

Sexual behaviour and HIV knowledge among Dermatology cum Genitourinary Clinic Attendees, Johor Bahru, Malaysia

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Summary

A study was conducted in the Dermatology cum Genitourinary Clinic, Hospital Sultanah Aminah Johor Bahru to determine a local population's knowledge of HIV and their sexual behaviour in relation to it. A total of 231 men and 217 women were interviewed. The sexual culture seen is one of relatively late age of first sexual intercourse, low level of partner change and low level of condom use. Men reported a higher involvement in risk behaviour. Nearly all the respondents (95.8%) have heard of HIV/AIDS but had incorrect perceptions of its mode of transmission and its associations with risk groups.. This study enable us to gain background information about our patients' sexual behaviour and HIV knowledge. There is a need to continue HIV education to improve our public's HIV knowledge and the results of this study provides a baseline against which future educational interventions can be gauged.

Key Words: Sexual behaviour, HIV, AIDS, Condom use

Introduction

Human immunodeficiency virus (HIV) infection is known to be sexually transmitted since 1980s¹. The presence of other sexually transmitted diseases (STDs) are now recognised to facilitate both the acquisition and transmission of HIV^{2,3,4}. Strategies developed by World Health Organization (WHO) Global Program on Acquired immunodeficiency syndrome (AIDS) to prevent sexual transmission focus on three linked components: condom promotion and distribution, change in sexual behaviour (delaying onset of intercourse by adolescents, avoidance of high risk sexual practices and partner number reduction) and control of STDs.

In Malaysia, 77% of the 12,905 HIV infections reported till June 1995 were associated with intravenous drug use (IVDU)⁵. This is because this high risk behaviour group is compulsorily screened for HIV.

However, the number of sexually transmitted HIV infections, which accounted for 2% of reported cases in Malaysia, is expected to rise⁵. Besides addressing the problem of IVDU, efforts to control the epidemic in Malaysia include upgrading of STD services and promoting sexual behaviour change by using government sponsored media campaigns aimed at educating the public about the cause of AIDS, the mode of transmission of HIV and possible methods of prevention. Emphasis is placed on adopting a healthy lifestyle which includes maintaining a happy healthy family with mutually monogamous relationship. Condom promotion and distribution is left to non-governmental organisations and personal health care providers in order to avoid the controversy that the very act of promoting and making condoms available encourages promiscuity.

The aim of this study was to investigate a local population's knowledge and behaviour regarding HIV

and their attitude towards condom use and towards people with HIV infection two years after our national launch of healthy lifestyle campaign on AIDS in 1992.

Methodology

Procedure

Face to face interviews were conducted in the Dermatology cum Genitourinary clinic, Hospital Sultanah Aminah Johor Bahru with consecutive clinic attendees between July 1994 to September 1994. Patients aged 14 years and above were approached by one of our interviewers who explained the purpose of the study and the nature of the questions. Patients were assured of confidentiality and anonymity. Interviews were conducted in the privacy of clinic rooms.

Setting

The Dermatology cum Genitourinary Clinic, Hospital

Sultanah Aminah Johor Bahru, Malaysia has over 12,000 attendances per year. About 4% of these are seen for STDs.

Questionnaire

The questionnaire contains a core of 37 items tapping demographics, sexual behaviour, condom use and attitude towards condom use, knowledge of HIV, perceived risk of contracting HIV and attitude towards patients living with HIV.

The questionnaire was pretested on patients attending a medical camp in Pasir Putih, Johor by the first three authors.

Data analysis

Descriptive statistical procedures were used to examine the characteristics of the subjects. Student-*t* test and chi square test for two independent samples were used

Table I
Demographic characteristics of respondents

	Males (N-231)		Females (N-217)		Total (N-448)	
	N	%	N	%	N	%
Age						
<20	25	10.8	19	8.7	44	9.8
20-29	60	26.0	88	40.5	148	33.0
30-39	59	25.5	67	30.9	126	28.1
40-49	50	21.6	23	10.6	73	16.3
50-59	20	8.7	19	8.7	39	8.7
60-69	11	4.8	1	0.5	12	2.7
70-79	4	1.7	0	0	4	0.9
>80	2	0.9	0	0	2	0.4
Ethnicity						
Malay	126	54.5	147	67.7	273	60.9
Indian	56	24.4	28	12.9	84	18.8
Chinese	39	16.9	33	15.2	72	16.1
Others	10	4.3	9	4.1	19	4.2
Religion						
Islam	139	60.2	155	71.4	294	65.6
Hinduism	47	20.3	23	10.6	70	15.6
Buddhism	32	13.9	28	12.9	60	13.4
Christianity	9	3.9	8	3.7	17	3.8
Others	4	1.7	3	1.4	7	1.6

to examine the differences between male and female respondents. We focused our analyses on questions pertaining to sexual behaviour.

Results

Demographic characteristics

A total of 231 men and 217 women were interviewed. The mean age for men was 36 years (range 14 - 82) and for women was 31 years (range 14 - 58). The age and ethnic distribution of the respondents are as shown in Table I. 2.5% had no formal education and 85.8% completed secondary school, that is 12 years or less of education. 67.1% of the men and 65.0% of the women were married. 87.4% of the men and 63.1% of the women were employed full-time. 8.7% of the men and 6.0% of the women were students.

Sexual orientation

Sexual orientation was based on questions exploring actual sexual behaviour. Hence, only sexually experienced respondents were captured. Sexual orientation could be assigned to 198 men (85.7%) and 170 women (78.3%). Of the men, 194 (98.0%) were heterosexual and 4 (2%) were bisexual. Of the women, 169 (99.4%) were heterosexual and 1 (0.6%) was bisexual.

Sexual behaviour

The mean age of first sexual intercourse was 22.8 years for men (range 15 - 38, SD 4.4) which is quite similar to that of women (22.3 years, range 14 - 41, SD 4.9, $p < 0.4$). 26.3% of the 312 respondents reported sexual intercourse before the age of 20 (Table II). Men reported a significantly higher involvement in premarital sex. Mean number of sexual partners in past year was 1 for both men (range 1 - 20) and women (range 1 - 5). Men had a higher mean number of lifetime partners (4 for men vs. 1 for women) but this is attributed to the small percentage of men who had around 100 lifetime partners (1% of 198 men). The median number of life time partners for both men and women was 1. Of the 46 men who had visited prostitutes, only 27 (58.7%) used condoms. This study did not identify any sex workers. A

significantly higher proportion of men reported past STDs.

Condom use

12.1% of men and 10.1% of women have not heard of condoms which were described to them. Knowledge and attitudes towards condom use are shown in Table 3. A similar proportion of men and women believed that condoms protect against STDs including HIV. A significantly higher number of women felt that condoms will encourage promiscuity ($\chi^2=9.098$, $p<0.005$).

HIV knowledge, attitudes towards HIV infection and perceived risk of infection

As table 4 indicates, the majority of respondents were aware of HIV/AIDS although only 79.7% knew that it is sexually transmitted. About half of the respondents thought that only intravenous drug users and homosexuals could contract HIV. A substantial minority of respondents still believed that HIV could be transmitted through casual contact like touching, sharing cutleries and from use of public toilets.

Up to 50% of the respondents felt that people living with HIV deserved the infection and only slightly more than half of them will not hesitate visiting friends with HIV infection. About 70% of our respondents worried about contracting HIV but only 10% felt that they were at risk of infection. Reasons cited for being at risk were contacts with sex workers, multiple partners, caring for people living with HIV and HIV being more common can affect anyone. 4.3% of men and 2.0% of women had been tested for HIV but the majority were willing to be tested (73.9% of men, 94.5% of women).

Discussion

This paper describes the sexual behaviour and HIV knowledge of 448 clinic attendees. The sexual culture seen is one of relatively late age of first sexual intercourse and low level of partner change when compared with American and European surveys^{6,9}. For instance, the median age of first intercourse in this study was 22 years for men and 21 years for women whereas in American and French surveys, the median

Table II
Sexual behaviour of respondents

	Males		Females		Chi-square p value	
	Yes/N*	%	Yes/N*	%		
Premarital sex	74/231	32	11/217	5.1	51.18	<0.001**
Sex before age 20	39/173	22.5	43/139	30.9	2.754	>0.05
Single partner past year	167/184	90.8	172/174	98.8	11.60	<0.001**
Single lifetime partner	132/206	64.1	171/181	94.8	55.26	<0.001**
5 or more partners past year	7/184	3.8	1/174	0.6	2.919	<0.025**
5 or more lifetime partners	46/206	22.3	3/181	1.6	35.38	<0.001**
At least one vaginal sex per week	113/178	63.5	102/140	72.8	3.093	>0.05
Ever had oral/anal sex	22/209	10.5	8/209	3.8	6.069	<0.025**
Sex with prostitutes	46/231	19.9				
Had previous STDs	31/231	13.4	8/217	3.7	12.141	<0.001**

**Significant difference, $p < 0.05$

*N = total respondents to individual questions

Table III
Knowledge and attitudes regarding condoms

	Males (231)		Females (217)		Total (448)	
	No.	%	No.	%	No.	%
Never heard of condoms	28	12.1	22	10.1	50	11.5
Easy to use	144	62.3	120	55.3	264	58.9
Tears easily	74	32.0	62	28.6	136	30.4
Expensive	35	15.2	21	9.7	56	12.5
Effective contraception	186	80.5	165	76.0	351	78.3
Protect against STDs	156	67.5	135	62.2	291	65.0
Protect against HIV	156	67.5	127	58.5	283	63.2
Usage is against my religion	66	28.6	53	24.4	119	26.6
Encourages promiscuity	122	52.8	145	66.8	267	59.6
Ever used condoms	69	30.0	55	25.3	124	27.7

age of first intercourse was 16 years for men and 17 years for women^{7,9}. One third of males and one fifth of females reported having intercourse before age 15 in United States whereas only 3 out of our 312 (1%) respondents had intercourse at or before age 15. 22.5%

of males and 30.9% of females had intercourse before age 20. The authors are aware that the population sampled may not be representative of our general population. However, a household survey carried out in 1986 on 1200 Malaysian adolescents aged 15-21

Table IV
Knowledge and attitudes towards HIV

	Males (231)		Females (217)		Total %
	No.	%	No.	%	
Heard of HIV/AIDS	222	96.1	207	95.4	95.7
Sexual Transmission	165	71.4	192	88.5	79.7
Transmission via needle sharing	212	91.8	202	93.1	92.4
Transplacental transmission	213	92.2	194	89.4	90.8
Transmission via kissing on cheeks	51	22.1	31	14.3	18.3
Transmission via mosquito bites	73	31.6	53	24.4	28.1
Transmission via sharing food/cutlery	55	23.8	34	15.7	19.9
Transmission via use of public toilets	43	18.6	29	13.4	16.1
Transmission by touching	43	18.6	24	11.1	14.5
Only IVDU/homosexual can get HIV/AIDS	101	43.7	89	41.0	42.4
HIV infection can be without symptoms	90	39.0	86	39.6	39.3
Asymptomatic patients are infectious	152	65.9	120	55.3	60.7
Know someone with HIV/AIDS	17	7.4	26	12.0	9.5
Do not worry about visiting HIV patients	139	60.2	128	58.9	59.6
HIV patients deserved the infection	122	52.8	111	51.2	52.0
Worried about contracting HIV/AIDS	145	62.8	158	72.8	67.6
Felt at risk of contracting HIV/AIDS	27	11.7	19	8.8	10.3
Tested for HIV/AIDS	26	11.2	5	2.3	6.9

years in Kuala Lumpur also showed a lower reported rate of sexual activities compared to similar studies in other countries¹⁰.

The authors realise that recall bias and a tendency for an individual to respond in a socially desirable way may have resulted in both under-reporting and over-reporting of certain behaviours. Premarital sex and multipartnership which are more tolerable to our society when practised by men than women may result in exaggeration by our males and under-declaration by female respondents. However, societal pressures may result in a real difference in the concerned behaviour. Of more importance here, is the finding that only 3.8% of men and 0.6% of women had 5 or more partners in the past year. In 1990, a study on patterns of risk

behaviour for patients with STDs in Kuala Lumpur reported that 41.1% of 91 men with STDs had between 6 to 20 partners in the past year¹¹. In 1994, a similar study in Penang reported that 76% of 262 men with STDs had between 6 to 20 partners in the past year indicating a need to target this high risk behaviour group for both educational and behavioural interventions¹². 13.4% of male respondents had previous STDs. Forty-six men (19.9%) had visited commercial sex workers but only 58.7% of them used condoms.

About 10% of the respondents had not heard of condoms and less than a third had ever used them. Condom knowledge was generally poor and attitudes toward condom use were negative as indicated in Table III. Our results indicate that a significant portion of

respondents are unaware that condoms protect against STDs and HIV. As such, it is unreasonable to expect these people to systematically use condoms unless they believe that condoms are highly effective against STDs and HIV transmission. There is, therefore, a need to educate and to inform them of the existence of compelling evidence that condoms, if used consistently and correctly for every act of sexual intercourse, are highly effective¹³⁻¹⁵.

The majority of our respondents have heard of HIV/AIDS and more than 90% of them were aware of transplacental transmission and transmission via needle-sharing. However, the much lower percentage of our male respondents (70%) who believed that HIV is sexually transmitted indicates a need to convince them of the importance of sexual transmission. That 28.1%, 16.1%, 19.9% and 14.5% of respondents erroneously thought that HIV/AIDS could be contracted from mosquito bites, use of public toilets, sharing food/utensils and through touching, respectively, indicated a potential for significant interference with, and phobic reactions to daily life that were not warranted by existing evidence. Ignorance of the lack of risk such as transmission through saliva, mosquitoes and use of public toilets together with association of HIV/AIDS with a particular risk behaviour group like IVDU or homosexuals may result in the persecution and denial of rights to people living with HIV and to individuals with a particular risk behaviour regardless of their HIV status. In this study, about 52.0% of respondents

believed that people living with HIV deserved the infection and only 59.6% of them will not worry about visiting friends living with HIV.

There is a need to continue aggressive educational interventions to improve HIV knowledge, to increase appreciation of condom efficacy and to change attitudes and beliefs of our general population. It is also necessary to target high risk behaviour groups for studies to understand why they put themselves at risk in order to devise interventions for behavioural change. This study cannot directly assess the effects of media campaigns on the sexual behaviour and HIV knowledge of the general population but it does provide a baseline against which future educational interventions can be gauged. It also provides some preliminary information that may be helpful in designing future educational interventions which are gender specific and culturally acceptable to our local population.

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