

UNIVERSITI PUTRA MALAYSIA

KNOWLEDGE, ATTITUDE AND PRACTICE RELATED TO HIV/AIDS PREVENTION AMONG SECONDARY SCHOOL STUDENTS IN KLANG, MALAYSIA

MAHTAB MOHAMMADI

FPSK(m) 2010 8



KNOWLEDGE, ATTITUDE AND PRACTICE RELATED TO HIV/AIDS PREVENTION AMONG SECONDARY SCHOOL STUDENTS IN KLANG, MALAYSIA

Ву

MAHTAB MOHAMMADI

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

Dedication

This thesis is especially dedicated to my beloved: Husband Ahmad Mohammadi, Mother Mehrangiz Hosseini, and father Badi Mohammadi, for unconditional patience, support and encouragement throughout this project and my life.

Abstract of thesis presented to the Senate of Universiti Putra Malaysia in Fulfilment of the Requirement for the Master Degree

KNOWLEDGE, ATTITUDE AND PRACTICE RELATED TO HIV/AIDS PREVENTION AMONG SECONDARY SCHOOL STUDENTS IN KLANG, MALAYSIA

By

MAHTAB MOHAMMADI

February 2010

Chairman: Professor Lekhraj Rampal, MBBS, MPH, DrPH, FAMM

Faculty: Medicine and Health Sciences

The HIV/AIDS has killed more than 25 million people since it was first recognized in 1981, making it one of the most destructive pandemics in recorded history. The adolescents generally tend to have high levels of knowledge about the meaning of HIV transmission, however somewhat lower levels of knowledge about effective means of protection lack some critical information and hold a number of misconceptions about the risks associated with casual contact. Knowledge about HIV/AIDS is clearly important for young people to prevent behaviors that place them at risk of contracting HIV, however, knowledge itself, is not necessarily associated with HIV preventive actions such as condom use. The aim of this study was to determine the level of knowledge, attitude and practices related to HIV/AIDS prevention among secondary school students in Klang district.

A cross-sectional study design was used. The study population was secondary school students in Klang district. Data was collected from 9th of February to 28th of March 2009 using a pre-tested self-administrated (Bahasa Malaysia) questionnaire. Data was analyzed using SPSS version 16.0.

Out of the 2273 students; 61.7% were male. Majority were Malays (37.2%) followed by Chinese (35.7%) and Indians (26.0%). The mean age ranged from 14 to 18 years. The overall mean age among the males (15.48 SD ± 1.14 years) was not significantly different from that of the females (15.49 SD ± 0.04 years) (t = -0.26, df = 2271, p>0.05). The main sources of information for HIV/AIDS awareness reported by the respondents were the print media (62.3%). The overall mean knowledge score of the respondents was 7.01 (SD \pm 3.62) and ranged from 0 to 15 points. One hundred and eighteen students 5.2% obtained 0 (zero) marks in knowledge questions score and 88.8% of students had less than 75% of full marks in knowledge question score. The result of this study revealed that although the majority (77.7%) of students knew that AIDS is fatal disease almost 52% were not aware that there is no cure for AIDS and only 23.7% knew that there is no vaccine that can stop people from getting HIV. More than half of the participants believed that HIV transmission was possible through casual contact with HIV-positive persons, such as sharing food (68.6%), sharing a glass of water (71.1%) and from mosquito bites (60.4%). Abstaining from sexual intercourse, having one uninfected faithful sex partner and use of condoms as an HIV prevention measure was not well understood among the participants, as indicated by an incorrect response rate of 55.7%, 63.5% and 67.2% respectively.

Mean attitude score toward HIV/AIDS was 25.32 (SD ± 3.60) and ranged from 8 to 45 points. Mean practice score regarding HIV/AIDS was 4.53 (SD ± 1.063) and ranged from 0 to 6 points and mean sexual behavior score was 3.73 (SD ± 0.78) and ranged from 0 to 6 points. The results also showed that knowledge of respondents was significantly associated with age (F = 33.41, p = 0.001) and academic grade (F = 31.47, p = 0.001). Attitude related to HIV/AIDS was significantly associated with age (F = 10.52, p = 0.001), mother's education (F = 2.87, p = 0.035) and academic grade (F = 21.03, p = 0.002). The practice of respondents related to HIV/AIDS was significantly associated with gender (F = 153.95, p = 0.001), age (F = 9.32, p = 0.001), religion (F = 2.82, p = 0.024), family income (F = 2.88, p = 0.035) and academic grade (F = 4.56, p = 0.001).

In conclusion, the result of study showed that the level of knowledge related to HIV/AIDS among secondary school students in Klang is not satisfactory. There is considerable misconception regarding transmission and prevention of HIV/AIDS. The respondents seem to have unfavorable attitude on the prevention of HIV/AIDS. Among 6.1% of students that admitted to have ever had sexual intercourse, only 43.1% of them reported that they or their partners used condom at last sexual intercourse. It is recommended that peer-led intervention on improvement of knowledge, attitudes and behaviour of secondary school children related to HIV prevention be implemented.

Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk Ijazah Master Sains.

PENGETAHUAN, SIKAP DAN AMALAN BERKENAAN PENCEGAHAN HIV/AIDS DI KALANGAN PELAJAR SEKOLAH MENENGAH DI KLANG, MALAYSIA

Oleh

MAHTAB MOHAMMADI

February 2010

Pengerusi: Professor Lekhraj Rampal, MBBS, MPH, PhD, FAMM

Fakulti: Perubatan dan Sains Kesihatan

HIV/AIDS telah membunuh lebih daripada 25 juta orang sejak pertama kali temui pada tahun 1981, menjadikannya ia salah satu pandemik pemusnah dalam sejarah. Remaja umumnya cenderung memiliki tahap pengetahuan yang tinggi tentang erti penularan HIV, namun tahap pengetahuan yang rendah mengenai perlindungan efektif adalah kekurangan beberapa maklumat penting dan sejumlah kesalahfahaman tentang risiko yang berkaitan dengan hubungan biasa. Pengetahuan tentang HIV/AIDS jelas penting bagi golongan muda untuk mencegah perilaku yang meletakan mereka berisiko untuk menjangkiti HIV, bagaimanapun, pengetahuan itu sendiri, tidak selalu nya berkaitkan dengan tindakan pencegahan HIV seperti penggunaan kondom. Objektif kajian ini adalah untuk menentukan tahap pengetahuan, sikap dan amalan yang berkaitan dengan pencegahan HIV/AIDS di kalangan pelajar sekolah menengah di daerah Klang.

Penyelidikan kajian irisan lintangan digunakan. Populasi kajian ini adalah pelajar sekolah menengah di daerah Klang. Data dikumpul dari 9th Februari hingga 28th Mac 2009 dengan menggunakan pra-ujian (Bahasa Malaysia) borang soal selidik. Data dianalisis dengan menggunakan SPSS versi 16.0.

Daripada 2273 pelajar yang menyertai kajian; 61.7% adalah lelaki. Majoriti responden adalah Melayu (37.2%), diikuti dengan Cina (35.7%) dan India (26.0%). Lingkungan purata umur pelajar adalah daripada 14 hingga 18 tahun. Tiada perbezaan signifikan di antara umur pelajar lelaki (15.48 SD ±1.13 tahun) dan umur pelajar perempuan (15.49 SD ± 0.039) (t = -0.26, df = 2271, p>0.05). Sumber utama responden memperolehi informasi kesedaran HIV/AIDS adalah melalui media cetak. Purata skor pengetahuan responden adalah 7.01 (SD ±3.62) dan berkisar dan antara 0 - 15 mata. Satu ratus lapan belas pelajar 5.2% memperolehi 0 (sifar) markah bagi soalan skor pengetahuan dan 88.8% pelajar mempunyai kurang dari 75% daripada nilai penuh dalam soalan pengetahuan skor. Keputusan kajian ini menunjukkan bahawa walaupun majoriti (77.7%) daripada pelajar mengetahui bahawa AIDS adalah penyakit yang fatal, hampir 52% tidak sedar bahawa tidak ada ubat untuk AIDS dan hanya 23.7% tahu bahawa tidak ada vaksin yang menghalang orang daripada menjangkiti HIV. Lebih separuh daripada peserta percaya bahawa ada kemungkinan penularan HIV melalui hubungan biasa dengan orang HIV-positif, seperti berkongsi makanan (68.6%), berkongsi segelas air (71.1%) dan daripada gigitan nyamuk (60.4%). Berpantang daripada hubungan seksual, mempunyai pasangan seks yang tidak dijangkiti dan penggunaan kondom sebagai pencegahan HIV adalah tidak difahami dengan baik di antara para peserta, seperti yang ditunjukkan oleh kadar respons yang salah 55.7%, 63.5% dan 67.2% masing-masing.

Min skor sikap terhadap HIV/AIDS adalah 25.32 (SD ±3.60) dan berkisar di antara 8 - 45 mata. Min skor amalan mengenai HIV/AIDS adalah 4.53 (SD ±1.06) dan berkisar di antara 0 - 6 mata dan min skor perilaku seksual adalah 3.73 (SD ±0.78) dan berkisar di antara 0 - 6 mata. Keputusan juga menunjukkan bahawa pengetahuan responden mempunyai hubungan yang signifikasi dengan usia (F = 33.41, p = 0,001) dan darjah akademik (F = 31.47, p = 0.001). Sikap berkaitan HIV/AIDS mempunyai hubungan signifikasi dengan usia (F = 10.52, p = 0,001), tahap pendidikan ibu (F = 2.87, p = 0.035) dan darjah akademik (F = 21.03, p = 0.002). Praktikkan responden berkaitan HIV/AIDS mempunyai hubungan yang signifikasi dengan jantina (F = 153.95, p = 0.001), usia (F = 9.32, p = 0.001), agama (F = 2.82, p = 0.024), pendapatan keluarga (F = 2.88, p = 0.035) dan darjah akademik (F = 4.56, p = 0.001).

Kesimpulannya, hasil kajian menunjukkan bahawa tahap pengetahuan berkaitan HIV/AIDS di kalangan pelajar sekolah menengah di Klang adalah tidak memuaskan. Terdapat banyak salah faham tentang transmisi dan pencegahan HIV/AIDS. Responden didapati mempunyai sikap buruk mengenai pencegahan HIV/AIDS. Di antara 6.1% pelajar yang mengakui pernah melakukan hubungan seksual, hanya 43.1% daripada mereka melaporkan bahawa mereka atau pasangan mereka menggunakan kondom pada hubungan seksual terkini. Adalah disyorkan agar 'peer-led' intervensi untuk peningkatan pengetahuan, sikap dan perilaku anak-anak sekolah menengah berkaitan dengan pencegahan HIV dilaksanakan.

ACKNOWLEDGEMENTS

I would like to express my sincere gratitude and deepest appreciation to my supervisor, Professor Dr. Lekhraj Rampal for his fatherly guidance and advice during this research. His patience and hard work have been beyond the call of duty.

I also would like to express my heartfelt thanks and special gratitude to Dr. Maha Binti Abdullah for her insightful suggestion, encouragement, patience and valuable advice that had helped carries on the study successfully.

I would like express my deepest special grateful to Associate Professor Dr. Hejar Abd. Rahman for her advice and helpful discussion during this period of study.

I would also like to thank:

- Professor Dato' Dr. Lye Munn Sann and professor Dr. Bahaman for their exceptional advice and guidance in statistical aspects of my thesis
- All of my lecturers, tutors and staffs in UPM
- All of the students from selected secondary school in Klang district, as well as their parents, teachers, and school administrators
- All my lovely friends in Malaysia for enjoyable social life in a wonderful country.

Last but not least, I wish to express my gratitude to my family for their support and encouragement.

I certify that an Examination Committee has met on (11-2-2010) to conduct the final examination of (Mahtab Mohammadi) on her Master of Science thesis entitled "Knowledge, Attitude and Practice related to HIV/AIDS Prevention among Secondary School Students in Klang District, 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 Sciences. Members of the Examination Committee are as follows:

Name of Chairperson, PhD

Assoc. Prof. Dr Rozita Rosli Faculty of Medicine and Health Sciences Universiti Putra Malaysia (Chairman)

Name of Examiner 1, PhD

Assoc. Prof. Dato' Dr. Faisal Ibrahim
Faculty of Medicine and Health Sciences
Universiti Putra Malaysia
(Internal Examiner)

Name of Examiner 2, PhD

Assoc. Prof. Dr. Mary Huang Soo Lee Faculty of Medicine and Health Sciences Universiti Putra Malaysia (Internal Examiner)

Name of External Examiner, PhD

Assoc. Prof. Dr. Mohamed Rusli Abdullah Faculty of Medicine and Health Sciences Universiti Sains Malaysia (External Examiner)

BUJANG KIM HUAT, PhD

Professor and Deputy Dean School of Graduate Studies Universiti Putra Malaysia

Date:

This thesis submitted to the Senate of Universiti Putra Malaysia and has been accepted as fulfilment of the requirements for the degree of Master of Science. The members of the Supervisory Committee were as follows:

LEKHRAJ RAMPAL, MBBS, MPH (HONS), DRPH, FAMM

Professor Department of Community Health Faculty Medicine and Health Sciences University Putra Malaysia (Chairman)

Hejar Binti Abd. Rahman, M.D., Masters Community Health

Associate Professor
Department of Community Health
Faculty Medicine and Health Sciences
University Putra Malaysia
(Member)

Maha Binti Abdullah, PhD

Department of Pathology
Faculty Medicine and Health Sciences
University Putra Malaysia
(Member)

HASANAH MOHD. GHAZALI, PhD

Professor and Dean School of Graduate Studies Universiti Putra Malaysia

Date: 13 May 2010

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.

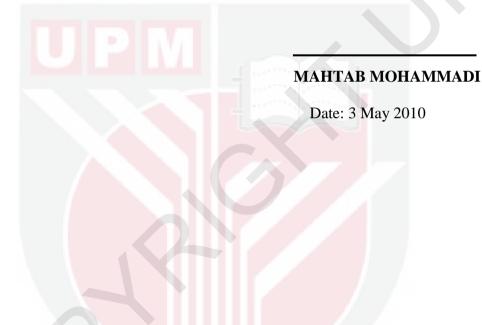


TABLE OF CONTENTS

			Page
DEDIC	ATION		ii
ABSTR	ACT		iii
ABSTR	AK		vi
ACKNO	OWLED	GEMENTS	ix
APPRO	VAL		X
DECLA	RATIO	N	xii
LIST O	F TABL	ES	xviii
LIST O	F FIGU	RES	xxi
LIST O	F ABBR	EVIATIONS	xxii
CHAP	TER		
1	INT	RODUCTION	
	1.1	Background	1
	1.2	Problem Statement	4
	1.3	Objectives	5
		1.3.1 General Objective	5 5
		1.3.2 Specific Objectives	5
	1.4	Research Hypothesis	6
	1.5	Conceptual Framework	7
2		ERATURE REVIEW	
	2.1	HIV/AIDS	8
	2.2	Historical overview of HIV/AIDS	8
	2.3	Epidemiology of HIV/AIDS	9
		2.3.1 HIV/AIDS - A Global Pandemic	9
		2.3.2 HIV/AIDS in Malaysia	10
	2.4	Transmission of HIV/AIDS	13
	2.5	HIV/AIDS Risk Behavior among Adolescents	14
	2.6	Pathogenesis of HIV/AIDS	16
	2.7	Sign and Symptoms of HIV/AIDS	17
	2.8	Diagnoses of HIV	17
	2.9	Treatment of HIV/AIDS	18
	2.10	Prevention of HIV/AIDS	19
		2. 10.1 National Plan of Action on HIV/AIDS 2006-2010	20
		Adolescents and HIV/AIDS	21
	2.12	KAP of HIV/AIDS Prevention	22
		2.12.1 Knowledge related to HIV/AIDS	22
		2.12.2 HIV/AIDS Myths and Misconceptions	25
		2.12.3 HIV/AIDS Information Source	26
		2.12.4 Attitude related to HIV/AIDS	27

		2.12.5	Practice related to HIV/AIDS and Risky	20	
	2.12	Dalatio	Sexual Behavior	28	
	2.13	Relationship between Knowledge, Attitude and Practice Related to HIV/AIDS Prevention			
	2 14		, Peer and Adolescent Communication	31 33	
		-	tion HIV/AIDS and Sex Education	34	
	2.13	Dvaraat	and the vertical and sea Education	31	
3			AND METHOD		
	3.1	•	Location	38	
	3.2	Study D	<u> </u>	39	
	3.3	-	Population	39	
			Sampling Frame	39	
			Sampling Method	39	
			Sample Size	40	
		3.3.4	Inclusion and Exclusion Criteria	40	
			3.3.4.1 Inclusion Criteria	40	
	2.4		3.3.4.2 Exclusion Criteria	40	
	3.4		ing Instrument	41	
			Demographic Factors	41	
		3.4.2		41 42	
		3.4.3	Knowledge Related to HIV/AIDS Prevention Attitude Related to HIV/AIDS Prevention	42	
			Practice Related to HIV/AIDS	42	
			Sexual Behaviors	43	
	3.5		y and Reliability of the Questionnaire	44	
	3.3	3.5.1	Pre-Testing	44	
		3.5.2	Reliability	45	
			Content Validity	45	
	3.6		Consideration and Consent	45	
	3.7		ollection	46	
	3.8		ion of Term	46	
	3.9		is of Data	48	
4	RESU			70	
	4.1	Respon		50	
	4.2	_	raphic Distribution of Respondents	50	
	4.3		edge Related to HIV/AIDS	52	
	4.4		nship between Knowledge Related to HIV/AIDS	55	
		4.4.1	cio-Demographic Variables	55	
		4.4.1	Relationship between Knowledge related to HIV/AIDS and Gender	55	
		4.4.2	Relationship between Knowledge related to	33	
		+. 4.∠	HIV/AIDS and Age	55	
		4.4.3	Relationship between Knowledge related to	33	
		T.+.J	HIV/AIDS and Ethnicity	56	
		4.4.4	Relationship between Knowledge related to	50	
			HIV/AIDS and Religion	57	
			- <i>G</i> -		

	4.4.5	Relationship between Knowledge related to	
		HIV/AIDS and Parents' Marital Status	58
	4.4.6	Relationship between Knowledge related to	
		HIV/AIDS and Living Arrangement	58
	4.4.7	Relationship between Knowledge related to	
		HIV/AIDS and Father's Education	59
	4.4.8	Relationship between Knowledge related to	
	11110	HIV/AIDS and Mother's Education	60
	4.4.9	Relationship between Knowledge related to	00
	1.1.2	HIV/AIDS and Family income	61
	4.4.10	Relationship between Knowledge related to	O.
	1.1.10	HIV/AIDS and Academic Grade	62
4.5	Sources	s of Information on HIV/AIDS	62
4.6		e related to HIV/AIDS	63
4.7		nship between Attitude related to HIV/AIDS	03
т./		cio-Demographic Variables	65
	4.7.1	Relationship between Attitude related to	03
	4.7.1	HIV/AIDS and Gender	65
	4.7.2	Relationship between Attitude related to	03
	4.7.2	HIV/AIDS and Age	66
	4.7.3	Relationship between Attitude related to	00
	4.7.3	HIV/AIDS and Ethnicity	67
	4.7.4		07
	4.7.4	Relationship between Attitude related to	67
	4.7.5	HIV/AIDS and Religion	07
	4.7.3	Relationship between Attitude related to HIV/AIDS and Parents' Marital Status	60
	176		68
	4.7.6	Relationship between Attitude related to	60
	477	HIV/AIDS and Living Arrangement	69
	4.7.7	Relationship between Attitude related to	70
	170	HIV/AIDS and Father's Education	70
	4.7.8	Relationship between Attitude related to	70
	4.7.0	HIV/AIDS and Mother's Education	70
	4.7.9	Relationship between Attitude related to	7.1
	4.5.10	HIV/AIDS and Family Income	71
	4.7.10	Relationship between Attitude related to	50
4.0		HIV/AIDS and Academic Grade	72
4.8		e of Risky Behavior related to HIV/AIDS	73
4.9		nship between Practice Related to HIV/AIDS	
		cio-Demographic Variables	75
	4.9.1	Relationship between Practice related to	
	4.0.0	HIV/AIDS and Gender	75
	4.9.2	Relationship between Practice related to	
		HIV/AIDS and Age	76
	4.9.3	Relationship between Practice related to	
		HIV/AIDS and Ethnicity	77
	4.9.4	Relationship between Practice related to	
		HIV/AIDS and Religion	77
	4.9.5	Relationship between Practice related to	_
		HIV/AIDS and Parents' Marital Status	78

	4.9.6	Relationship between Practice related to	
		HIV/AIDS and Living Arrangement	79
	4.9.7	Relationship between Practice related to	
		HIV/AIDS and Father's Education	79
	4.9.8	Relationship between Practice related to	
	,.0	HIV/AIDS and Mother's Education	80
	4.9.9	Relationship between Practice related to	00
	7.7.7	HIV/AIDS and Family Income	81
	4.9.10	• • • • • • • • • • • • • • • • • • •	01
	4.7.10	HIV/AIDS and Academic Grade	82
4.11	Covnol	Behavior	83
			83
4.12		nship between Sexual Behavior and	0.4
		Demographic Variables	84
	4.12.1	Relationship between Sexual Behavior	0.4
	4 10 0	and Gender	84
	4.12.2	Relationship between Sexual Behavior	0.5
		and Age	85
	4.12.3	Relationship between Sexual Behavior	
		and Ethnicity	85
	4.12.4	Relationship between Sexual Behavior	
		and Religion	86
	4.12.5	<u> </u>	
		and Parent's Marital Status	87
	4.12.6	Relationship between Sexual Behavior	
		and Living Arrangement	87
	4.12.7	Relationship between Sexual Behavior	
		and Father's Education	88
	4.12.8	Relationship between Sexual Behavior	
		and Mother's Education	88
	4.12.9	Relationship between Sexual Behavior	
		and Family Income	89
	4.12.10	Relationship between Sexual Behavior	
		and Academic Grade	90
4.13	Correlat	tions between Knowledge, Attitude	
		ctice related to HIV/AIDS	91
4.14		edge related to HIV/AIDS and Associated Factors	92
4.15		e related to HIV/AIDS and Associated Factors	92
4.16		e related to HIV/AIDS and Associated Factors	93
4.17		Behavior and Associated Factors	93
4.1/	Sexual .	Deliavior and Associated Factors	73
DIC	CTICCION	J.	
	CUSSION		Ω4
5.1		edge related to HIV/AIDS Prevention	94
<i>5</i> 2		Tyths and Misconception	95
5.2		e related to HIV/AIDS Prevention	96
5.3		e related to HIV/AIDS Prevention	98
5.4		tion between Respondents' Knowledge,	40:
- -		e and Practice related to HIV/AIDS Prevention	101
5 5	Implication	tion of the Study	102

6	SUN	MARY AND CONCLUSION		
	6.1	Summery and Conclusion	103	
	6.2	Limitation and Strength of the Study	104	
	6.3	Recommendations and Further Studies	105	
REFER	ENCES	3	106	
APPENDICES		119		
BIODATE OF STUDENT			136	

