

First-episode Psychosis in a Malaysian Chinese Population

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Abstract

Objective: To determine the characteristics of first-episode psychosis in Malaysian Chinese people.

Patients and Methods: All Chinese patients presenting with first-episode psychosis during an 8-month period from August 2003 were interviewed, excluding those with drug-induced psychosis or organic brain syndrome. Demographic data collected included presenting symptoms, the duration of untreated illness and duration of untreated psychosis, and pathways to care.

Results: Thirty eight patients were enrolled; 22 were men and 16 were women. The mean ages at presentation and disease onset were 31.8 years and 30.0 years, respectively. Thirteen patients (34.2%) were married and 19 patients (50.0%) were employed, housewives, or studying. Only 9 patients (23.7%) had been educated beyond secondary level and 8 patients (30%) had a family history of psychiatric illness. The median duration of untreated illness was 52 weeks (range, 1 to 780 weeks) and the median duration of untreated psychosis was 12 weeks (range, 1 to 260 weeks). The most common symptoms noted at presentation were deterioration in functioning (95%), sleep disturbance (89%), and dysphoric mood (89%).

Conclusion: Malaysian Chinese people with first-episode psychosis exhibited distinctive features that may need to be addressed when implementing early interventional programmes.

Key words: Behavioural symptoms, Early diagnosis, Ethnic groups, Psychotic disorders, Schizophrenia

Introduction

Schizophrenia is a debilitating illness and the onset frequently occurs in young individuals. The outcome is often poor and the illness has a significant impact not only on the patient but also on his or her family and the community. Unfortunately, treatment is usually delayed and stigmatising to both the patients and their families. Patients with schizophrenia usually experience disruptive behaviour before presenting for treatment. During the past several years, interest in early psychosis has grown considerably and strategies for preventive intervention are now more accepted and popular worldwide.¹ It is now obvious that greater

emphasis needs to be placed on the initial phases of the illness rather than more advanced schizophrenia.²

Both the duration of illness (DUI; the period from the onset of prodrome to onset of treatment) and the duration of untreated psychosis (DUP; the period from the onset of frank psychosis to onset of treatment) have been shown repeatedly to be quite lengthy. Not surprisingly, the majority of studies show a significant correlation between long DUI and DUP and poor outcomes.³⁻⁵ Reported average durations for DUI and DUP range from 1 to 5 years³⁻⁵ and 1 to 2 years,^{4,6-9} respectively. However, these data were derived mainly from Caucasian populations in western countries. Cultural differences in the presentation, perception, and course of mental illness between East and West are likely to contribute to differences in the DUP.^{10,11} Only a few studies of this issue have been carried out in the Asian context and most of these are from East Asian countries. In a study of patients from Korea and China, mean values for DUI and DUP, respectively, were 66.3 and 35.9 weeks for Korean patients, and 63.2 and 25.3 weeks for Chinese patients.¹² Similarly, in Singapore, the mean DUP for patients with first-episode psychosis was found to be 14.5 months.¹⁰

The currently available data do not indicate conclusively whether, or how, ethnicity affects the development of early psychosis. There is also a dearth of information about possible differences in characteristics of early psychosis among

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various ethnic groups within the same geographical region. Such data would be invaluable if an early intervention programme is to be introduced in a multicultural country such as Malaysia.

Malaysia is a melting-pot of various ethnic groups, consisting mainly of Malays, Chinese, and Indians. Only recently has there been an attempt to collect sociodemographic data regarding the population with psychosis in Malaysia. The Malaysian National Mental Health Registry, an initiative launched in January 2003, was an attempt to build a database of patients with schizophrenia. 4684 cases were registered from January 2003 to December 2004, with 2467 incident cases.¹³ These numbers represent an extremely small proportion of the population of Malaysia, which may be an indication that many patients are not receiving treatment. There was a preponderance of men (65%) and the ethnic composition of those registered reflected the ethnic composition of Malaysia: 53% were Malays, 27% Chinese, 9% Indians, and 11% from other ethnic groups. Most patients (76%) were not married, 52% were unemployed, and only 11% were educated beyond secondary level. Only 13.3% were prescribed atypical antipsychotic agents, with the rest prescribed typical antipsychotic agents. However, this registry did not include data suitable for specific, detailed analysis of patients with first-episode psychosis, different ethnic groups, or different geographical areas.

Currently, 40% of the Malaysian population of 25 million are Chinese people. The Chinese population first arrived in Malaysia in the 15th century, when seafaring traders arrived in Malacca. However, the majority of Chinese migrants arrived in the 19th century to work in the booming tin-mining industry. Although there is assimilation of all the cultures in Malaysia, most people still hold strongly to their own distinct cultural systems, beliefs, and values. Therefore, it is possible that each ethnic group will have inherent differences in their presentation of first-episode psychosis. Such differences, if they exist, need to be identified and addressed to enable an early intervention programme to run smoothly in a multiracial country such as Malaysia.

The present study was carried out at the University Malaya Medical Center, Kuala Lumpur, Malaysia, to address this issue. The University Malaya Medical Center is located at the western edge of Kuala Lumpur, and includes the township of Petaling Jaya in its catchment area. The Chinese are the main ethnic group in the area. The objective of this study was to determine the various characteristics, including DUI and DUP, common prodromal symptoms, and pathways to care, of Malaysian Chinese presenting with first-episode psychosis.

Patients and Methods

The study group comprised Chinese patients who presented with first-episode psychosis during an 8-month period from August 2003 and who had been admitted to the University Malaya Medical Center psychiatric ward. Patients who

attended either the adult or the children's psychiatric clinics were included. These patients represented a subset of patients from a survey of 100 consecutive patients with first-episode psychosis, which included all ethnic groups. Diagnoses were based on the Diagnostic and Statistical Manual of Mental Disorders (DSM)-IV.¹⁴ Patients with a diagnosis of drug-induced psychosis or organic brain syndrome were excluded. The following demographic data were collected: age of the patient at presentation and at onset of the illness, sex, level of education, employment and marital status, pathways to care, and presenting symptoms. Other data such as the diagnosis and family history of mental illness were also recorded. The patients were interviewed using the Structured Interview for Prodromal Syndromes (SIPS): Version for Present Prodromal Syndromes,¹⁵ for which permission was obtained. SIPS has been shown to be a valid tool when symptomatic prodromal states can be identified with satisfactory psychometric precision, and exhibits excellent inter-rater reliability ($\kappa = 0.81$).¹⁶

Results

Thirty eight patients were recruited during the study period, 22 (57.9%) were men and 16 (42.1%) were women. The distribution of diagnoses among the patients is given in Table 1. Most patients (63.2%) were diagnosed with schizophrenia, schizophreniform disorder, or brief psychotic disorder.

Age at Presentation and Onset of Psychosis

The age distribution of all patients in the study at onset and presentation is given in Figure 1. The mean ages at onset and presentation were 30.0 years (SD, 11.1 years) and 31.8 years (SD, 11.3 years), respectively. For both age at presentation and age of onset of psychosis based on the history, the youngest patient was aged 13 years and the oldest was 59 years (the same 2 patients in each case).

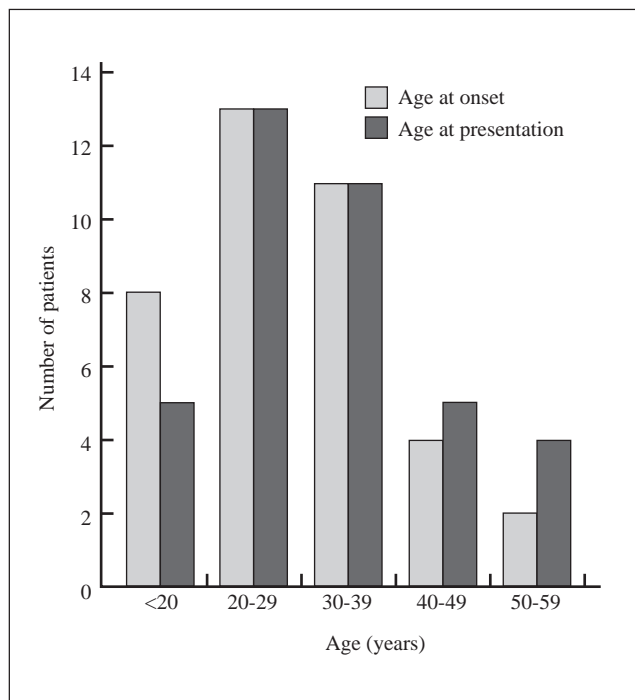
Overall, men had a later mean age of onset of 30.8 years compared with 28.9 years for women, a difference that was not statistically significant. However, among patients with a diagnosis of schizophrenia, men had a much earlier mean age of onset of 25.3 years compared with 29.8 years for

Table 1. Diagnosis among Chinese patients with first-episode psychosis.

Diagnosis	Number (%)
Schizophrenia	22 (57.9)
Schizophreniform disorder	1 (2.6)
Brief psychotic disorder	1 (2.6)
Psychotic depression	5 (13.2)
Psychotic mania	4 (10.5)
Other diagnosis*	5 (13.2)
Total	38 (100)

* Post-partum psychosis, delusional disorder, and psychotic disorders not otherwise specified.

Figure 1. Age at onset and age of presentation of Chinese patients with first-episode psychosis.



women, a relatively large difference that also failed to reach statistical significance.

Age at Presentation and Diagnosis

The mean ages at onset and presentation of all patients in relation to their diagnosis are given in Table 2. Patients with affective disorders were older at onset and presentation.

Marital, Employment, and Educational Status

Twenty four patients (63.2%) were never married, 13 patients (34.2%) were married, and 1 patient (2.6%) was divorced. Nineteen patients (50.0%) were employed, housewives, or studying at the time of the interview; the remaining 50.0% were unemployed. Only 9 patients (23.7%) had been educated at tertiary level, 20 patients (52.6%) were

Table 2. Age at onset and presentation according to diagnostic group.

Diagnosis	Age at onset (years) Mean (SD)	Age at presentation (years) Mean (SD)
Schizophrenia	27.4 (9.5)	29.1 (9.0)
Schizophreniform disorder	22.0	22.0
Brief psychotic disorder	21.0	21.0
Psychotic depression	36.2 (6.5)	39.0 (8.5)
Psychotic mania	36.8 (14.4)	37.3 (13.4)
Other diagnosis	33.4 (16.7)	36.4 (18.6)

educated to secondary level, and 8 patients (21.1%) had primary education only. One patient (2.6%) had no formal education of any kind.

Family History

Of the 38 patients in the study, only 8 (30%) reported a family history of psychiatric illness. The number of patients with a family history of mental illness in the various diagnostic groups is given in Table 3. There was no statistically significant tendency for a particular diagnostic group to have a positive family history. The nature of the psychiatric illness present in the families of the patients was not recorded because of doubts about the reliability of this information.

Duration of Untreated Illness

The median DUI was 52 weeks (range, 1 to 780 weeks). Table 4 indicates the distribution of patients in relation

Table 3. Availability of family history for various diagnostic groups.

Diagnosis	No	Yes
Schizophrenia	19	3
Schizophreniform disorder	0	1
Brief psychotic disorder	1	0
Psychotic depression	3	2
Psychotic mania	4	0
Other diagnosis	3	2
Total	30	8

Table 4. Distribution of duration of untreated illness values among patients.

Duration of untreated illness (weeks)	Number (%)
1	1 (2.6)
3	1 (2.6)
4	4 (10.5)
6	1 (2.6)
8	3 (7.9)
12	4 (10.5)
16	2 (5.3)
24	1 (2.6)
52	7 (18.4)
72	1 (2.6)
104	3 (7.9)
156	2 (5.3)
208	3 (7.9)
260	3 (7.9)
364	1 (2.6)
780	1 (2.6)
Total	38 (100)

to DUI. The median DUI was 52 weeks (range, 4 to 364 weeks) for men and 52 weeks (range, 1 to 780 weeks) for women, with no significant sex difference noted when Mann-Whitney *U* test was performed ($p = 0.326$). The mean and median values for DUI for the various diagnostic groups are shown in Table 5. The DUI was longer for the 'psychotic depression' and 'other diagnosis' groups.

Duration of Untreated Psychosis

The median DUP was 12 weeks (range, 1 to 260 weeks). Table 6 shows the distribution of patients in relation to DUP. The median DUP for males was 14 weeks (range, 3 to 208 weeks) and 12 weeks (range, 1 to 260 weeks) for females, with no significant gender difference noted when Mann-Whitney *U* test was performed ($p = 0.529$). The mean and median values for DUP for the various diagnostic groups are shown in Table 7. Unlike the result for DUI, the longest median DUP was associated with schizophrenia.

Table 5. Duration of untreated illness among different diagnostic groups.

Diagnosis	Number of patients	Mean (SD)	Median (range)
Schizophrenia	22	94 (86)	52 (6-260)
Schizophreniform disorder	1	4	4
Brief psychotic disorder	1	3	3
Psychotic depression	5	150 (157)	104 (8-364)
Psychotic mania	4	30 (49)	6 (4-104)
Other diagnosis	5	162 (345)	12 (1-780)

Table 6. Distribution of duration of untreated psychosis values among patients.

Duration of untreated psychosis (weeks)	Number (%)
1	1 (2.6)
3	2 (5.3)
4	6 (15.8)
6	1 (2.6)
8	5 (13.2)
12	5 (13.2)
16	1 (2.6)
24	1 (2.6)
52	8 (21.1)
72	1 (2.6)
104	2 (5.3)
156	2 (5.3)
208	2 (5.3)
260	1 (2.6)
Total	38 (100)

Pathways to Care

Of the 38 patients interviewed, it was found that, despite large DUP and DUIs, 25 of 38 patients (65.8%) had never sought any form of treatment for their psychiatric problems prior to coming to the hospital. Of the remaining 13 patients, 4 had consulted private general practitioners and 2 others had visited government primary care clinics before being referred to or seeking any form of psychiatric service. For 7 patients (18%), the preferred first point of contact was associated with a temple.

Presenting Symptoms

The symptoms present during the initial onset of illness are tabulated in Table 8. The most common symptoms at onset were deterioration in functioning (95%), sleep disturbances (89%), and dysphoric mood (89%), whereas disorganised communication (16%) and grandiosity (18%) were experienced

Table 7. Duration of untreated psychosis among different diagnostic groups.

Diagnosis	Number of patients	Mean (SD)	Median (range)
Schizophrenia	22	74 (77)	52 (4-260)
Schizophreniform disorder	1	4	4
Brief psychotic disorder	1	3	3
Psychotic depression	5	25 (25)	8 (3-52)
Psychotic mania	4	17 (4)	6 (4-52)
Other diagnosis	5	7 (6)	4 (1-16)

Table 8. Initial symptoms experienced by patients.

Symptom	Number (%)
<i>Positive symptoms</i>	
Unusual thought content	24 (63)
Suspiciousness	24 (63)
Grandiosity	7 (18)
Perceptual abnormalities	24 (63)
Disorganised communication	6 (16)
<i>Negative symptoms</i>	
Social anhedonia	27 (71)
Avolition	28 (74)
Decreased emotion	15 (39)
Decreased experience of self	10 (26)
Decreased ideational richness	8 (21)
Deterioration in functioning	36 (95)
<i>Disorganisation symptoms</i>	
Odd behaviour and appearance	20 (53)
Bizarre thinking	11 (29)
Trouble with focus/attention	28 (74)
Impairment in hygiene	4 (11)
<i>General symptoms</i>	
Sleep disturbance	34 (89)
Dysphoric mood	34 (89)
Motor disturbance	9 (24)
Impaired tolerance to stress	30 (79)

less frequently as presenting systems than virtually all other symptoms.

Discussion

The study population consisted mainly of young people, with onset of illness and presentation for treatment occurring in approximately half the patients before the age of 29 years. The diagnosis for most patients was schizophrenia. The findings are thus consistent with previous studies that have shown that the onset of psychotic disorders, and specifically schizophrenia, usually affects the younger age group. The onset of illness occurred later in patients with a diagnosis of an affective disorder than in those with a diagnosis of schizophrenia, schizophreniform disorder, or brief psychotic disorder. Men with schizophrenia in this study presented earlier than women. However, the mean age of onset for men (25.3 years) was at the upper limit of previously reported ranges for presentation of schizophrenia in men.^{4,6-9} This raises the possibility that illness onset may occur later in Malaysian Chinese men than in their western counterparts. Additional studies with larger populations are needed to verify this.

It was noted that unmarried people comprised almost two-thirds of the study population. This should not be attributed solely to the fact that the majority of the sample population had been diagnosed with one of the schizophrenia spectrum of disorders and experienced deterioration early in life making it difficult for them to achieve marriage. The fact that a large number of the study population may not yet have reached the age for marriage should also be taken into account. On the other hand, it is possible that 'deterioration in functioning' accounted for the finding that half of the study population was unemployed or not studying, despite the fact that only 5 were younger than 20 years. This may also account for the fact that almost one-quarter of the study population were only educated to primary school level or less. In Malaysia, almost everyone receives at least lower secondary education; this is especially so among Chinese people, who tend to be high achievers. Further, the study population is from an urban area and hence a higher than average level of education might be expected.

Approximately one-third of the patients had a family history of psychiatric illness. However, the exact nature and specificity of the type of illness in the relatives could not be determined due to uncertainty on the part of the patients. Therefore, it could not be determined whether family history was related to the development of psychosis.

The median values for DUI and DUP were 52 and 12 weeks, respectively. This result was unexpected, as studies in western countries have reported DUI and DUP values ranging from 1 to 5 years and 1 to 2 years, respectively.^{3-5,9} However, it should not be inferred that Malaysian Chinese are better informed about mental illness and/or that Malaysia has more advanced mental health services. It is more likely that this result reflects the fact that the study population was drawn from a highly affluent urban area in Kuala Lumpur.

Different results for DUI and DUP, more consistent with existing data, may have been obtained if the study was performed nationwide.

Almost one-fifth of the population sought help from traditional/religious healers. This is a higher proportion than that reported for studies in developed countries, but is more in keeping with findings for Asian countries. This suggests that involvement of temple personnel should play a central role in early intervention programmes in countries such as Malaysia.

It is noteworthy that the commonest initial symptom was 'deterioration in functioning', which was reported by 95% of the patients. Many Chinese values are based on Confucian principles, which teach that proper human relationships are the basis of society, and that human beings are bound to their peers by 'human heartiness'.¹⁷ Therefore, Chinese society can be considered as collective in nature, regarding the whole group as more important than the individual. This places pressure on the individual to conform to cultural norms and group demands, which invariably leads to a lower threshold of tolerance for the psychologically unwell. Further, mental illness in the family raises concerns about the marriage prospects of patients, for whom role functioning may be a concern.¹⁸ Malaysian Chinese people are also considered to be high achievers, which may lead to an increased tendency for any deterioration to be noticed and emphasised. Such factors might contribute to the reporting of 'deterioration in functioning' as a major presenting symptom by a relatively high proportion of Chinese people in the present study. Identification of any differences between common initial symptoms in various ethnic groups is particularly important in the context of implementation of interventional and educational programmes. Such programmes should take into account any differences in presentation in different ethnic groups and/or geographical locations.

The relatively later onset of schizophrenia among the Malaysian Chinese population suggests that further research needs to be conducted. Deterioration in levels of functioning was the major presenting complaint among this group of patients. It is possible that this is because the Malaysian Chinese population is more oriented towards performance and productivity and could be a precipitating factor for this illness. In this study, only 30% of the population reported a family history of schizophrenia, which could be a result of stigma avoidance. The relatively short DUI and DUP may be due to the study population coming from an urban setting, with an associated high level of illness awareness and motivation for improvement. Only one-fifth of patients with first-episode psychosis sought initial treatment from religious healers, implying a possible paradigm shift from the religious-magical approach towards allopathic medicine. This differs from the prevailing view among the Malaysian population that traditional approaches are still popular for the treatment of psychiatric illnesses.

Possible limitations of this study are the small sample size and the skewed nature of the data; recall bias, especially

among patients with long DUP and/or DUI; and the fact that most of the study patients were from an urban area so may not be representative of the Malaysian Chinese population. In addition, patients with a diagnosis of drug-induced psychosis were not included in this study due to the difficulty of determining whether the psychosis was due to a functional or organic cause. The presence of drug abuse may be comorbid with the functional psychosis and not the causative factor, so it is possible that genuine first-episode psychosis could have been overlooked.

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