A PREVALENCE SURVEY OF PSYCHIATRIC MORBIDITY IN A RURAL MALAYSIAN VILLAGE: A PRELIMINARY REPORT

H Ramli
K Ohn
S Krishnaswamy
K Kasmini
S Hassan

Department of Psychiatry
Faculty of Medicine
Universiti Kebangsaan Malaysia

H Ramli, MRANZCP
Associate Professor

K Ohn, DPM, MRC Psych
Lecturer

S Krishnaswamy, DPM, MRC Psych
Lecturer

K Kasmini, DPM, MRC Psych
Lecturer

S Hassan, DPM, MRC Psych
Lecturer

INTRODUCTION

Psychiatric illnesses in Malaysia are commonly seen late in the course of the illness when patients are hospitalised because the family and social environment will no longer tolerate the sick patient and all sources of traditional treatment have been exhausted. Consequently, psychiatric epidemiological data based on general or psychiatric hospital statistics (1,2,3) does not reflect the actual prevalence of psychiatric illnesses in the community. To our knowledge, this data is not available as yet for the Malaysian community. The importance of this data for rational and adequate planning for the delivery of mental health services as well as curriculum planning for the teaching of psychiatry to medical students is obvious and needs no further emphasis.

Our study is aimed at providing point prevalence data regarding psychiatric morbidity among adults in a rural Malay village. A two-stage approach is used in this study:

Stage One: a screening procedure to identify potential cases with psychiatric disorder.

Stage Two: psychiatric examination of the identified cases in order to arrive at diagnostic categories according to ICD 9.

This paper reports the results of the initial screening survey.

METHOD

The initial screening survey was done during a 2-week period in April 1985.

1. The Study Area

The screening exercise was carried out in Kampong Jeram, a village with an area of 2.58 sq. kilometers on the west coast of Malaysia in Selangor state, about 70 km from Kuala Lumpur. The latest Census (National Census, 1980) reported 237 households and a population of 677 adults (more than 16 years old) and 509 children. (The results of the initial screening survey for the children has been reported previously (4). The population of the village consists largely of Malays with Chinese and Indians forming only about 3-6% of the population. As the village is coastal, the main occupation of the villagers are fishing and small farming.

2. Screening Method

Fifth-year medical students who had completed an 8-week posting in psychiatry were used for the screening procedure. They had been given training in the use of the screening instrument prior to the actual screening procedure.

The screening instrument used was a Bahasa Malaysia version of the Self-Reporting Questionnaire (S.R.Q.) with 25 items. (Appendix I). The first 20 items were designed to detect non-psychotic disorders, and the last 5 items to detect psychotic disorders and epilepsy. The S.R.Q. was designed by Harding (5) and has been translated into 8 languages for use in the "Collaborative Study on Strategies for Extending Mental Health Care in Developing Countries", a WHO project (6). Versions of it have also been used in Brazil, Senegal, Kenya, China and Taiwan. A pilot study on the use of the English and Bahasa Malaysia versions of the SRQ-20 in a population done by 2 of the authors (7) indicated that it can differentiate between normal adults and neurotic patients. A cut-off point of 6 was suggested to define a case as at this level, only 6% of the normals would be labelled as potential psychiatric cases and 90% of the neurotics would have been detected, giving a specificity of 90% and a sensitivity of 94%. Using different cut-off points, Harding et al (5) reported a sensitivity between 73 and 83%, a specificity between 72 and 85% and a misclassification rate between 18 and 24%. Dadphale et al (8), using the SRQ-24 in Kenya obtained a sensitivity of 93% and a specificity of 89.2%.

In our study, all patients scoring 6 or more on the first 20 SRQ items or scoring at least one positive on items 21 to 25 were regarded as cases to be included in stage two of the study.

RESULTS

Out of a total population of 677 adults, 634 were screened, 308 males and 326 females.

Table 1 shows the frequency of the first 20 SRQ items among the males screened. The 10 most common items reported, in order of decreasing frequency, were poor digestion, tiredness all the time, uncomfortable feelings in the stomach, headaches, easily tired, loss of appetite, sadness, trouble thinking clearly, difficulty in making decisions and insomnia.

Table 2 shows the frequency of the first 20 SRQ items among the females screened. The 10 most common symptoms reported are tiredness all the time, poor digestion, headaches, sadness, uncomfortable feelings in the stomach, trouble thinking clearly, easily tired, loss of appetite, feeling fearful and worry.

Table 3 gives the distribution of the SRQ-20 total scores. At all ages, the mean score is higher for females.

Table 4 gives the number of potential cases among the adults screened i.e. those who were positive on 6 or more of the first 20 SRQ items. Out of the 634 adults screened, 92 i.e. 14.51% were identified as potential cases, 56 females and 36 males.

Table 5 shows the frequency of scores for items no. 21 to 25 of the SRQ. 42 of the adults screened i.e. 6.62% were positive on at least one of these items.

Both neurosis and psychosis appear to be commoner among females in the study population.

Combining all the items together, 134 of the adults screened i.e. 21.12% were identified as potential cases using SRQ-25.

TABLE 1: FREQUENCY OF THE FIRST 20 SRQ ITEMS IN MALES (IN PERCENTAGES)

Items / Age Group	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
16—29 (N = 110)	19.1	12.7	8.2	4.6	8.2	8.2	30.0	19.1	16.4	0.9	8.2	11.8	8.2	4.6	5.5	2.7	1.8	22.8	16.4	8.2
30—45 (N = 92)	14.2	5.5	5.5	0	0	13.1	36.0	9.8	12.0	0	10.9	10.9	9.8	4.4	2.2	1.1	0	18.5	16.4	10.9
45 (N = 106)	16.0	21.6	13.2	1.9	4.7	4.7	32.0	7.5	11.3	0.9	8.5	5.6	7.5	4.7	1.9	0	0.9	23.5	18.8	21.6
Total (N = 308)	16.4	13.3	9	2.2	4.3	8.7	32.7	12.1	13.2	0.6	9.2	9.4	8.5	4.6	3.2	1.3	0.9	21.6	17.2	13.6

TABLE 2: FREQUENCY OF THE FIRST 20 SRQ ITEMS IN FEMALES (IN PERCENTAGES)

Items / Age Group	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
16—29 (N = 134)	21.8	11.3	17.3	18.8	6.8	18.8	25.2	21.0	23.3	6	9.8	18.8	6	5.3	3.8	2.3	6	33.8	24.0	22.5
30—45 (N = 84)	31.2	15.6	13.2	10.8	3.6	9.6	27.6	20.4	21.6	7.2	8.4	13.2	4.8	64	1.2	1.2	2.4	27.6	18.0	13.2
45 (N = 108)	27.9	22.3	15.8	10.0	9.2	19.3	28.8	15.8	20.5	13.0	11.6	7.4	12.7	9.2	4.6	7.4	2.8	24.2	17.7	17.7
Total (N = 326)	27.0	16.4	14.6	15.9	6.5	15.9	27.3	19.1	21.8	8.7	9.9	13.1	7.6	6.8	3.2	3.6	3.7	28.5	19.9	17.8

TABLE 3: DISTRIBUTION OF SRQ-20 TOTAL SCORES BY AGE AND SEX

Sex and Age in Years / Item	Male			Female		
	16—29	30—34	45	16—29	30—45	45
Mean	2.19	2.12	2.22	3.05	2.17	3.04
S.D. ±	2.84	2.59	2.54	3.47	2.22	3.36

TABLE 4: NUMBER OF POTENTIAL CASES BY AGE AND SEX OF 634 ADULTS SCREENED USING SRG-20

Age (Years) / Sex	16—29	30—45	45	Total
Male	15	9	12	36
Female	27	6	23	56
Total	42	15	35	92

TABLE 5: FREQUENCY OF SCORES FOR ITEMS NO 21 TO 25 OF THE SRQ

Sex / SRQ Item	Male	Female	Total
21	5	23	28
22	12	20	32
23	9	14	23
24	4	15	19
25	3	5	8
Total	33	77	110

DISCUSSION

The results of the initial screening survey needs to be viewed with some caution. The selection of 6 as the cut-off point is based on the validity study of the SRQ-20 done by 2 of the authors. However, the methodology of that study which yielded very high values for the validity coefficients is not ideal as known patients were compared with normals. As Williams et al. (9) observed, "instruments which can distinguish clearly between distinct caseness groups, i.e. well separated locations on the continuum (of illness), need not perform well in classifying individuals of varying and intermediate probabilities of illness". Ideally, the SRQ-20 should have been validated against some other criterion e.g. the Clinical Interview Schedule (CIS), which is designed to assess non-psychotic psychiatric disorders in general practice and community settings.

Our study also assumes that validity coefficients applicable to the urban population of that validity study is also applicable to the rural population we were studying. This may not be so. Ideally, a pilot study should have been done to determine validity coefficients of the SRQ-20 using a random sample of the rural population to be surveyed.

As it is, it has not been established that the cut-off point of 6 that was used was appropriate for the population under study. The second stage of the study may be able to give an indication on this, especially if the cut-off point is too low and the rate of 14.51% of the population identified as potential neurotic cases has included many normals as well.

With regard to the last 5 items of the SRQ, no study to assess its suitability for population under study has been done. The authors' impression is that items no. 21, 22 and 23 are not specific enough to detect psychosis and that the respondents, because of their sociocultural background, tend to interprete the questions differently from what was intended. Item no. 24 appears to need further clarification to differentiate true hallucinations from other forms of hallucinatory experience. Because of these reasons, it is highly likely that the rate of 6.62% for cases of psychosis and epilepsy appears too high. The second stage of the study would be able to indicate how useful these items are in screening cases of psychosis and epilepsy.

APPENDIX I

MALAY VERSION OF SRQ-25

1. Adakah anda selalu mengalami sakit kepala?
2. Adakah selera anda kurang?
3. Adakah anda mengalami gangguan tidur?
4. Biasakah anda merasa takut dengan mudah?
5. Adakah anda merasa menggeletar (tangan)?
6. Adakah anda merasa gelisah?
7. Adakah anda makan dengan kurang baik?
8. Adakah anda mengalami gangguan fikiran?
9. Adakah anda merasa susah hati?
10. Adakah anda menangis lebih dari biasa?
11. Adakah anda merasa sukar bagi menikmati keselesaan kegiatan setiap hari?
12. Adakah anda merasa susah untuk membuat apa-apa keputusan?
13. Adakah kerja sehari anda menyusahkan anda?
14. Adakah anda merasa tidak boleh memain peranan yang berguna dalam kehidupan?
15. Adakah anda merasa tiada minat pada kehidupan?
16. Adakah anda merasa tiada berguna?
17. Pernahkan anda berfikir hendak menamatkan kehidupan anda?
18. Adakah anda selalu merasa letih?
19. Adakah anda merasa perut anda kurang sedap/selesa?
20. Adakah anda merasa letih dengan mudah?
21. Adakah anda merasa ada orang yang berniat buruk terhadap anda?
22. Adakah anda seorang yang lebih mustahak daripada apa yang di-anggap oleh orang lain?
23. Adakah anda merasa apa-apa gangguan fikiran atau fikiran yang luar biasa?
24. Adakah anda pernah mendengar suara yang puncanya tidak di-ketahui, atau suara yang tidak dapat didengar oleh orang lain?
25. Pernahkah anda mengalami sawan, pergerakan lengan dan kaki, dan menggigit lidah semasa pengsan?

REFERENCES

1. Kok L: Reasons for admission to Singapore Mental Hospital. Med JMalaysia 1975; 30: 70-5.
2. Tan ES: Characteristics of patients and illnesses seen in Tampol Mental Hospital. Med J Malaysia 1964; 10: 3-7.
3. Tan ES, Wagner NN: Psychiatry in Malaysia. In: Psychological problems and treatment in Malaysia. eds. Wagner, NN, Tan ES. University of Malaya Press.
4. Kasmini K, Ohn K: Prevalence studies of child psychiatric disorders in a Malaysian village — a preliminary report. 5th ASEAN Forum on Child and Adolescent Psychiatry, Singapore, 1985.
5. Harding TW, de Arango MV, et al: Mental disorders in primary health care: a study of their frequency and diagnosis in four developing countries. Psychol Med 1980; 10(2): 231-41.
6. Harding TW, Climent CE, Diop M, et al: The WHO collaborative study on strategies for extending mental health care, II — the development of new research methods. Am J Psychiat 1983; 140(ii): 1474-80.
7. Krishnaswamy S, Kyaw O: A pilot study on the use of the WHO self-reporting questionnaire (SRQ) on a Malaysian population. Sing Med J 1985; 26(6): 431-4.
8. Dadphale M, Ellison RH, Griffin L: The frequency of psychiatric disorders among patients attending semi-urban and rural general out-patient clinics in Kenya. Br J Psychiat 1983; 142: 379-83.
9. Williams PN, Tarnopolsky A, Hand D: Case definition and case identification in psychiatric epidemiology. Psychol Med 1980; 10: 101-14.