

PUBLIC AWARENESS OF AIDS IN SINGAPORE

S C Emmanuel

ABSTRACT

Singapore had 52 cases of AIDS as at June 1990. This places Singapore in the low-infection-load group of countries. Constant vigilance is necessary however.

The Health education programme against AIDS in Singapore was launched in 1985. This first ever National Survey on public awareness of AIDS was carried out by the Research and Evaluation Department, Ministry of Health HQ, in late 1987, to assess the impact of the programme. It showed the level of knowledge of among Singaporeans to be high and comparable in many areas to that in the USA. The survey however also showed lack of credibility in the knowledge of AIDS among the public in certain important areas. This poses challenges to the public education programme.

Keywords : AIDS status of Singapore, low infection group, evaluation of AIDS programme, high knowledge level

SINGAPORE MED J 1991; Vol 32: 123-126

INTRODUCTION

The first case of HIV infection in Singapore was diagnosed in May 1985. The numbers have since increased to 52 cases of HIV infection as at June 1990⁽¹⁾, some 5 years later. Included in this are 21 cases of AIDS, of whom 13 have died, 2 have AIDS-Related-Complex and 29 are asymptomatic carriers.

This definition of the AIDS status in Singapore places her in the low-infection-load group of countries⁽²⁾. Constant vigilance is necessary though, in view of the rapid spread of AIDS affecting people in many regions of the world and particularly because of the threat of a potential explosion in certain countries in Asia.

Mass media information and education programmes for the general public are often the first step and mainstay in national AIDS prevention efforts. Experience shows that these can teach the public about AIDS. It is less clear how much they contribute to changing high risk behaviour though.

The national programme for AIDS public education in Singapore was launched in 1985⁽³⁾. About 2 million copies of print material have been developed and distributed since. Mass media activities have included messages through television, radio, cinemas, newspapers and magazines in 4 languages. Public exhibitions and campaigns have been held.

To evaluate the AIDS health education programme in Singapore, a first ever nationally representative study of the Singapore population was carried out by the Research and Evaluation Department of the Ministry of Health Headquarters, at the end of 1987, for the first national assessment of public awareness of AIDS in Singapore.

The evaluation instrument used was modelled after that of the Centres for Disease Control in Atlanta Georgia, as this has been well tested and would enable Singapore's results to be compared with that of the USA and other countries adopting the same approach.

The questionnaire contained items on self-assessed knowledge about AIDS and HIV transmission, perceived effectiveness of various preventive measures, experience of

tests for AIDS, perception of how the problem of AIDS should be handled in Singapore and attitudes and practice towards AIDS patients.

1 METHODOLOGY OF SURVEY

A statistically-representative sample of 3,301 Singaporeans and Permanent Residents aged between 15 and 50 years were interviewed. The distribution of the demographic characteristics of the respondents closely resembled that of the population.

This paper presents salient findings from this first-ever National Public Awareness of AIDS survey in Singapore and compares the findings with those in the USA⁽⁴⁾.

2 SURVEY FINDINGS

The survey revealed that almost all Singaporeans (98%) had ever heard, seen or read something about AIDS. This compared favourably with the comparative level of 92% recorded for the USA.

There was a strong correlation between the level of education of the respondents and their awareness level of AIDS. The survey showed that all the tertiary educated were aware of the disease. The percentage awareness levels declined gradually to 74% among those with no formal education ($P < 0.001$). This group however comprised only 3% of respondents and 6% of the population.

3 LEVEL OF KNOWLEDGE

3.1 Although the large majority of Singaporeans were aware of AIDS, not many among them professed that they knew a lot about the disease.

3.2 The survey showed that only 6% of persons felt that they had substantial knowledge about AIDS, while 42% thought that they had some knowledge about the disease. The rest, constituting the majority (52%), indicated that their knowledge on AIDS was little or minimal.

3.3 The comparative situation in the USA showed that far more Americans felt they knew a lot about AIDS and far less knew little (Table I).

Table I: Self Perceived Knowledge About AIDS (%)

	Singapore	USA
A lot	6	22
Some	42	44
A little	52	26

Research & Evaluation Department
Ministry of Health
16 College Road
Singapore 0316

S C Emmanuel, MBBS, MSc(Public Health), AM
Director

4 INFORMATION SOURCES

4.1 Respondents learnt about AIDS mainly from the mass media, their acquaintances, or literature distributed by the Ministry of Health. The most often cited information sources were:

Table II: Commonest Sources of Information on AIDS

Source	%
Newspapers	93
Television	83
Relatives/colleagues/friends	51
Magazine	50
Brochures/pamphlets of MOH	38
Radio	36

4.2 Persons without any formal education obtained their knowledge of AIDS largely from television and from relatives or friends, while the most oft quoted source among the literate group of respondents was newspapers.

4.3 When respondents were asked what they thought was the single most important source through which they acquired their information on AIDS, 59% rated newspapers as the leading source, followed by television as a distant second (21%).

4.4 As to where the population would go to get more information on AIDS, 53% indicated they would resort to the privacy of reading from books, magazines, health pamphlets and information sources in libraries on AIDS. Seekers for specific information on AIDS would to a much lesser extent, consult private doctors (32%), government doctors (29%) or ask their friends, relatives or colleagues (29%). Only 19% considered resorting to the AIDS hotline.

5 DISCUSSION ON AIDS

5.1 The survey revealed that among the respondents who were aware of AIDS, two thirds (66%) had discussed the subject with their colleagues, friends or relatives. This is similar to the situation in the US (67%). Discussion of AIDS among Singaporeans was more common among the young and the better educated.

5.2 Overall, Singaporean parents did not talk much about AIDS with their teenage children. Only 27% said they had done so. This contrasted with the situation in the US where 60% of parents said they had discussed AIDS with their children.

6 GENERAL KNOWLEDGE ON AIDS

The survey showed that the public was quite knowledgeable about important facts about AIDS. A high proportion of respondents knew that AIDS is caused by a virus (81%), impairs the immune system (92%), usually leads to death (96%), and that a person who is HIV positive may look well (70%) (Table III).

Table III: Facts About AIDS

Statement on AIDS	% respondents indicating statement "definitely/probably true"
The AIDS disease usually leads to death	96
AIDS can damage/eliminate the body's ability to fight infection	92
AIDS is a disease caused by a virus	81
A person can have the AIDS virus yet look well	70

One fifth believed erroneously that one can detect a person with AIDS by looking at him (20%) and that an AIDS vaccine is currently available (19%).

7 TRANSMISSION OF THE AIDS VIRUS

7.1 Respondents had a rather mixed understanding of the modes of AIDS transmission. A high proportion of respondents (about 90% or more) appeared to know that the AIDS virus is likely to be transmitted via sexual relations particularly with homosexuals or multiple partners, from shared needles used for drugs, from the use of unsterilised needles, from sharing razors or tooth brushes with AIDS-infected individuals and from an infected mother during childbirth (Table IV).

Table IV: Means of Spreading AIDS Virus

Transmission of AIDS	% respondents indicating transmission "very/somewhat likely" by this mode
Having sexual relations with homosexuals	96
Having sexual relations with various partners	95
Sharing improperly sterilised needles for drug use	92
Re-using improperly sterilised needles for acupuncture, etc	91
From an infected mother during childbirth	91
Sharing razors, toothbrushes with someone who has AIDS	89

7.2 However, more than 50% of the respondents also incorrectly believed that one can contract AIDS by sharing plates and cutlery which have been used by AIDS victims or when coughed or sneezed upon by persons with AIDS. Over half the respondents also wrongly felt that they would be at risk if they ate food prepared by AIDS victims while a third felt they could contract the disease if they shared a common toilet or swimming pool with them (Table V).

Table V: Means of Spreading AIDS Virus

Transmission of AIDS	% respondents indicating transmission "very/somewhat likely" by this mode
Sharing plates, forks, chopsticks or glasses with someone who has AIDS	69
Being coughed or sneezed upon by someone who has AIDS	56
Donating or giving blood	53
Eating food prepared by AIDS victim	48
Using public toilets or a common swimming pool	37

7.3 In general, better educated respondents and those with a high self-perceived knowledge of AIDS were more aware of the well-recognised routes whereby the AIDS virus is

transmitted. However, there were still certain areas where there was a similar lack of awareness among these groups. For instance, 47.5% of tertiary educated respondents and 45% respondents with no formal education fallaciously thought that they may contract AIDS by donating blood. When very close contact was examined like intimate kissing, the majority (about 80% or more) of the respondents irrespective of their levels of education or self-perceived knowledge, felt that the AIDS virus is likely to be spread in that manner.

8 ATTITUDE TOWARDS VICTIMS WITH AIDS

8.1 Most of the respondents were quite negative about having contact with AIDS victims. Only 58% respondents would only be willing to shake the hands of AIDS victims and 41% would consent to work with this group. This decreased to 6% and 1% for sharing cutlery, glasses and intimate kissing of AIDS-infected persons respectively.

8.2 A raised educational level did make some difference to the general attitude of the respondents towards AIDS victims. Proportionately, there were twice as many or more respondents with tertiary education indicating that they would be prepared to have casual contact with AIDS victims eg. shake hands, work, share toilets, share cutlery, share common swimming pool with AIDS infected persons. But there was almost equal reluctance among all respondents, irrespective of educational differences, to participate in intimate kissing with AIDS victims which could lead to the exchange of saliva.

8.3 The respondents' willingness to carry out various forms of contact with AIDS-infected individuals was next compared with their knowledge on the transmission of the virus (Table VI) and this showed some interesting differences illustrating a definite lack of conviction in their knowledge when it came to their own personal behaviour requiring close contact with AIDS patients.

9 BLOOD TEST FOR AIDS

When the respondents in the survey were asked about the availability of a blood test for AIDS, nearly three quarters (72.5%) knew about the test.

Although a large number of the respondents were aware of the test, only 8.4% actually had the blood test; 4.6% had the test while donating/receiving blood and 3.8% either went on their own or had the test because of some other reasons.

When analysed by educational level of respondents, the

highest proportion who had the test were the tertiary educated, followed by those with secondary education or less and post secondary education (11.1%, 8.3% and 7.9% respectively).

9.1 Effectiveness of contraceptive methods in protection against AIDS

Of all the contraceptive devices available, the condom is regarded as the most effective against the transmission of AIDS. However, in the survey, only 17% of the population were confident of its effectiveness against AIDS. What is worth noting is that almost three quarters (72%) of the public knew that not having sex at all is a very effective safeguard against the disease. Only a small percentage of respondents erroneously thought that transmission of AIDS could be prevented by using the oral pills, diaphragm, spermicidal jelly, foam or cream.

Results of the United States survey showed that Americans were more knowledgeable about the effectiveness of condoms and celibacy against AIDS transmission compared to Singaporeans, for each educational level group (Table VII).

Table VII: Effectiveness of Protection Against AIDS

	Condom Use	Celibacy
Under 12 years education		
US	24	84
Singapore	16	70
12 years education		
US	34	93
Singapore	19	77
More than 12 years education		
US	29	89
Singapore	26	80

10 AIDS AS A MAJOR HEALTH THREAT

Respondents were questioned on whether they currently perceived AIDS to be a major health threat to Singaporeans. Slightly more than half (55%) thought so and these comprised mainly women and the lower educated respondents.

The majority of respondents (72.0%) however, thought that AIDS would pose a greater threat in the next five years.

Table VI: Comparison of Attitude vs Knowledge of Respondents

Selected casual contact with AIDS	% Respondents indicating practice does not lead to AIDS	% Respondents willing to carry out the practice	% difference
• Shake hands with someone who has AIDS	80	59	21
• Use the same toilets as someone who has AIDS	57	32	25
• Share the use of a common swimming pool with someone who has AIDS	55	27	28
• Eat food prepared by someone who has AIDS	45	18	27
• Share plates, forks chopsticks or glasses with someone who has AIDS	27	6	21
• Kiss the cheek of someone who has AIDS	52	10	42

11 MEASURES AGAINST AIDS

With regard to measures to prevent the spread of AIDS in Singapore, almost all respondents responded positively to the following three statements on how to combat AIDS in the country, ie. that:

(i) *the Government should spend money and effort to develop a vaccine against AIDS*

About 88.5% of all respondents who had heard of AIDS thought that the government should direct its resources towards developing an anti-AIDS vaccine.

(ii) *people should take steps to prevent/reduce their exposure to the AIDS virus*

Only 2.4% of respondents did not agree to this measure to combat AIDS in Singapore.

(iii) *the Government should inform/educate the public about AIDS through education and publicity*

This measure obtained an almost unanimous vote with as many as 99.1% of all respondents agreeing to the statement. In addition to this being the most popular method of combating AIDS in the eyes of the respondents, it also emerged as the most important measure to prevent the spread of the disease in Singapore (mentioned by 55% of all respondents).

12 ATTITUDE TOWARDS PATIENTS WITH AIDS

All respondents were asked whether they had personally known anyone with the AIDS disease or virus. The majority (99.3%) stated that they had not.

In order to gauge the public's attitudes towards AIDS victims, all respondents were next posed certain attitudinal statements about AIDS patients and were asked to indicate their agreement or otherwise regarding these. The reactions obtained were rather mixed. In some cases, the individual rights of AIDS victims were recognised (Table VIII).

Table VIII: Perception of Individual Rights of AIDS Patients

	% of respondents indicating strongly/ somewhat agree
Persons infected with the AIDS virus have a right to go to school, work and socialize	73.6
It is possible for persons infected with AIDS virus to live a normal life without endangering others	63.2

Although their rights as individuals were recognized, people still tended to dissociate themselves from AIDS victims as depicted in the following statements:-

Table IX: Reaction to Contact With AIDS Patients in General

	% of respondents indicating strongly/ somewhat agree
I am afraid of AIDS and will keep away from those people who have a high chance of being infected with the AIDS virus	80.0

Continued

Persons infected with the AIDS virus should be prevented from coming into contact with other people	64.3
The identities of persons infected with the AIDS virus should be made known so that the public can take precautions	45.5
Persons who are infected with the AIDS virus have only themselves to blame	44.3

However, if ever one of their family members succumbed to the disease, the respondents tended to be more supportive (Table X).

Table X: Reaction to Contact With Family Members With AIDS

	% of respondents indicating strongly/ somewhat agree
If a family member has AIDS, I will try to help him/her to live as normal a life as possible	95.9

CONCLUSION

Overall, this survey has shown a fairly high level of knowledge among the Singapore population about AIDS. However, credibility in their knowledge appears to be lacking in some crucial areas; especially if it involved close contact with AIDS patients. This poses challenges to the health education programme for AIDS in Singapore; namely how to raise conviction, credibility in knowledge and motivate change in behaviour with regards to the disease and AIDS patients. Therein lies the ultimate test.

Findings from this survey have served as input for the second generation of Health Education Programmes drawn up against AIDS in this country.

REFERENCES

1. Ministry of Health, Singapore.
2. WHO Weekly Surveillance on AIDS.
3. Personal communication from the Training and Health Education Department, Ministry of Health, July 1990.
4. Morbidity and Mortality Weekly Report Centres for Disease Control, Vol 38 No. 20, May 26 1989.