

**Knowledge and attitudes towards
HIV/AIDS
and pre-marital screening
in the District of Larut, Matang &
Selama**

Community Residency Programme 2004

Taiping

Phase 3A MBBS 2001/2006

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Introduction

- HIV/AIDS first emerged in 1981 and has since become a major infectious disease. It is now the 4th commonest cause of death in the world.
- In Malaysia, more than 800 deaths from HIV/AIDS have been reported annually since 1999.
- In the District of Larut, Matang & Selama, there were 189 reported HIV/AIDS cases, and 41 deaths in 2001
- In 2002, there were 245 cases. This was an increase of 30% compared to 2001. This may be an inflated figure due to increased screening in detention centres and correctional institutions in this district.
- Prevention of this disease is a must. Among the recognised methods of prevention are avoiding high risk behaviours and conducting **pre-marital HIV screening**.
- The Johor government has already introduced pre-marital screening in 2001. A survey that was done in conjunction with this move showed that 80% of 1911 respondents agreed with this move. However, criticisms from the public and academicians against pre-marital screening still exists.

Objectives

- To assess the knowledge and attitude concerning HIV/AIDS and premarital screening of the rural community in the District of Larut, Matang and Selama
- To determine the prevalence of risk behavior of the rural community
- To identify the expectations and preferences of population towards premarital screening for HIV

Materials and Methods

Study Design

This is a cross-sectional survey of households in four villages in the District of Larut, Matang and Selama. The study was carried out between 7 June 2004 to 10 June 2004.

Study Area

This study encompassed four villages in the District of Larut, Matang and Selama, Perak, namely: Kampung Menteri, Kampung Kuala Sepetang, Kampung Larut Tengah and Kampung Jelutong. These four villages were selected as a survey population by the Medical Officer of Health in the District of Larut, Matang and Selama for the Community Residency Programme (CRP).

Study Instrument

Interviewer-administered questionnaire was used. The interview was conducted in a private setting to protect confidentiality, obtain as truthful answers as possible, and to avoid embarrassment. The questionnaire was divided into four sections:

- personal information (9 questions)
- knowledge of HIV/AIDS (8 questions)
- attitudes towards premarital screening (10 questions)
- prevalence of risk factors (4 questions)

Study Population

Our target population is a member of the household aged 18 and above in the four villages. A sample of 221 respondents from these 4 villages was selected. One respondent was selected from each household that was chosen by random sampling. Each respondent was selected randomly among all the individuals age 18 and above who were present in the house at the time of interview.

Limitations

- The four villages allocated to us were selected based on accessibility. This may not reflect the total population in this district.
- *Interviewer error*: phrasing questions differently or giving clues during explanation.
- *Confidentiality factor*: Interviewees may not give truthful answers as this involved sensitive details. This was especially true in households that were overcrowded.
- *Complexity of questionnaires*: The questions may be difficult to understand and may not be suitable for respondents of older age groups and lower level of education.

Results

Table 1: Frequency and percentage of socio-demographic characteristics

Socio – Demographic Characteristics	Categories	Frequency	Percentage %
Marital status	Single (never married)	78	35.3
	Married	133	60.2
	Divorce/separated	2	0.9
	Widow/widower	8	3.6
Sex	Male	96	43.4
	Female	125	56.6
Age Group	<30	92	41.6
	31 – 60	117	52.9
	>61	12	5.4
Education Level	Low education	85	38.5
	High education	136	61.5
Ethnic	Malay	160	72.4
	Chinese	61	27.6
Religion	Islam	161	72.9
	Christian	6	2.7
	Buddhist	17	7.7
	Others	37	16.7
Occupation	Pensioner	5	2.3
	Lesser Professional and Trades	22	10.0
	Skilled Manual and Clerical	8	3.6
	Semi – Skilled Manual	36	16.3
	Unskilled Manual	15	6.8
	Housewife	87	39.8
	Student	32	14.5
	Unemployed	16	7.2

Knowledge about HIV/AIDS

Chart 1: Have you ever had any information on HIV/AIDS? (n=221)

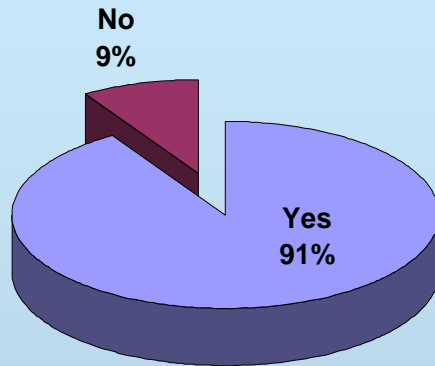


Chart 2: Source of knowledge about AIDS (n=221)

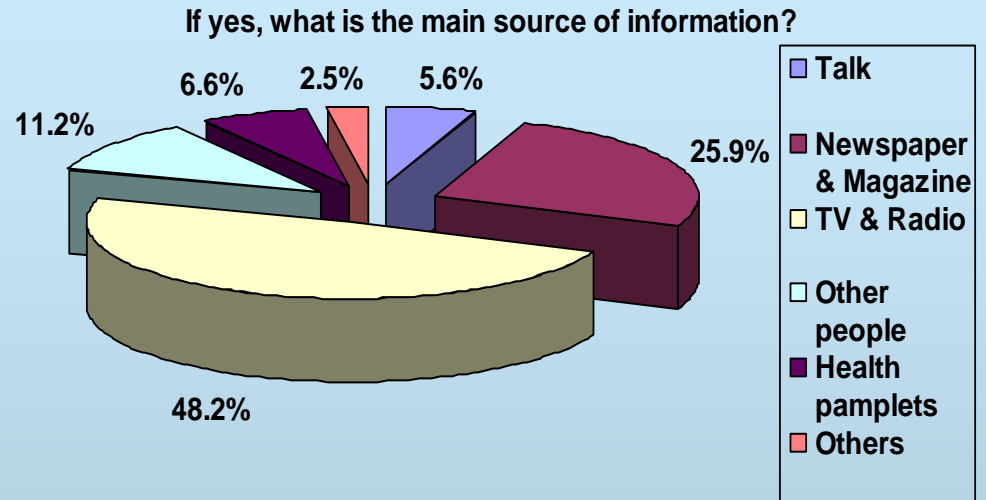
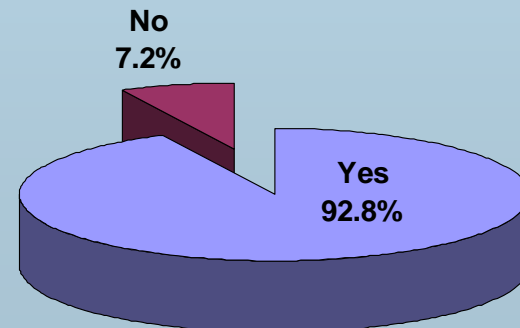


Table 2: Knowledge about the outcome of HIV infection (n=221)

Outcome of HIV/AIDS	Yes	No
Asymptomatic	127(57.50%)	94(42.50%)
Having AIDS	194(87.80%)	27(12.20%)
Self-limiting	16(7.30%)	205(92.70%)
Death	201(91.00%)	20(9.00%)

Chart 3: Is AIDS an important issue in Malaysia? (n=221)



Level of knowledge of HIV/AIDS

The level of knowledge of HIV/AIDS of the respondents was determined based on 25 true or false questions. Each correct answer was given one mark. The marks were totalled. We chose 20 marks as the cut-off point to determine high or low scores of knowledge because it was the median score.

The four sections consisted of knowledge of the modes of HIV/AIDS transmission (total marks=8), high-risk groups for HIV/AIDS (7), consequences of HIV/AIDS (4), prevention methods f HIV/AIDS transmission (5) and the curability of HIV/AIDS (1).

Table 3: Mean score for level of knowledge according to education level

Level of education	Mean score	p-value
Low level (n=85)	18.32 (\pm 3.37)	<0.001
High level (n=136)	20.04 (\pm 2.61)	

95% C.I: 0.921 – 2.517

Table 4: Association between levels of knowledge with the answer to the question “Is pre-marital screening test necessary?”

Level of knowledge	Yes	No	Total	p- value
Low score	85(83.3%)	17(16.7%)	102	0.001
High score	115(96.6%)	4(3.4%)	119	
Total	200	21	221	

Table 5: Association between levels of knowledge with the answer to the question “Should pre-marital screening be made compulsory?”

Level of knowledge	Yes	No	Total	p- value
Low score	85(83.3%)	17(16.7%)	102	0.503
High score	103(86.6%)	16(13.4%)	119	
Total	188	33	221	

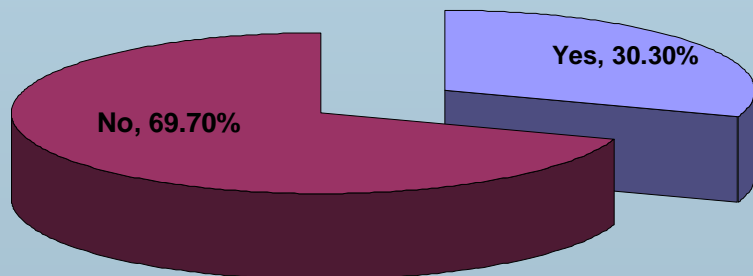
Table 6: Knowledge about Ways of Prevention of HIV/AIDS (n=221)

Ways of Prevention	Yes	No
Immunisation	116(52.50%)	105(47.50%)
Condom	160(72.40%)	61(27.60%)
Oral contraceptives	51(23.10%)	170(76.90%)
Abstain from sex before marriage	172(77.80%)	49(22.20%)
Prevent the sharing of needles	193(87.30%)	28(12.70%)

Table 7: Knowledge about Ways of Transmission of HIV/AIDS (n=221)

Ways of Transmission	Answer	
	Yes	No
Mosquito bite	50.7%	49.3%
Sharing Needles	93.2%	6.8%
Intercourse with HIV carrier	93.7%	6.3%
Vertical Transmission	87.3%	12.7%
Through Saliva	46.2%	53.8%
Touching HIV carrier	12.7%	87.3%
Sharing Public Toilet	18.6%	81.4%
Donating Blood	58.8%	41.2%

Chart 4: Can AIDS be cured?



Attitude towards pre-marital HIV screening

Chart 5: Opinion of Respondents of Different Ethnicity on Whether Pre-marital Screening should be made Compulsory (n=221)

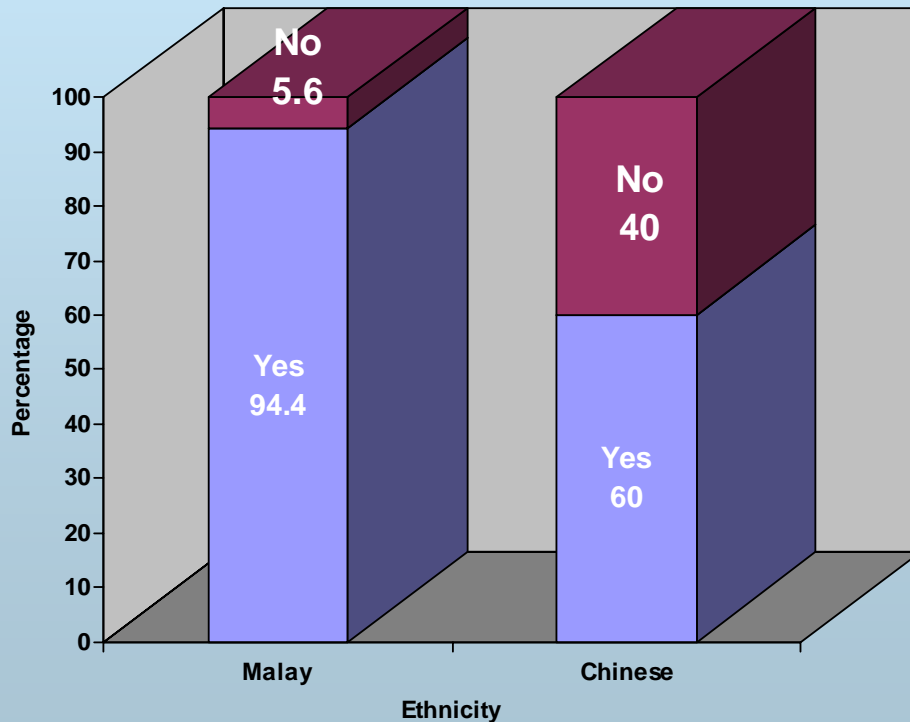


Chart 6: Is pre-marital HIV Screening Necessary? (n=221)

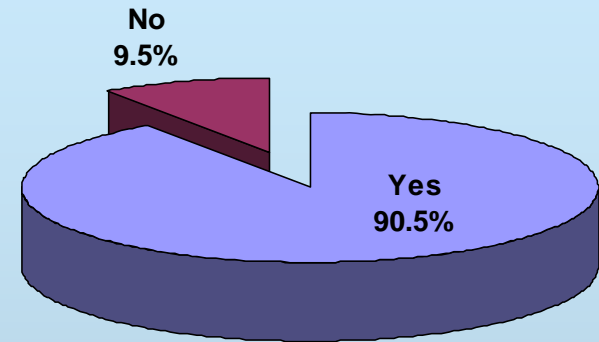


Chart 7: Should Pre-marital Screening Test be made Compulsory? (n=221)

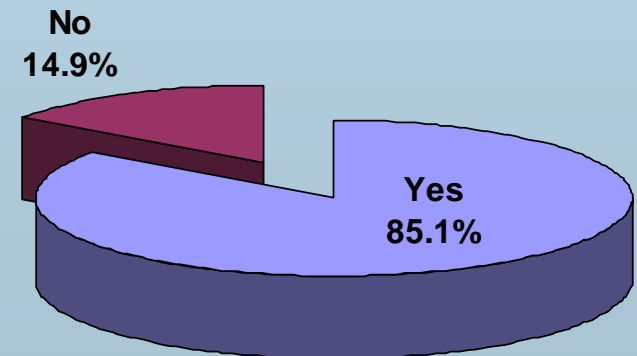


Chart 8: If you are diagnosed to have HIV, will you continue with your marriage plans?

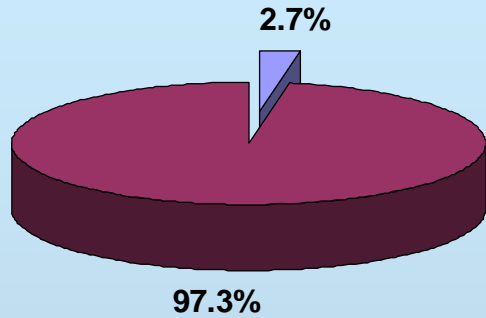


Chart 9: If your partner are diagnosed to have HIV, will you continue with your marriage plans?

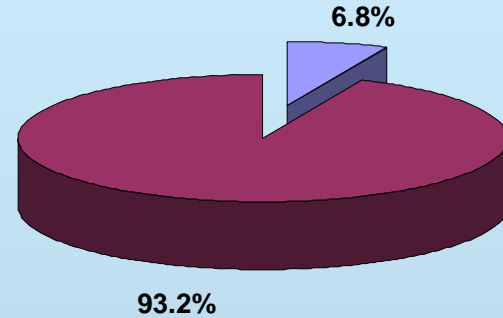


Chart 10: Suggested charge for test

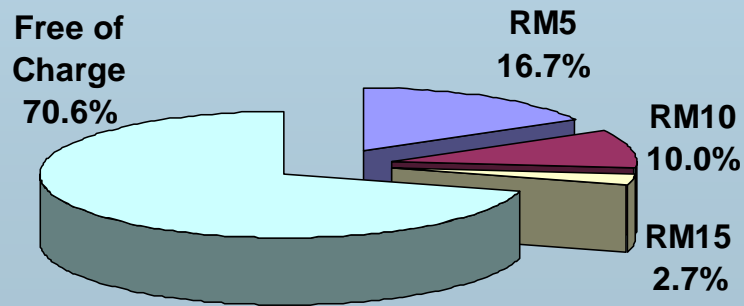


Chart 11: Do you think that the test is reliable?

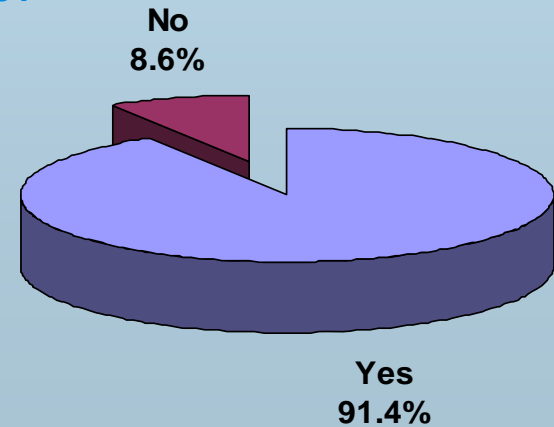
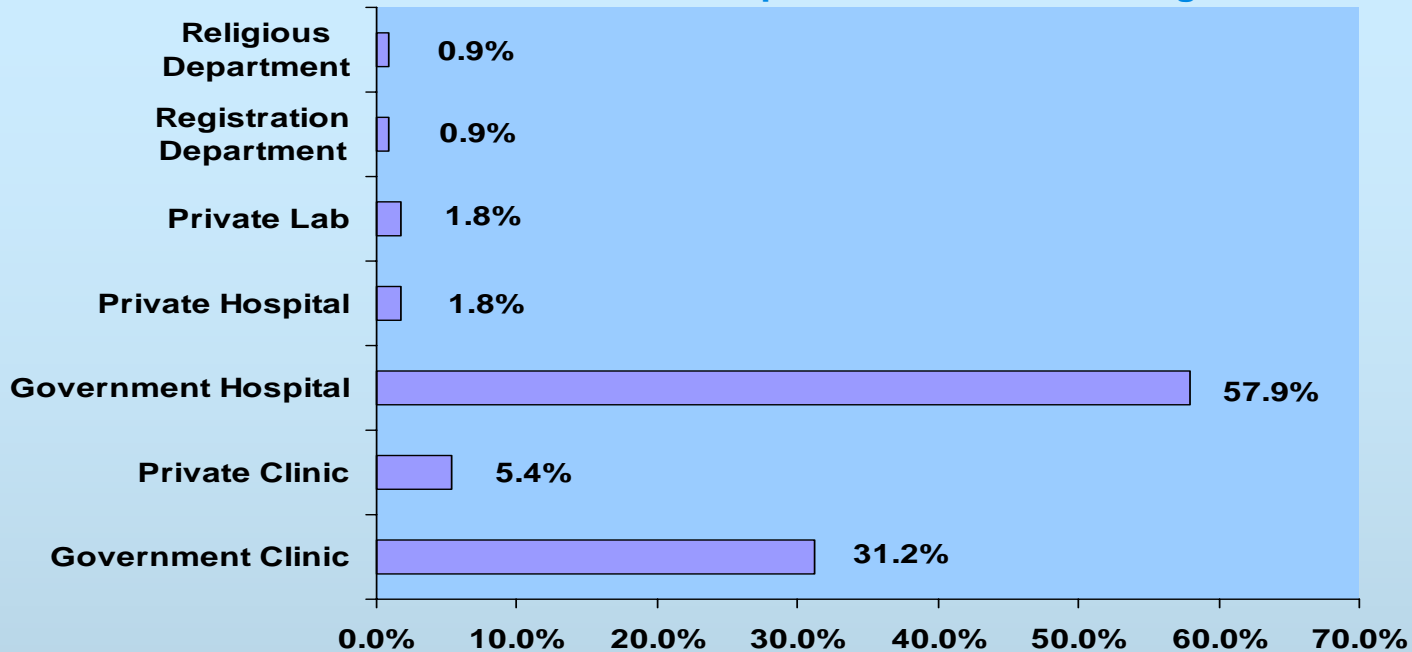


Chart 12: Places of preference for screening test



Prevalence of high-risk behaviours

- Out of 221 respondents, 3.2% have a history of drugs abuse. None of them have ever used needles or shared needles for drugs.
- There were 101 respondents who have had some form of sexual activity.
- Three (3%) of them have had multiple sexual partners or partners with multiple sexual partners.
- Only eight respondents (7.9%) used condom during sexual intercourse.
- Four (4.0%) of them were homosexuals.
- Four (4.0%) of them were involved in non-vaginal sex.

Discussion

- Most of our respondents have heard about HIV/AIDS and the most common source of information is the mass media. While this method of dissemination of information is effective, it may be misleading and open for misinformation.
 - Although their knowledge about HIV/AIDS was generally good, there were a few glaring misinformation that was found in a substantial percentage of our respondents:-
 - i) more than 50% thought that HIV is transmitted via mosquito bite and blood donation
 - ii) 40% were not aware that HIV infected individuals can be asymptomatic
 - iii) 27.6% of respondents did not think that condom can prevent HIV/AIDS.
 - iv) 30% thought that HIV/AIDS can be cured
 - v) 52.5% thought that HIV/AIDS can be prevented by immunisation.
- The level of knowledge of HIV/AIDS is statistically significantly associated with the level of education of the respondents' but not with age, sex or ethnicity.
- The level of acceptance of pre-marital screening is high among our respondents with 90.5% thinking that it is necessary and 85.6% thinking that it should be made compulsory. There is an statistically significant association between level of knowledge of HIV/AIDS and respondents who think that the pre-marital screening is necessary but not with those who think it is compulsory.
 - The proportion of Chinese disagreeing that pre-marital screening is necessary or compulsory was higher than the proportion of Malays, this may not reflect ethnicity or religious reason but rather the common attitude in the village of Kuala Sepetang where all of our Chinese residents came from.
 - When compared between the two genders, there were no significant difference in level of knowledge and attitudes towards pre-marital screening.

- Most of the respondents prefer the screening be done in government healthcare institutions and be offered free of charge. There could be a financial burden on the government.
- The screening test results significantly influence the decision to continue marriage plans. This means that it is very important to take sensitivity and specificity of the test into consideration in a screening programme as this may affect important decisions like marriage plans. Possibilities of false negatives and false positives should be recognized and any positive results should be repeated, as is routinely done, before confirming a diagnosis.
- In this population with such low prevalence of high risk behaviour, a pre-marital screening programme may not be feasible. However, the sample population is small and the results may not be accurate.

Conclusion

- Level of knowledge about HIV/AIDS is generally good in most strata of society but more among those better educated.
- Education should be continued with a more comprehensive and less sophisticated approach with the bulk of it coming from mass media.
- Level of acceptance of pre-marital screening is high.
- Prevalence of high risk behaviour is low, therefore screening may not be feasible.
- We hope this reflects the pattern regarding HIV/AIDS in a rural population and our findings would be useful for future plans on pre-marital screening programmes in rural areas.

Acknowledgement

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