sources, including their personal experience, within their social networks (Milburn, 1995). Peer education within the context of health promotion has been applied to a wide variety of health topics and programmes. In some programmes, peers are the same age as the target population and recruited by the target population themselves, in others peers are several years older than the target population and chosen by teachers, health educators or health practitioners. In some programmes peers are merely used to deliver information scripted by health educators whilst in others

peer educators decide on the content and mode of delivery of the intervention (Harden et al., 1999).

Turner and Sheperd (in Green, 2001) identified several rationales for the popularity of peer education programmes. Peers are said to be a credible source of information, because they are acceptable, more successful than professionals, able to reinforce learning through on-going contact and can be positive role models. Besides that, the argument is that, peer education is potentially empowering for those involved as peer educators, with the opportunity for volunteers to experience personal growth and perhaps career development. Thus it provides access to those who are hard to reach through conventional methods and is believed to be cost effective. Peer educators have been trained to reach specific target populations in contexts inside and outside health care settings. Particularly for adolescents, peers can be effective role models for promoting healthy behaviour, help create and reinforce social norms supporting safer behaviours through exchange of information, modelling and serve as an accessible and approachable health education resource both inside and outside the classroom (Fisher, 1998).

Theoretically, peer education has its roots in a number of theoretical disciplines including teaching and learning theories (e.g. Sotto, 1994) and psychosocial theories of behaviour change (e.g. Bandura, 1977). The most commonly used theories are such as Diffusion of Innovations Theory (Rogers, 1983) and Social

Learning Theory (Bandura, 1977). In these theories, social influence is considered to be an important determinant of behaviour. According to social cognitive theory, adolescents are more likely to enact modelled behaviour if they perceive the models as warm, supporting and similar to themselves with respect to such characteristics as gender, ethnicity and age (Bandura, 1986).

It is suggested that peer education programmes can positively affect the adolescent's knowledge, skills and beliefs relating to social norms meanwhile peer leaders gained knowledge, skills and self-confidence (Phelps et al., 1994). However, Helgerson and Peterson (1988) found that adolescents did not trust the information that they received from peer educators and they sought additional information from health professionals. The peer educator approach has reportedly been used in a diverse population such as (in UNAIDS, 1999), street youth in Thailand (Boontan, 1998), secondary school students in Argentina (Bianco and Pagani, 1998), factory workers in Zimbabwe (Katzenstein et al., 1998), sex workers in India (Seema, 1998) and drug users in the United States of America (Broadhead et al., 1998). However, the evidence base is actually quite poor as few studies have been published and most reports are merely conference abstracts with little explanation regarding evaluation methodology. Therefore, relatively, little is known about the influence of contextual factors on effectiveness of peer education (Green, 2001). As a result, the opportunity to learn lessons from successful and unsuccessful programmes is limited. Although more attention has been devoted to the factors that might result in successful peer-led programmes,

less attention has been directed towards understanding the effects of participation on the beliefs, attitudes and behaviours of peer educators (Ebreo, et al. 2002).

Despite the development of peer education programmes being for the benefit of the recipients (adolescents), the interventions are driven by an 'adultist' agenda, which defines what problems need to be tackled and how (Milburn, 1995). With this construction, the lives, views and experiences of young people are not known, and little importance is given to how young people understand themselves as social agents (Harden et al., 1999). As Milburn (1995) points out,

"... such intervention involve mature adults in developing or facilitating interventions with younger people, children or young adults, which aim, through the manipulation of young people's social worlds, to promote 'healthier' behaviours or lifestyles." (p.411)

The implication of this construction demands serious consideration of ethical issues when implementing peer education programmes. For example, in the selection of participants attending peer educator's training in the PROSTAR programme, the selections were normally done by the teacher. It is ethical to obtain parental or teacher permission to allow the students to participate, but are these students voluntarily participating? This raises the question of selection procedures incorporating an element of teacher discretion if not power (Milburn, 1995) and could raise the issues of voluntarism, manipulation and exploitation of the young people's social world by the project implementers (Green, 2001).

While it may offer some advantages, setting up and sustaining peer education programmes is not easy (Green, 2001). For example, the projects may face continuous funding problems and the school no longer incorporate it in their co-curriculum due to lack of manpower. The peer educator who might be sitting for their exam in that particular year will no longer have the interest or time because the focus of concentration is getting ready for and passing the academic examination.

Similar to the PROSTAR programme, Zambia and the Dominican Republic have also had their peer education programmes for the young. The programmes include “Expansion of Reproductive Health Programme for Adolescents Using Peer Education Strategies” and the ADOPLAFAM (Association Dominicana de Planificacion Familiar) in the Dominican Republic and YWCA (The Young Women’s Christian Association) and SEPO Centre Peer Education Programme in Zambia. These programmes target the adolescents 13 to 25 years of age and focus on the prevention of pregnancies, STIs and HIV/AIDS. Peer educators are trained and use one-to-one dialogue, group counselling and drama, as well as distribution of brochures, pamphlets, and condoms to disseminate the sexual health information. Incentives such as T-shirt, bag and caps, and paid transportation are provided when they attend training. For all the programmes above, peer educators are not paid. Formative research on the productivity and sustainability of these programmes (Svenson and Burke, 2005) found that, firstly, youth involvement is critical for peer educator retention, motivation and productivity. Secondly,

community participation and support is critical to programme sustainability and productivity. Thirdly, peer education needs sound technical frameworks, especially in regard to adequate training and supervision that meet the special demands of youth and adolescents volunteers. The technical frameworks should integrate youth involvement, youth-adult partnerships, and gender equity and equality into their planning and strategies. Fourthly, successful youth-adult partnerships are critical in developing positive youth dynamics. Fifthly, trained peer educators contribute to civil society by virtue of their citizenship and their long-term leadership, but this potential resource is often under-utilised once they age-out of the peer education programmes (these programmes are limited up to 25 years of age), and sixthly, there are considerably variations between peer education programmes in terms of the number of activities carried out, type of participations, nature of contacts, topic covered and cost. For example, the urban locations generally provide access to larger audiences at lower cost compared to semi-urban.

Although peer education still requires the evidence base about its effectiveness and ethical consideration, peer education could offer a potential vehicle for sexual health information dissemination for young people. Since young people (Tones and Green, 2004) are claimed to be more open to each other about sensitive issues such as sex, they could be a powerful influence on their peers' behaviour. In summary, it could be suggested that, in any health promotion programme for

young people, it is important for health practitioners to work together with them and to understand their needs.

2.7 The challenge of behaviour change

Behaviour change communication can enhance knowledge, ensuring that people are given the basic facts about HIV and AIDS in a medium that they can understand and relate to. Explanations to behavioural change in health promotion are primarily based on an understanding of behaviour within the paradigm of social psychology (Lupton, 1995). This is due to the fact that the primary goal of health promotion is to change the behaviour of the target population. It is assumed that, in some instances, health behaviours are mediators of health status, that health behaviours are the results of knowledge, beliefs and attitudes, and that specific behaviours, when changed, improve health (Lorig and Laurin, 1985). Therefore the goal of health promotion activity is not to produce behaviour change in a particular direction in order to impose a state of perfect health, but to help people to be as healthy as they wish to be. Thus, health promotion is directed not only at those who are sick, as is medical care, but at all individuals at all levels of the population (Lupton, 1995).

Theoretically, the developments of health education and promotion programmes are based on behavioural and communication theories drawn from several disciplines such as psychology, sociology and anthropology. Among others, theories such as

Social Cognitive Theory (Bandura, 1994), Stages of Change (Prochaska and DiClemente, 1983), Diffusion of Innovation (Rogers, 1983), Health Belief Model (Rosenstock et al., 1994), Theory of Reasoned Action (Fishbein et al. 1994), Social Movement Theory (Friedman et al., 1994) are mostly referred (see Appendix 2: p.306). These theories can help to provide the basis for judging whether all the necessary elements of a programme are in place (Piper and Brown, 1998), such as,

- who the target populations are,
- the specific behaviours that put them at risk of HIV/AIDS,
- factors that impact risk-taking behaviours, factors that are the most important and can be realistically addressed, and
- the kind of intervention that can best address the above factors

For example, providing young people with information about condoms will have little effect unless they have the willingness to obtain and use condoms, they are able to be assertive in negotiating condom use with their partner, condoms are available, and so on.

A well designed communication campaign can play an instrumental role in facilitating behaviour change, but the behaviour change process takes considerable time and behaviour is, of course, notoriously difficult to change (Aggleton and Campbell, 2000). There are many links in the chain from initial exposure to the sustained behavioural change of an individual. Behaviour change is conditional upon intention, which is conditional upon attitudes, which are conditional upon awareness, which is conditional upon exposure to a message

(Salmon and Atkin, 2003). Adoption of a new behaviour does not happen instantly. Prochaska and DiClemente (1983) identified stages of a change (transtheoretical) model through which an individual passes before adopting a new behaviour. The model is based on the premise that behaviour change is a process, not an event, and that individuals have different levels of motivation or readiness to change (Davies and Macdowall, 2006). This model identified five stages of change (Figure 2.3).

In a similar model, Rogers (1983) in Diffusion of Innovation studied the spread of new ideas and new patterns of behaviours through the communities. He demonstrated that at first, take up of a new idea is slow and only a few people (innovators) try it. Then the idea starts to spread and more people in the community adopt it. Finally, diffusion of the idea slows again as only resistant and 'hard to reach' groups are left (late adopters).

These two models show that different approaches to health promotion are required to reach different levels of the communities. For example, the stages of the change model stress the need to research the characteristics of the target population, the importance of not assuming that all people are at the same stage, and the need to organise interventions sequentially to address the different stages that will be encountered. It is suggested that those who believe they will succeed are, in general, more likely to formulate intentions to act, set themselves higher goals, exert great effort, regard errors as learning experiences and persevere for

longer. They are also less likely to be distracted by anxiety and self-doubt during performance (Bandura, 1992a). Therefore, to be highly effective, communication campaigns must consider a long-term perspective and issues of sustainability. Funding allocations need to be congruent with programme characteristics (Swerissen and Crisp, 2004) besides other factors such as full support from top policy makers, good leadership in programme management, and commitment of

the public health programme officers. The intervention programme requires long-term support if it is to be sustained, and if it is withdrawn too early, programme effects may disappear quickly. However, Green (1989) has argued that, in some circumstances, health promotion effects will be sustained without the need for ongoing intervention. When this occurs, efforts to sustain programmes are not warranted. But this raises the issue of what needs to be in place to promote sustainability.

Research shows that theory-driven mediated health promotion programming can put health on the public agenda, reinforce health messages, stimulate people to seek further information, and in some instances, bring about sustained healthy lifestyles (Nutbeam, 1998). A number of theories and models have been put forward in an attempt to explain the relationships between health beliefs and health-related behaviour. However, there is no single theory which entirely explains motivation. Cognitive models, such as the health belief model (Rosenstock et al., 1988; Rosenstock et al., 1994;) and the theory of reasoned action (Fishbein et al., 1994), have been found highly relevant in explaining HIV prevention behaviours (Vaughan, et al., 2000). For the Health Belief Model (Rosenstock et al., 1988), the key intervening variables at the level of an individual have been identified as (1) perceived susceptibility to HIV infection, (2) perceived severity of AIDS, (3) perceived benefits of prevention behaviours, (4) perceived barriers of adopting prevention behaviours, and (5) the individual's perceived ability to adopt the prevention behaviour (self-efficacy).

Psychosocial models such as social cognitive theory (Bandura, 1994), emphasise the importance of such concepts as self-efficacy, role modelling of behaviour change, the consequences of alternative behavioural change, and beliefs about normative behaviour within the local cultural setting. Self-efficacy is proposed as the most important prerequisite for behaviour change and will affect how much effort is put into a task and the outcome of that task (Davies and MacDowall, 2006). The promotion of self-efficacy is thus an important task in the achievement of behaviour change.

Diffusion of innovation theory (Roger, 1995) cited above and social-movement theory (Friedman, et al., 1994) emphasise the importance of (1) interpersonal communication in social networks, (2) opinion leadership by trusted local individuals, (3) credible change agents, (4) making the behavioural change compatible with local cultural standards, and (5) community organisation and mobilisation in promoting HIV prevention. These various behavioural change models are not mutually exclusive. They differ mainly in their emphasis on self-efficacy, interpersonal communication, beliefs about the behaviour change, and the belief in the personal threat from AIDS. They recognise that the same behavioural outcome may be influenced by different factors in different populations (Vaughan, et al., 2000).

These theories have helped to identify and explain the complex relationships between knowledge, beliefs and perceived social norms, and provide practical

guidance on the content of educational programmes to promote behavioural change in a given set of circumstances (Nutbeam, 2000). However, even the best education strategies and techniques cannot guarantee that learned behaviours will be internalised by the individual and incorporated into everyday life (Kemmm and Close, 1995). Moreover, even when individuals modify behavioural health risk, there is a high probability that they will not maintain the change they make (Quiqley and Marlatt, 1999).

In conclusion, HIV/AIDS health communication is not simply a matter of getting the message across. Its involves building relationships and empowering people, even in the briefest of encounters, so that they can make choices and decisions about health based on their own priorities and circumstances. However, mass communication alone will not change behaviour because of the culture, taboo and stigma issues surrounding HIV/AIDS, besides behaviour itself, which proved to be very difficult to change. It could be suggested that people are not aware that most health communication approaches fail to recognise the utilisation of message in term of behaviour change dependent on the context of health literacy.

2.8 Health literacy as the missing part of the equation

The term health literacy is a relatively new concept in health promotion. It is a composite term to describe a range of outcomes to health education and communication activities. In the United States, in particular, the term is used to

describe and explain the relationship between patient literacy levels and their ability to comply with prescribed therapeutic regimens (Ad Hoc Committee on Health Literacy, 1999 in Nutbeam, 2000). The concept was originally used to measure the capacity of individuals to understand instructions about medicines. This approach infers that adequate functional health literacy means the ability to apply literacy skills to health related materials such as prescriptions, appointment cards, medicine labels, and directions for home health care (Parker, et al., 1995).

Health literacy in fact has been variously defined. The World Health Organisation (in Nutbeam, 1998: p.10) has a broad definition of health literacy as “the achievement of the cognitive and social skills that determine the motivation and ability of individuals to gain access to, understand and use information in ways that promote and maintain good health”. Health literacy implies the achievement of a necessary level of knowledge, personal skills and confidence to take action to improve personal and community health by changing personal lifestyles and living conditions. Thus health literacy means more than being able to read pamphlets and successfully make appointments. Health literacy requires a complex group of reading, listening, analytical, and decision-making skills and the ability to apply these skills to health situations. By improving people’s access to health information and their capacity to use it effectively, health literacy is critical to empowerment (Renkert and Nutbeam, 2001).

This definition was elucidated further by Kickbusch (1997) as health literacy implies the achievement of a level of knowledge, personal skills, and confidence to take action to improve personal lifestyles and living conditions. These definitions have the value of including the cognitive element of basic understanding about health issues, interpretation of health information and applying this to make an informed decision about health as well as life skills such as communication, assertiveness, and decision making. Health literacy can be described as both a goal and an outcome, becoming the currency and capital needed to develop and sustain health (Department of Health and Human Services, 2000).

Nutbeam (2000) has identified three levels of health literacy, namely, functional, communicative/interactive and critical. Functional or basic health literacy implies basic skills in reading and writing, to be able to understand simple health messages and the ability to comply with expert-prescribed actions to remedy the problem (compliance with expert-prescribed behaviour), for example, the ability to read and understand a simple messages from HIV/AIDS posters.

Communicative or interactive health literacy involves more advanced cognitive and literacy skills, which together with social skills, can be used to function in everyday society and to seek information in order to respond to changing needs (self-management of problems in partnership with health professional), for example, seek out information on HIV/AIDS from different sources such as

newspapers, leaflets, posters, radio, television, health worker and to derive from it through understanding more complex language and concepts. It involves the ability to discuss this information with health professionals and to synthesise it to make informed decisions, the ability to respond to changing circumstances. The most advanced level of health literacy is critical health literacy. It implies more advanced cognitive skills which, together with social skills, can be applied to analyse information critically, and to use this analysis to increase awareness of one's situation and thereby exert greater control over life events (empowerment).

Acquiring and mastering skills such as decision making, self-assertiveness, self-reflection and social communication are regarded as fundamentally important to the enhancement of a young person's ability to understand, make rational decisions and to act on them (Scriven and Stiddard, 2003; Bernhardt and Cameron, 2003). However, the three levels of health literacy as proposed by Nutbeam (2000) might only be appropriate where the communities are able to read or are literate and might not be appropriate for the illiterate (unable to read and write) community. Also, educational level cannot be a yardstick to assume that individuals possess a higher level of health literacy. Also high literacy levels are not a prerequisite or guarantee that a person will respond in a desired way to health education and communication activities (Nutbeam, 1999). Therefore, the understanding of literacy in the field of education is not an acceptable proxy for health literacy as studies have found significant discrepancies in these two constructs (Doak et al., 1998; French and Larrabee, 1999). Even though the target

audience may not be able to read (illiteracy), if they can understand a simple fact about their health conditions and act towards improving it, this could categorise this person as health literate.

The three different levels of health literacy as discussed above can be modelled as top-down and bottom-up approaches (Wang, 2000). Basic health literacy is a traditional top-down approach to the dissemination of information regarding ideal health behaviours. Functional health literacy, which is also top-down, involves more educator training and skills development. Critical health literacy is a bottom-up approach to health promotion and is more participatory in nature. It empowers people to seek and analyse health information to self-management and improved health outcomes. These have been clarified further by Nutbeam (2000) as presented in Table 2:2.

Table 2.2: Levels of health literacy and the outcomes

Health literacy level	Outcomes
Level 1: Functional health literacy	'Functional health literacy' reflects the outcome of traditional health education based on the communication of factual information on health risks, and on how to use the health system. Such action has limited goals directed towards improved knowledge of health risks and health services, and compliance with prescribed action. Typically such approaches do not invite interactive communication, nor do they foster skills development and autonomy.
Level 2: Interactive health literacy	'Interactive health literacy' reflects the outcomes to the approaches to health education which have evolved during the past 20 years. This is focused on the development of personal skills in a supportive environment. This approach to education is directed towards improving personal capacity to act independently on knowledge, specifically to improving motivation and self-confidence to act on advice received.
Level 3:	'Critical health literacy' reflects the cognitive and skills

Critical health literacy	development outcomes which are oriented towards supporting effective social and political action, as well as individual action. Within this paradigm, health education may involve the communication of information, and development of skills which investigate the political feasibility and organisational possibilities of various forms of action to address social, economic and environmental determinants of health.
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Functional and interactive health literacy results in individual benefit rather than the population. Meanwhile critical health literacy can be more obviously linked to population benefit, alongside benefits to the individual (Table 2.3). Health education in this case would be directed towards improving individual and community capacity to act on social and economic determinants of health.

Such a classification indicates that the different levels of health literacy progressively allow for greater autonomy and personal empowerment. Progression between levels is not only dependent upon cognitive development, but also on exposure to different information or messages. This in turn, is influenced by variable personal responses to such communication, which is mediated by personal and social skills, and self-efficacy in relation to defined issues. The importance placed on developing self-esteem is based on the belief that a young person with a positive view of themselves and an inner confidence will possess stronger psychological characteristics, which will increase their self-efficacy and enable them to resist pressures to engage in potentially health-damaging behaviour. Building a positive self-esteem, providing opportunities for young people to develop positive self-efficacy, and fostering in young people the belief that they have control over some aspects of their educational experience or lives within school, are all central to them becoming an empowered individual (Scriven and Stiddard, 2003).

Personal competencies are of importance for the young people to make the right choice in health. It was suggested that three key areas might be useful to focus on when building personal competencies of young people (Scriven and Stiddard, 2003; Tandy and Bax, 1987). These are (a) promoting a positive attitude by the development of a positive psychological perception in young people, (b) building on knowledge, enhancing cognitive development, including the augmentation of competencies associated with accessing and interpreting health related information, and (c) increasing specific skills by the acquisition of appropriate life skills, such as assertiveness, critical thinking and decision making.

The early use of the term shows that there is a link between health literacy and health education. Health education encompasses opportunities for learning designed to improve health literacy, including increased knowledge and the development of life skills that lead to the improvement of individual and community health. Adequate health literacy is essential for primary prevention and health promotion. People's inability to access, understand, and apply health information to their own lives can have a significant negative impact on their health and well-being (Bernhardt and Cameron, 2003).

In summary, health literacy is the understanding of the language of health – understanding what is being shown, written or said, being able to take that information in, act on it, and make effective, positive and good health choices and decisions.

2.8.1 Does health literacy matter?

Every day people are inundated, even bombarded, with an abundance of health information through various channels of communication such as face-to-face, printed materials, television, radio and the Internet. It is all likely to be ineffective and potentially harmful, if the receivers of the information do not possess adequate health literacy to access the information, understand what is being communicated, and appropriately apply it to their own lives (Bernhardt and Cameron, 2003). The need for adequate health literacy is paramount particularly as the responsibility for health decisions continues to shift from practitioners to consumers in the modern era of managed care (Root and Stableford, 1999). Many public health messages and education materials about recommended disease prevention and screening are inaccessible to those with low literacy. Research has shown that poor functional health literacy poses a major barrier to educating patients with chronic diseases, and may represent a major cost to the health care industry through inadequate or inappropriate use of medicines (National Academy on Aging Society/Centre for Health Care Strategies, 1998).

Most research assessing the prevalence of low health literacy has been hospital based, focussing on patients at large hospitals. Research shows that low health literacy can contribute to a perception of shame and stigma, poor patient/provider communication, limited health knowledge, and adverse health outcomes (Bernhardt and Cameron, 2003). The relationship between literacy and health is complex. Literacy can impact on health knowledge, health status, and access to

health services. Meanwhile health status is influenced by several related socioeconomic factors such as income level, occupation, education, housing and access to medical care. For example, it could be suggested that the poor and illiterate are more likely to work under hazardous conditions, have less accessibility to health care and make poor health behaviour choices.

People who lack basic health literacy skills may not be able to acquire factual knowledge of their disease and may actually be misinformed, with increased feelings of shame (Brez and Taylor, 1997), poor patient/provider communication (Parker et al., 1995), a reduced level of health knowledge (Williams et al., 1998), poor health behaviours and treatment adherence (Kalinchman et al., 1999), adverse health care outcomes (Gazmararian et al., 1999), and increased individual and societal health care cost (Baker et al., 1997). Parikh et al. (1996) concluded that low health literacy carries serious stigma and can foster feelings of fear, inadequacy, and low self-esteem. The consequence of these perceptions is that some people may avoid or underutilise the health care system when they are ill to avoid being discovered or embarrassed by their low health literacy.

People with poor health literacy skills have been found to be less capable of describing their condition to medical personnel than people with higher health literacy (Roter, 2000). They are unable to clearly communicate their medical problems; their health care providers may be drawing conclusions on limited or flawed information. Furthermore, the results of medical tests or evaluation, and

treatment decisions based on those results, may be invalid if the test required verbal or written input from patients with inadequate health literacy (Bernhardt and Cameron, 2003). In an age of shared responsibility between patient and physician for health care, patients need to be strong decision-makers.

A study by Kalichman et al. (2002) found that lower health literacy patients will be more dependent on providers for information and may require more visits and tailored communications. Similarly, Baker et al. (1997) found that hospital patients unable to read commonplace medical instructions were significantly more likely to report poor health and were more likely to have been recently hospitalised compared with persons of higher health literacy. In a study of patients with hypertension and diabetes, Williams et al., (1998) found that poor health literacy was associated with less knowledge and less understanding of chronic illness. People with low health literacy have difficulty understanding health information and instructions, which can lead people to ignore disease warning signs, misuse medications and instructions, fail to comply with treatment regimens, incorrectly manage a disease, or fail to get needed care within an appropriate period of time (Parker et al., 1995; Williams et al., 1998). Practically it means that, for example, they cannot understand why they should not be sharing needles for injecting drugs and why one should practice safe sexual behaviours. Studies by Olson et al. (1996) found that people with low health literacy often did not understand the biological causes of symptoms and often have unrealistic expectations of the medications prescribed to address their medical condition.

They believed that the medications would achieve an immediate reversal or correction of the disease and many were not able to comprehend the need for long-term treatment.

Poor comprehension of medical instructions can lead to non-compliance with treatment regimens (Parker et al., 1996). Studies on health, education and literacy levels among African American men and women who are HIV positive found that education and health literacy were positively associated with HIV treatment adherence (Kalichman et al., 1999). Low health literacy is also related to poor health and adverse health outcomes. People with low health literacy were more than two times as likely to report their health to be poor than people with adequate health literacy (Baker et al., 1997). A two-year longitudinal study of the health literacy levels among almost 1,000 emergency room patients by Baker et al. (1998) found that people with low health literacy were two times as likely to be hospitalised as those with higher literacy. Higher rates of hospitalisation contribute to an increase in health care cost (American Medical Association, 1999).

In short, inadequate health literacy has had its impact on the healthcare system, such as bearing the cost of hospitalisation, treatment, staffing, training of physicians, laboratories, etc. Meanwhile, low literacy individuals cannot be empowered consumers in a market-driven healthcare system, taking care of themselves and their family members; they fail to seek preventive care, navigate

the health care system and to understand the language of health care providers. As a result, quality care, health services and health products cannot be enjoyed and fully utilised or used for the good of their own health and that of their families.

Throughout the studied literature, health literacy research has been done in healthcare settings. Most of the studies were concerned with patients' compliance to treatment regimens and their ability to understand prescription. However, in this study, the researcher attempts to apply the concept of health literacy as proposed by Nutbeam (2000), especially the functional health literacy, to a more challenging environment called health communication.

2.8.2 Focussing health literacy through health communication

Health literacy is not simply health knowledge, but also the motivation and ability of individuals to gain access to, understand and use information in ways that promote and maintain good health. Communication alone is not a simple solution to the complex problem of health literacy. Without effective communication, success in developing health literacy will be limited (Ratzan, 2001). Differences in the ability to read and understand materials related to personal health as well as navigating the health system appear to contribute to health disparities (Department of Health and Human Services, 2000). Therefore it was suggested that the failures in health education are related to poor health literacy (Nutbeam, 2000). The roots of health literacy problems have grown as health practitioners

and health system providers expect patients to assume more responsibility for self-care at a time when the health system is increasingly fragmented, complex, specialised and technologically sophisticated (Department of Health and Human Services, 2000). In a multi-cultural community, health information in one language or culture may not transfer to another. Therefore, the challenge is to improve the reach of health information to those with low health literacy within the population. This is because people with low health literacy may perceive themselves as lacking power and conversely, increasing health literacy has the potential also to increase self-efficacy (Parker, et.al., 1996).

Communicating health messages clearly is an essential principle for producing consumer health information. A message is salient if it is considered important, significant, or relevant by the recipient (Witte et al., 2001). Well presented and easy to read information is vital for everyone. Health practitioners need to check that what they are saying is being understood and is simple for the target audience to comprehend. The written format has been found to be the most effective medium for communicating relatively complex health information (Furnham et al., 1990). However, the written format is only suitable for the 'can read' or literate population and not for the illiterate. Also lack of a reading culture means that some written health education materials will go astray. For example, a study by Mitchell et al. (2001) in rural Uganda, found that around 80% of the community had seen the leaflets but not necessarily read them. Therefore,

information has to be made available in the most appropriate format to meet the user's needs and be relevant to the target audience.

It would appear that meaningful HIV/AIDS related health communication starts from the recognition that people's experience varies in complex and perhaps contradictory ways, according to their social background, status, gender, sexuality and ethnicity (Aggleton and Warwick, 1997). Kreuter and Holt (2001) found that, when health education materials have been individually tailored, they have been shown to be more effective than generic materials in promoting changes in a variety of health-related behaviours. Behaviour change was more likely for those who received tailored materials and those who had higher self-efficacy (Bull, et al. 2001). Indeed, studies also have found that compared to untailored messages, tailored messages are more likely to be read and remembered, saved, discussed with others and be perceived by readers as interesting, personally relevant and having been written especially for them (Brug et al., 1996; Skinner et al., 1994; Skinner et al. 1999; Kreuter and Wray, 2003). Other studies also show that tailored messages have a greater effectiveness as opposed to non-tailored messages across a wide variety of health domains such as diet and nutrition (Brug et al., 1999; Campbell et al., 1999), physical activity (Bull et al., 1999; Rosen, 2000), sexually transmitted diseases (Paperny, 1997), and medical decision-making (Spunt et al., 1996).

Better health literacy can be enhanced by better exposure to campaign messages and if health messages are disseminated through effective channels (Rimal and Adkins, 2003). Through segmentation, for example, the messages of the campaign can be constructed to cater to individual needs, interests, abilities, and motivations. Message efficiency can be maximised if subsets of the audience are ordered according to importance, and effectiveness can be increased if message content, form, and style are tailored to the predisposition and abilities of the distinct subgroups (Atkin and Freimuth, 2001; Derwin and Frenette, 2001). Tailoring and targeting are ways to meet the obligations to promote equity and obtain comprehensibility. Each requires the provision of equivalent but culturally appropriate messages to populations with different socio-cultural backgrounds and levels of literacy (Guttman, 2003).

People's culture and health literacy may interact in such a way to influence whether people pay attention to health communication messages and whether they apply the messages to their own beliefs and behaviours (Bernhardt and Cameron, 2003). Campaign planners need a greater understanding of their target audience, which often belongs to a culture and social class different from theirs (Arhihenbuwa and Obregon, 2000). For example, different cultures may have different preferred sources of information. A study by Davis and Flannery (2001), among Puerto Rican women, found that health information was seen as trustworthy when its sources were compatible with cultural beliefs and values. Therefore, improving health literacy does not just involve a health educator telling

a community what they can do to improve their health, but involving them in every step of the process so that they have a greater understanding of the problems they face and are empowered to take action to deal with them. However, the limitation is, it requires staff commitment to community participation and effective communication skills. In addition it is a time-consuming approach that involves working with a community at a pace that is suitable to their ability in order to ensure the development of health literacy and subsequent sustainable healthy behaviour changes (Jahan, 2000).

Mass media has been increasingly recognised by those concerned with educating the public as offering an extremely effective channel for communicating health messages. It provides the possibility of reaching more people, including those who might not otherwise be contacted, and it allows for a more sophisticated presentation of material than do many formal educational processes (Wellings, 1988). Although printed materials may not be the best health communication medium for reaching people with low health literacy, several studies have found that it is possible to create printed materials that are accessible to low health literacy populations. Davis et al. (1998) found that simplifying the materials can increase their appeal but did not raise comprehension levels. Improved comprehension of materials was achieved by adding instructional graphics to the materials. Similarly, Ngoh and Shepherd (1997) found that visual aids could help audiences to improve their comprehension of the information and compliance with treatment recommendations.

In summary, improved health literacy enables healthy lifestyle choices and these may contribute towards achieving change in the social, economic and environmental determinants of health which may benefit the health of whole populations.

2.9 Enhancing young peoples health literacy

Gilchrist (1990, in Maibach, et al. 1993) suggested that at least three different types of intervention approaches are necessary for the prevention of HIV/AIDS with young people, depending on the target population's potential risk of transmitting or acquiring the virus. The first is a universal approach that is broad in scope and entails dissemination of general information about AIDS and decision making to a wide audience, primarily through schools. The second is a selective approach that is more intensive and emphasises self-esteem and communication skill building by employing peer-led stress management programmes to be used with young people whose risk of AIDS is high, such as those in areas where the rates of drug use or sexually transmitted disease are high. The third is a sustained and highly personalised indicated behaviour change approach for adolescents who are already engaging in high-risk behaviours, to be delivered through programmes with access to high-risk groups, such as social services agencies, support groups, and detention centres. In other words, to develop effective prevention strategies for youth, their views of the problems and interpretations of proposed solutions must be understood (Ramirez et al., 2000).

For example, findings by Wren et al. (1997) on eleven AIDS prevention projects found that small group discussions were rated as one of the most effective activities for AIDS prevention projects targeting youths.

HIV/AIDS education varies widely, both in its goals and in the educational strategies that are used to bring these about. Many have utilised only didactic instruction, which focuses on knowledge and attitudes about HIV and AIDS (Brown et al., 1989; DiClemente et al., 1989; Petosa and Wessinger, 1999; Schinke et al., 1990). The content of the sexual health programme was focused on HIV/AIDS awareness and knowledge, stemming from assumptions that communication and education could contribute to behaviour change (Visser et al., 2004). This monologue of information transfer exemplifies what Freire (1972) called the 'banking concept' of education. It assumes that knowledge is 'bestowed by those who consider themselves knowledgeable upon those whom they consider to know nothing' (p.46). For example, health professionals regard the target audience not only as objects, but also as individuals considered to know nothing. Thus, target audiences become 'containers' to be 'filled' with the knowledge of the health professional, and information becomes 'deposited' into the empty 'receptacles' of the target audience through processes of memorising and repeating (Lee and Garvin, 2003).

Information-based approaches have been widely used, involving talks, lectures, guest speakers and videos; however, they are capable of doing much more than

bringing about change in knowledge. In a review of behaviour change interventions, Harrison et al (2000) emphasised that health intervention will develop negotiation and decision making skills. Young people would need to acquire decision making skills to deal with high-risk situations, negotiating less risky activities with friends or partners (Slonim-Nevo and Auslander, 1996) and have to have the means, resources, and social support to develop self-regulative skills and strong belief in oneself (self-efficacy) (Bandura, 1992b).

For adolescents, entertainment education was found to be an effective vehicle for health education (Salmon and Atkin, 2003) and behavioural changes (Singhal and Rogers, 1999). This is because the interesting and enjoyable style of presentation attracts large audiences and conveys information in a relevant and credible manner. The health-related messages are delivered in an entertainment format. The entertainment education strategy is based primarily on Bandura's (1977, 1986) social cognitive theory, which states that perceived self-efficacy is the driving force of human behaviour. Self-efficacy refers to people's belief in their capability to organise and execute the course of action required to perform a given behaviour successfully (Bandura, 1986). When people judge themselves to be efficacious, they are confident in their capability to overcome the difficulties inherent in changing and maintaining specific behaviour (Maibach and Cotton, 1995). Entertainment characters are thus created to serve as positive role models, negative role models, or transitional models, which are models that start off with poor behaviours and then move to positive or negative consequences. The role

modelling by the characters is thought to affect perceptions of self efficacy among listeners (Farr et.al., 2005). Self-efficacy is an important factor in that it mediates the application of knowledge and skills in the pursuit of behavioural attainments.

Most of the HIV/AIDS interventions have been aimed at changing individual behaviour through provision of information through education and social marketing to change knowledge, attitudes and beliefs that are the precursors of behaviour change (Swerissen and Crispp, 2004). However, HIV prevention programmes for adolescents have been developed without sufficient empirical information about the strategies that would be most effective in motivating health-promoting behaviour change (DiClemente, 1993). Adolescence has a social ordering, values, cultures and language of its own. What an adult considers to be risk behaviours may have totally different meanings to an adolescent (Rich and Ginsburg, 1999). Therefore, the modification of attitudes and behaviours requires more active involvement of adolescents in programme design, planning and implementation (Woods, 1998; Huba and Melchior, 1998), and encourages the use of more participatory approaches such as games, role-plays, stimulation and skills training. Research shows that skills-building programmes have been shown to be effective in changing adolescents' risk behaviours associated with sexual activity, STDs and HIV (Howard, 1985; Hynes and Bruch, 1985; Kipke et al., 1993; Rotheram-Borus et al., 1990).

Schools are increasingly recognised as a major setting for health promotion. Schools are widely accepted as influencing the health of young people and future

adults. This is because of the massive amount of time spent by the young people in school and the difficulties of reaching out of school youth and disaffected young people (Tones and Green, 2004). The element distinguishing school-based programmes from other interventions for youths was the supportive structural aspect played by schools and teachers, and the interaction between schools, parents, students and community (Kalichman, 1998). It was found that effective HIV/AIDS prevention interventions had a number of characteristics in common (UNAIDS, 1999):

- Accurate information was provided about the risks involved in unprotected sex, enabling informed behavioural decision making.
- Programmes included skills building sessions enhancing self-efficacy for safer-sex negotiating practice.
- Components were often based on social cognitive theory including modelling of safe behaviour.
- Activities were conducted in small groups.
- Social pressures to engage in sex were addressed with strategies for resisting peer pressure.
- Reinforced supportive groups norms and appropriate individual values for engaging in safer behaviour were emphasised.
- Extensive training was provided for teachers and/or peers who were to implement the training.

The health promoting school shows great potential in enabling high levels of health literacy to be achieved by giving students substantial amount of knowledge

in the classroom about diet, physical activity, drugs, safety, oral health, sexuality and relationships. This information is believed to develop certain attitudes on which health behaviours would be based. It is also believed that this will impact on morbidity and mortality rates (Leger, 2001). Table 2.4 uses Nutbeam's matrix of health literacy to show examples of content, outcome and educational activity for all three levels of health literacy in a school setting.

In summary, increasing young people's health literacy is fundamental for them to lead healthy lifestyles and to prevent risk behaviour.

2.10 A conceptual framework for understanding health communication and health literacy

The above discussion highlights the linkages that can be made between health communication and health literacy. The key element in that relationship are summarised in Figure 2.4 Underpinning this framework are the notions that health communications can be a planned social-change in which policy makers, planners, practitioners or others influence health-related attitudes and behaviours of the target populations and use health communication efforts to help increase people's health literacy skills. Also the assumption is that, effective health communication can contribute to adequate health literacy of the target groups or adequate health literacy as one of the factors that can contribute to the success of health communication. Within this framework, health communication and health literacy are seen to be inter-related with each other, hence suggesting a 'dependency relationship' between the two. It can be seen as 'two sides of the same coin'. However, there is always a tendency to forget 'the edge of the coin'

which can also play its roles and in this study it is called 'the interface'. This interface consists of factors that both can be used to develop effective health communication and health literacy enhancement. In the conceptual model presented below - as found in the literature review - participation, cultural appropriateness, and needs assessment are seen as the factors that link health communication and health literacy. The relevancy of this conceptual model will be examined through the PROSTAR programme in Malaysia.

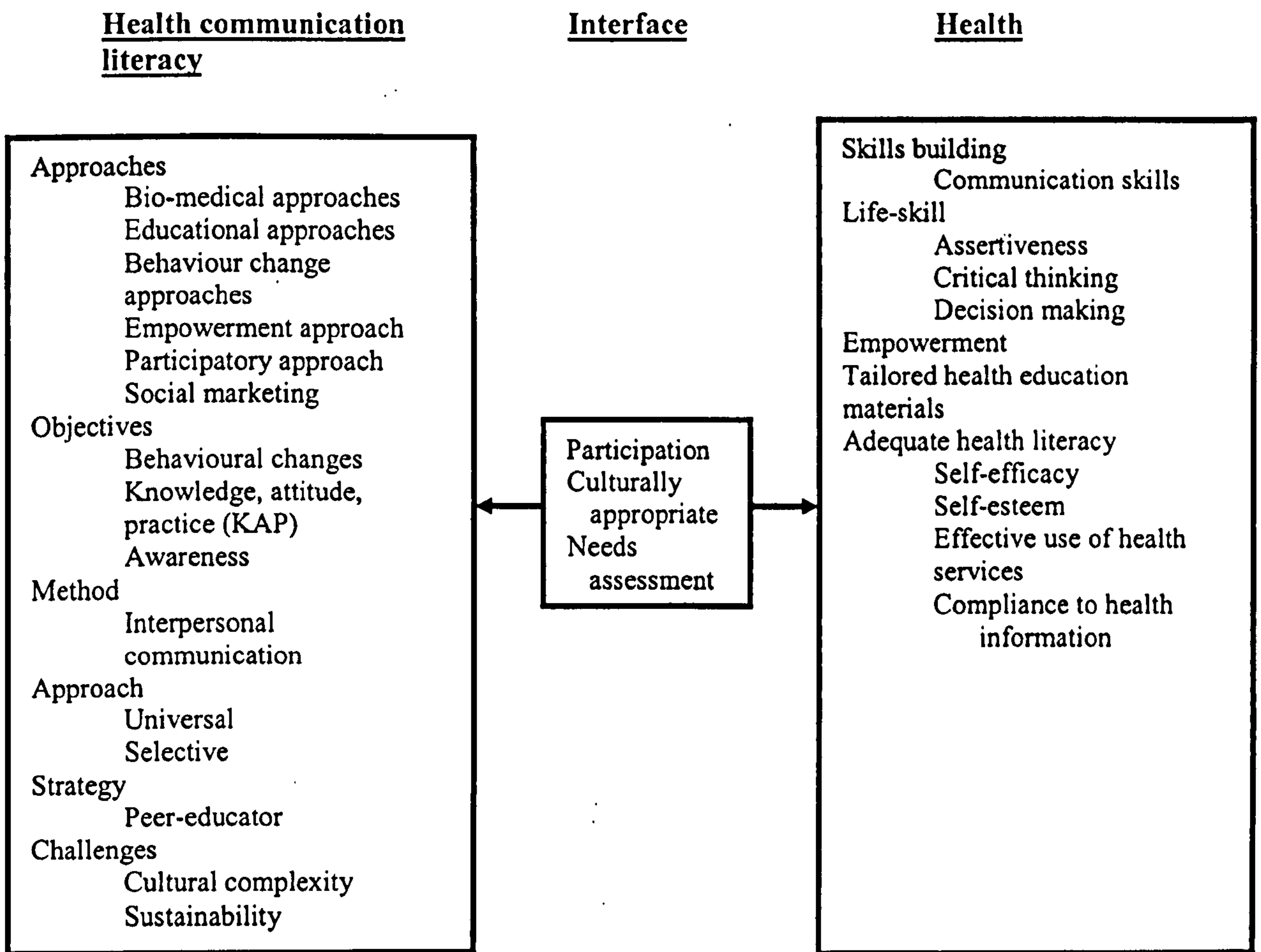


Figure 2.4: Conceptual framework for adolescence HIV/AIDS health communication and health literacy in Malaysia

2.11 Conclusion and overview

The literature shows that health communication plays a role in establishing a health problem as a priority concern in the minds of the target audience (the public), to increase knowledge and behavioural change that impede the adoption of healthy lifestyles (attitude and behaviour), motivating change by demonstrating the personal and social benefits of the desired behaviour, teaches health skills, demonstrates various barriers to behavioural change and how to overcome them, teaches self-management skills for sustaining change and provides support for maintaining changes in behaviour. The issue of health literacy is one that has been overlooked in the area of health communication. Access to, understanding of and application of health information are the main focuses of health literacy.

The following chapter presents the epistemological framework for this research and the rationale for choosing qualitative methodology as an approach to examine the relationship between health communication and health literacy.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter will present and discuss the methodology used for this study. Firstly, this chapter presents the theoretical lens that guided the development of the research methodology - social constructionism. Secondly, the research approach will be presented. For the purpose of this study a qualitative approach has been chosen. Thirdly, the chapter discusses the study design which includes the sampling frame, methods for data collection, piloting, the main set of data collection and data analysis approach. This is followed by presenting ways in which to preserve the quality of the methods, quality of the data and quality of the analysis carried out, or in other words the validity of the data. Finally, the potential bias and limitation of the study are identified and presented.

3.1 Social construction and the PROSTAR programme

The theoretical lens, which guided the development of this research methodology, is social constructionism. Social constructionism is a sociological theory of knowledge developed by Peter L. Berger and Thomas Luckmann (1966) with their book *The Social Construction of Reality*. The central concept of social construction is that individuals or groups interacting together in a social system

form, over time, typification or mental representations of each other's actions, and that these typifications eventually become habitualised into reciprocal roles played by the individuals or groups to each other. When these reciprocal roles are made available to other members of society to enter into and play out, the typified interactions are said to be institutionalised. In the process of this institutionalisation, meaning is embedded and institutionalised into individuals and society. Knowledge and people's conception of what reality is become embedded into the institutional fabric and structure of society, and social reality is therefore said to be socially constructed. As Berger and Luckmann, (1966) illustrate:

"All human activity is subject to habitualisation. Any action that is repeated frequently becomes cast into a pattern, which can be then reproduced with an economy of effort ... Habitualisation further implies that the action in question may be performed again and again in the same economic effort ... The objectivated meanings of institutional activity are conceived as a 'knowledge' and transmitted as such. Some of this knowledge is deemed relevant to all, some only to certain types ... The typology of knowers and non-knowers like the 'knowledge' that is supposed to pass between them, is a matter of social definition; both 'knowing' and 'not knowing' refer to what is socially defined as reality ... (pp. 71-88).

Social construction suggests that the social world is constructed, meanings are made, definitions produced and interpretations propounded. People construct evidence through their own experience (Alderson, 1998).

Despite health promotion paying attention to lay perspectives on health issues, however, much health education and promotion programming is based upon professional notions of health. For example, health messages for health education materials are developed based on health professionals' intuition, experience and knowledge such as leaflets, posters, videos, etc. It is the health practitioners who decide if there is a health need, who decide the nature of the intervention and the most effective means of communication, who try to ensure compliance and who will decide if the intervention has worked (Naidoo and Wills, 2000). Thus, in health promotion there is a dual construct involved. On the one hand, health practitioners provide according to target audience needs, yet on the other hand health practitioners tell the target audiences their needs (Grace, 1991). Although the notions of 'empowerment' and collective action is directed at the target populations, there is often still an emphasis on encouraging individuals to behave in certain ways deemed appropriate by public health professionals (Lupton, 1995).

Sexual health programmes, especially the PROSTAR programme, are developed based on the epidemiological data on HIV/AIDS, that higher numbers of young people are being infected by the disease. Because of this fact – based on epidemiological data on HIV/AIDS - health practitioners were asked by the health authority to come up with a specific programme targeting the most vulnerable groups, such as adolescents. This shows that the practice of health education and promotion in Malaysia is 're-active' rather than 'proactive'. The health education and promotion programmes have been developed as a response to the emergence of

life-threatening diseases among the population. Pools of experts, also known as 'think-tank groups' such as epidemiologists, health promoters, educators and health specialists sat together to share their expertise, knowledge and experiences to develop the programme. Therefore, the programme has been constructed by the thinking of the expert rather than the need of the target audience. In other words, it is a 'constructed' sexual health programme. The so called think-tank group holds the 'power' and decides the health needs of the audience, the nature of intervention and means of communication (Naidoo and Wills, 2000).

As reality is socially constructed, complex, and constantly changing, qualitative research investigates behaviours through the human perceptions, understandings, and beliefs that motivate them (Rich and Ginsburg, 1999). Listening to the views, approaches and experiences of the health practitioners and adolescents on the PROSTAR programme is of importance. Qualitative methods such as in-depth interviews and focus groups are better suited than quantitative methods to explore the practice of health communication by the practitioners and the health literacy of the adolescents. Qualitative research provides the participants with the opportunity to account for their experiences in their own words and is consistent with social construction.

3.2 Research approach

Qualitative research can be particularly useful in examining and exploring the insights of the participants, which shape their behaviour, including locating the

participants' frame of reference and cultural barriers to taking up services or adopting certain preventive health behaviours (McCamley-Finney and McFadden, 1999). It can offer a richly descriptive report of an individual's perceptions, attitudes, beliefs, views and feelings, the meaning and interpretation given to events and things, as well as their behaviour (Hakim, 2000). As Denzin and Lincoln (1994b) noted, the word 'qualitative' implies an emphasis on the process of an in-depth understanding of perceived meanings, interpretations, and behaviours, in contrast with the measurement of quantity, frequency, or even intensity of some externally defined variables. Further, Denzin and Lincoln (1994b) explained that;

"Qualitative researchers study things in their natural settings, attempting to make sense of, or interpret, phenomena in terms of the meanings people bring to them. Qualitative research involves the studied use of a variety of empirical materials-case study, personal experience, introspective, life story, interview, observational, historical, interactional, and visual texts – that describe routine and problematic moments and meaning in individuals' lives." (p.2)

The key here is the emphasis on deriving an understanding of how people perceive and construct their lives as meaningful processes, how people interact with one another and interpret those interactions in the context of the social and natural worlds, and the importance of observation in natural settings. As such, the central methods of qualitative research include interviewing people through various techniques such as face-to-face and recording what they say, observing people in the course of their daily routines, and recording their behaviours (Carlson et al., 1995).

The strengths of qualitative research derive primarily from its inductive approach, its focus on specific situations of people, and its emphasis on words rather than numbers (Maxwell, 1996). Qualitative research seeks to understand the subjects from the inside out and is designed to study a particular phenomenon, group, or behaviour in depth to reach a better understanding of the universal (Rich and Ginsburg, 1999). Miles and Huberman (1994) have elaborated on its strength, which is relevant to this study:

- Its focus is on naturally occurring ordinary events in natural settings so that the researcher has a strong handle on what real life is like, due to the fact that the data is collected in close proximity to a specific situation. In this study, the researcher had face-to-face contact with the participants. Prompt and probe techniques were used at times, where relevant, during the interviews and focus groups. This is not the case with quantitative research with a close-ended questionnaire.
- Qualitative data, with its emphasis on people's experiences, is fundamentally well suited for locating the meanings people place on the events, processes, and structures of their lives, their perceptions and how they connect these meanings to the social world around them. This is relevant when exploring the perspectives of health practitioners and adolescents on the PROSTAR programmes, where experiences and knowledge are made to practice in their everyday lives.

Although it cannot look for trends among large groups, qualitative research is an ideal approach to elucidate how a multitude of factors such as individual experience, peer influence, culture, or beliefs interact to form people's perspectives and guide their behaviour. Most importantly, qualitative methodologies can offer greater insight into 'why' and 'how' phenomena occur than can quantitative methods (Rich and Ginsburg, 1999).

There is general agreements among the authors such as Denzin and Lincoln (1998), Marshall and Rossman (1999), Patton (2002) and Walker (1985) that the factors that determine whether qualitative methods should be the principle or sole method used are centrally related to the objectives of the research. In this research, a qualitative approach was chosen to fulfil the objectives of the research, as follows:

- To examine the practice of health communication from the perspectives of health educators or practitioners.
- To explore the perspectives of health practitioners about HIV/AIDS programmes for adolescents.
- To explore the experiences of the adolescents towards the PROSTAR programme.

It is the nature of the information or evidence required that leads to the choice of a qualitative approach (Ritchie and Lewis, 2003). For this research, qualitative research was used to acquire information such as:

- The way in which the sexual health programmes for adolescents is delivered by health practitioners, i.e. their understanding of health communication, objectives and rationale for health communication, the approaches, and what they understand of adolescent needs.
- The experiences of the adolescents of the PROSTAR programme, i.e. the source of information on the PROSTAR programme, what they think about it, what the most preferred channel for communicating sexual health information is, and how they act on the health information they received.
- The ways in which health communication can be enhanced for the benefit of both health communicator and receiver.

Besides the objectives of the research, the factors that necessitate a qualitative approach for this research are:

- To provide greater understanding of how sexual health information is delivered to adolescents, particularly in a multi-cultural society, where measurement of its extent is not of interest. The purpose is to explore, interpret and obtain a deeper understanding of the interface between health communication and health literacy. This can only be obtained through interviews with health practitioners as a provider and adolescents as a receiver of the PROSTAR programme. This research is interested in examining how people make sense of their knowledge and experience in delivering sexual health information and react upon the information gained. In-depth understanding of the experience of the respondents will

be gained. The researcher therefore deliberately seeks out an individual or group who fits the bill.

- Health practitioner's views are being sought from the vantage of their particular positions as a programme manager for the PROSTAR programme and members of the PROSTAR Clubs where the nature of the information required an exploratory and responsive questioning. Therefore, face-to-face and focus group interviews were used to gain access to ideas, experiences and opinions.

In summary, qualitative research can offer the participants the opportunity to describe their perspectives and experiences of the PROSTAR programme. Qualitative research can also ensure that areas of greatest concern to the participants are explored. The use of qualitative research seeks to explore and explain by appreciating the subjective experiences of the social actors and unearthing data that are not easily accessed by quantitative means.

3.3 Study design

3.3.1 Sampling frame

In stage 1, the research examines the practice of health communication from the perspectives of health practitioners and explores their views about the PROSTAR programme for the adolescents in Malaysia. The respondents for this stage were

health practitioners⁵ of the PROSTAR programme. Participants were selected based on their role as programme managers or implementers of the PROSTAR programme at the national and state level (Malaysia consisting of 13 states and 3 federal territories).

Access and lists of participants were gained from the Ministry of Health Malaysia. Purposive sampling was used as the sampling technique. This technique does not depend on statistical formulae but involves the selection of participants bearing a study's research question in mind (Mason, 1996). It was intended to recruit between 15 – 20 participants within the timeframe of the research or until saturation is achieved. In the research literature there are a variety of guidelines concerning the number of interviews required. Spradley (1979), an anthropologist, for example, used one in-depth interview, which commonly involves six or seven one-hour sessions. McCracken (1988), a researcher with a business background who uses in-depth interviews to gain knowledge about marketing and business questions, recommended that eight interviews are usually enough. Meanwhile

⁵ In Malaysia, it is a normal practice for the Ministry of Health to specifically appoint or assign its officers to develop, implement, monitor and evaluate the programme under their charge. The appointment is usually done to replace the vacant position left by the previous officer in-charge because of transfer to another programme or location and/or being promoted to higher position. Therefore, each programme will see different programme managers over the years. For example, in 8 years service in the civil service, the researcher has been transferred to three locations. In this study, the programme managers are also the implementers of the PROSTAR programme (thereafter referred as 'health practitioner'). Academically, most health practitioners in this study are from a social sciences background such as communication, psychology, political sciences and sociology. Hence the theory and model of communication and health promotion, are mainly from the textbooks, were adopted when these health practitioners were asked to develop a health promotion and education programme. Furthermore, they have to undergo an 18 months course on health education and promotion before they were confirmed as Health Education Officer for the Ministry of Health Malaysia. Theories relating to health education, promotion, and behaviour change were studied during the duration of the course.

Glaser and Strauss (1967), do not recommend a specific number of interviews, but say that the researcher should continue until a state of saturation is achieved. This latter suggestion seems to be relevant in the nature of this study. Stage 1 concentrated on the collection of data to ascertain the range of health communication strategies practised by the health practitioners. The focus is to examine and explore the health communication undertaken by the sexual health services in an effort to disseminate health information to the target audience, particularly relating HIV/AIDS and STIs through the PROSTAR programme.

Meanwhile in stage 2, the sampling units were the adolescents responding to or attending the PROSTAR programme. These adolescents are aged between 16 and 19 years old. They were chosen because they were already acquainted with one another through the PROSTAR Club and exposed to the PROSTAR programme. Using these groups allowed the researcher to hear how the participants draw their experience to discuss a controversial topic such as sexual health. Access to the participant was through the co-ordinator of the PROSTAR programme from the Ministry of Health Malaysia. Two of the thirteen states in Malaysia had been chosen, namely Selangor and Sarawak, as a location for the study. The urban groups were from the state of Selangor (see Appendix 3, p.308) and the rural groups from Sarawak (see Appendix 4, p.309). The used of the notion of urban and rural groups were to identify and examine the perspectives of the adolescents towards the sexual health programme especially HIV/AIDS. These states were

chosen because it is convenient and easy to get access to the participants, having contact with the programme managers and transport availability.

Access to the participants from Kuala Lumpur - the capital city of Malaysia, in Selangor was mainly by road, meanwhile in Sarawak the researcher had to use aeroplane, road and boat. Contact with the two state co-ordinators was made by phone and also by mail. They were told the purpose of the research and the criteria of selection of the participants involved. The criteria set for the selection of the participants were, the participants must have been PROSTAR club members for at least one year and aged 16 – 19 years old. These criteria were set to allow an active discussion because the participants shared experiences with the PROSTAR programme and were within a close age range. Lists of selected PROSTAR Clubs from the respective states were given to the researcher for the purpose of research planning. Careful planning was essential, especially to get the dates and times for the focus groups to be conducted because of geographical and logistic constraints and the availability of the participants. These clubs were formed at the school and district level and members were mostly students and school leavers. Tentative dates were then given to the state coordinator to choose from for each of the selected focus groups and fix the date, time and place the focus group to be conducted (Selangor from 12th to 21st April 2004 and Sarawak from 23rd to 30th April 2004). Each selected club was required to form two groups (8 – 10 participants in each group). Groups were formed based on same sex or gender with an age ranging from 16 – 19 years old. Participants were selected randomly from the list of members for the respective clubs. Consent was obtained

from all the participants before they participated in the discussions and parental or guardian consent was also obtained for people younger than 18 (the legal age consent in Malaysia). However, for students in boarding schools, consent was obtained through the heads of the school, treated as the guardians of the students.

It is intended that information about the practice of health communication by the practitioners and experiences of the adolescents will be used as a framework to identify the interface of health communication and health literacy in Malaysia.

3.3.2 Research methods

Though many other qualitative research methods are available, this study exclusively used in-depth interviews and focus groups. Stage 1 of this study used in-depth interviews as a method of data collection. This method was decided on, as the study required an understanding of the experiences, views and perspectives of the informants, and therefore necessitated a more open-ended structure of questioning to enable this information to emerge (Flick, 2002). The structure of questioning was not fixed or rigid, allowing for change of question order and also the addition of new questions where necessary. This offers the interviewer more freedom in presenting the questions, changing wording, and adjusting the interview so that it meets the goals of the study. The use of open-ended questions allows the participants to elaborate their own ideas, experiences, thoughts, and memories using their own words, terminology, and language structure – and is therefore more valid.

In Stage 2, the method used for data collection was focus group interviews. Focus groups have been chosen, not only because they elicit the views and experiences of the informants, but also because they are a useful means of establishing consensus and differences in opinions (Kitzinger, 1994; Morgan, 1998). The use of focus groups has been identified as necessary in this study due to the large number of respondents and the importance of establishing consensus and to understand the perspectives of the adolescents on the issues of health communication and health literacy. Also, the interactions in focus groups can elicit more accurate accounts, as participants can defend their statements to their peers, especially if the group is made up of individuals who interact on a daily basis (Eder and Fingerson, 2002). Therefore one-to-one interviews, also known as in-depth interviews are not practical at this stage.

One clear reason for using the focus group discussion is to allow the adolescents to give voice to their own interpretations and thoughts about the sexual health programmes particularly the PROSTAR programme. It is important to find out how they interpret the messages they receive through printed material such as newspaper, magazines, posters, leaflets and electronic media such as televisions and radio and also peers, parents and health staff rather than relying solely on adult interpretations of their lives. Through this method, they are encouraged to give their perspectives, opinions and to defend their statements freely without fear of being controlled by adult figures. This is because adolescents are taught all

their lives to listen to, respect, and obey adults. They are surrounded by teachers, parents, relatives and adults, all of whom have the power to command their actions (Eder and Fingerson, 2002). Through group settings, the power dynamics can be minimised between those being studied and the researcher because adolescents are more relaxed in the company of their peers and are more comfortable knowing that they outnumber the adults in the setting (Eder and Fingerson, 2002). Observation methods, as used in ethnographic study does not apply to this study because the interest is in gaining the experiences and perspectives of the participants rather than observing the behaviours from within the social matrix of their worlds.

In summary, the idea behind the focus group method is that group processes can help the researcher to explore and clarify their views in ways that would be less easily accessible in a one-to-one interview. Furthermore, the research questions used were open-ended questions, which encouraged the research participants to explore issues of importance to them, in their own vocabulary and pursuing their own priorities.

3.3.3 Piloting

In stage 1, a pilot study was undertaken to determine the appropriateness of the interview protocol. Piloting was done to guarantee the quality of the method and data that are going to be collected and analysed. These interviews (n=3) aimed at

developing the study protocol in terms of language used, time taken to conduct the interview and the appropriateness the interview guide (Appendix 5, p.310). Meanwhile for stage 2, a pilot study was undertaken to determine the appropriateness of the group discussion guide. Three focus groups were conducted, aimed at developing the study protocol in terms of language used, time taken to conduct the discussion and the appropriateness of the discussion guide (Appendix 6, p.312). These interview guides were flexible in nature (not fixed) and were to act as a guideline for the interviews and focus groups. The participants were free to express their ideas and perspectives on the discussion topics. These guides were of importance to facilitate the interviews and focus group to actively involve in the discussion and as a reference for the moderator (researcher himself) so as not to miss any important data to be obtained from the participants.

The results of both pilot studies demonstrated that the protocol was appropriate and could be used for further research. Both English and Malay language were used during the interview, where Malay language was used as conversational language, and the various concepts and theories were mentioned in their English terms. However most of the participants preferred to use the Malay language during the interviews and focus group. It was based on the fact that this is the first language of the respondents.

For the focus groups, same sex group composition seemed appropriate for adolescents. The outcome of the pilot study also shows that the groups are more open, more verbal and more conversational if they are placed in same sex groups. Besides that, shyness is the main problem for them in participating, especially when discussing the sexual health issue. They are not even able to say the word 'sex' openly during the discussion. Therefore, for the entire research, the participants were grouped in a same sex group. Meanwhile for the scenarios, the girls had more difficulties and shyness discussing the issues of sex compared to the boys' group. Therefore, for the main set of interviews the scenarios for boys' and girls' groups were given differently. However, the aim is the same – to explore their application of knowledge into practice. Based on the researcher's experience as an educator (as a teacher for three years) and working with the young people in Malaysia, it is important to form the focus group discussion based on gender. Normally, the young are very shy to discuss or talk about sensitive topics such as sex with the opposite gender. Therefore, it is appropriate to separate the participants based on the same sex group to allow active discussion and participation in the discussion. Past experience, especially as an educator, gives advantage to the researcher to work and interact with the young people.

3.3.4 Main set of data collection

In stage 1, a total number of 23 respondents were selected for the interviews. These respondents were selected from the list of PROSTAR coordinators from all

over Malaysia, given by the Ministry of Health Malaysia. In this selection, health practitioners from the State level were chosen because they are responsible for the PROSTAR programme in their respective states. The interviews took place from the 4th August 2003 to 8th September 2003. Letters were sent out to the prospective respondents to fix the date and time for the interviews to be carried out (Appendix 7, p.316). Confirmation of dates, times and place of interviews to be conducted was done through mail, email and also by telephone. As a result, only 16 respondents out of the 23 respondents listed earlier had been interviewed. This is due to various reasons such as having no free time to suit the time-frame given (4th August 2003 to 8th September 2003), the officers were on leave or out of office at that particular time, one of the respondents forgot about the appointment, and two of them were reluctant to be interviewed. However, this does not jeopardise the data because it has achieved its saturation. Out of the 16 interviews done, 12 were face-to-face and the remaining four were telephone interviews. Telephone interviews were used because of limited time, resources and geographical constraints. Therefore telephone interviews seem to be the most appropriate method to suit their availability.

Meanwhile in stage 2, the data for this study was collected from focus groups conducted with adolescents between the ages of 16 to 19 years. Specifically the questions sought to explore the extent to which both the content and delivery of the learning supported the development of knowledge, skills and confidence to act, which characterise their health literacy.

The first 10 to 15 minutes of each group focused on solicited specific feedback about their source of information of the PROSTAR programme and their involvement in the PROSTAR programme. The questions asked were such as: "How did you get involved in PROSTAR? Tell me your story." This was aimed to determine their sources of information of the PROSTAR programme, the reason for getting involved, and activities of interest that attracted them to get involved in the PROSTAR programme. To get a focus on the PROSTAR programme, questions such as, "What do you think about the programme?", "What message did you get?" and "How do you think it should be carried out?" were asked.

The second part of the discussion was focused on their knowledge of HIV/AIDS, their understanding of sexual health and to know whether sexual health should be discussed openly. The questions used included: "How can HIV be transmitted to other people?" and "How can't HIV be transmitted to other people?", "If more information is needed, how would you go about finding it?", "What comes to your mind when I say sexual health?" and, "Should sexual health be discussed openly among adolescents?" This question aimed to explore their understanding and beliefs about HIV/AIDS, and to find with whom they are comfortable talking about sexual health matters.

The third section was aimed at exploring the association between health literacy or knowledge on HIV/AIDS and the ability to make a decision on risk-taking behaviour such as injecting drugs, illicit sex and also to get to know how they could deal with people living with HIV/AIDS (PLWHA). They were given scenarios and asked to think about what action they would take. For the boys, the scenario was, 'a good friend of yours plans to have sex with a commercial sex worker, and tries to persuade you to go with him, what do you do?' Meanwhile for the girls' group, the scenario was about a friend who is a drug addict and tries to persuade her to take drugs by sharing needles. To explore further the relationship between knowing and doing, both boys and girls groups were given a scenario where one of their family members or relatives might have HIV, what would they do to deal with the situation? This is to explore their ability to deal with the situation where they have to make a decision and the ability to use (self-efficacy) knowledge they gain through training, health education materials and also through other mass media.

During April and May 2004, 14 focus groups discussions were conducted, consisting of 7 groups from each urban (Selangor) and rural (Sarawak) area. Consenting participants were invited to participate in focus groups consisting of 8 to 10 persons in each group. The participants were volunteers and asked to fill in the consent form (see Appendix 8, p.316). In total there were 110 consenting participants (53 male and 57 female) to make 7 male and 7 female groups. For the participants from the schools (9 focus groups), the discussions were conducted at

the schools, meanwhile for the participants from the district PROSTAR Clubs (5 focus groups) they were conducted at their club's house. This was done both for the convenience of the participants and because they were used to the environment, a place where the participants feel comfortable and relaxed. Seats were arranged in a circle so that each participant could see each of the others in the group. Each session began with an introduction as to the purpose of the research and a disclosure that the session was being audio-taped. The discussion lasted for approximately an hour and a half and moderated by the researcher himself. Questions were asked until a topic area reached saturation and no new information was generated. When the saturation point was reached, the moderator moved to a different area of questioning. The moderator's posed the questions based on the interview guides. However, the participants were not asked to respond to the question in turn but rather actively encouraged to discuss it with each other in an informal manner.

For both stages of data collection, interviews were recorded using a tape recorder so as not to miss any of the conversation or discussion. This was because the researcher was not going to take any chances of missing something that the respondents said. Besides increasing the accuracy of the data collection, a tape recorder permits the interviewer to be more attentive to the interviewee. This increased the reliability as transcribing errors were minimised. The course of action of using a tape recorder and notes provided an opportunity to re-listen to, and re-interpret the interview.

Assurance of confidentiality was given before the interviews that any information given and recorded is just for the purpose of research only (see Appendix 9, p.319). All of the respondents and participants were told at the beginning of the interview that they have the right to withdraw at any time whilst the interview takes place. This was done to give them the right to be voluntarily involved in the research. Transcribing was done by the researcher himself and then analysed using thematic content analysis. Computer software – NUDIST – was used to organise the data and the analysis was done manually by different colours for each themes and cut and paste of words into the same themes. To ensure the respondents confidentiality, the respondents were coded and tapes destroyed after the analysis was completed to protect the research subjects.

3.3.5 Analysis approach

The audio-taped interviews were transcribed by the researcher personally. However, transcripts of interviews provide a descriptive record, but they cannot provide explanations. The researcher has to make sense of the data by sifting and interpreting them. Qualitative data are often analysed from multiple perspectives using different analytical methods. Such as:

- Narrative analysis (Riessman, 1993) – understanding human motivations, perceptions, and behaviour by interpreting the stories people tell of themselves and their experiences (life histories), long interviews, journals, diaries, memoirs, autobiographies, and the like. It encompasses issues of

narrative ontology, narrative knowing, voice, and representation. It is concerned with the means of generating data in the form of stories, means of interpreting that data, and means of representing it in narrative or storied form.

- Ethnographic approach to analysis (James, 1977; Agar, 1980; Adler and Adler, 1994; Hammersley and Atkinson, 1995; Yates, 2004) – studying people through linking their practices to social structures and culture. The ethnography stresses the centrality of culture as the analytic concept and emphasis on firsthand field study such as participant observation and text. Participant observation is the process by which the ethnographer comes to know a culture, and the ethnographic text is how culture is portrayed (Schwandt, 1997).
- Phenomenology (Colaizzi, 1978; Bergum, 1989) – understanding humans through the meanings they attach to experience. Phenomenologist insist on careful description of ordinary conscious experience of everyday life (the life-world), a description of ‘things’ (the essential structures of consciousness) as one experiences them. These ‘things’ include perception (hearing, seeing, and so on), believing, remembering, deciding, feeling, judging, evaluating, all experiences of bodily action, and so forth) (Schwandt, 1997).

- Grounded theory (Glaser and Strauss, 1967; Strauss and Corbin, 1990; Glaser, 1978, 1992) – theoretical ideas (concepts, models, formal theories) that is not predetermined but is tested against the data collected. This approach to the analysis of qualitative data simultaneously employs techniques of induction, deduction, and verification to develop theory. Experience with data generates insight, hypothesis, and generative questions, which are pursued through further data collection.

As explained above, various approaches have been identified for qualitative data analysis. However, in this study, thematic content analysis (Boyatzis, 1998) was used to analyse the data from the focus groups and interviews in an attempt to understand and explore the perspectives of practitioners and adolescents on sexual health communication and health literacy. Thematic content analysis is a form of analysis that sharpens, sorts, focuses, discards and organises data in such a way that ‘final’ conclusions can be drawn and verified. It could be argued that content analysis is more an art than a science (Burns, 2000). Given the nature of the method, content analysis tends to be more descriptive, summarising apparent facts, rather than explanatory or attempting to clarify a given interpretation (Kline, 2003). Furthermore, this analysis tends to look at the manifest or surface content of texts because these elements are less subject to interpretive variation that might undermine reliability and generalisability (Grossberg et al., 1998).

At the start of the analysis, data was managed based on the categories or themes, which have been discovered and described through literature reviews and which emerge from reading the data itself. Familiarisation of the data was done to gain an overview of the data coverage. The task is to identify recurring themes or ideas through reading the transcripts several times. Once the recurring themes have been noted, the next step is to devise a conceptual framework, drawing upon the topic guide(s). Themes are then sorted and grouped under main and sub-themes, and placed within an overall framework. At this stage, there is likely to be considerable overlap and repetition between the themes.

Informed by the analytical and theoretical ideas developed during the research, these themes are further refined and reduced in numbers by grouping them together. Grouping themes together typically entails a process of cutting and pasting, that is selecting sections of data on like or related themes and putting them together. This process continues once all the other data and refinement of themes or categories are done. After the refinement of themes, five main themes emerged from the data for Stage 1 and six from Stage 2. These themes are followed by numerous sub-themes as discussed in Chapters 4 and 5 of this thesis.

The challenge of this analysis lies in making sense of massive amounts of data. This involves reducing the volume of raw information, sifting trivia from significance, identifying significant patterns, and constructing a framework for communicating the essence of what the data reveals. As with all qualitative data, the views described and discussed in this report reflect those of the health

practitioners and the adolescents who participated in the FGDs conducted in Malaysia. The findings reported here may not necessarily represent the views held by young people in general in Malaysia.

3.4 Quality of the data

3.4.1 Quality of methods

Qualitative interviewing was used as a method for data collection. This method involved a face-to-face interview and also telephone interviewing. Before each interview was conducted, letters were sent to all the potential respondents to inform them about the research and also to fix the date, time and place of the interview. This was done so that they had sufficient time to be ready for the interview and also to control the quality of the method. The standardised interview guide was used in relation to all the respondents to get their insight on health communication. The interview guide was created in accordance with the research purpose and the research question. Further, the interview guide was presented to the supervisors, in order to guarantee that it was comprehensible, objective and complete.

A rapport was built at the beginning of each interview to gain honesty, cooperation, and to gain the trust of the respondent in answering the questions given. For these to be present, there must be a level of trust between the interviewer and interviewee. Establishing trust and familiarity, showing genuine interest, assuring confidentiality, and not being judgemental are important

elements in building rapport (Glassner and Loughlin, 1987). Gaining trust is essential for this study because the respondents might have the feeling that the researcher might be trying to evaluate their work or programme. Therefore clear explanations about the objectives of the study were given. It was suggested that knowledge of social worlds emerge from the achievement of inter-subjective depth and mutual understanding (Miller and Glassner, 2004). The interviewer begins slowly with 'small talk', explains the purpose of the research and begins with simple planned questions (as icebreakers) that are intended to 'get the ball rolling'. The interview guide used as an ethical framework and also to control the very talkative respondent to respond only to the question given so that the objectives of the interview can be achieved. Besides that, it can also encourage the 'quiet' respondent to talk by asking some prompt question as listed in the interview guide. The guide helps make the interviewing more systematic and comprehensive. It is essential to keep the interaction focused while allowing the respondent perspectives and experiences to emerge.

3.4.2 Quality of data

The quality of the data was constantly kept under review. Immediately after a recorded interview, tapes were checked to make sure they were functioning properly. Extensive notes on important issues or points were immediately compiled after each interview. If there was any ambiguity or uncertainty, follow-up work with the respondent was done via telephone for clarification, especially

with the programme managers. Meanwhile for the focus group interviews, the interview guide was carefully followed to avoid any uncovered issues. The period after an interview is a critical time of reflection and elaboration. It is a time of quality control to guarantee that the data obtained will be useful, reliable and authentic (Patton, 2002). Audio tapes of interviews and focus groups are transcribed to provide a record of what was said. After the tape has been transcribed, checking was done by listening to the tape again as it was read. This was done to make sure that all of the recorded conversation was transcribed. Furthermore the transcribing was done by the researcher himself. There is no technical jargon used during the discussion. This is to avoid any misunderstanding and jeopardise the flows of the discussion where words and meanings have to be explained if this technical jargon is used. Because most of the interviews and focus groups were conducted in the Malay language, the researcher had to translate it to English as accurately as possible with some help from a Malay speaking reader. Therefore, the quality of the data is preserved.

3.4.3 Quality of data analysis

In ensuring the quality of the data analysis, transcribed texts were carefully analysed by putting them together into their respective themes. The analysis of qualitative data involves creativity, intellectual discipline, analytical rigour, and a great deal of hard work and is time consuming (Patton, 2002). Most of the

analysis was done manually by the researcher himself. Therefore, the quality and consistency of the analysis were preserved.

3.5 The potential bias

Potential bias might exist in this research because of the background of the researcher. The researcher has been working with some of the respondents on the PROSTAR programme before. To overcome this bias, before each interview, a clear explanation on the status of the researcher as a research student was explained to gain trust and honesty and also so that they need to treat the researcher as an independent entity. Besides that, the researcher's associations with the Ministry of Health Malaysia also benefit the study because the researcher has the experience of working with the PROSTAR programme before and has pre-existing knowledge of how the PROSTAR programme was carried out.

Potential bias might also exist because of the researcher's gender being male. The pilot study found that the participants had to be grouped based on gender. From the researcher observation, the female groups do not have a problem getting involved in the discussions, except for the Muslim female groups. They were found to be shy and some were 'unable' to say the word "sex". However, this does not jeopardise the data because they used their own euphemisms such as "that thing" which refers to sex.

The other potential bias uncovered in this research is that the participants were the people who work with the PROSTAR programme and responded to it. They might have favoured the PROSTAR programme and been reluctant to reveal the weakness of the programme. Aware of this bias, the researcher gave the assurance to the participants that the objective of the research is not to evaluate the programme but rather identify their perspectives and experiences.

3.6 The ideal and limitations of the research process

3.6.1 The ideal research process

Ideally, the process for this research was planned as follows;

The data collection:

- Face-to-face interviews with health practitioners and focus group discussion with the adolescents.
- To interviews 23 practitioners who work with the PROSTAR programme from 13 states in Malaysia and one from Federal Territory.
- Focus group discussion will be conducted after school hours because most of the participants are school students. This is to avoid the students missing their lessons at school.
- To hire a female moderator to conduct the focus group discussion among the female groups.

The data transcribing and translation:

- To hire somebody to transcribe the interview data into text.
- To send the transcribed interview data to the respondents for verifying and to be validated.
- To check the validity and accuracy of the translated interview data with the respective respondents. This is to assure that the translation (Malay language to English language) carries the same meaning as what was said by the respondents.

However, in reality, the ideal of the research process could not be followed due to geographical, time and money constraints. Out of 23 health practitioners listed earlier, only 16 were successfully interviewed. However, only 12 out of 16 were done by face-to-face interviews, meanwhile four through telephone interviews. This is due to the fact that the practitioners had no suitable time to be interviewed in the time-frame given (4th August 2003 to 8th September 2003); two officers were out of office, and two reluctant to be interviewed without giving any reason. For the focus groups discussion, only three groups were done outside school hours (discussion was done at the district health office), meanwhile the rest (11 groups) were done during school hours. The reason was that, it was hard to get the students back for the group discussions once they had left after school hours. Furthermore, the focus group had to be conducted in the school and permission to use the classroom or meeting room was given only during school hours.

The moderator for focus group discussions and transcribing were done by the researcher himself because of lack of funds to hire and train a moderator and transcribers. The transcribed interview data could not be validated with the respondent because of the distance between Malaysia and the United Kingdom and also the time factors involved in sending and receiving back the transcribed data. To get back to the participants was found to be unrealistic because of the distance between Malaysia and United Kingdom and cost. To collect the data alone, the researcher had to go back to Malaysia twice and spent thousand of pounds to pay for transportations, accommodation and food. Geographically, the distance between each selected states, district and schools were very far. For example, the researcher had to use flight, four wheel drive and boat to get to one of the focus groups (rural). It took two days, just to conduct a one and a half hour focus group discussion.

Finally, the translation of transcribed interview data from Malay language to English language was done personally by the researcher. Validation of the translated data could not be done because nobody in the department (Institute for Health) is a Malay speaker. Furthermore, the researcher had to comply with the time-frame for the completion of this thesis, study visa and study leave given by the sponsor. Although the researcher faced some constraints in collecting and processing the data, however, saturation has been achieved.

3.6.2 The limitations of the research

There is a limitation to this research. Firstly, the time frames for the data collections were quite limited to get to all the respondents. It took 6 weeks to collect the data for Stage 1 and also 6 weeks for Stage 2 of the research. This was due to the earlier planning, which was seemed to be sufficient and feasible for all the respondents to be interviewed, but in the end some of the respondents had to make changes to the schedule at the last minute due to their job commitments. Therefore, the appointments had to be changed or cancelled if no other date or time was available. To overcome some of these difficulties, telephone interviews were used.

Secondly, the telephone interview has limitations in terms of the length of discussion. It is also found to be very expensive and discussion times were shorter than that of a face-to-face interview. Therefore in-depth discussion sometimes cannot be done. This is the impact that can be identified between these two methods, face-to-face and telephone interview.

Thirdly, money is one of the ultimate obstacles to the researcher because of geographical constraints. To reach the respondents, the researcher needed to travel either by air or land. This incurred large amounts of money being spent to fund the study, especially for the cost of transportation and accommodation. The lack of funds available is also one of the reasons that the researcher could not afford to hire an assistant moderator to take notes whilst the focus groups were conducted.

The researcher had to make notes himself immediately after each group was conducted through memorising certain important points which arose during the discussion and also by listening to the tapes. The characteristics of the groups were different, with some being exciting, energetic, and invigorating, whilst some were lethargic, boring, and dull.

Fourthly, the research is only limited to the adolescents' perspectives, especially on parent-child communication. Therefore, the parents' views on talking about sexual matters to their children cannot be obtained and we are relying on the literature alone.

Fifthly, the adolescent's level of health literacy is not known because no test has been carried out. Their self-efficacy and self-esteem are only known through a response to an imaginary situation given during the focus group discussions. Therefore, their action in a real-life situation cannot be obtained.

Sixthly, the opinions from the non-Malays, especially Chinese and Indians, who do not respond to the PROSTAR programme, are not obtained. The reasons why they are reluctant to join the PROSTAR programme are not known. The only reason known to the researcher was gained based on the assumptions given by the participants in the research.

Finally, the limitation of the focus group is that the outcome cannot be generalised but consists of the opinions of a selected group on the topics discussed.

3.7 Conclusion and overview

Social construction has been used as the theoretical framework for this study. To allow the exploration of the participants' perspectives and experiences on health communication and health literacy, a qualitative approach has been adopted and the use of in-depth interviews and focus group discussions. In this study, the limitation and bias has been identified and notified. In conclusion, it was felt that using focus group discussions and in-depth interviews helped to collect very descriptive and detailed information on sensitive topics such as HIV/AIDS and STIs. This methodology allowed participants to share their personal experiences. The findings of this study need to be better understood in the Malaysian context.

The next chapter will present the results of the study (stage 1) carried out amongst the health practitioners. This study emphasises the health practitioners understanding and perspectives of health communication and will examine how the PROSTAR programme was delivered.

CHAPTER FOUR

FINDINGS I: HEALTH PRACTITIONERS' PERSPECTIVES OF HEALTH COMMUNICATION

4.0 Introduction

This chapter will address the first research question as indicated in Chapter One, 'what are the health practitioners' perspectives on PROSTAR as a health communication programme?' The main objective is to examine the practice of health communication and to explore the perspective of health practitioners about the HIV/AIDS programme for adolescents. Firstly, summaries of the samples are presented, followed by a summary of the approach used for data collection. Secondly, this chapter presents the interpretation of the findings based on the themes, and finally the conclusion.

The respondents for this stage were health practitioners for PROSTAR programmes from the Ministry of Health Malaysia. Semi-structured interviews and open-ended questions were used. The use of open-ended questions allows the participants to elaborate their own ideas, experiences, thoughts, and memories using their own words, terminology, and language structure. In total, 16 interviews were conducted (12 face-to-face and four telephone interviews) and tape recorded. Data was transcribed and analysis was carried out using thematic

content analysis. The themes are divided into five main themes and a series of sub-themes.

The discussion of the findings begins by exploring the health practitioners' understanding of health communication and how the PROSTAR programme has been developed. Under this theme, health practitioners were asked for their views on health communication as a vehicle for sexual health information dissemination and also they were asked why and how the PROSTAR programme was developed. The second theme focuses on delivering the PROSTAR programme to the target audience. The PROSTAR programme has been recognised as a vehicle to reach adolescents with sexual health messages. The main approaches in delivering these messages are through target audience participation, peer-educator, educational and interpersonal communication. The third theme was the implementation of the PROSTAR programme. This theme was to determine how the PROSTAR programme was implemented. The fourth theme was about the obstacles faced by health practitioners in delivering sexual health messages to their target audience. In this theme, there are various sub-themes discussed, such as, cultural differences, prejudices and stereotyping, insufficient funding, difficult words, etc. The final theme was to discuss the health practitioners' suggestions for effective health communication.

4.1 Health communication

4.1.1 Health practitioners' understanding of health communication

Health communication plays an essential role in health promotion and disease prevention. Health practitioners have embraced health communication as an accepted means to promote healthy lifestyles and to educate the public. Health practitioners viewed health communication as the use of a communication strategy to disseminate health information to the target audience. Communication strategies were used to inform and influence the target audience in making decisions that enhance health and quality of life. The aim of the intervention can be summarised as, behaviour influences HIV/AIDS outcomes and therefore, interventions aimed at HIV/AIDS prevention need to change behaviour. Apparently, the health practitioners emphasise knowledge as an important factor for one to adopt healthy behaviour and practice.

Health communication is widely used by the health professionals ... used to impart knowledge. The use of health communication [the outcome] is to change people's behaviour ... also change their perception, values, norms and all those things toward positive health... (G03)

Health communication aims to improve the quality of life of the target population. To reach the target audience, health practitioners utilise print media such as pamphlets, leaflets, etc. and also electronic media such as radio and television.

...health communication is the use of communication as a tool to improve health in terms of the life expectancy of the public and the usage of the mass media in promoting health among the public. (G05)

... health communications is an effort to deliver health information. For example, regarding HIV/AIDS for the adolescent, we used the available methods of communication. (G12)

Besides being seen as a behaviour change medium, health practitioners also view that health communication can be used to educate the target audience on health matters. This is because it aims at enhancing health knowledge, awareness and giving life-skills to the target audience.

... mainly it is health education targeting adolescents at the school, youth associations, factory and higher learning institutions. We give them health knowledge, awareness, and skills especially on prevention of AIDS ... (G09)

Generally, these health practitioners are from various academic backgrounds such as communication, psychology, anthropology and human sciences. Therefore, their views were influenced by those of their academic training and experiences as health promoters.

My academic qualification is communication. I have been too long exposed to what communication is. So when I relate it to health communication, my opinion is that, it is related to the dissemination of health information. That's what I am thinking of it. (G10)

In sum, health practitioners have different views on health communication with some viewing health communication as a behavioural change medium while others viewing it as an educational and information dissemination activity. Their definitions were mostly based on their knowledge and experience as health

promoters. Overall, their emphasis was to educate and to create awareness in the target audience.

4.1.2 Developing PROSTAR programme

The health promotion programme was developed based on epidemiological data. The development of the PROSTAR programme, for example, was a response to the epidemiological data that reported higher cases of HIV among young people. Hence, the health authority feels that it is their responsibility to curb the spread of HIV among the general public, especially the young, through the dissemination of health information.

This programme was developed because cases of HIV/AIDS in Malaysia were high among young adults aged 20-49 years. So the Ministry of Health [Malaysia] think that we have the responsibility to have a programme to control the spread of HIV among young people. (G18)

Some health practitioners agree that the development of the PROSTAR programme was as a result of expert thinking at upper level, rather than a response to the need of the target population. Health practitioners were told by health management to come out with a specific health programme targeting young people.

From what I see, this programme [PROSTAR] was developed by the ministry. I personally don't think that it is the need of the adolescent, maybe it is the need of the health department, arising from analysing the cases [HIV/AIDS] which are higher among young adults. (G10)

Theoretically, the approach of the PROSTAR programme was to use innovation theory (Roger, 1995). Two relevant principles of diffusion of innovation widely used in the PROSTAR programme are to create awareness of AIDS and use peers as opinion leaders or educators to influence attitudes and behaviours of the young people. In the PROSTAR programme, the adolescents were trained as peer educators, to later influence their peers to adopt a healthy lifestyle in an effort to curb HIV/AIDS and STIs. The peer educators were trained in effective communication skills so that they will be able to disseminate health information effectively. As said by one of the health practitioners,

...communication skills, as I informed earlier, is to equip the students [adolescents] with the skills that they need to have before they can disseminate the messages to their peers. Communication doesn't really exist unless you have the skills and knowledge to communicate HIV/AIDS messages. (G05)

It can be concluded that the PROSTAR programme exists as a response to the epidemiological data. The development of health promotion and the intervention programme was the thinking of the health experts who used their instinct, knowledge and experience.

4.2 Delivering the PROSTAR programme

4.2.1 Target audience participation

Health practitioners are found to be talking about the participation of the target audience in the PROSTAR programme. However, they admit that, at the early

stage of the development of this programme there is no participation from the adolescent. After the PROSTAR training module was developed, a pilot was carried out to get feedback on the relevancy of the programme to the adolescents' needs. Their reason for not involving the adolescents at the early stage of the programme development was because they believed that it is very hard for the adolescent to start from scratch to address the issues of HIV/AIDS. They have to be guided and given thorough explanations of what has to be done. By involving the adolescents, much time and many resources are needed. Therefore, it is better for the expert to come out with what they think is relevant for the adolescent based on their knowledge and experience.

The participation of young people during the first phase of this programme, of course we didn't involve them. Only after it was completed, then we did the pilot to get their feedback on how they wanted it to be. It is difficult to involve them because they lack the experience and knowledge to develop the manual. In fact, to plan their own activities also, they are not capable of doing it themselves; we have to guide and support them. (G04)

4.2.2 Peer educator approach

PROSTAR activities are designed to generate interest among young people about HIV/AIDS. PROSTAR targets secondary school children, factory workers, university and college students, youth associations and clubs, and those who are not associated with any formal or informal institutions. Hence, they will be motivated to increase their knowledge and be aware about issues pertaining to HIV/AIDS. This could then influence them to practise healthy lifestyles and avoid

behaviours that place them at risk of contracting HIV. As the programme is meant for young people, the approach adopted stresses “*action by youth, through youth and for youth*”.

The concept is more like someone who understands their needs. We don't understand them [adolescents]. We use this opportunity, because they [adolescents] understand their peer so we are selecting them as a peer educator. We are using young people as role models and to give support to their peers. That is why we are giving more opportunity to the youth to provide the services to other young people. (G03)

Peer educator approaches were used because health practitioners believed that the dissemination of health messages will be more effective if they are delivered by the adolescents themselves. Therefore the concept of information and entertainment (infotainment) was widely adopted. As explained by one of the health practitioners,

My point is that, we must inform them of the learning process in PROSTAR, conduct lots of games, which consist of information they need. I would say that this term is info-tainment. We are entertaining them [adolescents] but at the same time they learn something out of the entertainment. (G05)

This study also found that the emphasis on health communication was based on the objectives of the PROSTAR programme (Ministry of Health Malaysia, 2000), that are, (a) raise awareness and knowledge of HIV transmission, its prevention and control measures, (b) instil positive values among youths so that they are able to stay away from behaviour that is risky to HIV infection, (c) encourage the youth to lead healthy lifestyles and uphold good moral values to protect

themselves from the risk of HIV infection as well as to influence peers to do the same, and (d) produce a pool of PROSTAR facilitators who can mobilise youths to participate in an effort to curb the HIV/AIDS epidemic.

*We are making them peer-educators. They were trained to approach adolescents at their level and to influence other peers to adopt healthy lifestyle. I think, for sure, by practising a healthy lifestyle they can also be able to influence others to stay away from those risk behaviours.
(G03)*

The foundation for this emphasis is through an educational approach where training and health talks are undertaken to give knowledge and raise the awareness of the target audience.

4.2.3 Educational approach

An educational approach was adopted with the aim of giving knowledge and an understanding of HIV/AIDS, so that the audience is well informed and can act upon the health information. The values that were of importance were to show the right of the individual to choose to act upon the knowledge they have gained through the training and talks. The activities implemented were mainly to give more information about cause and effects of health-demoting factors, exploration of values and attitudes and the development of skills required for healthy living. Therefore, knowledge has become the main agenda for the PROSTAR programme. Health practitioners believed that with knowledge the adolescents

can protect themselves from contracting HIV or STIs and avoiding risk behaviours.

Knowledge is the most powerful tool to prevent HIV/AIDS, therefore, right now we are giving them knowledge. (G03)

Although behaviour change was part of their intention in the PROSTAR programme, health practitioners admit that it is more an educational rather than a behavioural modification. One of the health practitioners argued,

... this programme helps to increase the knowledge of adolescents on HIV/AIDS, but behavioural change I don't believe it ... maybe he/she is good in the activities but his/her attitude and behaviour is not much different from that of others who didn't join PROSTAR. (G10)

This argument was supported by another health practitioner who stated that,

... to increase their knowledge, maybe yes, but in terms of behavioural modification or behavioural change I don't think so. (G15)

Therefore, health practitioners believed that the PROSTAR programme is more an educational approach because of its strong emphasis on giving knowledge and raising awareness of the target audience on AIDS, rather than focus on behavioural change.

4.2.4 Interpersonal communication

The PROSTAR programme is an interpersonal approach [often communicated on a face-to-face basis]. Responses from health practitioners suggested that with

unique populations [adolescents] the use of mass media channels alone is not enough to affect behavioural change. To obtain access to these populations and then to persuade them was perceived as a gradual process, in which interpersonal communication channels were viewed as being central. The respondents agreed that interpersonal communication was more effective in opening the lines of communication and building trust between the practitioners and the target audience [adolescents]. Interpersonal channels were viewed as being especially appropriate to impart knowledge, given the sensitive nature of most HIV/AIDS topics. Amongst other things health practitioners said,

... in our PROSTAR programme, the entire communication process, we are using interpersonal communication. (G03)

Amongst all health practitioners who spoke of the use of interpersonal communication for delivering the PROSTAR programme, many offered the following reasons:

- Lack of resources such as manpower and funds (G02; G13).
- Easy to plan, handle and implement (G15).
- It is peer learning where adolescents were encouraged to be actively involved so that they feel that they are part and parcel of the programme (G04; G05; G16).
- The adolescents can gain more understanding of the messages so that they can impart the knowledge they gain to their peers correctly (G05; G10; G11; G12).

- It can capture more of the audience, besides prompting an active interaction among the practitioners and the adolescents (two-way communication) (G01; G06; G14).
- Feedback can be gained immediately and any uncertainty can be attended to at the same time (G01; G14).
- Training of adolescents as opinion leaders among their group or peer educators and as a role model for the other adolescents (G07; G09; G11).
- Interpersonal communication can be used to communicate the issues of HIV and AIDS at the micro level. This is because to talk openly on some issues related to HIV/AIDS, such as drug abuse or users and prostitutes or promiscuity is still stigmatised and is taboo for certain groups of people (G03).
- To understand the values, norms and beliefs of the different backgrounds of the audience (G03).

Outdoor activities were conducted to suit the vibrant and energetic lifestyle of the adolescents. This involved physical activities. As stated by one of the health practitioners,

We have to include games, role-plays and so on. This is more effective. Besides that we also incorporate recreational activities, such as, jungle trekking. This is relevant for the adolescent ... (G06)

Printed materials such as pamphlets, posters, leaflets, etc. were also used but as a supportive role to interpersonal communication. These materials are widely

distributed on occasions such as training, launching and publicity activities. The component of training was a priority in the PROSTAR programme. Selected adolescents were trained as peer-educators, giving them the skills and knowledge so that they can be role models for their peers. As said by one of the health practitioners,

To me the most important thing is to be a role-model to others. (G16)

Health practitioners believed that the more adolescents participated in the activities conducted, the more widely the messages of HIV/AIDS can be disseminated to the target group. With the adolescents' involvement the PROSTAR programme can be sustained.

4.3 Implementation of the PROSTAR programme

The implementation of the PROSTAR programme is based on a top-down model. The development of the training modules and funding comes from the top level in the Ministry of Health. The officers from the ministry level are responsible for monitoring the progress of the programme at the ground level (state and district). State and district are the implementers of the programme, which brings PROSTAR to its intended audience. Every district is set a target (for example 2 trainings a year) to be achieved. Reports of the implemented activities will be sent to the state, compiled and then sent to the ministry level.

Peer-educators training are the main activity for the PROSTAR programme. Every district has to conduct two peer-educators training sessions a year. (G02)

The component of training in the PROSTAR programme is in strict adherence to the module provided by the Ministry of Health. This module provides them with the guide to conduct the training, such as selection of participants, budgeting, and time-tabling of activities. However, in certain circumstances, the implementation of the programme is also based on their creativity, but the focus is to achieve the objectives of the programme.

The implementation of the PROSTAR programme, of course, developed by the MoH, to be specific AIDS/STD Division ... we have to supply the MoH with the report on what we have done. So basically we run according to the procedure set by the MoH ... (G05)

There is a certain protocol we must follow, strictly from the ministry. For example, training for facilitators, we have to follow the module produced. (G2)

It is true that the module was initiated by the ministry. We follow the module but the presentation is based on the needs of the audience, as long as it is complying with the concept and the need of the module. (G09)

In reality, the implementation of the PROSTAR programme is based on the instruction given in the module with some modification to suit it to local needs. As a top-down communication, implementers of the programme have to implement the programme to achieve the target set and the target audience has to accept the programme as it is.

4.4 Obstacles in delivering the PROSTAR programme

4.4.1 Cultural differences

Cultural differences can present major obstacles to effective health communication. Culture is a complex set of values, beliefs, norms, customs, rules and codes that socially define people and give them a sense of commonality (Krueter and McClure, 2004). Thus, working in a community comprising culturally and linguistically non-mainstream people, it is an advantage for health practitioners to learn not only about the prevailing cultural practices and language in that area, but also the differing beliefs about health and illness. In Malaysia, the dominant religion is Islam. Muslim doctrine is reflected in the country's legal penal code, which include the prohibition of intoxicants. Sexual misconduct is considered to be an offence according to Muslim law, including incest and extramarital relations, as well as the practice of homosexuality. These misconducts are punishable under the Muslim legal penal code. In the HIV/AIDS prevention programme, the messages do not specify pragmatic recommendations for AIDS prevention that could be adopted by individuals whose behaviour puts them at risk, including commercial sex workers, men who have sex with men, or users of intravenous drugs, and in general, people who are not likely to adhere to abstinence messages and would need alternative risk reduction strategies. As said by one of the health practitioners,

For us, especially in Islam, talking about sex is not encouraged. We have the openness but with some limitation. We can't talk in detail. (G06)

This was supported by another of the health practitioners, who said that,

Of course in AIDS prevention we promote the use of condoms, but at school where adolescents are concerned, we can't promote condoms there. We have to consider the sensitivity of the surrounding communities who always have the misperception, that if we promote condoms we are promoting premarital sex. (G04)

For some health practitioners, the use of the same module for training was not suitable for certain states or districts, where races, cultures and languages are of concern. This is because Malaysian society is made of multi-racial cultures and norms. Geographically, Malaysia is divided into two main parts, namely East Malaysia and West Malaysia. East Malaysia, in particular, has a diverse ethnic background, with varied cultures and norms compared to West Malaysia, which consists of mainly Malays, Chinese and Indians. As said by one of the health practitioners,

The module of training, to us, we cannot follow 70 to 80 percent of its content, because it is more towards the setting in West-Malaysia. (G11)

Besides the standard module used in training, health education materials produced by the Ministry of Health also pose some barriers to health communication. The health education materials with standard design and language produced by Ministry of Health are distributed to all states and districts. As argued by one of the health practitioners,

The health education materials are developed amongst the Malays, they forget about our Malaysian setting. We have the Chinese, we have the other Bumiputera's group. So let's say, if you emphasise the Malay values or culture in health education materials, I don't think other groups like

the Chinese and Indian or any Bumiputera group can accept that sort of health education material. (G15)

In a cultural context, talking about sexual health matters to the Chinese seems to be easier compared to the Malays. The Malays find it difficult to accept the discussion of sexual matters openly because of morality issues. Therefore health practitioners found it quite difficult to approach the Malays audience with sexual health topics, especially when it involved sex and condoms.

When I talked about condoms or sex, if I talk to the Chinese youth, they take it openly. To them sex is a normal thing, but it is taboo among the Malays. The majority, lets say 100 Malays, you can ensure that 99 percent of them feel uncomfortable. This is not good, not even to hear the word condom and sex. (G16)

In summary, the major challenge for health communication in Malaysia concerns the cultural complexities. Health practitioners have to deal with community sensitivities and different approaches have to be adopted for different races, religions and cultures.

4.4.2 Prejudices and stereotyping

Approaches to health education and promotion in Malaysia are found to be based on conservative Muslim values. Some health practitioners viewed that non-Malays are quite reluctant to join the PROSTAR programme because the benefit only goes to the Malays or Muslim community. This is because certain

approaches and content, especially in the training module, are based on Muslim values and norms.

The PROSTAR programme is more towards the Malays culture. Our campaign normally attracted the Malays to join because we also incorporate the Islamic teaching and values in our approach. (G16)

This view was supported by another health practitioner who said that,

The component in the training module, especially the behavioural part, we include the subject of morality and spirituality based on Islamic values. Maybe these make them [the Chinese and Indians] not interested. (G10)

A substantial proportion of the HIV infection was occurring within the Malay community, which is Muslim. As a result of this situation health practitioners assumed that the Chinese and Indians were not interested in PROSTAR because of the fact that AIDS is seen as a Malay health related problem.

Those affected are mostly Malays, in terms of cases, in terms of drug usage patterns ... so because of that we have this programme. I believe Malays are more like, "aah, this is the programme that really answers our needs". Other races maybe did not feel that they are having this problem. (G16)

Based on these findings, the emphasis on Muslim norms and values can create uneasiness amongst the non-Muslims and lead to prejudice and stereotypes. Therefore, whatever programmes are conducted, if the majority of the peoples involved are Malays and Muslim, it will be seen as benefiting them, even though the programmes were targeting the general population as a whole.

4.4.3 Insufficient funds

Lack of funds also means that little public health information about HIV/AIDS and STIs can be disseminated to the target audience. Insufficient funds for educational activities results in fewer educational and promotional activities being conducted. Therefore, health messages cannot be disseminated effectively across the target audience. Funds from the national level are divided accordingly to the state level and then the state will allocate it to various districts. With limited funds given, only one or two sessions of training or activities can be conducted and can capture only a small number of target audiences. This was voiced by the health practitioners by saying that,

*We have little money to implement the programme fully.
The ministry sent the money under PROSTAR programme.
We have to divide it according to priority. When we want to
conduct the activity, sometimes we need lots of money.
(G11)*

According to health practitioners, preparation for training, for example, requires money because of the logistic and geographical difficulties. Accommodation for staff and participants and food normally take up a large portion of the funding given. The production of health education materials and others is also limited because of lack of funds.

4.4.4 Difficult words and language

The advent of HIV/AIDS means that health practitioners have to learn to talk about things that were formerly taboo and secret. Socially acceptable language

has to be developed, especially in a multi-cultural society. Nevertheless, many health practitioners found it embarrassing or distasteful and were having difficulties in discussing sexual matters in calm and objective ways, especially among the culturally conservative audience. Language is seen as more of an obstacle in a more conservative community. There are no socially acceptable words for the part of the body between knees and shoulder and no appropriate words other than an offensive slang for different sexual identities and sexual activities. Therefore health practitioners found it very difficult to talk about sexual health, especially sexual matters. As said by one of the health practitioners,

The problem is the staff such as the nurses. When explaining about high-risk behaviour, for example sexual activities, she herself can't say the word sex nor can the adolescent accept it. (G10)

4.4.5 Stigma and taboos

Raising the issues of HIV/AIDS is never easy for health practitioners. The campaigns and media consistently portray HIV/AIDS as related to drug users and illicit sex or sex with multiple partners. Both activities are regarded as immoral and against the norms of the society. In relation to AIDS, fear of illness, contagion, and death are common reactions among the general population and in many instances they are based on an inaccurate understanding of how HIV is transmitted. This shows that the lay public have a view that one can contract HIV

as a punishment for his or her bad behaviour, or in other words, victim blaming.

As viewed by one of the health practitioners,

... for the religious group or whatever group, they don't understand at all about HIV. To them the cause of HIV is because they are taking drugs, sharing needles and having unsafe sex. (G18)

Talking about sexual health and sex education in particular cannot be avoided when HIV/AIDS and STIs are concerned. Presently, talking openly about sex is still a taboo for certain communities in Malaysia, especially the socially conservative community.

Taboo is most apparent when we talk about sex ... because no matter how you handle the sexual health programme, you have to be open-minded, because it is something to do with AIDS ... (G05)

It is clear that Malaysian communities are still uncomfortable talking about sexual matters openly. This leads to the campaign on sexual health issues being done implicitly and not being known by certain people.

4.4.6 Sustainability

In the absence of an effective vaccine or cure for the HIV infection, education and promotion about how HIV is transmitted and how exposure to it can be minimised or eliminated, is the most important means of reducing its spread. As sexual behaviour is private and much risk behaviour is disapproved of in the community, continuous promotional activities have to be conducted for the entire population.

Sustainability of the PROSTAR programme is important in ensuring its effectiveness and its success. AIDS prevention needs continuous efforts through disseminating the health related messages to the population. In the PROSTAR programme, training and talks are popular methods of communication. The purpose of the training is to develop competency among the adolescents, so that they can be competent peer-educators. Trained peer-educators are supposed to conduct training or talks among their peers. As stated in the training objectives (Ministry of Health Malaysia, 2000), those who undergo the training should be able to plan, implement and evaluate the PROSTAR activities that are suitable for any identified target groups. At the end of the training session, they are expected to, (a) understand the facts about HIV/AIDS and its relation to youth, (b) be able to use appropriate communication methods, (c) understand what constitutes high risk behaviours and factors that may influence youths to be involved with those behaviours, (d) understand social problems and their relation to HIV/AIDS, and (e) be able to prepare an action plan for PROSTAR follow-up activities. These objectives show that trained facilitators must be totally committed in order to sustain the PROSTAR programme. However, health practitioners feel that these peer-educators themselves lack the commitment or interest to conduct follow-up activities for their peers. As said by one of the health practitioners,

From what I see, these adolescents are coming for the training only, there is no follow-up activity done. By right, when we conduct the peer-educators training and so on, they are supposed to disseminate the information they gain to their peers. (G02)

Lack of commitment and leadership among the programme managers at the district or school levels is also seen as a barrier to sustaining the prevention and promotional effort. This happened when the health staff or teacher who is responsible for the PROSTAR programme at their respective areas were transferred out or given another task by their superior. Therefore the new replacement needs to be appointed to fill the vacant place either voluntarily or by assignment. The new person in charge might be new to the programme and may not be interested or trained to handle adolescents, especially in communication skills.

The only problem when we are conducting PROSTAR activities, is that, we don't have leadership figures at the state level. To conduct the activity we need somebody that has an interest and is committed to the PROSTAR programme. That's why, whatever activity we planned, we have to find the persons that really want to be involved and are committed. This is one of the constraints. (G18)

Self-confidence is vital for the trained peer-educator to conduct any appropriate activities for their peers. They must be competent and knowledgeable and also possess communication skills in disseminating the health information to their peers. However, from the health practitioners' observations, they still need the support from the health staff, especially to talk on the topic of HIV/AIDS. As said by one of the health practitioners,

They have a lack of confidence. They still need the support of the health staff. Meaning that, when talking about the subject of HIV/AIDS, a doctor is still needed to explain it, by rights the information is so basic ... using the adolescent to disseminate health information from what I see is ineffective. Until now they [adolescents] cannot conduct any follow-up activity, for example, training. (G10)

It seems that the peer educators lack self-efficacy and self-esteem. These two factors are important for the sustainability of PROSTAR programme and for it to be effective.

4.4.7 Collaboration

Health may be promoted everywhere because almost each social sector contributes to health conditions such as workplace, schools, home, etc. The PROSTAR programme targets mostly school students as the main target group. This is due to the fact that they are easy to capture and reach. Therefore, intersectoral collaboration is important for the PROSTAR programme to reach adolescents but is difficult to implement, since each sector follows its own sectoral objectives and policies (Franzkowiak and Wenzel, 1994). Health promotion is concerned about bringing about change at various levels - individual, network, organisational and societal. Collaboration involves joint problem solving and decision making among key stakeholders. However, to get other agencies, government and non-government, to be involved in any health activities can be very tough for health practitioners. As said by one of the health practitioners,

*When we try to get some co-operation and invite them to come for the meeting, it is very difficult to get them in.
(G13)*

In summary, with this difficulty, health practitioners found that the effort to get the messages across to the target audience can be very limited. To be efficient,

collaboration with other agencies is needed to address the problems associated with HIV/AIDS.

4.5 Suggestions for effective health communication

Health practitioners suggested that *on-going training* for health staff and facilitators or peer-educators, is essential for continuous health information dissemination. Trained peer-educators will be able to disseminate or share the knowledge they gain during the training with their peers and they could be the opinion leader for their group.

First we train the health staff as a communicator ... then the adolescents. When they go back to their village, they can disseminate the HIV/AIDS information to their family, friend and neighbours. (G12)

However, to achieve this, the peer-educators have to be fully committed and involved actively in the dissemination of information and continuously inform their peers about adopting healthy life-styles. Self-efficacy and self-esteem need to be emphasised.

Training has become the main activity for PROSTAR, especially the training of facilitators or peer-educators. For the purpose of training the Ministry of Health produced a module that has to be used as a guideline for any state or district conducting the training. However, health practitioners suggested that improvement of the *training module* has to be done so that the approach is more

holistic, such as to include the component of mental health, self-esteem and decision making skills.

We also have to incorporate sexual health subjects, self-esteem, decision-making and so on. Religious components should also be emphasised and not only based on one religion. (G14)

By giving them the life-skills, adolescents can make sensible and wise decisions, especially when they are under peer pressure. Health practitioners believed that including the component of mental health in the training gives the adolescents the ability to cope with stress or stress management.

Insufficient funding or resources are important in the implementation of the programme. Educational activities can be costly and have to be done constantly and continuously. Therefore sufficient funds are needed to sustain the programme.

Sometimes, it is quite difficult when you are trying to implement the PROSTAR programme and yet when it comes to the upper level it cannot be done (approved) because of the budget constraint. (G15)

From the health practitioners' perspectives, adolescents need to be involved in all aspects of the interventions such as programme development, implementation and evaluation. The *participation* of the target audience enables their needs and wants to be better understood, more effective messages and materials to be designed and greater insight to be gained. As said by one of the health practitioners,

We must know what their needs are. For example, the approach, colour [printed material] and so on. (G14)

The *target audience* does not only include school children, but also, most importantly, out-of-school adolescents or youths. These are often vulnerable to diseases and high-risk behaviours and are also hard to reach through conventional educational media. Smoking, alcohol, drug abuse and sexually transmitted diseases are among the many risk factors affecting the well-being and futures of out-of-school adolescents.

Nowadays we have lots of smoking teenagers, "hanging around" [loitering] at shopping complexes, so basically we design a new syllabus or module specifically to tackle these problems and I would say that this is a healthy improvement in PROSTAR syllabus. (G07)

Health practitioners also suggest that more emphasis should be weighted towards problematic adolescents. Persuading adolescents to take protective steps and changing social norms to make prevention possible are the key aims of a successful health promotion campaign. For the programme to be more effective, the target group has to be defined clearly. As clarified by one of the health practitioners,

Target group, what I meant is the adolescent that's really having a problem. (G07)

Nationwide publicity could help the health messages to be disseminated to a large number of adolescent populations. They must be well informed of certain issues that are related to their health. Mass media of the likes of television and newspapers plays an important role as a means to publicise the health information.

If we can publicise it through television and newspapers, I think the adolescents will know what PROSTAR is. At the moment, we know it (PROSTAR) at our level only, district level. Nationwide, still not many know about it. (G01)

In a multi-cultural society, practitioners do agree that *culturally appropriate* programmes are of importance. Populations settle in various settings such as urban, rural and sub-urban settings and also by state. These settings present a different social, political and economic status. Therefore the approach used for the urban setting might not be suitable for the other two settings. Also the approach used in West Malaysia is slightly different for East Malaysia because of the differences in languages, cultures, preconceived ideas, etc. As said by one of the health practitioners,

The module, to us, we cannot follow 70 to 80% because it was developed based on the West Malaysia setting. We have to redo it again to meet our local needs. For example, the picture. The Indian community is less here, so it is not suitable to use their pictures in our health education materials. (G11)

Adolescents are energetic and vibrant. They prefer something that is entertaining and interesting. *Interactive* educational activities can facilitate involvement, building on young people's strengths, and using these to raise the awareness of others. In this study, health practitioners seem to be more aware of the needs and likes of adolescents in terms of their approaches.

... less reading, less contained but more of a game, role-play, and less lecture. Because they are not interested listening to lectures. So we disseminate the information through role-play, etc. (G16)

Tailored health education materials are important but need a large amount of funding if the needs of the multi-cultural languages and backgrounds of the adolescents are to be catered for. For the practitioners, general health messages for HIV and AIDS are sufficient because the facts are all the same for all levels of society. Amongst others one of the health practitioners said,

AIDS facts are the same for everybody. Maybe if you want it to be tailored to the adolescents needs, just change the picture and use the words that the adolescents talk and can easily understand. (G02)

New mass communication technologies, such as the *Internet*, are being used increasingly to promote health. The Internet offers another exciting means of reaching and engaging members of the population to promote health. PROSTAR through its web site (<http://www.prostar.com.my>) is one of the innovative and interactive websites for young people. It has been developed as a component of the national HIV and AIDS prevention programme.

Now we use IT, so they can browse the website. In that website, almost everything they need to know about AIDS is there ... now we have the web from national level, and we are in the planning for every district and state to have their own web, linked to this. (G16)

4.6 Conclusion and overview

In summary, the existence of the PROSTAR programme was generated by health practitioners based on epidemiological data. The PROSTAR programme is a top-down programme and is used as a vehicle to disseminate sexual health

information and to protect the adolescents from getting infected by HIV. Overall, a didactic approach is used and the emphasis is on giving knowledge and to create awareness in the target audience on HIV/AIDS. In doing so, health practitioners are facing challenges in communication, especially from the cultural complexities and the difficulties of communicating the subject of sexual health, which is normally associated with stigma and taboos.

The next chapter will present the results for Stage 2 – the adolescent perspectives of health communication and health literacy – of this research. The emphasis in the next chapter will be on the adolescents' health literacy – focusing on self-efficacy and self-esteem.

CHAPTER FIVE

STAGE 2: ADOLESCENTS' PERSPECTIVES OF HEALTH

COMMUNICATION AND HEALTH LITERACY

5.0 Introduction

This chapter addresses the second research question, “What are the experiences and perspectives of the adolescent on the PROSTAR programme?” Specifically, this chapter discusses the perspectives and experiences of the adolescents on the sexual health programme in Malaysia. Firstly, a brief discussion on the research methodology is presented followed by a brief discussion on what the PROSTAR programme is. Finally, this chapter will present the findings of the research.

In total, 14 focus group discussions (FGDs) were conducted with a sample of students selected from those responding to the PROSTAR programme at school and district level. They were chosen because they are active in and participating with the PROSTAR programme. They were aged between 16 and 19 years old. Each focus group consisted of 8 – 10 participants and altogether there were seven groups of boys and seven groups of girls. The FGDs were used to gain an insight into the experiences of the participants regarding the sexual health programme and to determine consensus on a number of issues. All the discussions were tape recorded and analysed using thematic content analysis. Themes and sub-themes have been

developed from the data. The themes have been divided into six main themes and a series of sub-themes.

The discussion of the findings begins by exploring the adolescents' source of information about the PROSTAR programme and the reasons why they get involved with the PROSTAR programme. The aim was to examine where the adolescents get their information on the PROSTAR programme from. This is important because by knowing the source of information, it can be utilised in the future health promotion programme for adolescents. This study found that word-of-mouth and teachers were the main sources of information for finding out about the PROSTAR programme, followed by health workers and relatives. Secondly, the emphasis will be to determine the reasons for the participants' responses to the PROSTAR programme. Thirdly, this chapter present the adolescents' source of information on sexual health information especially HIV/AIDS. Fourthly, the discussion is about the ability (self-efficacy) of the adolescents to apply their knowledge to the exercise given during the focus group discussion. The focus of the discussion is about adolescents' ability to put the knowledge they have gained into practice. The aim was to get an insight into adolescents' functional health literacy. The fifth theme is about sexual health communication. The discussion was drawn towards adolescents' understanding of sexual health, with those whom they feel comfortable talking and sharing information on sexual matters, and what the constraints are that they face in discussing sexual matters. The final theme is the

adolescents' perspectives of the PROSTAR programme and suggestions on how to enhance the delivery of the PROSTAR programme.

5.1 Sources of information on the PROSTAR programme

5.1.1 Word-of-mouth

The sharing of information happens in the everyday lives of adolescents through social contact and networking. Word-of-mouth is the main source and channel of communication for participants in finding out about the existence of the PROSTAR programme. The information is passed on by a friend, relative or family member, in an informal manner. The influence of friends and the need to be in the same social group was the main factor for participants to join the PROSTAR clubs and become involved in the activities. Thus, the participants join and become involved in the PROSTAR programme without questioning what it is all about. They only know that the PROSTAR programme conducts lots of activities that can fill their free time and that their friends have also joined in.

I heard about it [PROSTAR] from a friend of mine. She says it is good to join the PROSTAR programme because there are lots of activities. So I joined. I knew nothing about it. I just heard it has organised lots of enjoyable activities.
- FGD6

I joined PROSTAR in 2000 after being introduced by my friend. He mentioned to me that the PROSTAR programme is worth joining. We can get lots of information especially as to how we can avoid unhealthy behaviour. So by joining the PROSTAR programme I feel that it has given me the motivation to adopt healthy lifestyles.
- FGD13

Certainly, through social networks, new information is shared and made known to each other. Furthermore, the participants are normally from the same school and mingle with each other frequently during school hours. Meanwhile, some of the participants are from boarding school and this makes them very close and they always do things together. However, knowing the name of PROSTAR alone is not really enough to convince them to join, but also because of the activities conducted within the PROSTAR programme. These activities themselves have promoted and introduced the PROSTAR programme to the adolescent.

5.1.2 Teachers

Teachers have also become an important source of information about the PROSTAR programme. This is because mostly the adolescents are of school age and attending schools. The school management normally appoints a teacher as an advisor of the PROSTAR club at school level. This club has become one of the after normal schools hours or co-curriculum activities for the school and the students are encouraged to join any club of their choice. The PROSTAR programme is quite new for some schools, so it is the sole responsibility of the teacher in-charge to promote the club amongst the students.

The first time I heard about the PROSTAR programme was from our teacher. She explained the activities conducted by the club and I was interested to know more information about the PROSTAR club.

- FGD7

The teacher introduced the PROSTAR club to us.

This club is newly formed in our school. We joined because we want to know what PROSTAR actually is.
- FGD11

I joined the PROSTAR club last year (2004). Our teacher went to all the classes to ask if anyone is interested in joining the club. So we asked what it was all about. After hearing the explanation from the teacher I then joined the club to know more about it.
- FGD13

However, not all schools have the PROSTAR Club. This is because some schools are reluctant to introduce the club due to the number of clubs already existing at their school and also because of a lack of manpower or teachers in-charge. Some of the participants who knew about it from their previous schools were not able to get involved in the club's activities. Even if there is a district PROSTAR club available, it is far away from the school.

I heard about PROSTAR before and had the interest to join. However my previous school did not have it, when I came to this school, I joined.
- FDG13

Active involvement in co-curriculum activity is important because this can enhance their curriculum vitae besides improving academic achievement. This is important when they need to apply for higher learning institutions or are looking for a job after leaving school.

5.1.3 Health workers

Health workers play a major role in promoting the PROSTAR programme to schools, factory, villages and higher learning institutions in their administration

area. Health talks and exhibitions are normally organised at the school, either by the invitation of the school concerned, or as yearly activities planned by the health office. Through these activities, the club's activities are promoted and the students have the opportunity to ask the health workers about the PROSTAR programme. At the same time the health workers also encourage the school to form a school PROSTAR club and for the students to join in.

We are from the dance group and were invited to perform at the launching of the PROSTAR Club at our school. At that time we did not know what PROSTAR was. Mr Hadi [health worker] met us and he wanted us to join the club as role models to the others. We filled in the form and that's it. We are members.
- FGD 10

We have motivation camps organised by our Indian Society. Mr Manimaran [health worker] used to come and give health related talks. So he called us to join PROSTAR because we are active in the Indian Society. So that is the first time we heard about PROSTAR.
- FGD4

5.1.4 Relatives

Relatives or family members are the least mentioned as a source from where the participants hear about the PROSTAR programme. Only one participant mentioned that she knew about the PROSTAR programme from her aunt, who is coincidentally an advisor of the district PROSTAR club. Also, only one participant knew about it from his sister. Both participants were encouraged by their aunt and sister respectively to join the club.

Coincidentally my aunt is an advisor for the club and she always brought me whenever there are club activities going on. From there I started to join.
- FGD2

I heard about PROSTAR from my sister. She is a PROSTAR club member. So I was interested in joining. My previous school didn't have the club. When I transferred to this school, then I joined.
- FGD13

5.2 Reasons to get involved in the PROSTAR programme

One of the reasons for the adolescents joining the PROSTAR club is because of the activities conducted within the programme. The PROSTAR programme adopts an interactive and infotainment approach to deliver the HIV/AIDS messages which attract the young to join. The participants mentioned that classroom teaching or didactic methods such as lectures discouraged and bored them.

For me, I don't fancy talks. At the beginning I can remember all those points, but after two or three days I forgot. I think adolescents need something that they can remember for their whole life. Mostly talks are about giving knowledge, but it is boring.
- FGD5

We adolescents feel bored listening to talks. Why not use other approaches such as games.
- FGD4

Outdoor activities such as jungle trekking, games, treasure hunts, carnivals and conventions are most preferred by the participants. These activities give them the opportunities to get involved and interact with their friends. Their involvement and

participation in the club's activities can earn them the skills and knowledge such as teamwork and communication skills.

*I see it has lots of outdoor activities. I am interested in those activities, such as the carnival.
From there, we learn about teamwork.
- FGD4*

Training sessions and conventions are two main activities conducted in the PROSTAR programme, especially to train new peer-educators among the young. The training normally takes up 2 to 3 days and participants come from various schools and associations and are put up at hotels or training centres with the cost funded by the Department of Health. With accommodation, food and transportation provided, this attracts the adolescents to join. Also gifts such as caps, t-shirts, goody bags and certificates are given out. During the training convention, the participants have the opportunity to socialise and share their views and experiences, besides meeting and making new friends. Therefore, this can widen their horizon, networks and experiences.

*I can make many new friends from other schools besides gaining some experience from the activities conducted.
This was very interesting.
- FGD7*

The PROSTAR programme was purposely developed to disseminate sexual health information to adolescents, especially about HIV/AIDS. However, because of a lack of promotional activities, PROSTAR was not known to some of the adolescents. Some of the participants never knew about PROSTAR, not even after it came to

their school. Therefore, some of the participants are curious as to what the PROSTAR programme can offer them and what it means.

I am interested in joining because I wanted to know in-depth about HIV.

Me too. I am interested to join to gain experience and knowledge about how to prevent HIV.

- FGD14

I didn't know what PROSTAR was all about. We thought it was same as other clubs. So after joining the club we knew that it was about HIV/AIDS. Because before this, we knew HIV could only be transmitted through unsafe sex.

- FGD3

5.3 Sources on sexual health and information seeking practices

When asked where the participants obtained most of the information on sexual health, especially HIV/AIDS, most of them mentioned television followed by the radio, teachers, health workers and printed materials such as leaflets and posters. The participants pointed out that the doctors are the most reliable source for HIV/AIDS information because they have the credibility and knowledge. So the doctor is always projected as someone who is knowledgeable and trustworthy.

What doctors say is more important and most people trust the doctors. A doctor is more professional and knowledgeable.

- FGD11

On seeking more information, the participants can be divided into two groups. The first group consists of the participants who said they would not seek further information on HIV/AIDS because the information they get from the mass media

and interpersonal communications is sufficient. This group will only look for information if they really need it, for example, if it is related to their schoolwork. The second group include the information-seekers. This group will search for more information about HIV/AIDS from their teacher and health officer. However, a teacher is the easiest resource to access because they are at the same school, compared to health officers. Also, in certain schools they have their counselling teacher who can provide them with the information, especially when they are doing school work on the topic of HIV/AIDS.

Moderator: If you need more information on HIV/AIDS who do you look for?

Teacher.

Counselling teacher.

Because she is more knowledgeable in this field.

-FGD6

For us in this school we will go to see the teacher in-charge of the PROSTAR programme. We need her advice, whether we need to go to the hospital or browse the internet maybe.

At this school we have a counselling room to get information because in this room normally lots of information is available.

-FGD7

As discussed above, the participants trust the doctors as a reliable and trustworthy source of HIV/AIDS information. However, the participants did not go and visit the doctor for information on HIV/AIDS - instead the teacher was the most easily available person. Their reason was because they perceived that doctors are busy and do not have time to listen to them. They also revealed that they only visit the doctor if they fall ill and need treatment.

We go and see the doctor if we have a disease. I don't go and see the doctor just to know about HIV/AIDS. Otherwise the doctor will think I am not alright.

I think if we go and see the doctor we must know the doctor well, for example a family doctor. Because sometimes the doctor has no free time for us. But for us normally we have the club advisor here, so we talk to them.

- FGD4

The participants also expressed the notion that they will be laughed at by their friends or colleagues if they visit the doctor just to get information about HIV/AIDS. They also worried that their friends might accuse them of having STIs and this could subject them to embarrassment. This is because STIs are seen as the disease of immoral activities such as pre-marital sex and drug abuse.

To see a doctor is good, but I think adolescents won't see a doctor. If we ask the doctor about AIDS, our friend will think we are mad. Why would we want to see a doctor?

We see a doctor only if we want to do research.

Maybe if we have an assignment to do then we will see a doctor, or if we are sick.

- FGD3

Therefore, they turn to their friends to share any information on sexual matters. However, they also expressed their concern that their friends were not a reliable source of information because they too might lack knowledge and have the wrong interpretation.

We need to get correct information. Otherwise we might get the wrong information if our friend is also not sure about it.

- FGD11

5.4 Knowledge and self-efficacy

5.4.1 Knowledge

This study found that the participants are aware and knowledgeable about HIV transmission and prevention. The participants were asked about how HIV and STIs can and can't be transmitted. The participants stated that sex and injecting drugs were the most common modes of transmission mentioned. Social contacts such as shaking hand, touching and sharing public utilities were mentioned as a false mode of infection.

*Through practicing unsafe sex (simultaneously).
Sharing infected needles amongst drug users
(simultaneously).
Blood transfusion (simultaneously).
Mother to child (simultaneously).
- FGD5*

However, they are unclear about the difference between HIV and AIDS and struggle to give the meaning of the acronyms. Some do not even know the meaning at all. This suggested that the acronyms are better known in comparison to the meaning itself. The participants are also aware that the public stigmatises HIV-positive people. According to the participants, this happens because the public have a lack of knowledge and understanding about the disease. Even the participants themselves agree that they still have a fear of people with HIV, even though they know the facts about HIV/AIDS. This fear has become reinforced in their minds.

Normally HIV-positive people are isolated. That is what we fear for. Hearing about someone who has HIV, we are scared to get near them. The young didn't understand how the disease can be spread. Their understanding is unclear and closed-minded ...

When we hear about HIV-positive people automatically we have this negative feeling, even though we have the knowledge.

- FGD1

With virtually no formal sex education in the schools, and with most parents reluctant and embarrassed to discuss sexuality with their children, most of the adolescents learn about HIV/AIDS through the media and friends. This suggests that the family is not the prime reference group in sexual health-related decisions, since adolescents tend to value the opinions of their friends and others. Discussion of HIV/AIDS normally links the disease to no available treatment resulting in death, arousing fears among the recipients.

AIDS is a killer. Like a death sentence.

There is no cure for AIDS, unlike some viruses, which we can treat, but not AIDS.

- FGD10

When I hear about AIDS, it is so scary.

This is because people like to make a story of it. For example, if an HIV-positive person makes you a drink, the drink might contain the HIV virus. People are so scared, because the end result is death.

- FDG8

Even though the participants have a fear of AIDS, generally the participants think that HIV can't infect them because they are not drug users and do not practice unsafe sex. Their perception is that AIDS is a disease of "bad people" as a result of their immoral activities such as drug abuse and multiple sex partners or illicit sex.

It does not involve me, why should I bother.

I only smoke cigarettes, how I can get HIV?

...

Because I feel HIV/AIDS does not affect me, why should I want to think about it? Because it does not affect any of my relatives, so I didn't bother.

- FGD8

It is impossible for me to get infected.

Because the way it is transmitted is through unsafe sex and drug addicts. I feel it is not important.

I didn't do all those things, so I am not infected.

- FGD5

This shows that the participants believed that if they remain a 'good person' they will never get infected by HIV. By itself, this perception is good because as long they feel safe and stay away from HIV risk behaviour they are not going to get infected by the disease.

5.4.2 Self-efficacy

Even though the participants have a good knowledge about the disease, there is some contrast as to what is known and what is going to be done. In this section, the presentation will be divided into two sections namely, perceptions of people with HIV/AIDS and the ability to make decisions (decision-making). The first section will discuss the findings of the participants' perception of people living with HIV/AIDS, meanwhile the second section will examine the participants' decision-making ability. These two themes are crucial because they relate to the functional health literacy of the participants. Even though the findings were the result of a given scenario and none of the participants actually experience it in their real life,

they took it seriously in the group discussion and this shows they are genuine in their responses.

5.4.2.1 Perceptions of people with HIV/AIDS

In this part the participants were given a scenario where one of their relatives or family members has contracted HIV. The participants were asked to give their reaction, opinions on how and what they would do if they were in this situation. The scenario was given since the personal experience of adolescents about HIV-positive persons and AIDS patients were non-existent.

The findings show that the participants' opinions about people with HIV/AIDS were mostly positive and tolerant. The ideas of adolescents were mostly based on information from the mass media or lay referral system, such as to give moral support and love, not to isolate the victim, get treatment and help in counselling, and to share the information on how the disease can be transmitted so that the victim does not pass the disease to other people. This information is always the focus of health promotion and education so as not to discriminate the victims of HIV/AIDS.

First of all we would have to accept him as a family member. We shouldn't show to him that he is a HIV patient. We must always give him the positive attitude. Always encourage him to live and give support to him. Shouldn't let him feel he's left out from the world. Ask him to go for proper treatment and follow the proper path, and don't go back to the old days, where he got it [HIV] - FGD4

The belief that a person contracted HIV because of his sin, or as a punishment from God, is not accepted by the participants. They knew that it is their risk behaviours that matter. Even though it is the person's mistakes, they are aware that by giving their support and encouragement to the victim, they can release some of the burdens faced by the HIV-positive people.

We cannot just 'punish' him even though he got it from his own mistakes. We are not God. We are not the ones that have the right to give punishment. What we can do is try to help him.

We give him the support, because those affected by HIV sometimes feel down and alone.

- FGD3

However, the secrecy of the victim has to be kept because the stigma and taboos associated with the disease still exist amongst the community at large. The HIV status of the victim should only be made known to the family.

It will be a secret among family members only. Not because it brings shame but because the negative views from the community will make the HIV-positive person feel distress if everybody knows he has HIV. He will be left out and isolated. Better it to be known to the family members only.

- FGD13

Because it can bring shame if he got it from the wrong source [sex of drug abuse]. Because society normally has this negative mind.

Because once someone has HIV, he is bad. Some people said, God punishes him because of his wrongdoing.

- FGD14

Some of the participants were confused and did not know what to do. Most of these participants fear the victim could infect them with the disease, even though they

knew how HIV can be transmitted. Fear also exists because AIDS is always publicised as associated with death and a result of immoral behaviours (drug abuse, promiscuity or illicit sex).

I think I can't accept it. Very hard to accept even though he is one of our family members. It is hard, I also don't know.

I think not many people can accept those who are HIV-positive.

- FGD5

Although the participants knew well that HIV cannot be transmitted through shaking hands, etc. undefined fears concerning the infection were strong. They fear that they might get infected if shaking hands with the infected person, especially if they both have cuts in their hands.

I still have the fear. If we have a wound on our hand and that the person [HIV-positive person] also has a wound, maybe we can get infected.

- FGD1

The moral of this scenario is that, even though the person knew well about HIV, the fear of the disease still exists, especially the fear of getting infected. The participants also show that they have the ability to function based on their knowledge that the HIV victim should not be victimised and discriminated against, rather that they should be supported. As stated earlier, the participants' functional health literacy was not assessed in their real-life situation, but through these responses it can be concluded that participants' self-efficacy needs to be emphasised rather than bombarding them with knowledge and information.

5.4.2.2 Decision making

This part will discuss the findings of the participants' ability to make a decision in the presence of pressure from their peers. Again, the participants were given a scenario and asked to act rationally as if they are in the real situation. In this part, the boys and girls were given a different set of scenarios. For the young men the scenario was, "a good friend of yours plans to have intercourse with a commercial sex worker (who has multiple sex partners and is at high risk to have HIV and STIs), what is your opinion?" Meanwhile for the female groups the scenario was about a friend who was a hardcore drug addict persuading her to try the drug. In these scenarios, both "persons" are very persuasive and stick to their decisions to use syringes for taking the drug and to have sex with an unknown person. The scenarios for both genders were given differently because, based on the pilot study that had been done earlier, the girls were quite reluctant to discuss the sex topic compared to the boys. Therefore, to get them really attached to the scenario, the participants were given the topic that they were comfortable talking about and encouraged to participate in the group discussion. The intentions of these scenarios, as mentioned earlier, were to explore the ability of the participants to apply (self-efficacy) their knowledge to make an appropriate decision when they are under pressure from their peers.

The expected responses from the participants were, to give advice on practicing safe sex and using clean needles for injecting drugs if their friend from each of the scenarios insists on injecting the drug and having unsafe sex. Also, it was expected

that they would say “NO” to the offer. However, the result shows that only a few participants from the boy and girl groups mentioned practising safe sex by using condoms and using clean needles, even though they have the knowledge that HIV and STIs can be transmitted through both unsafe sex and sharing infected needles amongst IVDUs. Instead, mostly their answers were about morality, religion and law.

Advise him not to do it.

Tell his parent. Report to the authority.

Avoid him.

If he insists on it, report him to the police, or the religious department.

Ask him to think of the future.

Think about God.

- FGD8

Because the addiction is controlling her, it is very hard to give her the advice.

Distance ourselves from her.

Report to the authority so as to arrest her.

Try to give advice to her, if she didn't listen just leave her alone.

Very hard because she is addicted to it.

- FGD5

These answers could be due to the fact that both activities were known to be illegal and against the norms of the society in Malaysia, and the offenders could face prosecution from the authorities. Also, because the emphasis on moral and religious values is incorporated in health education and promotion programmes.

In terms of the decision whether or not to accept their friend's offer to take drugs, the girls have a firm grip by reluctantly opposing it. Meanwhile the boys are split in

their decision by not accepting the offer and following their friend to have unsafe sex. The reason for the boys who might follow their friend was because they want to experience sexual intercourse and would not want to hurt his feelings, which might ruin their relationship.

The male groups discussed that:

I might have the feeling to try. I will accept it. But because I have the knowledge that if I do it I might get AIDS. Maybe we can give advice to him. Think twice before you do it. If he didn't listen, just leave him alone.
- FGD10

For me, because I had religious education since I was still young, I think I will be opposed to it. I will be opposed to it because if I do it, I might get infected by the disease. The risk is very high.

For me I would follow, not wanted to hurt his feelings, but must use protection [condom].

I will base it on my sexual desire. If my sex drive is high at that moment, I will do it.

For me there are two situations. I might not and might do it because I have never gone to that kind of place. If my sex desire wanted to, I might do it.

- FGD13

Meanwhile the girls expressed their objection as follows:

No. I am not going to do it.

If she kept on persuading me, I would say no. I value my life. I would tell her to remember God.

If she forces me, I will report her to the authority.

- FGD6

The above results suggested that knowledgeable person(s) cannot guarantee that he or she could act according to what they know. In the presence of peer pressure, the participants were facing a situation of not wanting to hurt the feelings of their

friends. These findings suggest that adolescents' health programmes need to focus on self-efficacy and self-esteem, besides communication and decision-making skills.

5.5 Communication about sexual health

Young people may receive far more information about HIV/AIDS than they do about sexual health or reproductive health. When asked what they do understand about sexual health, immediately their responses relate it to sexual activities or intimate relationships between men and women (intercourse). Participants mostly learned about sexual health through science and biology subjects at school. It is apparent that they need more accurate information about sexual health.

*It is a relationship between man and woman.
Man and man, woman and woman [homosexual].
Unsafe sex.
- FGD1*

In Malaysian society, talking openly about one's sex life is considered against the norms of the society, especially among the religious or conservative community. If a woman, especially, talks openly about sex or her sex life, she will be accused or labelled as a loose woman with low morality. Too many constraints from the culture and norms of the society make it very difficult to talk about sexuality. The participants agreed that talking about sex among themselves is not a problem but it is the norms of the society that restricted them from doing so in the public.

*Nowadays, sex is normal. Everybody knows about sex.
It doesn't matter if it is discussed openly, but it depends*

on individual preferences. Certain individuals will say, eh, that is secret, how come we talk about it. It's embarrassing.

- FGD3

I think with adolescents we have no problem because it is within our own age group.

It is easy to discuss and have a better understanding, but not with older people. We still have the shyness.

Maybe if we talk to older people, they won't accept it. It is our culture.

- FGD4

Participants identified friends, parents (especially mothers) and teachers as the people with whom they feel most comfortable discussing sexual matters. Even though parents were mentioned, they are too shy to talk about such things with parents, especially with the father, and it is culturally disrespectful to do so. They thought their parents might think they have been doing it [sex] or are spoilt and loose. The reason some participants felt they should talk about sexual health with their parents was because the parent knows a lot or has the experience. Even if friends might be deemed as a less reliable source of information, participants expressed the opinion that friends were more approachable and comfortable to talk to.

For us, among the girls, we can talk about it.

But it must be among close friends only. If not they might think differently.

- FGD5

We are more open to our friends.

Friends like to share their problems. That's why we discussed it with our friends.

- FGD9

The participants agreed that parents have a responsibility to teach their children about sexual health so that they have the appropriate knowledge about it. There is no doubt that parent-child communication is very important, so that the young get the right information besides strengthening the family values. In a conservative society, it is very important to preserve family values and not to be put in an embarrassing situation, such as getting involved in immoral activities and drug abuse.

Do some programmes to make it easier to talk about it HIV. For example, a family day. So that we can go there and get knowledge about HIV with our family. If we have any doubt we can ask our parents.
- FGD11

The findings also revealed that some of the participants were uncomfortable discussing sexual matters openly even within small groups. Some participants are not even able to say the word “sex” openly and spontaneously. When asked to discuss the topic of how HIV can be transmitted, they referred to it as “doing that thing” which means “sex”. Shyness and embarrassment are the factors that lead them to being unable to discuss sexual health matters. Even though there is some constraint in communication about sexual health, the participants suggested that this topic should be made explicit and reach the young people.

If we are looking at adolescents' problems, why they do all those things, it's because they don't know what the consequences are. They watch i.e. pornography films and so on. Then they try to do what they see. Therefore, we need to teach them so that they will think about what is good and what is bad.
- FGD4

In summary, even though there are still a lot of taboos and stigma in talking about sexual matters amongst the public, the participants suggested that it is time to shift from the traditional views to being more open-minded about sexual matters.

5.6 Adolescents and the PROSTAR programme

5.6.1 Adolescent's perspectives of the PROSTAR programme

PROSTAR is the acronym for *Program Sihat Tanpa AIDS Untuk Remaja* which means "Healthy Youth Without AIDS". In a glimpse, it is a disease-based programme because it relates to HIV/AIDS and STIs. However, based on the activities conducted and topics discussed within this programme, the participants feel that the PROSTAR programme is a universal programme because it is not only about HIV/AIDS prevention, but also other social ills such as truancy, smoking, drug abuse and pre-marital sex involving their group. They agreed these social ills can contribute to the higher instances of HIV among young people.

For me, the PROSTAR programme is good. It can give me the motivation through talks and educational activities. It can provide awareness to the young generation and help them to appreciate their lives and stop them from participating in unhealthy behaviours.

Actually the PROSTAR programme has done a lot of good things. Before joining the PROSTAR programme I did smoke because I was influenced by my friends. Since I joined the PROSTAR programme I can overcome my smoking habit.

- FGD6

Before, the PROSTAR programme was giving more priority towards AIDS because the objective of the PROSTAR programme is giving knowledge on AIDS. However, for us here, we conduct a variety of activities. Not only related to AIDS but other social ills among the young people such as smoking,
- FGD10

The PROSTAR programme not only gives them knowledge about HIV/AIDS but also gives the opportunity for them to meet and make new friends or socialise. Furthermore, the activities conducted within the clubs attracted them, especially outdoor activities, because most of the time they are confined to the classroom during school hours. Through these activities, new skills such as leadership, teamwork, management and communication are learned.

*It is nice because we have lots of outdoor activities ...
Once we are out, we meet a lot of people, know new things, so we become interested.
It is really helping us. It gives us a lot of knowledge.
Teamwork skill, teaching us how to work in a big group
and organise some activities.*
- FGD4

As discussed earlier, the participants also expressed that they gain knowledge and life-skills such as communication, teamwork and leadership through the PROSTAR programme. However, when asked whether they can practise these skills, the answer was that they can, but with the support of the health staff. This is because they lack the confidence to do it themselves especially talking to the public and organising training for their peers, even though some have attended the training for facilitators. They phrased it as follows:

We can deliver the message but not all of it because maybe we might forget about it ... we can't give 100%. Sometimes they didn't understand what we told them ... We don't have the courage to stand in front of the student because of lack of experience on the stage to give talks on AIDS because it is an open space. We don't have the confidence.
- FGD1

The participants also agreed that not all young people gain benefit from the PROSTAR programme. The PROSTAR programme only benefits club members. The participants are worried that their peers, who are not members of the club and can't be reached by the programme, will be left with a lack of knowledge or skills and might end up practising risk behaviours, which might put them at risk of being infected by HIV and other STIs.

Before, we didn't know about the PROSTAR programme. We are not exposed to the activities. For myself, it's given me some knowledge about how to prevent it [HIV]. For us, who join the PROSTAR programme, it really helps. But how about the other people who are not joining? Are they getting any benefit from it? It can only help the PROSTAR club members. For example, those who are doing nothing outside there, those who are involved in drugs, I feel the PROSTAR programme doesn't really help much in that.
- FGD5

A lack of promotional activity is one of the reasons identified by the participants as to why the PROSTAR programme is not known to many adolescents. The participants compare it to other programmes such as "Rakan Muda" (a programme for the young under the Ministry of Youth and Sports), which is so well known because it is widely publicised by the media throughout the country.

If I ask my friends, 'What is PROSTAR?', none of them know. Specific people only know ... the PROSTAR programme is not as popular as "Rakan Muda". Actually PROSTAR is not that popular.
- FGD4

Participants also feel that the PROSTAR programme is not meant for behavioural change but more to give knowledge and raise awareness on AIDS. However, they do agree that behavioural change needs time to be accomplished and is not an easy task to achieve, especially amongst young people.

I think we cannot change people's behaviour, but we can give them the support for change. We conduct the activities and deliver the information on HIV/AIDS. We try our best to give them as much information as we can.
- FGD11

Behaviour is hard to change because they are used to their lives. They themselves can change their behaviour. The PROSTAR programme can only give them the knowledge about HIV/AIDS.
- FGD10

In a pluralistic society like Malaysia, the participants also expressed their views that it is very difficult for the PROSTAR programme to be accepted by all. Among the three main ethnic groups namely, Malay and other *Bumiputeras*, Chinese and Indian, they have different perspectives on the relevancy of the PROSTAR programme. The Malays seem to accept the programme as it is relevant to their current problem with HIV/AIDS. The Malay participants agreed that this programme was developed to solve the HIV/AIDS related problem among the Malays, but it is not for the Malays alone. The PROSTAR programme also targets other ethnic groups.

Maybe now, if we look at the cases [HIV/AIDS] the majority are Malays. So we promote among the Malays first. If we succeed, then maybe the Indians and the Chinese will think, 'oh, it is good'. Maybe now they are still unclear.

It is open to everybody. Maybe the reason why other races are not joining is because they lack the time and don't have the interest ...
- FGD3

Meanwhile, the Indian participants join the PROSTAR clubs because the advisor is from their own community. However, after joining in, they then realised that it is not only for specific races but for all.

The Indian is one of the factors ... teacher is also one the factors. Once we came here, we saw that the students are not fanatic Malay students. They are very understanding and we don't have any problems. You ask me why Indians don't join much, I can't tell you. Maybe they don't know about the PROSTAR programme.
- FGD4

However, the Chinese are the most outspoken of all on their views on the PROSTAR club. They view the PROSTAR club like any other clubs in their school and they will join the club if their friends are in. They mentioned that most of the people who join the clubs are Malays and the clubs are dominated by the Malays. Therefore, they have the feeling that the PROSTAR programme is meant for the Malays.

I joined the Counselling Club at my school. Actually the Counselling Club also offered some information about HIV/AIDS. So actually it is quite the same.

Actually, there are quite a lot of Malays joining the PROSTAR programme.

All the committee members of the PROSTAR Clubs are Malays and furthermore we have no Chinese friend who joined the clubs.

- FGD11

In summary, the participants felt that the PROSTAR programme is a platform for the young people to gain knowledge and raise their awareness of sexual health, especially HIV/AIDS. PROSTAR is also seen as a vehicle to address the social ills among young people and not merely on AIDS only or disease-based programmes. However, not all the young people knew about the PROSTAR programme due to a lack of promotional activities and it was more popular among the Malays compared to the other ethnic groups in Malaysia.

5.6.2 Adolescents' suggestions for an effective PROSTAR programme

5.6.2.1 Adolescent participation

From the group discussion it appears that virtually all PROSTAR activities were mostly planned by health workers or the health department. The roles of the adolescents are as participants of the activities implemented. The participants stated that their involvement in programme planning and implementation is important because they are the only people who know what their peers out there want and can deliver the correct messages to them. However, they also agreed that support from the health workers is still needed as they lack the resources and experience to plan

and implement the programme by themselves. What the participants really needed was to sit and work together with the programme planners.

Both of us must be there. I mean health professional, because they can give us a better idea to control us maybe. We are teenagers, so they must be there to control us. But they shouldn't do everything. They must give us some of the responsibilities. We must give our ideas, we must stay in the boat.

Actually we are not involved in the decision making process. Weekly or monthly meetings we are invited to, but the important ones, for example, to make a decision on some important matters were attended by the doctors and health staff ... the PROSTAR Convention for example, actually for the young but why there are many adult attending it?

- FGD4

5.6.2.2 Peers out-reach programme

The concentration of the PROSTAR programme was more towards the schools and students. The participants have concerns about their peers who have left school or never had the opportunity to visit one, as their situation is frequently bleak. They have only limited access to counselling, diagnosis and treatment or reproductive health services. The participants suggested that PROSTAR Clubs should be encouraged to be formed at the community level. These clubs can be used to capture as many adolescents as possible, especially the out-of-school adolescents.

We have some clubs formed at the village level ... we can use it to give talks to the adolescents at the village. With this maybe we can solve some of the problems of sexual health faced by them.

- FGD4

However, this effort needs time, commitment and resources to implement especially from the club's members.

We need more people to commit. Because, if there is a club but nobody works for it, it will be useless. We need people who are really committed and willing to work voluntarily. We can't force people to do it.
- FGD4

Peer support is potentially invaluable for HIV/AIDS action, and can be used to channel correct information about HIV prevention. The PROSTAR clubs can draw young people into productive activities that contribute to increased competence and confidence amongst the young people to face the pressure of adolescence lives.

5.6.2.3 Health education material and sexual health messages

Health education materials have been produced to support interpersonal communication. These materials are distributed to the participants of any activities conducted. Most participants in this study said they had seen the health education materials such as leaflets and posters produced by the health authorities. These health education materials are available from the school resource centres and local health offices. However, not all the health education materials produced attract them to read through the information. Furthermore, the participants admit that some of them do not read much and are not interested in reading. For those who did not read the health education materials, they expressed their dissatisfaction with the printed materials as not attractive and too textual. The information provided especially on HIV/AIDS is nothing new to them. It is a repetition of information,

which has been presented in different ways. This is because the facts on HIV/AIDS that were presented were mostly on the disease transmission and prevention.

Not all the health education materials we read. Some that are interesting we will read it. If the information on the leaflet is something on the activities that are going to be done, then we are interested to know further. If it is on AIDS only and lots of text, we are not interested. We as adolescents are more interested in the outdoor activities. We lack interest in reading.

Before, I have come across the PROSTAR club members delivering leaflets to the students. Unfortunately, some of it was thrown on the floor and binned before it was read.

- FGD10

Mostly the reasons the participants were not interested in reading the health education materials was because they were not interesting, lack attraction, and presented with too much text. They suggested that they should include some pictures, less text and bright colours.

The colour should be bright, to attract the young to look at it. The graphics must be attractive too. Graphics that show the adolescents themselves giving the information to their peers.

It shouldn't have lots of text. I think that would be more attractive.

- FGD13

For the participants who read the health education materials, they read it to gain information and knowledge about the disease. The materials were kept for future reference whenever they need it.

After we read it, we can keep it. If we need more information on HIV then we can refer to it again.

- FGD5

In terms of messages, the participants preferred fear arousing messages. They believed that these messages can give them the awareness and could lead them to

avoid risk behaviours. For example, health information materials with real pictures of the effects of the disease can give them a real feeling about the disease. Besides the fear appeal, the participants also prefer humour appeals. These approaches can attract them to read and go through the information provided.

Normally, they didn't show the real pictures. It is just like a note. If we see something without picture we are bored. Because we can't see the consequences of the disease we are not scared. Not bothered in knowing about it.
- FGD3

However, the participants also admitted that there are certain limits on printing real pictures. From the cultural point of view, showing the picture of human private parts or the naked body is unacceptable i.e. showing picture of private parts that were affected by STIs. They stated that, not only it is not relevant to some of the community, but even they themselves sometimes feel embarrassed to look at it.

5.6.2.4 Peers and role-models

The credibility of the source of information was also discussed by the participants. It seems that the young people have little interest in listening to their parents and elders talking to them about sexual health. They suggest that the person(s) should have credibility and be popular among the adolescents so that they would be attracted to come to any of the programmes conducted, such as talks and exhibitions. They suggested that well-known public figures and celebrities should play their part.

If adolescents themselves deliver the messages to their peers, it is more effective. When the older people talk to the young, the young will not really listen to it.

If public figures talk to them, they will listen but not if it is parents or grandparents.

The adolescents admire Siti Nurhaliza [celebrity] ... but Siti Nurhaliza never talks about AIDS. What Siti Nurhaliza does, I think they will follow.

- FGD3

5.7 Conclusion and overview

Overall, the participants were familiar with the PROSTAR programme and had a good knowledge of HIV/AIDS. However, misconceptions still persist and what was known was not in accord with what was intended to be done. In terms of functional health literacy, the participants lack the ability (self-efficacy) to practice what they know in their real lives and influence the decision made by the health practitioners. The implication is that the adolescents accepted the PROSTAR programme which was developed based on the thinking of health professional without question.

The following chapter will re-visit the findings presented in both Chapter Four and Chapter Five and present a detailed discussion of the findings.

CHAPTER SIX

DISCUSSION

6.0 Introduction

The discussion presented in this chapter will focus on the respondents' perspectives and existing knowledge (as presented in Chapter 4 and 5), as well as the wider literature as discussed in Chapter 2. Furthermore the discussion will determine the interface between health communication and health literacy. In the first instance, the discussion will emphasise the practice and challenges of health communication faced by the health practitioners. Secondly, it will discuss the dilemma faced by the adolescents as the receivers of health communication information. Thirdly, this chapter will explore the adolescents' health literacy, focusing on self-efficacy and self-esteem. Finally, the conceptual framework as presented in Figure 2.2 is discussed and compared with a new model presented, based on this study's findings.

6.1 Discussion

6.1.1 Tension faced by health practitioners in health communication

In Malaysia, when determining health promotion programmes for the people, health practitioners are not always in a position to begin with a 'blank canvas'. They are appointed to designated programmes and required by management directives to

address particular health issues. This practice can be referred to as 'vertical programmes' (Tones and Green, 2004) or a top-down model of communication. The programmes to which health practitioners are designated are often defined in terms of disease i.e. communicable disease, non-communicable disease, etc.

It is clear Malaysia is a multi-racial and multi-cultural country and health practitioners struggle to apply the theory and practices of health promotion and to tailor it to the local needs, in order to meet its cultural complexity. The practice of health promotion in Malaysia is influenced by the advancement of Western health promotion practices and other developed countries. In this respect, health practitioners are caught between the advancement of western health promotion theory and practice, local culture and public health management traditions. Furthermore, these health practitioners are being 'forced' to achieve the targets set by the management. For example, for the PROSTAR programme, every district in the country has to conduct two training sessions for facilitators per year. Each of these health practitioners is not only responsible for the PROSTAR programme but also other programmes as directed by their superiors. And all these programmes have their own targets to be achieved. The emphasis on achieving national targets is seen as discouraging the identification of local needs and flexibility in setting local targets and putting much pressure on the programme implementers. The latter creates potential tension between health management and health practitioners. Health practitioners have a responsibility to inform their target audience about

healthy lifestyles whilst simultaneously working to achieve targets set by management.

Despite increasing evidence on knowledge and practice as outlined in section 2.1 (p.24), health practitioners consider knowledge and awareness to be fundamental for behaviour change because of its association with a healthy lifestyles. This is despite findings that increasing knowledge on HIV/AIDS has had little effect on sexual behaviour and is reported to be unrelated to safe sexual behaviour. As discussed in section 2.7 (p.68), the behaviour change process takes a considerable amount of time and is difficult to change. In this study, health practitioners also realised that changing peoples' behaviour could be very challenging, given individuals' comfort zones. Therefore, giving the audience the opportunity for knowledge and awareness in health interventions is considered to be a priority because of its associated connection with a change in behaviour and practice. The findings show that Malaysia still emphasises knowledge, attitudes, practices and behaviours (KAPB) in their health education and promotion programmes. This practice puts 'pressure' on the target audience to comply with the professional's recommended health action. Therefore, there is potentially some tension between individual and societal responsibility for health, between individual and collective responsibility and between voluntarism and control (Tones and Green, 2004). In this study, it was found that the focus of the PROSTAR programme emphasises individual responsibility. Therefore, it can be suggested that the aim is to make a healthy individual healthier. The emphasis on individualism and lack of attention to

the social and environment factors that impinge on health could, in fact, increase rather than reduce the gap in society (Tones and Green 2004). This is because health gains will inevitably be greatest in those who gain the benefit of the programme than those who are not being able to access the programme or have low health literacy level.

Good health promotion practices requires that a needs assessment is undertaken. In this study, need was determined by the health professional, based on routinely collected morbidity and mortality data to support it but not through target audience needs analysis. The need to have a PROSTAR programme specifically for young people has been identified by health professionals. This means that the PROSTAR programme has been socially constructed by health experts. Therefore, in addressing the HIV/AIDS problem, the approach has remained disease prevention and expert-driven. The emphasis has been put on encouraging individuals to behave in certain ways deemed appropriate by public health professionals. The consequence of the professional supremacy results in some of the target audience feeling disenchanted with the PROSTAR programme and retreating into non-cooperation. For instance, the PROSTAR programme is more accepted by the Malays compared with the Chinese, Indians and other indigenous groups.

In summary, the ultimate objectives of health promotion plans are to improve the health of communities and individuals and to attain acceptable levels of equity in health. To achieve this, health practitioners faced difficulties in adopting the

western concept of health promotion to suit it to the local setting. They are also under 'pressure' from the top public health management which can cause tense relations. This study found that the top-down communication facilitated one-way communication between management and implementers of the health promotion programme. The PROSTAR programme was 'constructed' by expert thinking with health professionals (the implementers) working to achieve the targets set for them besides delivering the messages to the target audience. Health education and promotion continue to be based on epidemiological data and thus the didactic approach is widely adopted.

6.1.2 The challenge of participation

In the literature, much has been talked about the participatory approach in health promotion. Participatory approach in health promotion shares much with communication for social change and focuses on facilitating exchange of health information. It has a strong capacity-building and empowering component, since the participants are responsible for informing and sensitising their peers. This approach helps people to identify their own concerns and gain the skills and confidence to act upon them. Participation can be a means of bridging the gap between planners and the community (Tones and Green, 2004). This approach is very much based on a 'bottom-up' communication. Instead of the expert role as adopted by the other approaches (bio-medical, educational, behavioural change), the health promoter becomes a facilitator to act as a catalyst, getting things going,

and then to withdraw from the situation (Naidoo and Wills, 1994). Wide community participation is necessary for members to gain ownership of the programme or 'sense of belonging' to the programme. Participation is expressed as an important dimension of how a society conceives and practices democracy. It could be suggested that participation is an end in itself, building networks of solidarity and confidence in social groups, building institutional capacity, empowering people to understand and influence the decisions which affect their lives, legitimising policy and practice, ensuring that they relate more closely to perceived public need and strengthening the incorporation of local knowledge.

In contrast to the literature, this study found that the health promotion programme in Malaysia uses a top-down model of communication. Therefore, the decision making is made autonomously by the health expert. Health practitioners were found to talk about participation and know the importance of participation of the targeted audience in their health promotion programme. However, in practice, they do not involve the target audience in programme development, implementation, monitoring and evaluation. The occurrence of dialogue only happens within the experts' circle, during the development of this programme. This result is a one-way communication between the provider and receiver. The provider has become the active communicator meanwhile the receiver is passive. In this situation the feedback from the target audience on the programme cannot be gained immediately. This practice is felt to be insufficient because it is rooted in a one-way model of communication (Lee and Garvin, 2003), which does not really allow participation in

practice. Therefore, participation as claimed by health practitioners in this study is viewed as rhetoric or 'lip service' rather than reality (Tones and Green, 2004).

Engaging young people as key informants in the design and development of new programmes will directly benefit them. Rhetorically, the basic principle of the PROSTAR programme is "by youth, through youth and for youth" however in practice, this principle can be drawn as "by health professionals, through health professionals, for youth". The planning and organising of PROSTAR activities was mostly conducted by the health staff. The adolescents only play their roles as helpers to the organisers and as participants. Even though the adolescents argued that activities in the PROSTAR programme are actually meant for the adolescents, the decision making processes were made by the adults from the health department, leaving them with a minimal role to participate and voice their concerns and needs. Therefore, despite supposedly employing a participatory approach, the adolescents' input into the programme was limited by the 'power' of the health expert. Therefore, the so-called peer education project or programme was controlled by the 'adultist' agenda (Milburn, 1995).

The ideal of young peoples' active involvement is fundamental to programme effectiveness. They have the experience, knowledge and ideas that are unique to their situation, enabling them to offer key insights and perspectives on programme development. Participatory approaches can enable individuals not only to learn about the facts, but also to become more confident and to identify ways in which

they can take more control over their lives. Interactive educational activities can facilitate involvement, building on young people's strengths, and using these to raise the awareness of others. Participation will bring a sense of responsibility and ownership to the programme. Participation in social groups could foster a feeling of connectedness and belonging, helping them to develop a sense of identity. It is a way to provide opportunities for adolescents to take on greater responsibilities and through these real world experiences they can build competencies and develop into successful adults. Target audiences need to be involved in defining needs, planning, implementation and evaluation of the programme. Health practitioners may take part, not as experts but as part of the group (Lavarack (2004)).

In summary, as can be seen from the PROSTAR programme, there is a gap between participation rhetoric and practice. This is because of the dominant use of a bio-medical approach, which is very much dependant on epidemiological inputs and conceptualised around the absence of disease, and therefore ignores the social and environmental determinants of health.

6.1.3 The medium of communication

Communication takes place in many forms. Indeed almost every aspect of human behaviour can be a form of communication conveying a message to someone. Interpersonal communication strategies that involve face-to-face interaction are said to have greater potential for changing an individual's attitude and behaviour. Health

communication is a way that can enhance health and is not simply a matter of getting the message across. It involves building relationships and empowering people so that they can make choices and decisions about health based on their own priorities and circumstances (see section 2.4). In this study, health practitioners mostly employed interpersonal communication to deliver sexual health messages to the adolescents. Interpersonal communication was used to allow for much greater dialogue where interaction and feedback are required. Through interpersonal communication, feedback can be given immediately through face-to-face interaction and body movement such as facial expressions and even challenge the accuracy of the information. Interpersonal communication can be enhanced by the use of audio-visual aids, props and other forms of multimedia presentation.

Entertainment-education was part of the approach used to cater to the mood and needs of the adolescents. Entertainment-education, as defined by Singhal and Rogers (1999, p.9) “is the process of purposely designing and implementing a media message both to entertain and to educate, in order to increase audience members’ knowledge about an educational issue, create favourable attitudes, and change overt behaviour.” In this study, this method was widely employed by the PROSTAR programme. Whilst they are entertaining themselves, the sexual health messages are passed on through, for example, drama, theatre, games and outdoor activities. This method encourages the participants to interact amongst themselves, exchanging information, and sharing their experiences. The most popular outdoor activities among the adolescents were camping and jungle trekking.

In this study, adolescents admitted that they are bored of listening to lectures and being confined to the classroom environment. This is because most of them are students and their everyday lives are surrounded by the school environment. This suggests a demand for interactive over didactic methods of communication. Didactic methods focus more on information transfer rather than information exchange, or in other words health practitioners adopt traditional practices of information transfer (based on one-way monologue) rather than information exchange, based on two-way dialogue. Through one-way communication, target audiences are bombarded with an abundance of health information and considered to know nothing. Thus the audience become 'containers' to be 'filled' by knowledge of the communicator, and information becomes 'deposited' into the empty 'receptacles' of the receiver through the process of memorising and repeating (Lee and Garvin (2003)).

In summary, this study found that health practitioners employed interpersonal communication as an approach to delivering the sexual health messages. Entertainment-education was also used, but mostly the didactic method was used, especially in training. On the other hand, the adolescents were bored of listening to lectures and preferred outdoor activities.

6.1.4 The challenge of peer-education and PROSTAR sustainability

Peer-educators are widely used to disseminate and share sexual health information, although the effectiveness of this approach is rarely evaluated (see section 2.6). This approach was underscored by the idea that peer influence is stronger than that of adults such as teachers or experts and plays an increasing role in the delivery of information about sexual health. In this study, adolescents felt comfortable talking to their peers and seek advice from their friends. They admitted that talking to peers is a lot easier than talking to their parents or adults on sexual matters. Therefore, unsurprisingly, adolescents search out information from their peers rather than parents. They also preferred their idols such as celebrities to deliver sexual health information. Based on aforementioned factors, health practitioners emphasise the training of facilitators and peer-educators as the main activity for the PROSTAR programme.

Adolescents were trained as peer-educators and given the knowledge on HIV/AIDS and STIs, reproductive health, communication skills and decision-making skills. Facilitators and peer-educators were trained to lead the activities with the adolescents at grass-root levels. Therefore, training activities were conducted to train as many peer-educators as possible. In fact training activities have become the main activities conducted in sexual health programmes for the adolescents. Through this training, facilitators and peer-educators can build up their social networking and contact each other when they need help to organise activities for their peers at their level. Through peer-networking, ideally, it is easier for health practitioners to

reach a large target audience because they have contact with the peer-educators at the ground level who, in turn, have contact with their peers. This strategy has a number of advantages over traditional methods (Latkin *et al.*, 2004) such as, (a) it is less expensive than one-on-one interventions, (b) peers can reach individuals who do not frequent health care facilities, and (c) peers tend to be familiar with the risks and concern of the local population.

Young people are likely to rely on peers for information and believe that peer-educators can act as role models. Models are those who are similar to members of the target audience, but somewhat more competent at their behaviour being modelled. In this study, health practitioners aimed to produce as many role models as possible and promote youth networking throughout the country to disseminate sexual health information to their peers. Peers use many and diverse methods such as presenting lectures, drama or theatre, supporting resource centres, and also one-to-one counselling. It could be suggested that role models do not have to be 'real' people. Fictional characters such as cartoons can become media role models.

One challenge for health education programmes is the lack of ability of trained peer-educators to conduct activities with and for their peers. This study found that the peer educators lack resources such as money to conduct the activities at their level besides lack of confidence. Support from the health staff is still needed, for example in giving talks about HIV/AIDS. This happened because of a lack of motivation, commitment and support from the schools and also local health offices.

This could be the effect of top-down communication, where the target audience need to respond to the directives from the top and not encourage participation and volunteerism. With this approach the audiences were less motivated to start their own efforts but rather waited to be instructed from the top. Furthermore, not all the schools from where these facilitators or peer-educators derive have the PROSTAR programme or clubs at their school.

The findings suggest that the peer educators' level of health literacy need to be improved. Being health educators, they are seen as knowledgeable by their peers because of having attended training and so on. Trained peer educators are supposed to be at the level of interactive and critical health literacy. However, lack of supportive environment, self-esteem and self-efficacy are found to be the dominant factors for peer educators to function effectively, for example, some schools are reluctant to have the PROSTAR programme in their school and no support is given to peer educators to implement their activities. In terms of self-efficacy and self-esteem, they still need the support from health workers to carry out their roles. It could be suggested that the training for peer educators should be more interactive rather than didactic in its approach. The schools, health department, employer, youth associations, higher learning institutes, etc. have to play their roles to give the support the peer educators needs with their activities. This could give them the conducive and supportive environment to function as peer educators and sustainability of the PROSTAR programme.

The sustainability of HIV/AIDS promotional and educational programme is essential due to the fact that there is no vaccine available to treat this disease. The findings of this study found that training plays an important role in sustaining the programme because more young people will be trained as peer-educators. With more peer-educators being trained, the exchange of information will be continuous and reach large groups of the young. With continuous effort, the target audience will be more knowledgeable about AIDS and STIs. However, the study found that many peer-educators were unable to continue their tasks due to transfer of location. Those members who had completed their secondary education and were looking for a job somewhere else were not able to continue their interest since there are no PROSTAR Clubs at the higher learning institutions and at their work place. In the end, they loose contact and interest with the programme. Even if this programme is available at their new place, such as at the district level, they are reluctant to join because they have no friends in the new clubs. These factors result in a high turnover of PROSTAR Club members and peer educators. For the adolescents, friends have a great influence on their decision to join the PROSTAR programme.

At the club level, the members are not given the freedom to plan their own activities. Even if they are to plan their own activities, they face difficulties in obtaining funding and also lack the confidence to deliver the message or speak in public. Support from health personnel is still needed even though training has been given. Therefore, most of the activities were planned by the health staff and not by the peer-educators at grass roots level. With too many programmes targeting the

schools, not all the schools are keen to have PROSTAR in their co-curricular list because of a lack of personal resources and interest. For the sustainability of the PROSTAR programme, the recognition of PROSTAR clubs as a co-curricular in schools is important. As such, clubs activities will have proper supervision and time allocated.

Insufficient resources for health promotion result in a challenge regarding dissemination of health information. The aim of health promotion is to produce intervention effects that can be sustained over time and subsequently, require ongoing funding and resources (Swerissen and Crsip, 2004). The immediate success of any health programme may depend directly on the amount of money or resources and time that the source is willing to spend because to change people's behaviour and improve their literacy level needs time. In fact many health promotion efforts fail to become sustainable because insufficient resources are provided (Goodman *et al.*, 1993). Health practitioners find that they lack the funding to conduct activities in their administration areas. Lack of funds means fewer activities can be done and only a small number of adolescents can be trained and reached. This is because face-to-face communication, used especially in training, requires large amounts of money, human resources and time.

Besides money, manpower is also identified as one of the barriers to sustaining the sexual health programme, especially the PROSTAR clubs, at the district level. To run the club's activities total commitment from members is needed with the help of

the teacher in-charge and health staff. Replacement for members of health staff and teachers in-charge of the sexual health programme also posed problems for the programme because sometimes the new officer or teacher might be new to the programme and may not have experience working with adolescents.

In conclusion, although peer education has been the approach used in the PROSTAR programme, however, the effects of this approach have never been evaluated. It could be suggested that evaluation of peer educators should be done to identify the benefit from their experience and involvement as peer educators, to find out how peer educators, in comparison to the other students in the classroom, differ in their responses to the prevention of HIV/AIDS, and to see whether or not at-risk adolescents should be selected as peer educators. The findings from the questions above could be used to enhance the use of the peer educator programme in Malaysia, with particular reference to the PROSTAR programme.

6.1.5 The challenge of cultural complexity

Cultural differences could present major barriers to effective health intervention and implementation. This is when health practitioners overlook, misinterpret, stereotype, or otherwise mishandle their encounters with those who might be viewed as different from them in their assessment, intervention, and evaluation planning processes (see section 2.5.1). The traditional and conservative way of life for the majority of the Malaysian population has influenced the approach for sexual

health promotion. In the PROSTAR programmes for the adolescents in Malaysia, the emphasis on moral values is based on Muslim values, whereby the target audience are from other communities such as Chinese, Indians and other ethnic groups. For example, during the training of peer-educators, dress code, food, timetable, etc. were based on the Muslim values and practices, despite there being non-Muslim participants who would not be accustomed to such values. The development of the health education materials are based on Malay values. Therefore, the non-Muslims consider that the PROSTAR programme and its activities are targeted more towards the Malays. For minority groups, such as mine, any programme that emphasizes the culture and religion of the dominant population would not attract us to join or even accept it unless we are 'forced' to attend by the authorities or directive from the top management. As a government servant, we have an obligation towards the directives from our superior. The emphasis only on one dominant culture or set of values, such as Malay and Islam, can create prejudice and uneasiness amongst the minority who have and hold onto their own culture and values. The culture and values of this dominant culture might contradict those of the Chinese, Indians and other minority ethnics, resulting in a reluctance to join the programme whose committee member positions are mostly held by the Malays. This has discouraged those of Chinese and Indian origin to join in. Meanwhile the Indians only participate if there is an Indian teacher or if the advisor of the club is an Indian. Not surprisingly, Malaysia is still a divided community in social, economic and political terms, inheritance from British colonial rule.

Undoubtedly, the incidence, prevalence and experience of health, disease and sickness and their determinants are unequally distributed (see section 1.1.2, p.7). There have been reportedly higher cases of HIV/AIDS and drug use among the Malays, leading to a negative stereotype within a particular culture, especially among the Indians and Chinese who believe that HIV/AIDS is not their problem, but a disease that occurs within the Malay population. Health practitioners agree that it is hard to get the Chinese and Indians to get involved in PROSTAR activities and clubs because of the inequality in the HIV cases. Also, to fulfil the needs of all cultures is almost impossible. That is one reason why the emphasis on sexual health communication at present is more towards the Malay and Muslim values. Empirical evidence shows that the PROSTAR programme has been 'controlled' by the medical model (emphasis on prevention), Malays and Muslim values. However, health practitioners reveal that efforts have been made to attract the other ethnic groups to get involved because AIDS is not an individual problem but goes beyond socio-economical and political boundaries.

Besides cultural norms and values, language barriers compound the problem of addressing the sexual health messages (Ramirez *et al.*, 2000). Malay is the Malaysian national language and English is a second language, mainly spoken within the business sector. However, the people are free to speak their mother tongue such as Chinese (Hokkien, Cantonese, etc.), Tamil, Iban, Bidayuh, Kadazan, Dusun, etc. For these ethnic groups, besides the Malays, they only speak and learn the Malay language at school and when socialising with friends from other ethnic

groups. Therefore, some of these people do not understand or are not fluent in Malay language, including the adolescents themselves. All training and activities conducted in the PROSTAR programme use Malay language. Based on the researcher's experience and observation in training or bigger events such as conventions, the participants are more comfortable socialising among their own ethnic group and speaking their own language. In the classroom for example, they chose to sit next to their own ethnic group. That is why the young people only join and get involved in the clubs and activities organised if their friends are there or otherwise they find themselves isolated.

Although culturally competent health communication was suggested by the health practitioners, it is unclear how this can be done. This by itself shows that health practitioners are challenged themselves in terms of what approach to use to suit the cultural elements and public sensitivity in their programmes, of a subject area, such as HIV/AIDS often associated with immoral activities (Cline, 2003). Mostly, their suggestions were such as: using the language that can be understood by the audience, and engaging speakers from the same ethnic background as the participants or in other words, a culturally appropriate approach. However, in practice these suggestions were just too ideal to apply, hence are 'the rhetoric of culturally appropriate health communication'. Management of public health and health communication has increasingly recognised the importance of culture as a factor associated with health and health behaviours, as well as a potential means of enhancing the effectiveness of health communication programmes and intervention

(Krueter and McClure, 2004). With this recognition, health practitioners need to be culturally sensitive to their approach, such as using culturally sensitive health education materials for HIV-related interventions with racial and ethnic minority groups (Herek *et al.*, 1998).

The complexity of Malaysian cultures makes it very difficult for health practitioners to deliver health messages to all its populations. Tailoring and audience segmenting are ways that could meet the obligations to promote equity and obtain comprehensibility. Each requires the provision of equivalent but culturally appropriate messages to populations with different socio-cultural backgrounds and levels of health literacy (Guttman, 2003). However, some practitioners feel that this idea is not practical to implement in their setting because of the constraints, for example producing different health education materials for different audiences will involve massive amounts of money. Therefore, it can be argued that social marketing concepts are not being employed due to being expensive and difficult to apply. In addition, they argued that the facts on HIV/AIDS they are trying to convey are universal and the same for everybody. The only approach they are using is to produce the same health education materials, especially printed materials, by using three main languages namely, Malay, Mandarin and Tamil.

In delivering sexual health messages, health practitioners not only faced constraints from the audience but also from the providers themselves. This study showed that, health practitioners (such as nurses) find it embarrassing and have difficulties in

discussing sexual health matters in a calm and objective ways to their audience. This is similar to other findings (such as Klien *et al.*, 1994; Kuhn *et al.*, 1994; Scott and Thomson, 1992) that teachers are uncomfortable talking with students about sexual relationships because of cultural and social inhibitions. One reason for such inhibition is that there are no universal or socially acceptable and appropriate words to describe the intimate parts of the body and sexual activities, other than offensive slang words used amongst the various ethnic populations. Furthermore, the categorisation of unhealthy areas of life related to HIV such as drugs abuse and illicit sex creates its own stigma. Those who are involved in these unhealthy activities are often regarded as immoral and face disapproval from the community. For example, it is believed that if some contract the disease, it is their own fault or as a 'punishment from God' because of their unhealthy activities, and even worse that it is ones 'fate' to get infected by the deadly disease. This is parallel with 'victim-blaming' and the individual carries the sole responsibility for their own health. Under these circumstances, HIV/AIDS has been constructed as a disease of 'bad people' and will not happen to 'good people'.

In summary, HIV/AIDS prevention is being developed and implemented on a nationwide basis, and the implications of successful outcomes of such activities demand a clear understanding of the cultural influences on health beliefs and practices of the target audience. Malaysia is a multi-racial country and multi-cultural society. Therefore, promoting sexual health is a complex dialogue between

health practitioners and the target audience and the ability of both to put those health promotion messages into practice.

6.1.6 Adolescent's perspectives on the PROSTAR programme

Empirical evidence shows that the PROSTAR programme has been seen by the adolescents as a general programme while it is seen as a disease based programme by the practitioners. Adolescents felt that the programme not only addressed the issues of HIV/AIDS and STIs, but also social problems faced by young people. Meanwhile, from the views of health practitioners, this programme addresses issues of sexual health, especially HIV/AIDS, or in other words is a disease-based approach. The adolescents not only gain knowledge, but also meet new friends and share their experience. Through this programme they can build up their networking and gain correct information on sexual health matters. New skills such as leadership, communication and management are learned. However, at ground level these, peer-educators still needs the support from the health staff to conduct and facilitates the programme for their peers.

This study also found that although this programme gives lots of benefits to adolescents, it only benefits the young who actively join the programme. The strategy of selecting only the good students to join the training is seen as neglecting the other young people who really need to be exposed to the sexual health programme. There is a worry that these groups are left with a lack of knowledge on

HIV/AIDS and a lack of life-skills. Lack of promotional activities was seen by the adolescents as the main reason why some of the adolescents do not know about the existence of the PROSTAR programme. Even if they have heard about the PROSTAR programme, some do not know what it is and where to get further information. Therefore, progressive health promotion activities are important for the PROSTAR programme to be sustained and known by the adolescents.

6.1.7. Adolescent's dilemmas

In this study, there are three main dilemmas faced by adolescents. They face dilemmas in seeking health information, talking with parents about sexual health matters, and their responding to fearful health messages. These factors were suggested by the participants, but what is said often contradicts to what they are intending to do. This is due to some factors as discussed below.

6.1.7.1 Health information seeking

Since the beginning of the AIDS pandemic numerous efforts have been made to inform the public about the disease through all means of communication such as television, radio, newspapers, magazines, health education materials, interpersonal communication, etc. This was done to give the public knowledge and raise awareness on AIDS. As printed materials were widely used, this needed the target group to have the ability to read and understand the information provided.

Generally, the use of leaflets or booklets to deliver health messages by the provider is to support interpersonal communication. Meanwhile, radio and television were used to target large groups of viewers and listeners. However, due to their nature, sexual health matters are very much taboo and hence stigmatised, so television, radio and newspapers are not the popular means of health communication in Malaysia. This is ironic given that most of the participants preferred television as their channel for sexual health information.

As interpersonal communication is widely used for sexual health communication, professional groups such as teachers and health workers were the most mentioned source of HIV/AIDS information by the adolescents besides their friends and the mass media. The credibility of the source is of importance to the adolescents as they need to get the correct information. As most Malaysian adolescents are still attending school, the teacher is the most convenient person to talk to about sexual health because they are approachable. The nature of the relationship between the teacher and student makes it easy for them to interact because they meet each other almost everyday. Therefore, for the dissemination of sexual health information to be effective and accurate the teachers need to be trained as sexual health communicators.

Information provides knowledge and understanding; it enables people to plan and remain active, as far as possible. This in turn provides a sense of control that is critical to maintaining confidence and self-esteem. An understanding of information

seeking behaviour is important if HIV/AIDS control programmes are to be effective. However, taboos and stigma related to the disease itself in most cultures mean that gaining a true picture is difficult and requires considerate cultural sensitivity (Ward *et al.*, 1997). Physicians are generally seen by adolescents as credible sources of health information, however they only seek health services when they fall ill.

Parents are an ideal source for sexual health information. But the young people do not have the confidence to talk to the older ones about the sexual health issue, because they assume that the elders might not listen to them because of the gap in age, knowledge and experience. Furthermore, it is considered disrespectful and immoral, especially among the conservative community for the young to talk about sexual health matters. Some of the young people also mentioned that they would have no difficulties in talking about sexual matters with their parents, but maybe their parents might not be able to communicate with them because of shyness. Consequently, young people often share knowledge and seek information from their peers. Because of the strange relationship between parents and children, the young reluctantly listen to their parents or the elders talking to them about sexual matters but rather preferred celebrities and public figures as a means to gather information about sexual health. Literature has also revealed that parents or elders are not a popular source of sexual health information compared to mass media, peers or friends (see section 2.1: p.29-30) However, seeking information from peers could

lead to incorrect information if these sources also had limited knowledge or information.

Confidentiality has to be assured for any health services involving young people because of the stigma and taboo related to sexual diseases, which could lead to late treatment and complications. The stigma surrounding HIV/AIDS makes it difficult for the adolescents to consult the physician. If they are known to consult the physician about sexual health information, their friends might think that they have the disease. Also they will be seen as loose and involved in immoral activities such as premarital sex and taking drugs.

In summary, adolescents trust health experts (doctors) and parents as the most reliable source of health information. However, because it was constructed that doctors are meant to treat illness and parents have to be respected, the adolescents feels that they do not have the confidence to initiate the communication on sexual health matters with them. Therefore, they turn to peers to share and seek health information.

6.1.7.2 Parent-child sexual health communication

The literature (see section 2.1) indicates that adolescents whose parents talk with them about sexual issues are more likely to delay sexual behaviours, and when sexually active, are more likely to use contraceptives, use condoms, and have fewer

sexual partners than those adolescents for whom this communication does not occur. A family-based approach to sexual communication can influence the adolescents to adopt their parents' values and beliefs about sexuality. In this study, the adolescents view parents as one of the reliable sources of sexual health information, however, many adolescents felt unable to discuss sex-related matters with their parents.

Parent-child communication regarding sexuality is viewed as desirable and is perceived to be an effective means of encouraging adolescents to adopt responsible sexual behaviours (Moore and Rosenthal, 1993). Although some parents discuss sexuality with their children, the predominant content of conversation revolves around socio-sexual issues and moral views (Nolin and Peterson, 1992) and focuses more on the negative outcomes of sexual intercourse and sexuality such as AIDS/STIs and unwanted pregnancy (DiIorio *et al.*, 1999). Parental roles transmitted values and rules of sexual conduct based on socially accepted values in the community present for generations. The emphasis on moral values makes it very difficult to talk openly about sexuality especially in the community where sex is considered private and personal. Saying the word 'sex' (referring to sexual intercourse) sometimes can make someone uncomfortable. In this study, adolescents found that they are shy to talk about sexuality with their parents even though they are saying that their parents are knowledgeable about this topic. They are worried that if they ask questions about sex to their parents, their parent might think that they have had intercourse. In the conservative society, sex before

marriage is condemned as immoral and against the norms of the society because it can bring embarrassment to the family. From this perspective, adolescents see their parents as more restrictive in sexual attitudes. Close-minded parents make it difficult for the adolescents to discuss sexuality openly and they ended up discussing the issues with friends who might have the same or limited knowledge.

Although there are obstacles to talking about sexual matters between parents and children, parents can still be a major source of sexual information. It could be suggested that adolescents should have complete understanding of how they are growing and developing from their parents and not other sources, such as friend and mass media. As a result of this, adolescents suggest that sexual health programmes should also involve parents, such as organising family days. With both parents and children involved in the activity, the children have the opportunity to ask their parents if they need more information. This suggested that parents need to be trained as sexual health communicators for their families because adolescents' attitudes are more strongly related to values learned at home. Nevertheless, improving information outreach to adults could help increase parents' desire to support their children in obtaining accurate and comprehensive sexual and reproductive health information (Raquel and Jorge Diaz, 1996).

In Malaysia, parent-child communication is becoming limited, especially in the urban areas where both parents are working. Many parents are constrained by time when talking to their children. Quality time and the relationship between parents

and children are important in early childhood care and development (Zulkifli and Low, 2000). As both parents are working and the children attending school, they have a limited time to talk at home, especially when both parents are busy at work and coming home late in the evening when sometimes their children are asleep. Talking about sexual matters needs both sides to feel comfortable and relaxed. Therefore, in this situation, where time with the children is limited, communication about sexual matters between parents and child is very difficult or unlikely to occur. Most of their time is spent outside the family circle such as with friends.

6.1.7.3 Fear appeal health messages

The AIDS education campaign designed by the Malaysian government is very conservative in its presentation and relies on fear as the primary motivation to control the spread of AIDS. The strategy is to tell people to stop using drugs or prostituting themselves. These actions are followed by the use of legislation to prosecute drug users and prostitutes because it is illegal in the eyes of Malaysian law. Through the years, HIV/AIDS prevention had used fear appeals as a strategy to keep the public informed and aware of risky sexual behaviours and drug use. Persuasive messages that arouse fear such as 'AIDS is a killer', 'No vaccine for HIV', and so on, have been used by health practitioners. This study found that adolescents prefer persuasive messages that place an emphasis on the consequences of AIDS. The health education materials printed with real pictures of the disease consequences are seen as being more effective than just text. They believed that by

looking at the real picture they can have a better understanding and feeling of the disease and raise awareness of the disease. Presently, most of the health education materials, especially the printed materials, are textual resulting in most young people not reading them. Abstracts and cartoons are also recommended by the young people. However, to print a real picture on the health education materials has its obstacles, especially if it involves the intimate parts of the body. For example, the pictures of damage on the sexual organs by STIs are not acceptable to some people.

Even though young people suggested that fear appeal messages contribute to awareness and fear of AIDS, they felt that they were not necessarily good at allowing young people to realise that they are themselves vulnerable to the disease. They have the tendency to view HIV/AIDS as something which happens to other people who are 'different', either in their behaviour or their sexual orientation (Carlisle, 2001). The modes of HIV transmissions, as portrayed and publicised through the media, imply that HIV is a disease contracted through personal behaviour, namely sexual practices and drug use. Therefore, the young feel that they are not indulging in risk behaviours so they are not going to get infected by HIV. Furthermore, the negative image of HIV/AIDS that's always associated with illicit sex or promiscuous behaviour causes stigmatising that HIV/AIDS only happens to bad people, rather than people with health problems (Low *et al.*, 1995; UNAIDS and UNDCP, 2000).

In summary, while young people have a fear of AIDS, they feel that they are not vulnerable to HIV infection as they are not indulging in risk behaviours.

6.1.8 Adolescent's health literacy: self-efficacy and self-esteem

Functional health literacy is often measured by a validated quantitative scales i.e. Test of Functional Health Literacy in Adults (TOFHLA). TOFHLA is directed toward capturing numeracy and reading comprehension skills in the middle to low levels of literacy ability (Nurss *et al.*, 1995). It was not, however, used for the study with its focus on perception and beliefs. The participants' health literacy was obtained through interpreting 'what was said' during the focus group discussion. The self-efficacy of participants was examined by giving an exercise or scenario to the groups (see section 3.3.4: p.116). The results of the exercise were 'measured' by comparing them with the participant's knowledge on HIV/AIDS. The aim was to examine the ability (self-efficacy) of the participants to use or apply their knowledge in real life and the ability to cope (self-esteem) with peer pressure. Even though they have the ability to cope with peer pressure but they are also in the dilemma associated with friendship and belong to the group.

Building positive self-esteem provides opportunities for young people to develop positive self-efficacy and fosters in young people the belief that they have control over some aspects of their lives and experience, which is central to them becoming an empowered individual. This study found that the emphasis on the PROSTAR

programme was on giving knowledge to the recipients, the adolescents. Overall, the adolescents have the knowledge and accurate facts regarding the spread and prevention of AIDS. They know that HIV can be transmitted from mother to foetus, by transfusion of contaminated blood, by sharing of needles to injecting drug and semen fluids. However, few of the participants knew that the use of condoms could prevent the spread of HIV. This could be attributed to the lack of emphasis given to messages on sex and the use of condoms in the AIDS educational activities (Rahim and Pawanteh, 2001).

Even though these adolescents have a good knowledge and have trained as peer-educators, they stated that they are not comfortable in delivering the information related to sex and lack confidence in their abilities. Even though training is given, practically, these adolescents lack in confidence to allow them organise their own activities due to limited organisational skills, time and funds. The emphasis on skills-building is important because research (such as Howard, 1985; Hynes and Bruch, 1985; Kipke *et al.*, 1993; Rotheram-Borus *et al.*, 1990) has found that skills-building programmes have been shown to be effective in changing adolescents' risk behaviour associated with sexual activity – STIs and HIV.

In this study, the major challenge faced by the adolescents was self-efficacy. Even though they possessed good knowledge on HIV/AIDS prevention, they have difficulties in applying it to the situations that require them to make a decision. Such as, “if they have a friend who is hard on drugs and engages in sexual

relationships with sex workers, what should they do to their friend?" Most of their responses were "giving advice to their friend on the consequences of taking drugs and engaging in multiple sex partners", and that "the practice was against the religion". The expected answer to this situation was "use condoms" or "do not share needles". As mentioned above, this could be attributed by the lack of condom discussions on sexuality. Mostly the discussion was on abstinence and "no" to premarital sex.

Even if sex education is lacking in discussion about condom use, some of the participants also have difficulties coping with people living with HIV/AIDS. Misperception about AIDS still exists, which leads to the people themselves being unsure of what to do if their relatives or family members become infected by HIV. They still have the fear that they might get infected if they have contact with the patient even though they know that HIV cannot be transmitted through personal or close contact such as shaking hands and hugging. Knowledge about etiology, effect, and causes of AIDS are known by young people, but self-esteem and skills such as decision making is still needed to help them to make wise choices. Giving knowledge and awareness alone seems to be insufficient if self-efficacy and self-esteem are of concern.

It is reasonable to expect the adolescents involved in this study to achieve functional health literacy (level 1). They have the basic knowledge of HIV/AIDS and understand the ways by which HIV can and cannot be transmitted. This is

known through the discussion on HIV during the focus group discussion. However, interactive health literacy (level 2) and critical health literacy (level 3) in Nutbeam's hierarchy appears to be in doubt. Even though there is no specific test done, from the results of the focus groups, the participants seem to be struggling in areas such as problem-solving, communication and decision making. The results of the focus group discussions found that the adolescents struggle to demonstrate functional health literacy e.g. coping with peer pressure in using drugs and engage in sexual risk behaviour.

From the findings of this study, it can be revealed that adolescents need to achieve some levels of knowledge, attitudes and values, behavioural skills and social support to improve their sexual health literacy.

- Being accurately informed about HIV and STIs transmission and the nature of the infection before they become sexually active or engage in drug use.
 - Identifying and rejecting inaccurate information and stigmatising myths relating to HIV/AIDS, and speaking and acting out against social discrimination of people concerned.
 - Developing life skills to protect themselves and others from infection, such as communication skills, decision-making skills and problem solving, creative and critical thinking, coping with emotion and causes of stress.
- Knowledge alone is not enough.

- Understanding the symptoms of HIV/AIDS and being able to personally seek and inform others in need about appropriate resources, counselling, and necessary medical care.
- Fostering empathic attitudes towards those who are infected with HIV.

In summary, the importance placed on developing self-esteem is based on the belief that a young person with a positive view of themselves and an inner confidence will possess stronger psychological characteristics, which will increase their self-efficacy and enable them to resist pressures to engage in potentially health-damaging behaviour. Personal competencies are of importance for the young people to make the right choice in health.

6.1.9 Articulating the silences

It was never intended that the research reported here would evaluate the effectiveness of the PROSTAR programme. However, it is significant that issues of effectiveness were never mentioned by any of the parties interviewed. This issue was raised by the researcher in some of the interviews but none of the participants could give a clear answer. It was found that the PROSTAR programme was developed without specific health indicators⁶ to measure its impact and

⁶ Health indicators can be used to define public health problems at a particular point in time, to indicate change over time in the level of the health of a population of individual, to define differences in the health of populations, and assess the extent the objectives of a programme are being reached. Health indicators may include measurement of illness or disease which are more commonly used to measure health outcomes, or positive aspects of health (such as quality of life, life skills, or health expectancy), and of behaviours and actions by individuals which are related to

effectiveness. The only quantitative evaluation of the PROSTAR programme was done by Rahim and Pawanteh (2001). However, the study has emphasised the awareness of AIDS amongst the adolescents. The issue of evaluation has become the challenge for health promotion in Malaysia; the traditional biomedical approach to evaluation putting too much concentration on outcomes measures and indeed on quantitative data is an outmoded and inappropriate way to measure the effectiveness of health promotion programmes and interventions (Nutbeam, 1996). In a medical environment evidence-based health care relies on the logical-positivist paradigm and is epitomised in the randomised control trial which is found to be inappropriate to measure the effectiveness of health promotion programmes. Due to the complexity of health promotion evaluation, health practitioners have some 'fear' in talking about health promotion evaluation. This is because health promotion took place within a natural and complex setting (the community or society) and it was notoriously difficult to control all the variables that might affect health (Macdonald and Davies, 1998). Furthermore, to evaluate the effectiveness of large-scale health promotion programmes has proved difficult due to the difficulty of isolating environmental and multimodal interventions' effect and assessing their impacts on health status outcomes. For example, empowerment theories are based on the belief that equality and equity of participation are related to access to needed health services and physical and mental health status. But they are also based on the idea that participation is a right of citizenship. The implication is that evaluation is not

health. They may also include indicators which measure the social and economic conditions and the physical environment as it relates to health, measures of health literacy and healthy public policy. This latter group of indicators may be used to measure intermediate health outcomes, and health promotion outcomes (Nutbeam, 1998:10).

the norm and culture of health promotion in Malaysia, thus many health promotion programmes were not evaluated.

6.2 Interface of health communication and health literacy in the context of the PROSTAR programme

The findings in this study indicate that the conceptual framework based on the literature and developed (Figure 2.4, p.98) does not apply to the Malaysia situation. It was found that Malaysia does not have the interface which can link health communication and health literacy. This problem is the result of the PROSTAR programme being developed without consulting adolescents. The most interesting finding was that, even though the PROSTAR programme was developed solely by the health expert, the adolescents responded positively to the programme. The only interface found to exist is the notion that it is for the 'public good' (Guttman, 1996). In this notion, the PROSTAR programme is likely to benefit the target audience and the population as a whole. Not only do the adolescents who responded to the programme benefit, but also the management of the public health in their efforts to control and prevent the spread of HIV/AIDS. The PROSTAR programme is seen by both health practitioners and adolescents as a programme that benefits not only the individual but also the public as a whole. Both 'compromised' that the adolescents will likely benefit by knowing the facts about HIV/AIDS and STIs and learning new skills such as decision making, communication, coping with peer pressure, and management. Meanwhile, on the health practitioner's side, the PROSTAR

programme will likely benefit in terms of disease prevention and could reduce the number of HIV/AIDS cases. Furthermore, the programme comes from the government (public service department) and is passed to the public (top-down) who sees the programme as 'for the public good' (fight against HIV/AIDS).

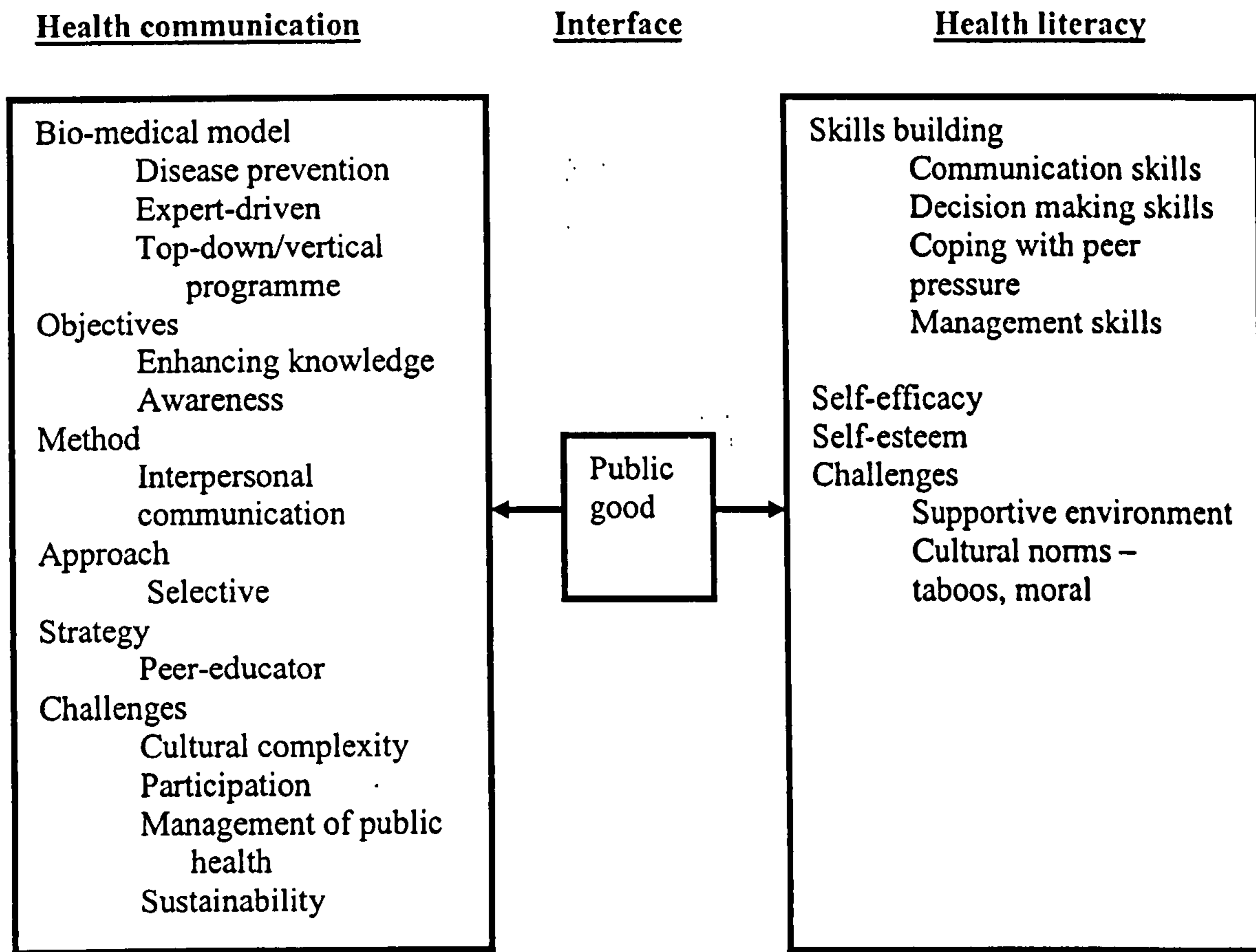


Figure 6.1: Framework for adolescence HIV/AIDS health communication and health literacy in Malaysia.

In the previous framework (Figure 2.4, p. 98), health communication and health literacy were linked by the notion of participation, culturally appropriate approach and needs assessment intervention. However, these approaches have been found to

be difficult to adopt by the PROSTAR programme because of a top-down management programme. Health intervention was constructed by health professionals because of the emergence of life-threatening diseases such as AIDS. Health interventions then are directed to the target audience, who are expected to accept the truths of public health authorities without question (Lupton, 1995). The implications of this approach result in the PROSTAR programme being accepted by only certain groups of adolescents - the Malays.

Empirical evidence shows that Malaysia still practises health education and disease based prevention rather than health promotion as a whole. However, good health is not about living without the absence of disease or infirmity but also a state of complete physical and social well-being (WHO, 1946). Importance is also attached within health promotion to the provision of information and life skills, the creation of supportive environments, providing opportunities for making healthy choices and the creation of health-enhancing conditions in the economic, physical, social and cultural environments (Tones and Green, 2004). If the key principles of health promotion (see Section 2.2.1) are to be followed and adopted, promoting health is not only the responsibility of health promoters but also involving collaboration with other government agencies such as housing, education, etc. and non-government organisations. At present, the nature of health promotion in Malaysia is being controlled by the 'power' of health expert authority. These health experts hold the responsibility to control the outbreak or occurrence of certain diseases especially communicable and non-communicable diseases and have a priority to introduce and

develop programmes based on a bio-medical model perspective which leaves minimal negotiation with key stakeholders about appropriate strategies and techniques for the delivery of such a programme in order to work optimally with all target groups. Health promoters are required to implement and monitor these programmes. The method of information dissemination used is largely a didactic approach, top-down communication, expert-driven and individual-focused. The target audience for health programmes is seen to be passive, vulnerable and has to be protected. The audience were persuaded to adopt recommended health actions rather than health as an individual choice. Therefore, health promotion as it is advocated by health practitioners is yet to be fully implemented and is just 'rhetoric' or in other words, 'socially constructed health promotion'. To justify what is regarded as 'health promotion', the activities have to be consistent with the values position of health promotion such as equity and empowerment, health as right, voluntarism, autonomy, participation, partnerships and social justice (Tones and Green, 2004). Based on this investigation's finding, a modified interface for health communication and health literacy for an adolescent sexual health promotion programme in Malaysia is suggested in comparison to that of section 7.3 in this thesis.

6.3 Conclusion and overview

This chapter demonstrates how the findings of the research reported within this thesis both reflect and add to the existing knowledge on health communication and

health literacy. Cultural diversity issues, participation and self-efficacy have been the major issues discussed within the framework of health communication and health literacy. The issues mentioned above can offer the platform for further research and exploration, such as the role of health communication to address the self-efficacy and self-esteem of the target audience.

In the following chapter, the discussion presents a summary of the previous chapters, recommendations for further research, recommendations for the interface of health communication and health literacy for the PROSTAR programme, as well as providing a conclusion for the study.

CHAPTER SEVEN

CONCLUSION

7.0 Introduction

The discussion in this chapter begins with the summary of all the chapters. Secondly, this chapter will present some recommendations for enhancing the interface between health communication and health literacy for adolescents HIV/AIDS programme in Malaysia. Thirdly, this chapter will present some recommendations for further research. Fourthly, recommendations for the framework of health communication and health literacy for the PROSTAR programme are presented. Fifthly, some recommendations for the effectiveness of sexual health communication in general are listed. These recommendations are to support the framework of health communication and literacy as discussed with the awareness of some enabling and disabling factors within the Malaysian context, and this is followed by some concluding remarks.

7.1 Summary of chapters

Chapter 1 presented the social and political background to health promotion in Malaysia including the history of HIV/AIDS and the government response in the form of the PROSTAR programme which is the context for this study on the interface between health communication and health literacy.

In Chapter 2, the wide range of literature on adolescence sexual health behaviour, health communication and health literacy was discussed. Adolescents were seen as passive objects and need to be protected as they are vulnerable to HIV/AIDS and other STIs because of their high levels of sexual activity, sexual experimentation, often with multiple partners, and their failure to use condoms consistently, or even at all. Hence health education and promotion programmes were developed to prevent young people from becoming infected by HIV. The principles of social marketing (4Ps - product, price, place, and promotion) also known as marketing mix have been advocated by health promotion by applying a customer orientation to understanding what the target audiences currently know, believe, and do. The term 'health communication', has been adopted to describe a field of endeavour directed towards disseminating information about health and illness to members of the public through interpersonal communication. Cultural complexity has become the major challenges in health communication. It was suggested that health practitioners need to be culturally sensitive to their approach, for example by using culturally sensitive health education materials for HIV-related interventions with racial and ethnic minority groups. A well designed communication campaign can play an instrumental role in facilitating behaviour change, but the behaviour change process takes considerable time and behaviour is, of course, notoriously difficult to change. The target audience needs the cognitive and social skills that determine the motivation and ability of individuals to gain access to, understand and use information in ways that promote and maintain good health.

High literacy levels are not prerequisite and do not necessarily guarantee that a person will respond in a desirable way to health education and communication activities. However, building a positive self-esteem, providing opportunities for young people to develop positive self-efficacy, and fostering in young people the belief that they have control over some aspects of their educational experience or lives within school, are all central to them becoming empowered individuals. This has become the main challenge for health literacy. Inadequate health literacy has been found to have its impact on the healthcare system, for example by bearing the cost of hospitalisation, treatment, staffing, training of physicians, laboratories, etc. Meanwhile, low health literacy individuals cannot be empowered consumers in a market-driven healthcare system, taking care of themselves and their family members, failing to seek preventive care, navigate the health care system and to understand the language of health care provider. It could be suggested that improved health literacy enables healthy lifestyle choices, and effective use of health services. Finally, this chapter presents the conceptual framework to understand health communication and health literacy.

In Chapter 3, the discussion was focused on methodology and study design. Social constructionism has been used as a focal point for the research which was aimed at exploring the insights of the participants. Thus qualitative methods such as in-depth interviews and focus groups were used because they were found to be better suited than quantitative methods to explore the practices of health communication by the practitioners and the health literacy of the adolescents. Qualitative research provides

the participants with the opportunity to account for their experiences in their own words and is consistent with the social constructionist approach. The participants for this research were the health practitioners and adolescents who responded to the PROSTAR programme. The results of the study are presented in Chapters 4 and 5 of this thesis.

In Chapter 4, the health practitioners' perspectives were explored with regard to the practice of health communication and the PROSTAR programme. The respondents for this stage were health practitioners with particular reference to the PROSTAR programmes, from the Ministry of Health Malaysia. The use of open-ended questions in this study allows the participants to elaborate their own ideas, experiences, thoughts, and memories using their own words, terminology, and language structure. The interviews were taped recorded and transcribed before they were analysed. Overall, there were five main themes (and various sub-themes) to emerge from that data, namely, health practitioners' understanding of health communication and the reason behind the uses of health communication, delivering of sexual health messages to the target audience, the implementation of the PROSTAR programme, and the obstacles and suggestions for effective health communication.

Chapter 5 addresses the second research question, 'what have been the experiences and perspectives of the adolescents from the PROSTAR programme?' The FGDs were used to gain an insight into the experiences of the participants regarding the

PROSTAR programme and to determine consensus on a number of issues. This study found that word-of-mouth and teachers were the main sources of information for finding out about the PROSTAR programme. Above all, the most interesting finding was that, while participants are knowledgeable about HIV/AIDS prevention they struggled to use this knowledge in the exercise given during the focus group discussions.

In the discussion presented in Chapter 6, it was found that health practitioners faced challenges in delivering the PROSTAR programme such as from the public health management, cultural constraints and applying the principles of health promotion to the Malaysian setting. Meanwhile, the adolescents experience a dilemma talking about sexual matters with their parents and deny they are vulnerable to HIV and STIs. With regard to health literacy, it was found that the adolescents struggle with self-efficacy and their self-esteem even though they are knowledgeable about HIV/AIDS prevention.

7.2 Recommendations for further research

A number of issues have emerged from the research discussed in this thesis. Firstly, parents are key players in sexual health communication. However, there are barriers preventing parent-child communication from working effectively. Therefore it is suggested that further research needs to be done to find ways of overcoming those barriers. Also, it is important to know why some parents are reluctant in talking

about sexual matters to their teenagers even though they are the main person(s) trusted by the adolescents as a reliable source of information.

Secondly, it is important to study the adolescents' level of health literacy based on Nutbeam's (2000) three level of health literacy. In this thesis their self-efficacy and self-esteem are only 'measured' through an exercise given during the focus group discussions. More in-depth study can be done to determine the adolescents' knowledge and practice in their everyday lives.

Thirdly, more research exploring the relationship between sexual health communication and ethnicity would be valuable (e.g. Malay, Chinese, Indians and other indigenous groups). I researched the Malays' and Muslim perspectives predominantly. It would be interesting to know how the non-Malay ethnic groups perceived PROSTAR and deal with the issues of AIDS.

Fourth, as indicated in section 3.3.1(p.87) this study only involved the adolescents who attended the PROSTAR programme. Therefore, the perspectives of the adolescents who did not attend were not known. Further research can help determine the perspectives of the non-participant adolescents who were aware of the PROSTAR programme and also for the adolescents who had never heard about the PROSTAR programme.

Fifth, the PROSTAR programme was meant for healthy adolescents. Drug users are the group most vulnerable to HIV infection. Therefore, the opinions and perspectives of the drug users on HIV/AIDS intervention programme also need to be explored.

Finally, in this study, peer-educators were found to be widely used to disseminate and share the sexual health information with their peers. However, not all trained peer-educators have the ability to conduct the activities for their peers without the support of health officers. An in-depth study can be done to understand the perspectives of the adolescents on peer-education approach for the health promotion programme.

7.3 Recommended framework for improving health communication and addressing health literacy in the PROSTAR programme

With reference to Malaysia, this section presents some recommendations on how health communication and health literacy might be improved. This model is presented to give suggestion to enhance the already existing model (Figure 6.1) which is currently practised by health practitioners. This suggestion was built upon the principles of health promotion and discussed below.

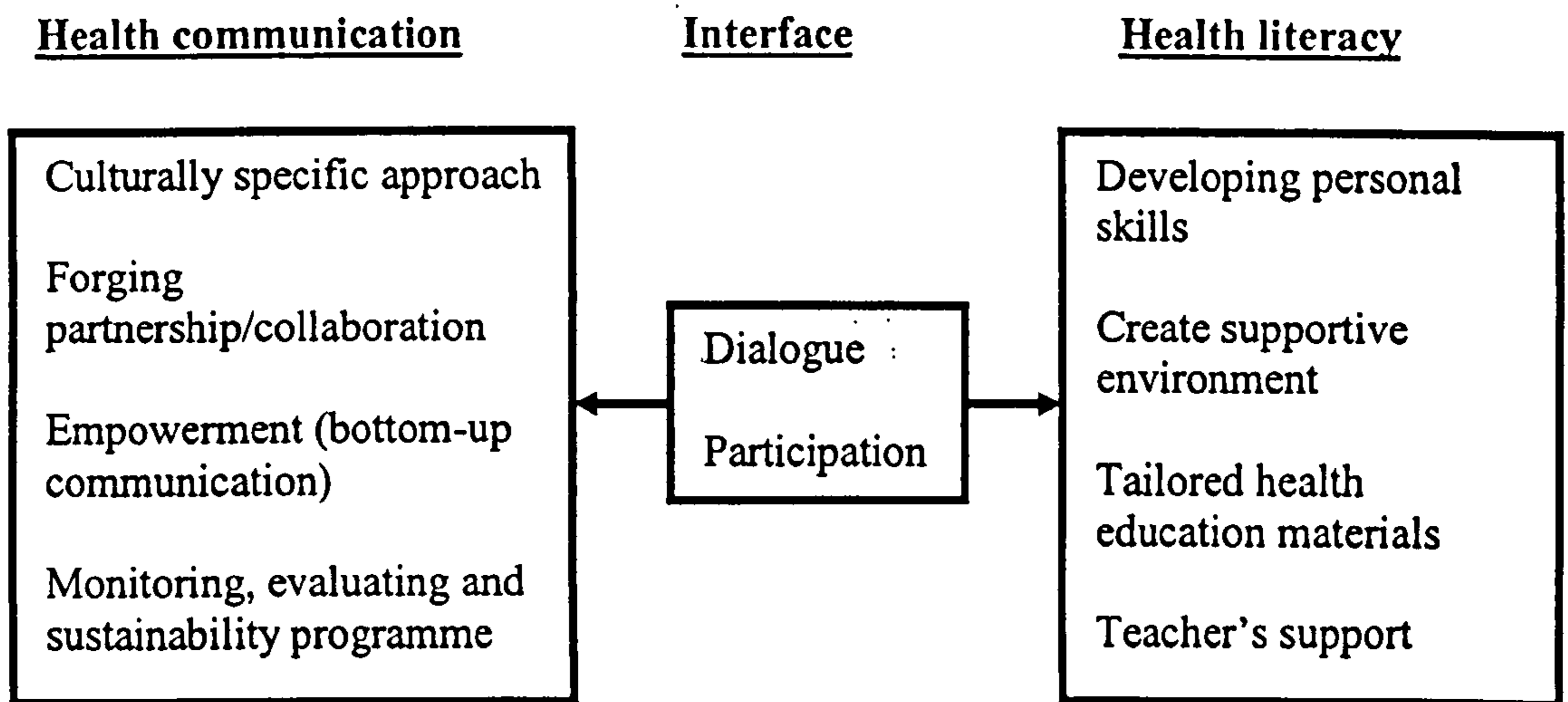


Figure 7.1: Recommended framework for improving health communication and health literacy for PROSTAR programme in Malaysia

7.3.1 Health communication

7.3.1.1 Culturally specific approach

Multicultural approaches to health communication have a larger potential audience than a culturally specific approach. They can be used with several ethnic and racial groups rather than only one and may be more economical to produce. However, based on the cases of HIV/AIDS in Malaysia, a culturally specific approach could be appropriate because of the inequality of the distribution of HIV and AIDS cases amongst its population, where the Malays are the most affected by the disease. Even if a multi-cultural approach is adopted, it is very hard to implement because the emphasis is towards the dominant cultures and values of the Malays and Muslims, which will create uneasiness and prejudice amongst other ethnic groups (non-Malays). Therefore, with the existence of dominant norms and values, a multi-cultural approach might not be an appropriate approach for HIV/AIDS

communication in Malaysia. The principle of social marketing, the so-called audience segmentation and 4Ps (product, price, place, promotion) can be applied to understand what the target audiences currently know, believe and do. This is so that the needs and wants of the people can be actively solicited, attended to, and acted upon in programme planning, delivery, management, and evaluation.

7.3.1.2 Forging partnership

Effective health promotion needs concerted efforts by a number of players, including government at all levels, many sectors of society, such as social services, education, environmental protection and healthcare, the media and non-government organisations, and all public and private sectors (Tones and Green, 2004). As most of the adolescents in Malaysia are attending schools, colleges and universities, therefore, to capture them, collaboration with the education sectors is important. Schools play an essential role in adolescent health promotion and disease prevention (Leger, 2001). After the family, the school may be the primary social institution influencing adolescent health behaviour. Long-life education is an essential factor in preparing adolescents to lead healthy, socially rewarding, and economically productive lives. Therefore schools are essential in achieving health literacy. Schools contribute to the achievement of public health goals in conjunction with their educational commitments (Leger, 2001). Educational programmes, in addition to providing relevant knowledge, should focus on motivational issues, and on developing communication skills and recommended health behaviours (Catania

et al., 1989; DiClemente *et al.*, 1989; Carmel, 1990; Fisher *et al.*, 1992). Besides that, sexual health subject can be incorporated in the National Service Programme⁷ because the participants for this training are the adolescents.

A coalition of the media, NGOs that are active at grass-roots level, and the politicians and religious leaders who understand what is at stake, is needed. Media workers have to be stimulated to cover subjects that challenge dominant values, and national leaders should take the responsibility to encourage people to discuss these subjects. Issues relating to sexual health and reproductive health are often highly sensitive or even taboo to discuss openly, but when positively engaged and provided with evidence-based information, religious and spiritual leaders might be willing to collaborate. This happens especially when it can be seen that both parties are working towards a common goal, or when a health intervention is either not contradictory to religious teachings or traditional practice, or can clearly be seen to be complementary. Through mutual respect and collaboration, results can be achieved which might otherwise be hindered because of pre-conceived ideas about 'entrenched' beliefs or practices. Alliance or partnership initiatives to promote health across sectors, across professional and lay boundaries and between public, private and non-government agencies, do work. Although from this research, where

⁷ Initiated by the government, National Service Programme (NSP) was conceived out of a desire to inculcate the spirit of patriotism in the hearts and minds of Malaysian youths of eighteen years of age. A three-month stint-based programme, NSP will also tap and instill the "Malaysia Boleh" culture in the youth regardless of their racial and religious background, besides shaping them into disciplined, independent and resilient citizens capable of advancing the nation ahead. The youth of the country constitutes 60% of the population, hence their talents and energies are integral elements of national development and progress. The programme is envisioned to produce true patriots who would inherit the responsibility of integrating the various races together and nation-building (http://en.wikipedia.org/wiki/Malaysian_National_Service)

health practitioners are found to be struggling to work collaboratively with other agencies, such as the schools and local government agencies, some of the criteria in Figure 7.2 can be used for the effectiveness of health promotion in Malaysia.

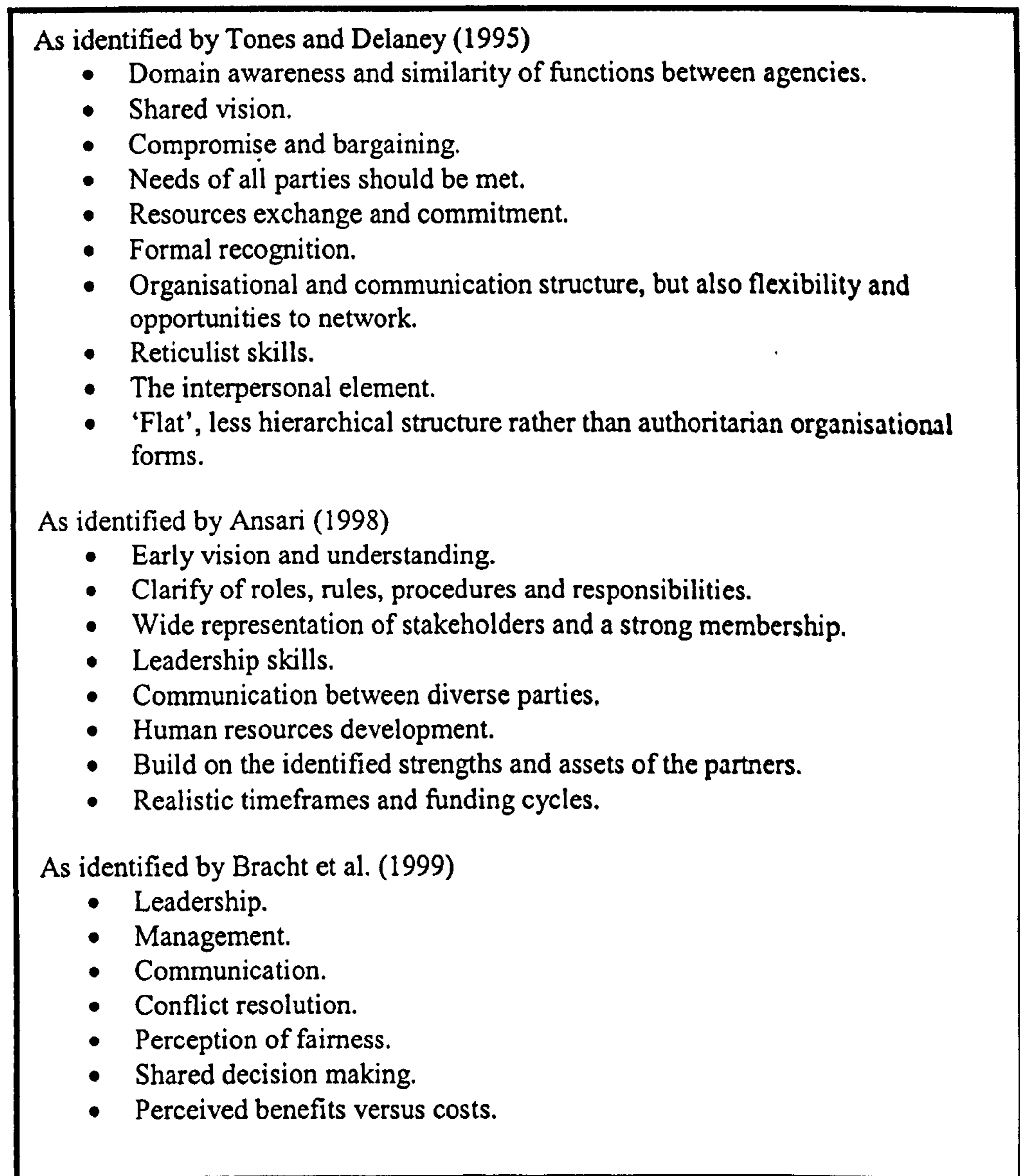


Figure 7.2: Key features of successful collaboration (from Tones and Green, 2004)

Political contexts shape the institutions which impact on individual and community level responses to health interventions. Political statements and support can give credibility to issues that are otherwise stigmatised and steeped in silence and hidden in the family or domestic fronts. Political leadership may come from a charismatic leader either at the level of the head of state, or at any other level, by visibly supporting or opposing an issue or programme. Politicians have a role to ensure that policies, programmes and practices do not exclude, stigmatise, or discriminate against people living with HIV/AIDS. Also, involving religious leaders and communities is important in the fight against HIV/AIDS, and against stigma and discrimination because of the respect and trust given to them by the community.

Links with people and organisations, including partnerships, coalition and voluntary alliances between the community and others, can assist the community in addressing its issues (Lavarack and Labonte, 2000). Partnerships of this kind could lay the foundation for sustainability, especially for the PROSTAR programme, which is meant for adolescents.

7.3.1.3 Empowerment

Empowerment is about enabling people to identify their own concerns and gain skills and confidence to act upon it. It is about the active involvement of all involved in a process, including, and especially, those who are its intended beneficiaries, using what is now often termed a 'bottom up' rather than 'top down'

approach (Weare, 1992). The activity is undertaken by and with, rather than on behalf of or to, people. The health practitioner becomes facilitator and acts as a catalyst, getting things going, and then withdrawing from the situation (Naidoo and Wills, 1994). A distinction has made between individual and community empowerment. Individual empowerment refers primarily to the individuals' ability to make decisions and have control over their personal life. Community empowerment involves individuals acting collectively to gain greater influence and control over the determinants of health and the quality of life in their community, and is an important goal in community action for health (Nutbeam, 1998). Following the doctrine of the Ottawa Charter and related developments of WHO, an active, empowered community is perhaps seen as the most important of the desirable empowerment outcomes of health promotion activities (Tones and Green, 2004). Empowerment enables the people to take an active part in influencing policy at the local and national level. In Malaysia, empowerment, including a high level of self-esteem, self-efficacy and a set of life skills, is important in the process of enhancing positive health amongst its people.

7.3.1.4 Monitoring, evaluating and sustainability of health promotion programme

Monitoring is concerned with the ongoing implementation of a programme and evaluation is concerned with a programme's effectiveness. There are two types of evaluation, namely outcome evaluation (knowledge, attitude, practice and

behavioural) and process evaluation (number of coverage or people reached and resources used) (MacDonald, 1998). Programmes must be evaluated, for example, to measure their effectiveness, to monitor progress, measure the impact and maximise cost-efficiency. Through this, the effectiveness of health communication can be known and health literacy of the target audience can be assessed. A well-designed evaluation enables full documentation about what worked and what did not for use in future planning.

For any educational activities targeted towards changing people's behaviour, effort and time is needed. Therefore, there is a need for such programmes to be sustained and funded. Even though PROSTAR was launched nearly a decade ago, yet there are still some misconceptions among the young people (Rahim and Pawanteh, 2001), including the belief that only drug users, sex workers, and homosexuals were those infected. The prejudices and misconceptions about who gets infected with HIV remain entrenched, despite the massive efforts to disseminate information over the years. This shows that sexual health education, particularly HIV/AIDS need to be carried out as a long-term programme and have sufficient funding. Therefore, health policy needs to focus on investment for health⁸ rather than expenditure.

⁸ Investment for health refers to resources which are explicitly dedicated to the production of health and health gain. They may be invested by public and private agencies as well as by people as individuals and groups. Investment for health strategies are based on knowledge about the determinants of health and seek to gain political commitment to healthy public policies. Investment for health is not restricted to resources which are devoted to the provision and use of health services and may include, for example, investment made by people (individually or collectively) in education, housing, empowerment of women or child development. Greater investment for health also implies reorientation of existing resource distribution within the health sector towards health promotion and disease prevention. A significant proportion of investments for health are undertaken by people in the context of their everyday life as part of personal and family health maintenance strategies (as adapted from Nutbeam, 1998).

7.3.2 Health literacy

7.3.2.1 Developing personal skills

People's inability to access, understand and apply health information to their own lives can have a significant negative impact on their health and well-being (Bernhardt and Cameron, 2003). Skills-building programmes have been found to be effective in changing adolescent risk behaviours that are associated with HIV and STIs (Howard, 1985; Hynes and Bruch, 1985; Kipke *et al.*, 1993; Rotheram-Borus *et al.*, 1990). Young people need to acquire skills such as decision-making, self-assertiveness, self-reflection and social communication to deal with high-risk situations, negotiating less risky activities with friends, and to deal with stress. It is fundamentally important that young people have the ability to understand, make rational decisions and to act on them. For those who believe they have the ability to successfully undertake an action, they are more likely to succeed because they set themselves higher standards, exert more consistent efforts and suffer less from stress-related disruptions during actions (Bandura, 1992b). Educational programmes, in addition to providing relevant knowledge, have to focus on motivational issues, self-confidence and on developing communication skills relevant to the specific recommended behaviours (DiClemente *et al.*, 1989).

Building positive self-esteem provides opportunities for young people to develop positive self-efficacy and fosters in young people the belief that they have control over some aspects of their educational experience or lives within school, which is central to them becoming empowered individuals (Scriven and Stiddard, 2003).

Adolescents need to access information, resources and social support to develop self-regulative skills and strong beliefs in one-self (self-efficacy). They must have the capability to overcome the difficulties inherent in changing and maintaining specific behaviour. Self-efficacy is an important factor in that it mediates the application of knowledge and skills in the pursuit of behavioural attainments and as key component of empowerment (Tones and Green, 2004). Belief in one's efficacy to exercise control is a common pathway through which psychosocial influences affect health functioning. This core belief affects each of the basic processes of personal change – whether people even consider changing their health habits, whether they mobilise the motivation and perseverance needed to succeed should they do so, their ability to recover from setbacks and relapses, and how well they maintain the habit changes they have achieved.

Building skills involves increasing the level of the adolescents' health literacy. Skills are needed not only for them being able to read, write and understand basic health messages (functional health literacy) but also to use, discuss and seek more information (interactive health literacy) and critically analyse related health situations so that they can be empowered individuals (critical health literacy).

7.3.2.2 Create supportive environment

Mostly, young people are not provided with information, counselling or support when they experience stress owing to biological changes that affect their

behaviour, attitude, personality and lifestyle. Parents are often unprepared or unable to give sufficient advice and reassurance to their children or are reluctant to discuss sexual issues with their children because of the taboo. Therefore, young people often share experiences of biological changes and sexual relationships among themselves. Hence, increasing knowledge and skills alone is not enough for adolescents. They need to be supported and provided with training and access to services to enhance their self-esteem and ability to take up recommended health action and maintain specific behaviours through counselling, consultation and advice centres, smoking cessation clinics, sexual health clinics, etc. Social support and good social relations make an important contribution to health. Social support helps give people the emotional and practical resources they need. Belonging to a social network of communication and mutual obligations makes people feel cared for, loved, esteemed and valued. Supportive relationships may also encourage healthier behaviour patterns. Supportive environments for health may include direct political action to develop and implement policies and regulations which help create supportive environments for young people. Young people participation in programme planning and development can build networks of solidarity and confidence in their social groups, building institutional capacity, empowering young people to understand and influence the decisions which affect their lives, legitimising policy and practice, ensuring that they relate more closely to perceived public need and strengthening the incorporation of local knowledge.

7.3.2.3 Tailored health education materials

The more relevant and tailored the contents and methods used are to the person's circumstances, interests, norms and values, the more likely the learning and behaviour change process will be successful (Frankish *et al.*, 1999). Moreover, the participants will find the messages more relevant, understandable, interesting and believable, and therefore they are more likely to participate, adopt and remember it, discuss it with others and perceive it as being interesting, relevant and having been developed especially for them. This is because the messages will be delivered by the person or model from their own group, using the same language as the audience, sharing key cultural values and characteristics and will be more acceptable (Trompenaars, 1993). Components of effective health literacy include readable health information, culturally sensitive materials, evaluation and assessment, formal and informal health advice, and professional health providers' network. Improving people's access to health information and their capacity to use it effectively is critical to their confidence, and being able to take preventive and prompt action.

7.3.2.4 Teachers' support

Teachers' perceptions about the involvement of peer-educators are critical to educators carrying out their responsibilities. Peer-educators can only be effective in their role if teachers are comfortable sharing the responsibilities associated with the intervention (Ebreo *et al.* 2002). One of the ways to achieve an effective teacher – peer-educator relationship is to properly educate and train teachers about the

involvement of peer educators. This can be accomplished by providing joint training for teachers and peer-educators for implementing the intervention. Training that involves both teachers and peer-educators allows both parties to understand how the intervention is implemented with mutual involvement and allows both parties to become comfortable and confident working together. The involvement of teachers and peer-educators to disseminate sexual health messages can strengthen the networking among the adolescents. This is because of the close relationship between adolescents and teachers when they attend formal education in schools. The sharing of new information and knowledge could contribute to the health literacy of the adolescents.

7.3.3 The interface of health communication and health literacy

7.3.3.1 Dialogue

In health promotion, the health practitioners can think and suggest what is 'good' for the people but the relevancy of the proposed health action with the people's daily life is only known by them (target audience). This is because skills and environmental factors can influence the individuals to attain 'good' health. Therefore, through dialogue the constraints faced by the target audience to attain the recommended health action can be made known to health practitioners and can be discussed with the target audience. Dialogue can give the target audience a greater voice and encourage them to get involved in their own health enhancing programme.

7.3.3.2 Participation

To improve the health literacy of the target audience is not only informing or advising them what to do to enhance their health but also involves the target audience in every step of the process so that they have a better understanding of the problem they face and are empowered to deal with it. Adolescents have their own experiences which can be served as the basis for sexual health education. A central theme of sex education programmes might be to explore and question the ways in which young people understand their sexuality and sexual identity (Wight *et al.*, 1998). Young people's active involvement is fundamental to programme effectiveness. Interactive educational activities can facilitate involvement, building on young people's strengths, and using these to raise the awareness of others. One of the essential components of an effective programme is listening to their needs. The participation of the target audience enables their needs and wants to be better understood, more effective messages and materials to be designed and greater insights to be gained into the contexts within which these adolescents practise behaviours. The experience from Zambia and the Dominican Republic (see Section 2.6, p.62) are found to be useful lessons for the PROSTAR programme, especially for the sustainability of the programme. Young people participation in programme planning has to be integrated in the PROSTAR programme development. This factor was found to be lacking in the existing PROSTAR programme.

Through participation trust could be established with the young and responses are more likely to be developed which address their initial present problems as they perceive them (Johnson *et al.*, 2003). The involvement of the target audience in all aspects of programme design and implementation can instil a sense of belonging or ownership to the programme and most importantly empowerment. The target audience participates in action to influence policy at local and national level. Individuals who are actively involved are likely to experience at least some degree of control (Tones and Green, 2004). The argument that participation is important for health promotion is that it gives the opportunity for individuals to have a voice and also fosters higher levels of motivation and enhances the effectiveness of intervention (Watson, 2002). It could be suggested that participation can bridge the gaps between health practitioners and adolescents. Through participation, the needs of the target audience can be known and this offers a complementary insight that should be considered alongside the epidemiological approach. The greater the level of participation in setting agendas for action and in the practice of health promotion, the larger the impact.

7.4 Some recommendations for the effectiveness of sexual health communication in Malaysia

Among others, below are some short and long term recommendations that can be adopted by sexual health communication targeting young people in Malaysia. These

recommendations are recognised as supportive factors to the framework as discussed in section 7.2.

- Appropriately selecting peer educators is one of the most important of peer-involved intervention. Only those who are interested and motivated to serve in the capacity of peer educator should be considered. The classmates should become involved in the selection process, because those who are viewed as credible by their classmates should be considered to serve as peer educators.
- Ensuring that peer educators are knowledgeable about the content of the PROSTAR programme and are properly trained on their involvement. They must be familiar with the various components of the intervention and know their role and functions as peer educators. If peer educators lack knowledge about, i.e. HIV/AIDS, this can lead to over-reliance on referral to medical staff, which may not always be needed.
- Teachers and the supervision of, and collaboration with, peer educators in the classroom also play a very significant role in the effective use of peer educators. Teachers' perceptions about the involvement of peer educators are critical to educators carrying out their responsibilities (Ebreo et al. 2002). This could suggest that peer educators can only be effective in their role if teachers are comfortable sharing the responsibilities associated with the interventions. This can be done only by providing joint training for

teachers and peer educators prior to implementing the intervention. Training that involves both teachers and peer educators allows both parties to understand how the intervention is implemented with mutual involvement and allows both parties to become comfortable and confident working together.

- Programmes should be informed by established theory which is relevant to the type of intervention planned. As discussed in Chapter 2, there are several theories and models which are commonly used to guide programme development and implementation and these can be adapted to fit most interventions. Examples of theories such as the Social Learning Theory (Bandura, 1977) claim that modelling is an important component of the learning process. The Diffusion of Innovations Theory (Rogers, 1983) explains how innovation comes to be adopted by communities and what factors influence the rate of adoption. The Social Inoculation Theory (McGuire, 1968) is premised on the belief that young people lack the negotiating skills to resist unhealthy behaviour arising from peer pressure and other influences and proposes a range of techniques which can 'inoculate' young people from such pressure, and Role Theory (Sarbin and Allen, 1968) is based on the concept of social roles and role expectations. Other theories such as the Social Representation Theory (Moscovici, 1973) is based on the system of common understanding between groups of people where the meaning is created through a system of social negotiation rather

than being fixed and the Social Network Theory (Morris, 1997) looks at social behaviour not as an individual phenomenon but through relationships. With respect to sexual relationships, social networks focus on both the impact of selective mixing (i.e. how different people choose who they mix with). The use of theories can provide the basis for judging whether all the necessary elements of a programme are in place (Piper and Brown, 1998), such as, who are the target populations, specific behaviours that put them at risk for HIV/AIDS, factors that impact risk-taking behaviours, factors that are the most important and can be realistically addressed, models or theories best address the identified factors, and kinds of intervention that can best address the above factors.

- More promotional activities have to be done to attract more non Malays to join the programme. This could be done through training of facilitators or peer educators just for the non-Malay and trained by non-Malay health practitioners. This can eliminate the image that the PROSTAR programme is designed solely for the Malays.
- Involving parents and children in the training or programmes to encourage parent-child communication. Parent-child communication regarding sexuality is viewed as desirable and is perceived to be an effective means of encouraging adolescents to adopt responsible sexual behaviours (Moore and Rosenthal, 1993). Nevertheless, improving information outreach to adults

could help increase parents' desire to support their children in obtaining accurate and comprehensive sexual and reproductive health information (Raquel and Jorge Diaz, 1996). Experience from Zambia and Dominican Republic (see Section 2.6, p.62) shows that successful youth-adult partnerships are critical in developing positive youth dynamics. These partnerships require open communication, trustworthiness, mutual respect, reciprocity and adult support.

- **Interactive intervention.** Sexual health communications have to move from traditional methods (didactic) to more interactive ones (two-way communication) and recognise that young people still want to have fun and enjoy themselves. Creative HIV/AIDS awareness campaigns such as poster competitions, drama productions, and outdoor activities are particularly popular with young people.
- **The different aspects of the intervention should be designed to fit the multi-cultural society.** Pre-testing all messages is essential so that messages address a specific objective, are culturally relevant, believable and 'do-able' by the target audience.
- **Policy level interventions.** Policy level interventions are 'enabling' approaches that attempt to remove structural barriers at a larger level. AIDS interventions have to move from solely investigating individual approaches

to multi-dimensional models of community mobilisation and structural policy level interventions i.e. sex education in school.

- Sexual health education, relevant health services, and supportive social and economic environment that will touch all vulnerable groups will reduce their vulnerability to HIV infection and strengthen their skills for protection.
- Media can play a vital role in creating an environment in which sensitive subjects can be discussed, providing legitimacy for discussion and unfamiliar protective behaviours, and modelling terms and tactics that can make discussion more probable and comfortable.
- Leaders need to move beyond their complacency and denial of AIDS and face the issues of AIDS and society.
- Finally, the aim of any health promotion programme is to produce intervention effects that can be sustained over time and this subsequently, requires ongoing funding and resources because to change people's behaviour needs time (Swerissen and Crisp, 2004). The priority is to invest in health, within and outside the health sector through sustainable financing for health promotion. All health promotion programmes have to be evaluated to enable full documentation about what worked and what did not for use in future planning and replication.

In reality, the implementation of these recommendations will be influenced by the enabling and disabling factors surrounding HIV/AIDS within the Malaysian context. The disabling factors are;

- Political and economic. The demand for the promotion of health is not as easily discernable as the demand for health services. Therefore, there is no popular pressure to urge politicians to incorporate such issues in the political agenda, and the result is an infrastructure for illness rather than an infrastructure for health. This can be seen when the government persists in patterns of spending and continues to erect large hospitals simply because they are visible and popular, and thus very useful vehicles to secure votes. Therefore, there is not enough investment in the health system and inadequate attention being paid to the coherence of investments in health systems and their medium to long-term sustainability.
- Funding. The immediate success of any health programme may depend directly on the amount of money or resources and time that the source is willing to spend because to change people's behaviour and improve their literacy level needs time. In fact many health promotion efforts fail to become sustainable because insufficient resources are provided (Goodman *et al.*, 1993). Insufficient resources mean that fewer promotional activities can be carried out and a smaller audience reached. The aim of health promotion is to produce intervention effects that can be sustained over time

and subsequently, require ongoing funding and resources (Swerissen and Crsip, 2004).

- **Culture.** The emphasis only on one dominant culture or set of values, such as Malay and Islam, can create prejudice and uneasiness amongst the minority who have and hold onto their own culture and values. The culture and values of this dominant culture might contradict those of the Chinese, Indians and other minority ethnics, resulting in reluctance to participating or response to the programme. Not surprisingly, Malaysia is still a divided community in social, economic and political terms, inheritance from British colonial rule.
- **Stigma and taboo.** The tendency to view HIV/AIDS as something which happens to other people, and particularly to people who are 'different' either in their behaviour or their sexual orientation, can lead to a stigmatising response (Carlisle, 2001) and negative stereotypes within a particular culture (Guttman, 2003). This context makes AIDS education very difficult since the lifestyles that put people at risk are illegal, particularly in a society which views drug users as criminals to be rejected rather than people with health problems (Low et al., 1995; UNAIDS and UNDCP, 2000). In Malaysia and Indonesia, for example, parents and religious leaders were reported to have objected strongly to discussions

about condoms within classrooms as a means of preventing disease transmission (Smith et al., 2003).

Even though there are some disabling factors which have been identified above, there are some potential factors that can enable progressive sexual health promotion within the Malaysian context. These factors are:

- Using the mosque approach. As a respected community leader and head of the mosque, the Imam is the recognised teacher and model for social behaviour within the Muslim community. The HIV/AIDS message can be delivered during congregational prayers and at intimate family ceremonies such as marriage, birth, and burial.
- Family approach. Parent-child communication regarding sexuality is viewed as desirable and is perceived to be an effective means of encouraging adolescents to adopt responsible sexual behaviours (Moore and Rosenthal, 1993). Family has the potential as an approach for sexual health promotion in Malaysia because of the strong family values amongst its population.
- Youth-adult partnership. Youth-adult partnerships are formed through a balancing process that requires shaping and facilitation by adults, who naturally tend to have the upper hand in the relationship. These partnerships require direct youth involvement, open communication, trustworthiness, mutual respect, reciprocity, and adult support. Adults can take a leading role

in the partnership. This approach can be utilised as an approach for sexual health promotion in Malaysia because the young people normally have respect for their elders.

- The World Bank is a vital source of technical assistance to developing countries around the world by providing grants and low-interest loans for development projects, as well as expert advice and consulting services. World Bank support is vital for the third world country in the fight against AIDS. AIDS is not only a medical problem but also directly undermines economic growth, good governance, development of human capital, the investment climate and labour productivity. Money might not be the solution, but it is part of the solution to HIV/AIDS programmes in term of funding. Funds generously allocated for AIDS by the World Bank would enable the struggle of the national AIDS programme, NGOs, communities, and the private sectors in HIV/AIDS prevention, care and treatment. Especially for young people; it is very important above all in giving these young people an HIV-free start to their adult lives.

Malaysia needs progressive sexual health education and promotion by fostering vibrant public debate, social cohesion, advocacy, free media, responsive government and an engaged civil society. A comprehensive approach to sexual health promotion also requires changing the practices of social systems that have widespread effects on human health. It focuses mainly on creating supportive policy

environment, facilitating dialogue between civil societies, policy makers, and encouraging the development of an informative, responsive and accountable local media. This includes the use of information and communication technologies (ICT). Those charged with the promotion of public health must have the appropriate skills, i.e. political and advocacy skills, as well as presentation and communication skills to push public health into the political agenda and to have health valued by political leaders and decision makers.

In summary, health practitioners must recognise that health and its absence are determined not only by genes and germs but by social, economic and environmental factors.

7.5 Concluding remarks

Health literacy has been embraced as a central concept and challenge for future health communication interventions (Ratzan, 2001; Benhardt and Cameron, 2003). The health communication and health literacy concept offers the opportunity to shift our thinking in sexual health education for the adolescent away from a simple transfer of knowledge to a more active process of empowering adolescents. The results from the interviews and focus groups gives a realistic view of what adolescents learn from the existing sexual health education and how it can be improved. By working towards the development of health communication, health literacy becomes an outcome in a health promotion programme. It could be

suggested that health literacy may be able to bring the adolescents the confidence and emotional insights which they cannot gain from other sources such as peers, media, etc.

Health communication is a central process that performs essential functions in the delivering of health information and the promotion of public health. The communication process is complex and the quality of communication in health education and promotion depends upon careful analysis and strategic use of communication processes. Health information is the key resource in health education and promotion because it is used to guide strategic health behaviours, treatments and decision-making. Meanwhile communication is the social process used to convey relevant health information to the key audiences that desperately need such information to accomplish their goals. However, for this information to be effective, the target audience has to possess a high enough level of health literacy to access the information, understand what is being communicated, and appropriately apply it to their own lives. The need for high health literacy is particularly paramount as the responsibility for healthy decisions continues to shift from practitioners to consumers in the modern era of health management (Bernhardt and Cameron, 2003) and at a time when the health system is increasingly fragmented, complex, specialised and technologically sophisticated (Parker and Gazmararian, 2003).

Knowledge is a term used frequently in health education and promotion. The assumption is that, the acquiring of knowledge leads to a changing of attitudes, subsequently leading to the changing of behaviour. Education is seen as the key to behaviour change, because if people are informed about the dangers of indulging in certain activities, it is argued that they will then rationally use this information to weigh up the risk to themselves and act accordingly (Lupton, 1995). However, this study found that the adolescents had an accurate knowledge of the risk factors for HIV as disseminated by health promotion agencies and the mass media but they did not see themselves as vulnerable group because they are not 'doing it' (taking drugs and having illicit sex). Therefore, health education and promotion need to focus on the self-esteem and self-efficacy of the target audience besides increasing their knowledge and awareness and not only focusing on the disease alone. Building a positive self-esteem, providing opportunities for young people to develop positive self-efficacy, and fostering in the young people the belief that they have control over some aspects of their lives is central to them becoming empowered individual. Personal competencies are of importance for the young people to make the right choice in health and their everyday lives. The emphasis on personal learning activities such as role-play still focuses on the individual acquiring skills. Even though the model used is still that of the health education approach, importance has to be placed on developing self-esteem, based on the belief that a young person with a positive view of themselves and an inner confidence will possess stronger psychological characteristics, which will increase their self-efficacy and enable them to resist pressures to engage in potentially health-damaging behaviour.

The didactic approach for information dissemination has to be shifted to a dialogue approach. The target audience has to engage with the programme actively and spend as little time as possible on passive tasks such as reading and listening, and as much as possible in participatory and active learning. People are more likely to be influenced by their learning if they engage with it actively and make it their own. Approaches to learning that employ a range of methods such as interactive, dialogue, etc. have been shown to be more effective than those that use a limited range (DuPaul and Eckert, 1994).

The assumptions of health promotion that underlie the model of behaviour change is that, its primary goal is behaviour change, and that belief and attitudes mediate this behaviour change. It is assumed that at least in some instances, health behaviours are mediators of health status, that health behaviour is the result of knowledge, beliefs and attitudes, and that specific behaviour, when changed, improved health (Lupton, 1995). Based on this assumption health practitioners constructed their health promotion programme guided by their tacit knowledge, experience and instinct. Health practitioners generate health programmes by defining health problems and recommending health action to solve those problems without consultation with end-users of the programme. As health communicators, health practitioners have the great potential to help shape public health policy and practices that help optimise strategic and effective use of communication in health education and promotion activities. To achieve this, it is good if health experts work

with members of the target audience to identify potential health communication barriers and are aware that people have different perceptions of reality, especially in relation to health issues. For example, adolescence has social ordering, values, cultures and languages of its own and without their participation of the adolescents, these factors cannot be identified.

When health communication interventions take place in multicultural settings, one may need to reconcile different conceptions of moral values and beliefs. Members of different groups have divergent views on the morality of different persuasive strategies. Some may prefer an emphasis on the values of personal responsibility and culpability, whereas others may want to stress social solidarity, respect for elders, or harmony with nature. Understanding what motivates people's behaviours, knowing how to address these motivations appropriately, and taking into consideration people's culture when developing programmes addressing HIV/AIDS is imperative in the fight against the AIDS pandemic. The ability to identify and describe cultures or subcultures within the population, understand how each relates to health behaviour, and apply this knowledge in the planning and development of health promotion programmes is an advantage for any health practitioners working within a multi-cultural society. In a multicultural setting like Malaysia, there is a case for arguing that general HIV/AIDS messages should be used. This is because of the taboo and stigma attached to AIDS, prostitutes and drug users. If specific messages are to be used, this could further marginalise these groups (prostitutes and drug users) from the wider population who might think they are not vulnerable to

HIV infection because they are 'not doing it' (unsafe sex and taking drugs). This could lead to the AIDS prevention programme or campaign being ignored by the 'not at risk population' and linking HIV/AIDS with only high risk group. The effect of ignoring the AIDS messages could lead to lack of HIV/AIDS knowledge and awareness among the population and the effort to shed the taboo and stigma related to this disease will fail.

In conclusion, effective health communication is imperative for enhancing the level of people's health literacy and people's health literacy is crucial for them to understand, attend to and search for more health information.

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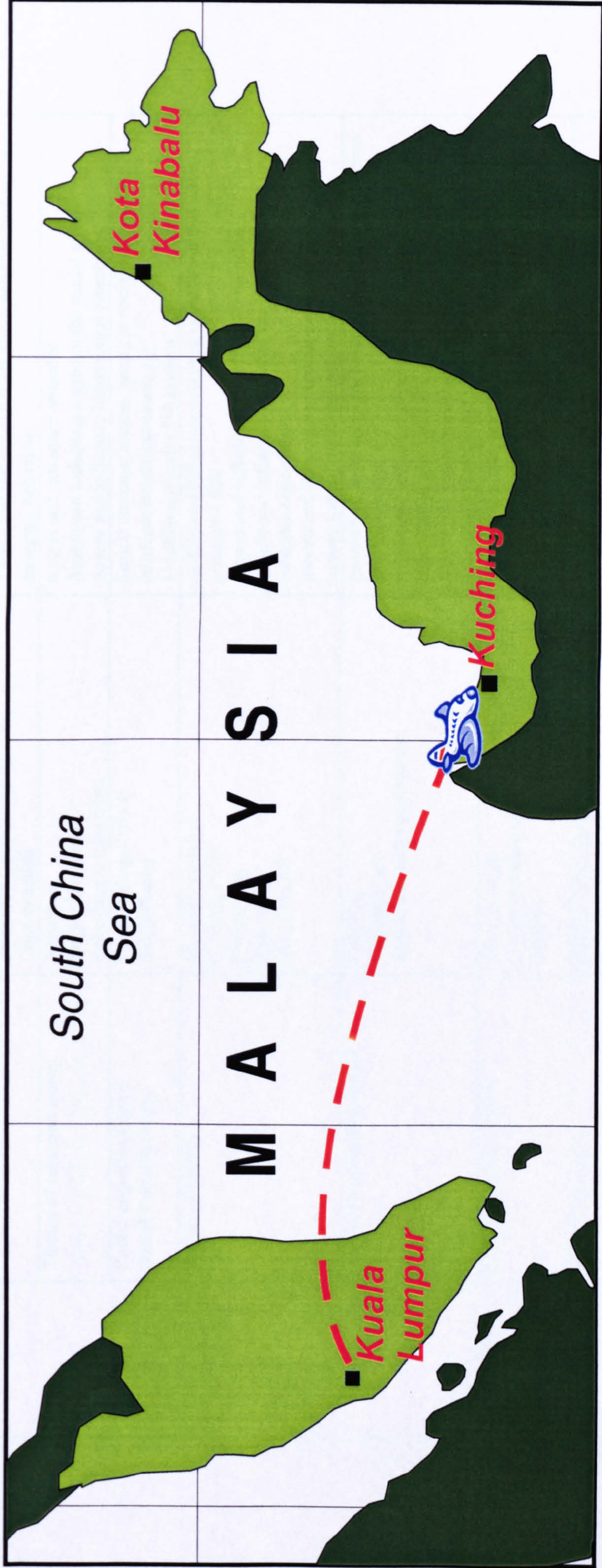
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Appendix 1: Map of Malaysia



It takes 1 hour 45 minutes by flight from Kuala Lumpur (capital of Malaysia) to Kuching, Sarawak.

Appendix 2

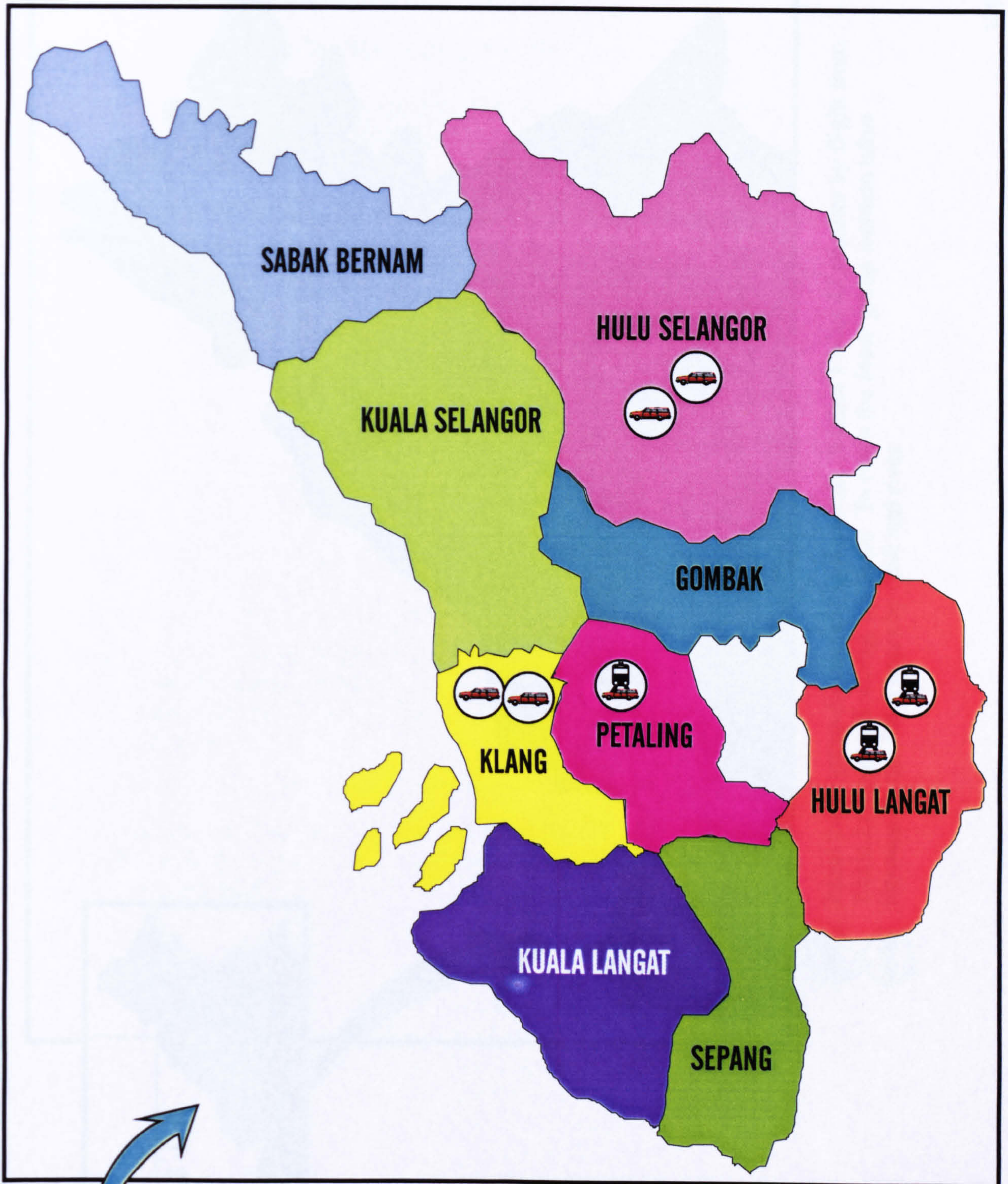
Overview of most frequently used theories of human behaviour


<i>Level</i>	<i>Theory or model</i>	<i>Behavioural determinants</i>	<i>Examples of programme application</i>
Individual level	Health belief model	Perceived susceptibility	Increase level of risk perception
		Perceived severity	Influence beliefs of severity
	Theory of reasoned action	Perceived benefits and barriers	Assess and influence beliefs about benefits/barriers of changing behaviour
		Cues to action	Assess and influence attitudes
	Social cognitive theory Social learning theory	Attitudes	Assess and influence norms in the social group
		Subjective norms	Assess and influence behavioural intentions
Stages of change	Behavioural intentions	Outcome expectation	Sexual communication, need for social support to reinforce behaviour change
		Self-efficacy	Modelling of safer behaviours
	Pre-contemplative	Contemplative	Assess and influence outcome expectation and norms, perceived risk
		Preparation	Assess and influence self-efficacy, intention
Action	Action	Assess and influence self-efficacy, intentions and outcome expectation	
	Maintenance	Assess and influence outcome expectation and norms	
AIDS risk reduction model	Labeling	Commitment	Assess and influence norms, self-efficacy
		Enactment and maintenance	Assess and influence risk perception, aversive emotions and knowledge
Diffusion of innovation	Change agent	Communication channels	Assess and influence perceptions of enjoyment, self-efficacy and risk reduction
		Context	Assess and influence communication, informal networking, formal help-seeking
	Social influences	Context of social interactions	Who are the influential people in the community
		Social norms	Most effective means to spread information including community leaders
Social and community level	Social influences	Social norms	Assess type of social networks in community
		Social rewards and punishments	Equip young people with social skills including peer pressure resistance skills Assess and influence social norms

	Social network theory	Social network Social support	Assess composition of social network Assess build up social support
	Theory of gender and power Empowerment	Social sexual norms and power dynamics Community organization Community building	Address social structure of gender relations Assess community priorities Assess key activities of the community and facilitate alliance building
	Social ecological model for health promotion	Intra-personal (knowledge, attitudes, perception of risk) Social, organization, cultural (social networks) Political factors (regulation)	Increase in knowledge, skills development, influence risk perception Community organizing, mass media
	Socio-economic and environmental factors	Policy Resources: living conditions Access to prevention	Advocacy Advocacy; community organizing Social services Increasing access to preventions

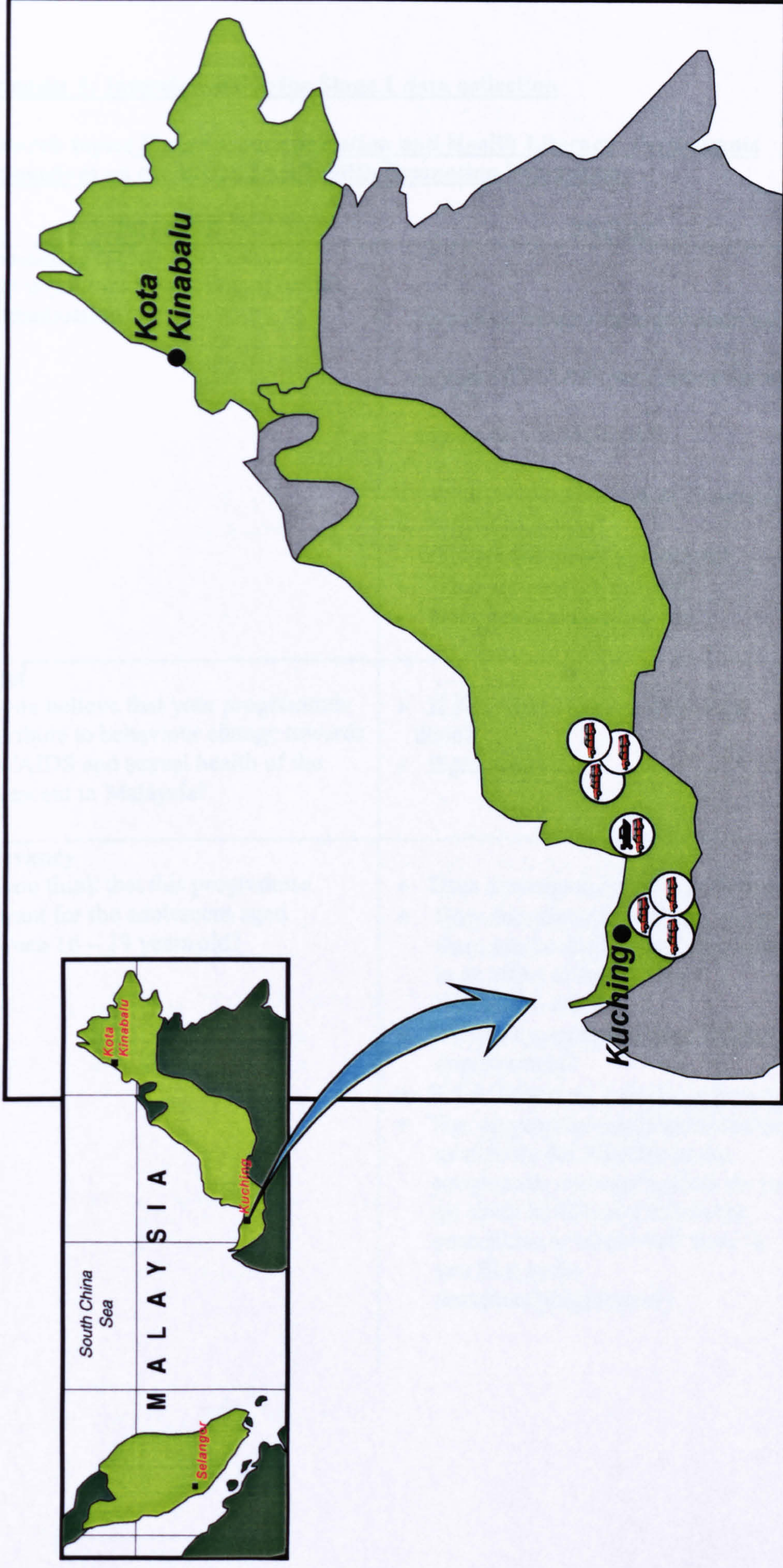
Source: From UNAIDS, 1999

Appendix 3: Map of Selangor



 Urban focus group discussion in Selangor. It takes between 30 minutes to an hour and half by road to travel from Kuala Lumpur to reach the focus group location.

Appendix 4: Map of Sarawak



Rural focus group discussions in Sarawak. It takes 1 hour 45 minutes by flight from Kuala Lumpur to Kuching, Sarawak. To reach the focus group location takes between an hour to 6 hours by road and river.

Appendix 5: Interview guide for Stage 1 data collection

Research topic: Health Communication and Health Literacy: Participants Perspectives on the PROSTAR Health Promotion Programme

THEMES	PROBE
<p>Understanding of health communication What is your understanding of health communication?</p>	<p>How does health communication used in your HIV/AIDS programme for the adolescents in Malaysia?</p> <ul style="list-style-type: none"> • What are your choices of channels? • Why it is chosen? <p>What are the message contents?</p> <ul style="list-style-type: none"> • What are your objectives? • Does needs analysis done?
<p>Belief Do you believe that your programmes contribute to behaviour change towards HIV/AIDS and sexual health of the adolescent in Malaysia?</p>	<ul style="list-style-type: none"> • If <i>Yes</i>, what contribution does it done? • If <i>No</i>, why?
<p>Relevancy Do you think that this programme relevant for the adolescent aged between 16 – 19 years old?</p>	<ul style="list-style-type: none"> • Does it accepted by the adolescents? • How does the information you gave them can be used in their daily lives in an effort to fight against HIV/AIDS and STIs? • Does this programme need further improvement? • If <i>Yes</i>, how does it can be improved? • The programme has been formulated as such by the Ministry or the programme manager's. How do you go about it? (Do you follow the procedures or otherwise? How do you fit it to the document/programme?)

<p>Communication barriers Do you encounter barriers or difficulties in implementing this programme?</p> <p>Effectiveness of health communication In your opinion, what is the most effective way to enhance health communication?</p>	<p>What types of barrier/difficulties?</p> <ul style="list-style-type: none"> • Language? • Believes/religion? • Values/taboo? • Educational level? • Communication methods? • Financials, etc? <p>• How do these barriers could be overcome?</p> <ul style="list-style-type: none"> • What are your choices of communication? • Do you believe that tailored health education materials can enhance health communication? • Does the present health education material tailored to the needs of the adolescents. • Do you think that adolescent participation in developing the programme will contribute to the successful of the programme? • Do they participate in your develop this programme? How? • Does this programme been evaluated? What are the outcomes?
<p>Information sufficiency Do you think that the information given sufficient for the adolescent?</p>	<ul style="list-style-type: none"> • If they need more information where do they get it? • Who do you think they prefer to talk to about sexual health?

Appendix 6: Interview guide for Stage 2 data collection

DISCUSSION GUIDE

Introduction:

Good [morning/evening] and welcome to our session today. Thank you for taking the time to join our discussion of adolescence and HIV/AIDS. My name is Ajau Danis and I am a research student from Liverpool John Moores University, United Kingdom. I want to find out more about how you feel about the HIV/AIDS prevention for adolescence in Malaysia. You were selected because you have certain things in common that are of particular interest to me. You are all PROSTAR Club members. Today we will be discussing your experience and your opinions about HIV/AIDS prevention for adolescence. There are no wrong and right answers but rather differing points of view. Please feel free to share your point of view even if it differs from what others have said. Before we begin, let me share some ground rules. This is strictly a research project. Please speak up – only one person should talk at a time. I am tape recording the session because I don't want to miss any of your comments. If several are talking at the same time, the tape will get garbled and I'll miss your comments. You may be assured of complete confidentiality. Keep in mind that I am interested in negative comments as positive comments, and at times the negative comments are the most helpful. Our session will last about an hour and a half. Let's begin. I've placed name cards on the table in front of you to help me remember each other's names. Let's find out some more about each other by going around the room on at a time.

	Main	Probe
Warm-up		
	<ul style="list-style-type: none">• How do you get involve in PROSTAR. Tell me your story?• What do you think of it?	<ul style="list-style-type: none">• What message did you get?• How do you think it should be done/carried out?
Knowledge & sources of information		
	<ul style="list-style-type: none">• How do you get the information on HIV/AIDS?• What information do you need most?• Sexual health should be discussed openly. What do you think?	<ul style="list-style-type: none">• From what channel?• What do you think of the present health education material? Preferred medium of deliver.• If more information needed, how would you go about it?• Who do you prefer to talk about sexual health?
Competency, self-efficacy, self-esteem		
	<ul style="list-style-type: none">• What do you do in this situation? You think your family member/relative might have HIV. What would you need to know to deal with the situation?	<ul style="list-style-type: none">• How would you interact with that individual [eg. a parent]?• Where would you turn for help [call, write, go]?• What information you need to know [diagnosis/symptom, consequences, treatment, referral, services – kind of services existing, research you have heard about]?
	<ul style="list-style-type: none">• A good friend of yours is planning to have sex with a commercial sex worker,	

and persuade you to go with him. What do you do?

- A friend of yours who is known to be a hard core drug addict tries to persuade you to take drug by sharing the needle. What is your response?

Thank you for your time and taking part in this discussion.

Appendix 7: Participant's letter

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21st July 2003

To:

Dear Sir/Madam,

Research on health communication and health literacy

I am writing to inform that you have been selected as my respondent for a research entitled:

Health Communication and Health Literacy: Participants Perspectives on the PROSTAR Health Promotion Programme

For this research, HIV/AIDS programme for adolescents especially the PROSTAR programme has been chosen. Therefore, interview with the co-ordinator or the person involved directly with this programme is required to gain in-depth views and ideas about the programme. The aim of this research is to examine the process of health communication undertaken by sexual health services especially HIV/AIDS for adolescents. Secondly, the aim is to examine the impact of health communication and its relationship with health literacy, and thirdly, to explore ways of enhancing health communication and health literacy. This study should provide details about more ways to disseminate health information through effective health communication. It is hoped

that effective health communication could enhance the health literacy of the targeted audience. Information given will be treated as confidential and only be used for the research purposes. Recorded data or information will be disposed off after appropriate analysis has been done.

It is hoped that the outcomes of the study will benefit the Malaysian government, in general, and the Ministry of Health, in particular, by enhancing health communication and encouraging behaviour change.

As referred to our conversation by phone/email earlier, our appointment will be on _____ at _____. You will be contacted again as soon as I arrived in Malaysia or before our meeting commence.

Your kind attention and participation in making this research a success are very much appreciated. If any further clarification is required, please don't hesitate to contact me.

Yours faithfully,

Ajau Danis

Email: LNGADANI@livjm.ac.uk

Appendix 8: Participants Consent Form

LIVERPOOL JOHN MOORES UNIVERSITY

**FORM OF CONSENT TO TAKE PART AS A SUBJECT IN A MAJOR
PROCEDURE OR RESEARCH PROJECT**

Title of project/procedure:

**Health Communication and Health Literacy: Participants Perspectives on the
PROSTAR Health Promotion Programme**

I,agree to take part in
(Subjects full name)*

the above named project/procedure, the details of which have been fully explained to
me and

described in writing.

Signed
(Subject)

Date.....

I,AJAU DANIS.....certify that the
details of

.....
(Investigators full name)*

this project/procedure have been fully explained and described in writing to the subject
named above and have been understood by him/her.

Signed
(Investigator)

Date.....

I,certify that the details
of

.....(Witness full name)

this project/procedure have been fully explained and described in writing to the subject
named above and

have been understood by him/her.

Signed..... Date
.....(Witness)

NB The witness must be an independent third party.
.....*Please print in block capitals

LIVERPOOL JOHN MOORES UNIVERSITY

FORM OF CONSENT (B) (CARER)

Title of project/procedure: Health Communication and Health Literacy:
Participants Perspectives on the PROSTAR Health Promotion Programme

I,the undersigned being
.....(Carer/parent/guardia
n's full name)*

the carer/parent/guardian for ** having read
.....(Subjects full
name)*

and understood the protocol presented to me hereby give consent for the subject named
above to take part in the project/investigation as described in the protocol.

Signed Date
Carer/Parent/Guardian**

I,.....AJAU DANIS.....certify that
the details of
.....(Investigator's full
name)

this project/procedure have been fully explained and described in writing to the
carer/parent/guardian** named above and have been understood by him/her.

I,certify that the details
of
.....(Witness full name)*

this project/procedure have been fully explained and described in writing to the
carer/parent/guardian** named above and have been understood by him/her.

Signed Date
(Witness)

N.B. The witness must be an independent third party.
* please print in block capitals
** delete as appropriate

Appendix 9: Participants information sheet

Participant Information Sheet

Name of experimenter: Ajau Danis, Full-Time Student, Liverpool John Moores University, United Kingdom

Supervisors:

Professor Jane Springett, BA(Hons), MA, PhD

Professor of Health Promotion and Public Health, Liverpool John Moores University, United Kingdom

Dr Ciara Kierans, PhD

Co-ordinator/Snr. Lecturer Institute for Health, Liverpool John Moores University, United Kingdom

Title of study/project: **Health Communication and Health Literacy: Participants Perspectives on the PROSTAR Health Promotion Programme**

Purpose of study: The purpose of study is to examine the interface between health communication and health literacy with particular reference to the PROSTAR programme. Its aims are, to examine the process of health communication undertaken by sexual health services for adolescents, to examine the impact of health literacy and the relationship between the two, and to explore ways of enhancing the relationship between health communication and health literacy. Qualitative methods will be used to look into the delivery of information (communication) and the receiver (health literacy). The samples will be the selected from groups of adolescents. The purpose is to look into the impact of health communication on health literacy and the relationship between the two. The study will be focusing on the health literacy of the target audience and also looking into the effectiveness of health communication in HIV/AIDS and STIs preventive services implemented by the various agencies. It is also trying to identify the best possible ways to disseminate information on HIV/AIDS and STIs among the adolescent and enhancing their health knowledge. Interviews and focus groups will be conducted.

Procedures and Participants Role: The sampling unit will be the adolescents (age 16-19 years old) that had been a target population by the various sectors. The samples will be taken from various PROSTAR clubs in Selangor and Sarawak based on volunteer basis (willingness). The clubs concern will be accessed through the PROSTAR programme co-ordinator at the state level. The participants will be informed through the coordinator at least two weeks before the interviews take place to give an ample time for the respondent to make their decision on joining the project. Approximately 20 focus group (6-8 individuals in a group) will be conducted or until saturation is achieved. The

focus is mainly on the health literacy of the adolescent with regard to HIV/AIDS and STIs. The participants will be informed that the discussion will be taped for the data analysis purposes and that they will be destroyed at the end of the project. All data will be compiled and analysed using content analysis method.

Please Note:

All participants have the right to withdraw from the project/study at any time without prejudice to access of services which are already being provided or may subsequently be provided to the participant.

PARTICIPANT'S INFORMATION SHEET

Group:..... (To be filled by moderator)

Date:..... Time:.....am/pm

Place:..... Setting: Rural/Urban

State: Wilayah/Selangor/Sarawak

Participants:

No	Name	Age	Sex	Race	Academic	Year joining PROSTAR	No. of training attended	Signature
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								

Note: