康寧學報 第一卷 第二期 民國88年
Academic Journal of Kang-Ning Vol.1, No.2, 147~160

AIDS-Related Knowledge and Attitudes of the Taiwanese Community in Sydney

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ABSTRACT

The purpose of this study was to examine AIDS-related knowledge and attitudes of the Taiwanese community in Sydney and to provide the information of AIDS health promotion programs so as to meet their needs. The convenient sample consisted of 80 Taiwanese migrants. The data was obtained from self-administered questionnaire survey and was analysed by using SPSS program. The percentage of correct answers for all respondents was 80%, with a mean score of 11.2. Surprisingly, 70% of respondents thought that HIV/AIDS could be transmitted by a mosquito bite. Males had a significantly better HIV/AIDS-related knowledge than females did. The survey also highlighted the uneven nature of attitudes towards those with HIV/AIDS. Three-quarters of respondents did not think that HIV/AIDS is a punishment for immorality. Conversely, the majority of respondents disallowed doctors having HIV/AIDS to go on their practice and refused HIV infected person handling food in restaurants. Males had more positive attitudes towards HIV infected person than females did. In conclusion, a person with sufficient knowledge regarding AIDS is not necessary to be in favor of HIV/AIDS persons. Thus, public health workers should emphasize on not only improving the public's knowledge about AIDS but also their attitudes towards HIV infected persons.

Key words: AIDS, HIV, knowledge, attitude, Taiwanese community.

INTRODUCTION

Australia has become increasingly aware of the growing Acquired Immunodeficiency Syndrome (AIDS) problem. AIDS can be spread over not only every country but also every race. Since 1982, HIV (Human Immunodeficiency Virus)/AIDS cases have been snow-balling every year. A total of 20,279 HIV/AIDS cases in Australia were reported to the World Health Organization (WHO) as at 31 December 1998 (WHO and UNAIDS, 1999). There were 33.4 million cumulative HIV/AIDS cases worldwide reported to the WHO as at 31 December 1998. The figure showed a 17 per cent increase of HIV/AIDS cases as compared that in December 1997 (i.e. 27.6 million cumulative HIV/AIDS cases) (WHO and UNAIDS, 1999). Although the prevalence of HIV infection and AIDS in Taiwan has remained low, the increase since 1989 has been rapid (Chuang, 1993). But the incidence rate of HIV/AIDS in Taiwan is still lower than that of the majority of Western countries. There were 2,131 HIV/AIDS cases in Taiwan reported to the Department of Health in Taiwan as at 14 December 1998. The Department of Health did not view HIV/AIDS as a public health problem in Taiwan. There is little, if any, actively promoted campaign for prevention of HIV/AIDS in Taiwan. As a result, the public may lack of knowledge or have misconceptions about AIDS.

A number of research findings reveal that misconceptions towards HIV/AIDS are quite common amongst migrants in the Western countries (Adrien et al., 1994; Goh, 1991). The misconceptions include a belief that AIDS is the punishment for immorality; a belief that HIV infection is just a viral infection and a lack of understanding of the severity of HIV infection (Ross, 1986). These misconceptions affect attitudes to people with AIDS by both the general public and professionals (Douglas, Kalman & Kalman, 1985) and influence the effectiveness of educational efforts to reduce the risk of transmission.

Although there is no cure for HIV/AIDS till now, the spread of HIV can be contained by effective educational and preventive measures (Ghodse, Tregenza & Li, 1987; Ross et al., 1988). Clearly, accurate knowledge is a pre-requisite for preventive measures (Clearly et al., 1986). In fact, it is generally agreed that AIDS education should not only pay attention to homosexual or injecting drug users but also consider low-risk populations. There has been growing interest in assessing AIDS-related knowledge and attitudes among homosexual men, prostitutes, injecting drug users, or the general public. However, there are few studies focus on minorities

and migrants in Australia. Therefore, this study is to identify the knowledge of and attitudes towards HIV/AIDS in the Taiwanese community in Sydney. If the research findings show that there is a lack of knowledge or misconceptions towards HIV/AIDS, it is recommended that the promotion of health education programs should be complemented by using Mandarin. Because Mandarin is the common spoken language in Taiwan as well as in China. Thus, it would be a cost-effective method to meet the health information needs of a growing Chinese population in Sydney regardless they are from Taiwan or China.

OBJECTIVES OF THE STUDY

The objectives of the study are as follows:

1. To examine AIDS-related knowledge and attitudes of the Taiwanese community in Sydney.
2. To assess the efficiency of existing HIV/AIDS health promotions in the Taiwanese community in Sydney.

METHODS

Sample

A convenience sample was selected from Taiwanese migrants who had stayed in Sydney for more than six months, obtained from existing Taiwanese associations. Ninty-four questionnaires were distributed to voluntary Taiwanese and 81 copies were returned.

Questionnaire

The self-administered questionnaire was based on previous studies, including the World Health Organization / Knowledge, Attitudes, Beliefs and Practice on AIDS Questionnaire, and was translated into Chinese. The instrument included items to assess the subjects' demographic backgrounds, knowledge of and attitudes towards AIDS.

Respondents answered 'yes', 'no', or 'don't know' for 15 items of knowledge regarding HIV/AIDS. Cronbach alpha indicated 0.6860 internal consistency in scale item scores. In addition, respondents indicated their agreement and disagreement with the statements of attitudes on a 5-point scale. Factor analysis was done for the attitude items to reveal the underlying structure of a set of variables by clustering related items into fewer factors. The

nine items of the attitudes were subjected to oblique factor analysis (direct oblimin rotation with Kaiser normalisation). The three factors, which were (1)social acceptance, (2) risk awareness and (3) attribution of responsibility, with eigenvalues greater than 1 were comprised in this part. Finally, the questionnaire contained the questions regarding their needs and the sources of their HIV/AIDS related information. The questionnaire was examined for content validity by a well-known professor in AIDS.

Data Collection

The questionnaire was distributed to all potential respondents from the existing Taiwanese associations. The purpose of the study and the way in which the questionnaire should be answered were clearly explained. Further, strict confidentiality with respect to the subjects' opinions was guaranteed.

Data Analysis

The Statistical Package for the Social Sciences (SPSS) program was used for data analysis. Differences between knowledge scores and demographic variables, and individual attitudes and demographic variables were examined by way of two-tailed t-tests. The Pearson correlation coefficient (r) analysis was used to examine the relationship between individual knowledge and attitudes items.

RESULTS

Demographic data

94 questionnaires were distributed and the return rate was eighty-six per cent (N=81). There was only one unusable questionnaire. Thus, 80 questionnaires were usable in this study. There were 38 males and 42 females. The age range of the sample was from 24 to 76 years with a mean age of 43. The residence were divided into four parts as east, west, south, and north, as shown in Table 2. The mean length of living in Australia was six years. The educational level of the respondents is displayed in Table 3.

Table 2. Number of respondents by residence

Place	Frequency
East	10
West	25
South	11
North	34
Total	80

Table 3. Number of respondents by educational level (N=80)

Educational level	Frequency
Primary/Secondary	2
High school	11
Diploma/Bachelor	53
Master/Ph.D.	14
Total	80

Knowledge

Table 4 presents percentages of respondents whose answers were correct or incorrect/don't know in each item. The percentage of correct answers for all respondents was 80 per cent, with a mean score of 11.215 (the maximum score was 14). All respondents answered correctly questions 5, 7 and 11 concerning shaking hands, sharing needles and having a blood transfusion with a person who has HIV/AIDS as presented in Table 4. Respondents were well aware of the major methods of transmission such as homosexual and heterosexual intercourse (99% and 96%, respectively). And 98% of respondents understood that a woman with HIV/AIDS may pass it on to her baby. Most people (80%) knew that HIV/AIDS can not be transmitted by someone with HIV in close proximity who is sneezing or coughing, and by using the same swimming pool with a HIV infected person.

However, 28 per cent of respondents thought that HIV could be transmitted through causal contact such as sharing food or cups with a person with HIV/AIDS and by using the same toilet

seat with a person having HIV/AIDS. Some people (27%) thought that a person who has HIV/AIDS can be cured. Besides, 32 per cent of respondents did not know that a person could have the virus and still appear healthy. Moreover, near half of respondents (47%) incorrectly believed that kissing someone with HIV carries a high risk of infection. Most surprisingly, 70% of respondents thought that HIV/AIDS can be transmitted by a mosquito bite.

Male had a significantly higher level of knowledge than female did (t=2.21, P=.03). In addition, there was a significant difference between knowledge and educational level (t=-2.23, P=.029). However, in terms of knowledge, there were no statistically significant differences (P<.05) in terms of age, place of residence, and length of living in Australia.

Table 4. Percentage of subjects who replied with correct, incorrect and don't know responses to knowledge items (N=79)

Knowledge Items	Correct	Incorrect/Don't know
1. a person can be infected with HIV without showing any symptoms	68	32
2. a person who has HIV/AIDS can be cured	73	27
HIV/AIDS can be transmitted by.....		
3. kissing a person with HIV/AIDS	53	47
4. using the same swimming pool with a HIV infected person	80	20
5. shaking hands with people with HIV / AIDS	100	0
6. sharing food or cups with a person who has HIV/AIDS	72	28
7. sharing needles/syringes with a person who has HIV/AIDS	100	0
8. having sex with a man or woman who has HIV/AIDS	99	1
9. using the same toilet seat with a person having HIV/AIDS	72	28

10. being bitten by a mosquito or similar insect	30	70
11. having a blood transfusion/receiving blood from a person who has HIV/AIDS	100	0
12. sneezing or coughing	80	20
13. from sexual intercourse between two men	96	4
14. a woman with HIV/AIDS can pass it on to her baby	98	2
Mean percentage	**80**	**20**

Attitudes

The majority (59%) believed that people with HIV should be allowed to live normally in the community and should not be forced to resign from their jobs as shown in Table 5. In addition, fifty-eight per cent of respondents believed that they were at risk of contracting HIV. Further, three-quarters of respondents did not think that HIV/AIDS is a punishment for immorality while only twelve per cent were definitely against this opinion. Forty-four per cent would send their children to the school where a child carried the HIV while thirty per cent disagreed to do so. There was nearly equal proportion of respondents who agreed or disagreed with the statement: 'I don't feel sorry for homosexual infected with HIV because it is their own fault' (41% and 46%, respectively).

However, there was a high proportion of respondents (55%) who did not feel sympathy for injecting drug users with HIV while 32% of respondents did express sympathy for them. There was a statistically significant difference between males and females regarding expressing their sympathy for injecting drug users with HIV. The males were more likely to express their sympathy than females were (t=2.41, P=.019). Furthermore, the majority of respondents disallowed doctors with HIV to go on their practice and HIV positive person handling food in restaurants, 78% and 74% respectively. There was a significant disagreement between males and females regarding whether doctors infected with HIV should continue to their practice (t=2.23, P=.029).

There was a significant difference between males and females regarding their attitudes

towards HIV infected persons (t=2.31, P=.024). Males were more in favor of HIV infected persons than females were. Age was weakly correlated with attitudes toward HIV/AIDS (r= -.2218, P=.054). In terms of attitudes, there were no statistically significant differences ($P<.05$) in residence, educational level, and length of living in Australia.

Table 5. Percentage of respondents by responses to individual attitude items(N=76)

Statement	SA*	A*	N*	D*	SD*	Total
1. People with HIV should be allowed to live normally in the community	8	51	25	16	0	100
2. A child at my local school is HIV infected. I will still send my child there.	7	37	26	30	0	100
3. I don't feel sorry for injecting drug users who have become infected with HIV because it is their own fault.	13	42	13	28	4	100
4. Those who have HIV/AIDS should be forced resign from their jobs so that they don't infect others.	1	16	25	51	7	100
5. Doctors with HIV should be allowed to go on working with their patients.	3	9	10	62	16	100
6. I believe that I am at risk of contracting HIV.	4	54	10	24	8	100
7. I don't feel sorry for homosexuals infected with HIV because it is their own fault.	11	30	13	39	7	100
8. People with HIV/AIDS should be allowed to handle food in restaurants.	3	10	13	54	20	100
9. HIV/AIDS is a punishment for immorality.	0	12	13	61	14	100

* SA= strongly agree A= agree N= neutral D= disagree SD= strongly disagree

Relationship between knowledge and attitudes

Table 6 shows the relationship between knowledge and attitudes towards HIV/AIDS for each statement. There was a statistically significant relationship between attitudes and knowledge (r=.3412, P=.003). The more knowledgeable the respondents are about AIDS, the

more positive their attitudes are towards people with HIV.

There was a significant relationship between respondents' knowledge and attitude to a person with HIV/AIDS in their working places (r=.3184, P=.005). The more knowledgeable the respondents are about AIDS, the more positive their attitudes are towards people with HIV in their working places. Moreover, those who were more knowledgeable about AIDS were significantly more likely to agree that HIV infected people should be allowed to handle food in restaurants (r=.3295, P=.004). Furthermore, those who were more knowledgeable about AIDS were significantly more likely to disagree with this statement 'HIV/AIDS is a punishment for immorality' (r=.4064, P<.001).

Table 6. Correlations between aggregated knowledge scores and each statement of attitude (N=75)

Statement	correlation coefficients (r)	P value
1. People with HIV should be allowed to live normally in the community	0.2253	0.052
2. A child at my local school is HIV infected. I will still send my child there.	0.0389	0.740
3. I don't feel sorry for injecting drug users who have become infected with HIV because it is their own fault.	0.1517	0.194
4. Those who have HIV/AIDS should be forced resign from their jobs so that they don't infect others.	0.3184	0.005*
5. Doctors with HIV should be allowed to go on working with their patients.	0.1111	0.343
6. I believe that I am at risk of contracting HIV.	0.0377	0.748
7. I don't feel sorry for homosexuals infected with HIV because it is their own fault.	0.2021	0.082
8. People with HIV/AIDS should be allowed to handle food in restaurants.	0.3295	0.004*
9. HIV/AIDS is a punishment for immorality.	0.4064	0.000*

* in a significant level (P<.05)

Sources of information about HIV/AIDS

A majority of respondents pointed out that newspaper (83%) and television (72%) were the sources fom which they learned most about AIDS. Friends and spouses were most frequently mentioned as those who respondents had discussed HIV/AIDS with. Sixty-nine per cent had discussed AIDS with friends, and 44 per cent with spouses, but 12 per cent had never discussed it with anyone.

Efficiency of existing AIDS health promotions

Seventy-four per cent of respondents have seen educational posters about HIV/AIDS in Australia. However, half of the respondents have never obtained pamphlets about HIV/AIDS. In other words, only 50 per cent of respondents have received the pamphlets about AIDS. Eighty-four per cent of respondents have never received any Chinese HIV/AIDS information in Australia. Most respondents (91%) have never been taught the information about AIDS by public health workers. Hence, most respondents (91%) have never attended an AIDS education program in Australia. Only seven per cent of respondents have attended an AIDS education program in community, school, or hospital. An overwhelming majority (93%) felt there is a need for more education about AIDS. If there was a HIV/AIDS education program and the time was suitable for people, 66 per cent expressed their willingness to attend the program. However, 10 per cent of respondents did not want to attend it. Table 7 shows that respondents are interested in gaining more knowledge about various AIDS topics.

Forty-six per cent of respondents preferred to receive the information about AIDS in Chinese/Mandarin while fifty per cent expressed no preference about the language used. Only four per cent of respondents stated that the information could be received in English.

Table 7. Percentage of respondents interested in gaining more knowledge about various AIDS-related topics (N=78)

Topics	Percentages
1. Transmission of the HIV	74
2. Treatment of HIV/AIDS	47
3. HIV prevention	85
4. Symptoms of HIV/AIDS	72
5. HIV antibody test	36

DISCUSSION

This study attempted to examine AIDS-related knowledge and attitudes of the Taiwanese community in Sydney. A satisfactory level of knowledge about AIDS was shown by the community. Most respondents were middle aged migrants from Taiwan. Although they were not health professionals, the major characteristic of this sample group was high educational background that may lead to a high level of knowledge about AIDS. The majority of respondents correctly identified the principal ways of transmission of HIV. However, that AIDS could be transmitted by a mosquito bite was the most common misconception. This finding is in accordance with Adrien et al. study (1994). The possible explanation for this finding may be that people know that mosquitoes suck people's blood and blood is one of the main routes for HIV transmission. In addition, the results also indicate that a degree of confusion still exists concerning kissing someone with HIV, to the extent that nearly one in two people considered the situation to carry a high risk of transmission. Whilst the finding may be somewhat surprising , similar results have been noted in Roberts, Blakey and Smith's study (1994) which examined the public's knowledge and attitudes toward HIV/AIDS.

Attitudes about AIDS was found to be uneven among the respondents. For example, most of respondents disagreed that doctors with AIDS should be allowed to work with their patients while the majority of respondents considered that people with HIV/AIDS should be allowed to live normally in the community. The relationship between knowledge and attitudes was found to be statistically significant. The results indicate that respondents with better knowledge on AIDS tend to have a positive attitude towards HIV infected people. The attitudes of people are affected by many factors such as people's belief and social change. There has been a rapid development of social movements during the past ten years in Taiwan. People tend to accommodate different values. In consequence, there may be various attitudes toward a single issue.

The results suggest that people who have high risk behavior are blamed. As they get infected it is their own fault, in particular injecting drug users. There is a difference between the respondents' attitudes towards injecting drug users and homosexuals infected with HIV. The respondents are more likely to express their sympathy for homosexuals. Homosexuals are not blamed for being homosexual. Homosexuality may be regarded to result from personality or the individual's background. It would thus appear that a trend is emerging with sympathy

for those who are perceived not to be at fault and an increasing intolerance towards those who are seen to have got what they deserve. Moreover, the lack of sympathy expressed by respondents may have more to do with a general widespread prejudice against drug users rather than with them being infected with HIV *per se*. As a result, public health programs should emphasize on minimizing discrimination.

Most respondents never attended an AIDS educational program, never were taught about AIDS by public health workers, and never received any Chinese AIDS information in Australia. Half of the respondents preferred to receive the information in Chinese /Mandarin. Undoubtedly, migrants from Taiwan are not English native speakers. Education programs presented in Chinese will be much easier to understand and imbibe. A strong plea was made by the respondents for further education. Gaining more knowledge about prevention, transmission and symptoms of HIV/AIDS was the major concern among the respondents in this study.

There were some limitations of this study. The sample was selected from a convenient population. They all seemed to have a high level of educational background. It may not accurately reflect the whole picture of all Taiwanese migrants.

CONCLUSION

The language barrier may decrease the chances for migrants to access the information regarding AIDS. It seems to be a good idea if the information, for example, pamphlets, posters, and videos tapes, could be designed and presented in Chinese. It will certainly improve the results of AIDS education in a multicultural city such as Sydney.

Although the knowledge level about AIDS was found to be high amongst Taiwanese migrants in Sydney, education programs should be developed to ensure that an awareness of AIDS results in appropriate sexual behavior. Focus groups interviews may be conducted to get in-depth understanding of reasons for variant attitudes in order to design an effective education program to change people's attitudes. AIDS is a disease without a curable therapeutic procedure so far. Continuous education for the public is important and mandatory for health promotions in the country.

ACKNOWLEDGMENT

The author gratefully thanks Dr. Magnus Steirnborg for his valuable advice.

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探討雪梨華人對於愛滋病相關的知識及態度

林素蓉

摘　要

本研究的目的在於探討雪梨的合籍華人對於愛滋病相關的知識及態度。以自填式問卷，方便取樣的方式共收取 80 位移民至雪梨合籍華人，採 SPSS 分析資料。本研究發現：（1）民衆對於愛滋病的相關知識答對 80%，但卻有 70% 的民衆認為愛滋病可經由蚊子咬傷傳染；（2）民衆對於愛滋病患者的態度有矛盾的現象，3/4 的民衆都不認為得到愛滋病是對於不道德行為的懲罰，但大多數的民衆卻不贊成有愛滋病的醫生行醫，也拒絕感染愛滋病毒者於餐廳服務；（3）整體而言，男性比女性對於愛滋病的相關知識要充足，且態度更為正向；但是對於愛滋病有充足知識的人，未必對於愛滋病患者有正向的態度。所以，衛生教育工作者不僅要增進民衆對於愛滋病的相關知識，也應加强對於愛滋病患者的正向的態度。

關鍵詞：愛滋病、愛滋病毒、知識、態度、合籍華人。