UNIVERSITI PUTRA MALAYSIA

KNOWLEDGE, ATTITUDE AND PRACTICES RELATED TO HUMAN IMMUNODEFICIENCY VIRUS AND ACQUIRED IMMUNODEFICIENCY SYNDROME AMONG STUDENTS IN UNIVERSITI PUTRA MALAYSIA

ROZINA RAHNAMA

FPSK(M) 2009 1
KNOWLEDGE, ATTITUDE AND PRACTICES RELATED TO HUMAN IMMUNODEFICIENCY VIRUS AND ACQUIRED IMMUNODEFICIENCY SYNDROME AMONG STUDENTS IN UNIVERSITI PUTRA MALAYSIA

ROZINA RAHNAMA

MASTER OF SCIENCE
UNIVERSITI PUTRA MALAYSIA

2009
KNOWLEDGE, ATTITUDE AND PRACTICES RELATED TO HIV/AIDS AMONG STUDENTS IN UNIVERSITI PUTRA MALAYSIA

By

ROZINA RAHNAMA

Thesis Submitted to the School of Graduate Studies, Universiti Putra Malaysia, in Fulfillment of the Requirements for the Degree of Master of Science

January 2009
Dedicated

To

This thesis dedicated to my beloved husband, Mehran (Akbar) Dehghani Ghahfarokhi, to my dear daughter Artonis, my dear mother Mahvash Gharibi and my deceased father Majid Rahnama that I owe them all of success in my life.
The aim of this study was to determine the level of knowledge, attitude and practices related to HIV/AIDS among the students in UPM and to determine the relationship between their knowledge, attitudes and practices. A cross-sectional study design which employed two stage simple random sampling technique proportionate to size was used to select the sample. The list of all 23,202 students of UPM served as the sampling frame. The sample size was 1920. The data was collected from 10th of August to 31st of October 2007 using a structured pre-tested questionnaire. The response rate was 92.3 % in which, out of 1773 respondents, 57.3% were female, 52.5% were Malays and 58.2% were Muslims.

The overall mean knowledge scores of the respondents was 20.11 out of the maximum score of 34 while the mean attitude scores was 24.09 out of the maximum score of 35,
and the mean practice scores of the respondents was 4.14 out of the maximum score of 7. The results of the GLM (General Linear Model) and Post Hoc Test showed that knowledge of the respondents on HIV/AIDS was significantly associated with age ($p = 0.001$), sex ($p = 0.004$), educational level ($p = 0.04$), faculty or institute ($p = 0.001$), religion ($p = 0.008$), mother’s occupation ($p = 0.045$), mother’s educational level ($p = 0.039$) and family income ($p = 0.001$). The results also showed that the attitude of respondents on HIV/AIDS was significantly associated with faculty or institute ($p = 0.001$), father’s occupation ($p = 0.028$) and the practice of the respondents with regards to HIV/AIDS was significantly associated with sex ($p = 0.001$), faculty or institute ($p = 0.001$) and marital status ($p = 0.009$).

The results show that there was a significant but weak and positive relationship between the total knowledge scores and the total attitude scores of the respondents ($r = 0.24$, $p = 0.001$). There was also a significant but weak and negative relationship between the total knowledge scores and the total practice scores of the respondents ($r = -0.059$, $p = 0.021$).

In conclusion, this study showed that the level of knowledge about HIV/AIDS among UPM students is unsatisfactory. The respondents seem to have favorable attitude on the prevention of HIV/AIDS. There was a low level of condom use (29.8 %) and voluntary HIV testing (13.48 %). However, 97.8 % of the respondents do not have multiple partners. The practice scores for Malaysian students were significantly higher than the international students. It is recommended that an educational program on HIV/AIDS prevention is to be implemented to remove some weaknesses such as the low level of knowledge, low level of condom use and voluntary HIV testing.
Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk ijazah Master Sains

PENGETAHUAN, SIKAP DAN AMALAN BERKAITAN HIV/AIDS DIKALANGAN PELAJAR-PELAJAR DI UNIVERSITI PUTRA MALAYSIA

Oleh

ROZINA RAHMANA

2009

Pengerusi: Professor Lekhraj Rampal, MBBS, MPH, DrPH, FAMM
Fakulti: Perubatan dan Sains Kesihatan

Tujuan kajian ini dijalankan adalah untuk mengenalpasti tahap pengetahuan, sikap dan amalan terhadap HIV/AIDS di kalangan pelajar UPM dan untuk mengenalpasti hubungan di antara pengetahuan, sikap amalan. Kajian keratan rentas telah digunakan.

Dua tahap teknik pensampelan rawak setara dengan saiz telah digunakan untuk memilih sampel. Senarai pelajar UPM sebanyak 23,202 telah dijadikan sebagai bingkai sampel. Jumlah populasi untuk kajian ini ialah 23,202. Saiz sampel adalah 1920. Data telah dikumpulkan bermula 10 Ogos hingga 31 Oktober 2007 menggunakan pra ujian soal selidik berstruktur. Purata respon adalah 92.3 %. Dari 1773 responden, 57.3 % adalah wanita, 52.5 % adalah Melayu dan 58.2 % adalah Muslim.

Jumlah purata skor pengetahuan responden adalah 20.11 dari skor maksimum sebanyak 34, purata skor sikap adalah 24.09 dari skor maksimum sebanyak 35 dan purata skor amalan adalah 4.14 dari skor maksimum sebanyak 7. Keputusan GLM (General Linear
Model) dan ujian Post Hoc menunjukkan pengetahuan responden terhadap HIV/AIDS mempunyai perkaitan yang signifikan pada umur (p = 0.001), jantina (p = 0.004), tahap pendidikan (p = 0.037), fakulti atau institut (p = 0.001), agama (p = 0.008), pekerjaan ibu (p = 0.045), tahap pendidikan ibu (p = 0.039) dan pendapatan keluarga (p = 0.001). Hasil kajian juga menunjukkan bahawa sikap responden terhadap HIV/AIDS mempunyai perkaitan yang signifikan dengan fakulti atau institut (p = 0.001), dan pekerjaan bapa (p = 0.028). Selain daripada itu, sikap responden terhadap HIV/AIDS mempunyai perkaitan yang signifikan dengan jantina (p = 0.001), fakulti atau institut (p = 0.001) dan status perkahwinan (p = 0.009).

Hasil kajian menunjukkan hubungan signifikan yang positif tetapi lemah di antara jumlah skor pengetahuan dan jumlah skor sikap responden (r = 0.242, p = 0.001). Ia juga menunjukkan hubungan signifikan yang negative tetapi lemah di antara jumlah skor pengetahuan dan jumlah skor amalan responden (r = 0.059, p = 0.021).

Kesimpulannya, kajian ini menunjukkan tahap pengetahuan terhadap HIV/AIDS di kalangan pelajar UPM adalah tidak memuaskan. Responden kelihatan seperti mempunyai sikap yang dikehendaki dalam mencegah penyakit ini. Tetapi terdapat penggunaan kondom yang rendah (29.8 %) begitu juga dengan ujian HIV (13.48 %). Walaubagaimanapun, 97.8 % responden tidak mempunyai banyak pasangan. Skor amalan dikalangan warganegara Malaysia juga signifikan dan tinggi berbanding pelajar asing. Program pendidikan mengenai cara-cara menghindari HIV/AIDS perlu dijalankan untuk mengatasi kelemahan seperti rendah tahap pengetahuan, rendah penggunaan kondom dan ujian HIV.
ACKNOWLEDGEMENTS

I thank Allah the Almighty to have bestowed such consciousness and chance to continue this endeavor onward.

I would like to express my deep gratitude and appreciation for a lifetime to Professor Dr. Lekhraj Rampal for his wonderful advice, thoughtful guidance, unceasing support and meaningful friendship throughout my master’s degree. He encouraged me through the difficulties and inspired me to move to a higher level of learning experience. His positive attitude and support have helped me to become a better person.

I would also like to give my heartfelt thanks and deepest appreciation and gratitude to professor Dato' Dr. Lye Munn Sann for his insightful suggestions and guidance, encouragement, patience, valuable advice that had helped me to carry on the study successfully.

I would like to express my special appreciation and very sincere gratitude to Dr. Hejar binti Abd. Rahman. She gave me the time, effort, encouragement and valuable suggestions.

They were exceptional role models in teaching, mentoring, and conducting research studies. Without their outstanding assistance and support, I would not have reached my goal.
Also I would like to express a special thank you to Professor Dr. Bahaman and Dr. Karuthan Chinna for their exceptional advice, guidance, and assistance with the statistical aspects of my dissertation work.

I am so grateful to Faculty of Medicine and Health Sciences, Universiti Putra Malaysia for allowing me to study.

I also express appreciation for all of my lecturers, tutors, staffs and office assistants that helped me in the survey. I would also like to thank the students who had participated in the survey, thank you, for I could not have done it without you all.

I would like to extend a special thank you and deepest gratitude to my dear mother for her great kindness, devotion, encouragement and continuous support. I commend her efforts and her toleration. She will remain in my heart forever.

I would like to extend my deepest love and gratitude to my dearest friend and husband, Mehran (Akbar), and my beloved daughter Artonis, for heartily encouragement and the unconditional support that they’ve offered through the long days stretching into months of my studies.

I also wish to express my appreciation to all of my friends in Malaysia and Iran who’ve inspired me in all of these years. Thank you all!
Thank you to all of my dozens of colleagues, clients and course attendees over the past few years for providing me with the experience and insights necessary for this kind of writing.

*Rozina Rahnama*
I certify that a Thesis Examination Committee has met on 6 January 2009 to conduct the final examination of Rozina Rahnama on her thesis entitled “Knowledge, Attitude and Practices Related to HIV/AIDS Among Students in Universiti Putra Malaysia” in accordance with the Universities and University Colleges Act 1971 and the Constitution of the Universiti Putra Malaysia [P.U. (A) 106] 15 March 1998. The Committee recommends that the student be awarded the Master of Science.

Members of the Examination Committee were as follows:

Mohd Yunus Abdullah, MD, MPH
Professor
Faculty of Medicine and Health Sciences
Universiti Putra Malaysia
(Chairman)

Wan Omar Abdullah, PhD
Professor
Faculty of Medicine and Health Sciences
Universiti Putra Malaysia
(Internal Examiner)

Rozita Rosli, PhD
Associate Professor
Faculty of Medicine and Health Sciences
Universiti Putra Malaysia
(Internal Examiner)

Awang Bulgiba Awang Mahmud, PhD
Professor
Faculty of Medicine and Health Sciences
Universiti of Malaya
(External Examiner)

BUJANG KIM HUAT, PhD
Professor and Deputy Dean
School of Graduate Studies
Universiti Putra Malaysia

Date: 19 March 2009
This thesis was submitted to the Senate of Universiti Putra Malaysia and has been accepted as fulfillment of the requirement for the degree of Master of Science. The members of the Supervisory Committee were as follows:

**Lekhraj Rampal, MBBS, MPH (Hons), DrPH, FAMM**  
Professor  
Faculty of Medicine and Health Sciences  
Universiti Putra Malaysia  
(Chairman)

**Lye Munn Sann, MBBS, MPH, DrPH, FAMM**  
Professor  
Faculty of Medicine and Health Sciences  
Universiti Putra Malaysia  
(Member)

**Hejar Binti Abd. Rahman, M.D., Master’s Community Health**  
Head,  
Faculty of Medicine and Health Sciences  
Universiti Putra Malaysia  
(Member)

---

**HASANAH MOHD. GHAZALI, PhD**  
Professor and Dean  
School of Graduate Studies  
Universiti Putra Malaysia

Date: 9 April 2009
DECLARATION

I hereby declare that the thesis is based on my original work except for quotations and citations which have been duly acknowledged. I also declare that it has not been previously or concurrently submitted for any other degree at UPM or other institutions.

__________________________
ROZINA RAHNAMA

Date:
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEDICATION</td>
<td>iii</td>
</tr>
<tr>
<td>ABSTRACT</td>
<td>iv</td>
</tr>
<tr>
<td>ABSTRAK</td>
<td>vi</td>
</tr>
<tr>
<td>ACKNOWLEDGEMENTS</td>
<td>viii</td>
</tr>
<tr>
<td>APPROVAL</td>
<td>xi</td>
</tr>
<tr>
<td>DECLARATION</td>
<td>xiii</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>xvii</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>xx</td>
</tr>
<tr>
<td>LIST OF ABBREVIATIONS</td>
<td>xxi</td>
</tr>
</tbody>
</table>

## CHAPTER

### 1 INTRODUCTION

1.1 Background

1.2 Objectives

1.3 Research Hypothesis

1.4 Conceptual Framework

### 2 LITERATURE REVIEW

2.1 History of HIV/AIDS

2.2 HIV/AIDS Terminology

2.3 Microbiology of HIV

2.4 Epidemiology of HIV/AIDS

2.4.1 Global Situation of HIV/AIDS

2.4.2 Local situation of HIV/AIDS

2.5 Transmissions of HIV

2.5.1 Failure of transmission of HIV

2.6 Signs and Symptoms of HIV/AIDS

2.7 Diagnosis of HIV/AIDS

2.8 Treatment of HIV/AIDS

2.8.1 Cure of HIV/AIDS

2.9 Prevention of HIV/AIDS

2.10 HIV/AIDS and STDs (Sexually Transmitted Diseases)

2.11 Youth and HIV/AIDS

2.12 Knowledge and concern on HIV/AIDS

2.13 Myths about HIV/AIDS

2.14 Attitude towards HIV/AIDS

2.15 Health Promotion and HIV/AIDS

xv
| 2.16 | Practices towards HIV/AIDS | 34 |
| 2.17 | Evaluation of health education program | 39 |
| 2.18 | Gender and HIV/AIDS | 41 |
| 2.19 | Women and HIV/AIDS | 43 |
| 2.20 | Culture and HIV/AIDS | 44 |
| 2.21 | Stigma and HIV/AIDS | 45 |
| 2.22 | Implication of HIV/AIDS | 46 |

### 3 MATERIALS AND METHODS

3.1 Study Location  
3.2 Study Design  
3.3 Sample Size, Study Population and Sampling Method  
  3.3.1 Sample Size  
    3.3.1.1 Calculation of Sample Size  
  3.3.2 Study population  
  3.3.3 Sample Frame  
  3.3.4 Sampling Method  
3.4 Ethical Issue and Consent  
3.5 Instruments  
  3.5.1 Demographic  
  3.5.2 General Information on knowledge, and attitude and Practice on HIV/AIDS  
    Knowledge on HIV/AIDS  
    Attitude on HIV/AIDS  
    Practice on HIV/AIDS  
3.6 Validity and Reliability of the Questionnaire  
  3.6.1 Pre Testing  
    3.6.1.1 Pre-Testing Results  
  3.6.2 Reliability  
  3.6.3 Content Validity  
3.7 Data Collection  
3.8 Analysis of Data  
3.9 Glossary of terms

### 4 RESULTS

4.1 Response Rate  
4.2 Demographic Distribution of Respondents  
  4.2.1 Sex  
  4.2.2 Age  
  4.2.3 Ethnicity
## LIST OF TABLE

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1 Expected Sample Size</td>
<td>53</td>
</tr>
<tr>
<td>3.2 Sample Size Estimation Procedure from the Selected Faculties and institutes</td>
<td>54</td>
</tr>
<tr>
<td>3.3 Pre Testing Reliability Test Result (N = 20)</td>
<td>57</td>
</tr>
<tr>
<td>3.4 Reliability Test Result after the Study Survey (N= 1773)</td>
<td>58</td>
</tr>
<tr>
<td>4.1 Response Rates According to Faculties and Institute</td>
<td>64</td>
</tr>
<tr>
<td>4.2 Demographic Description of the Respondents</td>
<td>65</td>
</tr>
<tr>
<td>4.3 Distribution of Respondents from Faculties by Sex</td>
<td>68</td>
</tr>
<tr>
<td>4.4 Age Group of Students by Sex</td>
<td>69</td>
</tr>
<tr>
<td>4.5 Education Levels of Students by Sex</td>
<td>70</td>
</tr>
<tr>
<td>4.6 Item Analysis of Respondents Knowledge towards HIV/AIDS</td>
<td>71</td>
</tr>
<tr>
<td>4.7 Distribution of Students’ Mean Knowledge Scores by Sex</td>
<td>74</td>
</tr>
<tr>
<td>4.8 Distribution of Students’ Mean Knowledge Scores by Age Groups</td>
<td>75</td>
</tr>
<tr>
<td>4.9 Distribution of Students’ Mean Knowledge Scores by Nationality</td>
<td>76</td>
</tr>
<tr>
<td>4.10 Distribution of Students’ Mean Knowledge Scores by Residence</td>
<td>76</td>
</tr>
<tr>
<td>4.11 Distribution of Students’ Mean Knowledge Scores by Ethnic Groups</td>
<td>77</td>
</tr>
<tr>
<td>4.12 Distribution of Students’ Mean Knowledge Scores by Religion</td>
<td>78</td>
</tr>
<tr>
<td>4.13 Distribution of Students’ Mean Knowledge Scores by Marital Status</td>
<td>79</td>
</tr>
<tr>
<td>4.14 Distribution of Students’ Mean Knowledge Scores by Educational Level</td>
<td>80</td>
</tr>
<tr>
<td>4.15 Distribution of Students’ Mean Knowledge Scores by Faculty/Institute</td>
<td>81</td>
</tr>
<tr>
<td>4.16 Distribution of Students’ Mean Knowledge Scores by Employed Status</td>
<td>81</td>
</tr>
<tr>
<td>4.17 Distribution of Students’ Mean Knowledge Scores by Occupation</td>
<td>82</td>
</tr>
<tr>
<td>4.18 Distribution of Students’ Mean Knowledge Scores by Father’s Occupation of Respondents</td>
<td>82</td>
</tr>
<tr>
<td>4.19 Distribution of Students’ Mean Knowledge Scores by Mother’s Occupation of Respondents</td>
<td>83</td>
</tr>
<tr>
<td>4.20 Distribution of Students’ Mean Knowledge Scores by Father’s Educational Level of Respondents</td>
<td>84</td>
</tr>
<tr>
<td>4.21 Distribution of Students’ Mean Knowledge Scores by Mother’s Educational Level of Respondents</td>
<td>84</td>
</tr>
<tr>
<td>4.22 Distribution of Students’ Mean Knowledge Scores by Family Income of Respondents</td>
<td>85</td>
</tr>
<tr>
<td>4.23 Attitude regarding HIV/AIDS</td>
<td>86</td>
</tr>
<tr>
<td>4.24 Distribution of Students’ Mean Attitude Scores by Sex</td>
<td>88</td>
</tr>
<tr>
<td>4.25 Distribution of Students’ Mean Attitude Scores by Age Groups</td>
<td>89</td>
</tr>
</tbody>
</table>
4.26 Distribution of Students’ Mean Attitude Scores by Nationality 89
4.27 Distribution of Students’ Mean Attitude Scores by Residence 90
4.28 Distribution of Students’ Mean Attitude Scores by Ethnic Groups 90
4.29 Distribution of Students’ Mean Attitude Scores by Religion 91
4.30 Distribution of Students’ Mean Attitude Scores by Marital Status 91
4.31 Distribution of Students’ Mean Attitude Scores by Educational Level 92
4.32 Distribution of Students’ Mean Attitude Scores by Faculty/Institute 93
4.33 Distribution of Students’ Mean Practice Scores by Employed Status 94
4.34 Distribution of Students’ Mean Practice Scores by Occupation 94
4.35 Distribution of Students’ Mean Practice Scores by Father’s Occupation of Respondents 95
4.36 Distribution of Students’ Mean Practice Scores by Mother’s Occupation of Respondents 95
4.37 Distribution of Students’ Mean Practice Scores by Father’s Educational Level of Respondents 96
4.38 Distribution of Students’ Mean Practice Scores by Mother’s Educational Level of Respondents 97
4.39 Distribution of Students’ Mean Practice Scores by Family Income of Respondents 98
4.40 Practice regarding HIV/AIDS 99
4.41 Distribution of Students’ Mean Practice Scores by Sex 100
4.42 Distribution of Students’ Mean Practice Scores by Age Groups 101
4.43 Distribution of Students’ Mean Practice Scores by Nationality 102
4.44 Distribution of Students’ Mean Practice Scores by Residence 102
4.45 Distribution of Students’ Mean Practice Scores by Ethnic Groups 103
4.46 Distribution of Students’ Mean Practice Scores by Religion 104
4.47 Distribution of Students’ Mean Practice Scores by Marital Status 104
4.48 Distribution of Students’ Mean Practice Scores by Educational Level 105
4.49 Distribution of Students’ Mean Practice Scores by Faculty/Institute 106
4.50 Distribution of Students’ Mean Practice Scores by Employed Status 106
4.51 Distribution of Students’ Mean Practice Scores by Occupation 107
4.52 Distribution of Students’ Mean Practice Scores by Father’s Occupation of Respondents 107
4.53 Distribution of Students’ Mean Practice Scores by Mother’s Occupation of Respondents 108
4.54 Distribution of Students’ Mean Practice Scores by Father’s Educational Level of Respondents 109
4.55 Distribution of Students’ Mean Practice Scores by Mother’s Educational Level of Respondents 110
4.56 Distribution of Students’ Mean Practice Scores by Family Income of Respondents 111
4.57 General Linear Model Analysis Showing Factors Associated with Knowledge on HIV/AIDS

4.58 General Linear Model Analysis Showing Factors Associated with Attitude towards HIV/AIDS

4.59 General Linear Model Analysis Showing Factors Associated with Practice towards HIV/AIDS
**LIST OF FIGURE**

<table>
<thead>
<tr>
<th>Figure</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>10</td>
</tr>
<tr>
<td>Conceptual Framework of Knowledge, Attitude and Practice on HIV/AIDS among Students in UPM</td>
<td></td>
</tr>
<tr>
<td>4.1</td>
<td>73</td>
</tr>
<tr>
<td>Distribution of Total Knowledge Score</td>
<td></td>
</tr>
<tr>
<td>4.2</td>
<td>87</td>
</tr>
<tr>
<td>Distribution of Total Attitude Score</td>
<td></td>
</tr>
<tr>
<td>4.3</td>
<td>100</td>
</tr>
<tr>
<td>Distribution of Total Practice Score</td>
<td></td>
</tr>
</tbody>
</table>
LIST OF ABBREVIATION

AIDS   Acquired Immune Deficiency Syndrome
CDC    Centers for Disease Control and Prevention
HIV    Human Immunodeficiency Virus
IDUs   Injecting Drug Users
KAP    Knowledge, Attitude and Practice
MOH    Ministry of Health
MOE    Ministry of Education
N      Number of individuals who responded
NPFDB  National Population and Family Development Board
NGOs   Non-Governmental Organizations
PLWHAs People Living with HIV/AIDS
STD    Sexually Transmitted Diseases
STIs   Sexually Transmitted Infections
UNICEF United Nations Children’s Emergency Fund
UNESCO United Nations Educational, Scientific and Cultural Organization
UPM    Universiti Putra Malaysia
US     United States of America
UNGASS United Nations General Assembly Special Session on HIV/AIDS
UNAIDS United Nations Joint Program on HIV/AIDS
WHO    The World Health Organization
CHAPTER 1
INTRODUCTION

1.1 Background

Acquired Immunodeficiency Syndrome (AIDS) is one of the most complex global health problems in the 21st century (Ayranci, 2005). AIDS and Human Immunodeficiency Virus infection (HIV) are the world’s most urgent public health challenge. The disease has emerged and been considered as a threat for society for the last three decades and caused significant morbidity and mortality in human societies throughout the world (World Health Organization, 2004). There is no treatment or cure in sight; the disease continues to spread at a disturbing rate (Tumer and Unal, 2000).

AIDS is the last stage in a progression of diseases resulting from infection with a virus known as HIV. It is a serious condition that weakens the body's immune system, which includes a number of unusual and severe infections, cancers, debilitating illnesses and affecting the central nervous system (The Health Center Network, 2001).

HIV infection and AIDS affect physical, mental, emotional, social and spiritual dimensions of human life. HIV and AIDS reduce the life expectancy of infected persons, increasing the number of orphaned children, creating turbulence in health care systems, and contributing to economic insecurity, potentially leading to political instability (Sowell, 2004).
HIV and AIDS have claimed many lives over the years and continue to involve varying societies. It has been estimated that more than 25 million people have died of AIDS since 1981 when AIDS was first diagnosed (United Nations Joint Program on HIV/AIDS / WHO, 2007).

As of November 2008, 33.0 million people were infected with HIV/AIDS worldwide (UNAIDS/WHO, 2008). Statistics show that more than 6,000 people become infected with HIV every day in the world. In 2007, AIDS caused the deaths of an estimated 2.1 million people including 1.7 million adults and 330,000 children under the 15 years of age. Around two and a half million adults and children have become infected with HIV (UNAIDS/WHO, 2007). Young people aged 15 to 24 year accounted for 45% of all new HIV infections worldwide. Sub-Saharan Africa is the most heavily affected by HIV/AIDS, with the Caribbean region ranking second (Fitzpatrick et al., 2004). In Asia, Vietnam is a country in which the estimated number of people living with HIV has more than doubled between 2000 and 2005, and Indonesia has the fastest growing epidemic. Also, Cambodia is a country with the highest national HIV prevalence rate (UNAIDS/WHO, 2008).

In Malaysia by the end of September 2008, the incidence of HIV infection had increased from three cases in 1986 to 83,527 cases in 2008. The cumulative total number of AIDS death was 12,245 until 2007 and 14,317 AIDS cases (Ministry of Health Malaysia, September 2008). Out of 83,527, majority (84.5 %) were male. There is an increasing rate among the ages between 13 to 49 years old. The prevalence is the highest among Malays as compared to other ethnic groups. In Malaysia, the main mode of transmission
is intravenous drug use (55.4%) and heterosexual (27.4%) (Ministry Of Health Malaysia, 2008). However, detail information on the 27.4% who had heterosexual transmission is not available. The HIV/AIDS epidemic in Malaysia has emerged as an important health problem since the first HIV case was detected in 1986.

The trend among adolescents and young adults towards high-risk behavior coupled with insufficient education are the primary reasons for the increase in transmission of HIV (UNAIDS, 2006). A worrisome aspect of this epidemic is that HIV/AIDS affects Malaysians in their prime productive years. Malaysia's young people are assets in the development of the country, and this epidemic result in a drain on human resources in this most economically-productive portion of the population (UNFPA, 2005).

Malaysia is a moderate Islamic country with the majority of Muslim Malays and other ethnicities such as Chinese and Indian. Like many Islamic societies, some issues which are related to sex and sexually transmitted infections are considered as taboo and sensitive, and therefore are not discussed openly in the society (Yoo et al., 2005; Mahat and Scoloveno, 2006). Despite the domination of conservative and traditional values in Malaysia, adolescents are engaging in some behaviors like unsafe sexual intercourse (Huang, 1999). The incidence of adolescents engaging in sexual intercourse also increases with age. What is more alarming is that most sexual encounters are unsafe, with no protection against STI and unwanted pregnancy. There is no doubt that young people are at greater risk of acquiring sexually transmitted infections (STIs), particularly HIV/AIDS, than other age groups.