







**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<sup>7,9</sup>. 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 countries<sup>10</sup>.

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 year<sup>11</sup>. 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 interventions<sup>12</sup>. 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 effective<sup>13-15</sup>.

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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