Audit of New Long-stay Patients in Permai Mental Hospital, Johor

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Summary

We report a cross-sectional descriptive study of 90 new long-stay patients (NLS) (ie. those who had been resident for six months to three years in Permai Mental Hospital, Johor) and studied from April to June, 1995. The age of this sample ranged from 18 to 85 years. Two subgroups were observed (ie. younger NLS patients aged 18 to 34 years and older NLS patients aged 35 to 85 years). Among the younger NLS patients, the commonest diagnosis was schizophrenia (51.2%), followed by mental retardation with related problems (24.4%). Sixty-one percent of these younger patients had a history of serious violence or dangerous behaviour. Older NLS patients were likely to have a diagnosis of schizophrenia (79.6%), followed by mood disorder (6.1%) and dementia (4.1%). Forty seven percent of these older group had history of danger to others and 57.1% were at moderate or severe risk of non-deliberate self-harm. Focusing on the schizophrenic patients, all of them had some form of psychopathology, either positive, negative or general symptoms and about one-fourth were assessed to pose a risk for aggression.

Key Words: Audit, Psychiatric in-patients, Long-stay psychiatric patients, Psychiatric institution

Introduction

The emergence of effective psychopharmacological treatments in the 1950s resulted in a significant reduction in the resident population of mental hospitals. Tooth and Brooke[1], noting this decrease in England and Wales, predicted that the existing population of mental hospitals would disappear within 16 years (ie. in 1975). This prediction was challenged by several authors[2,3] and the decline of beds in the mental hospitals has not been as rapid as was hoped and a 'new long-stay' population has continued to develop[4]. This group constituted 21% of the total population in the mental hospital studied by Mann *et al*[4].

The phenomenon of 'new long-stay' patients has been studied[5] and reasons suggested to explain why they could not be discharged. The suggestions include disability due to psychiatric illness and concomitant physical illnesses[6], behavioural problems[7], or absence of suitable accomodation in the community[6].

This study aims to study the cross-sectional profile of the new long-stay (NLS) patients in Permai Mental Hospital, Johor, and to provide baseline information for further study.

Materials and Methods

This is a cross-sectional study carried out in Permai Mental Hospital, Johor, from April to June, 1995. All the new long-stay (NLS) patients (ie. who had been in hospital for between six months and three years from the time of study) were traced. A total of 90 patients were identified and the patients were assessed by the second and third authors for the following information:

1. Demographic characteristics (ie. age, sex, marital status, social class, ethnicity and employment status prior to admission). In this study, social class was determined by the occupation of their main carers.

2. Psychiatric history (ie. diagnosis, symptoms* over the previous month, date of present admission, duration of mental illness, number of admissions, voluntary or compulsory detention).

3. Aggression (ie. danger to others and self) taking into consideration violence or threat of violence, sexual assaultiveness, arson or destructiveness in the past three months *, risk of deliberate or non-deliberate harm.

4. Behavioural problems, alcohol or substance abuse in the past three months*.

5. Personal functioning* (ie. ratings were made on daily activities, personal appearance, social interaction, basic domestic and vocational skills).

6. Physical health * (ie. coexisting medical problems) in the past three months.

7. Social support (ie. frequency of visits and concern from family or carers).

Items marked with an asterisk * were rated on a scale of 0 (no problem or absent) to 3 (severe problem). The ratings were completed in consultation with the nursing staff and psychiatric worker who best knew the patient. The availability of family support was measured by contacting the relatives and carers.

Focusing on schizophrenic patients, the mental status of the patients was assessed using the Positive and Negative Syndrome Scale for Schizophrenia (PANSS)[8,9,10]. The PANSS is a 33-item, 7-point rating instrument. Of the 33 psychiatric parameters assessed on PANSS, seven constitute the Positive Scale, seven the Negative Scale and another 16 parameters constitute a General Psychopathology Scale. There are 3 other parameters which assess the risk for aggression[8]. The second and third authors were trained in the rating of the PANSS by viewing videotapes prepared by the original author of the Scales (Kay for PANSS). They were able to achieve an interrater concordance of more than 0.80 as recommended by Kay[8].

The WHO Psychiatric Disability Assessment Schedule (WHO/DAS)[11] was used to assess the social functioning of these schizophrenic patients by the second and third authors. This instrument was shown to be a valid and reliable tool for cross-cultural comparison of psychiatric disability. The informants include the nursing staff who knew the patient best, the patient and written records. This instrument covered the one-month period preceding the assessment. WHO/DAS consists of four sections. Section 1 deals with overall behaviour (self-care, level of activity,social withdrawal). Section 2 is an inventory of social roles. Section 3 is filled in if the patient has been hospitalised for most of the time in the last month. Section 4 consists of "modifying factors" which include items designed to describe specific assets (eg. above-average abilities, supportive relationships) and specific liabilities (eg. membership of an underprivileged group) of the patient, as well as salient features of his home environment. At the end of the schedule, a global judgement about the level of disability of the patient is made.

Result

There was slight female preponderance in the sample. The age range was from 18 to 85 years, with a mean age of 37 years. The commonest diagnosis was schizophrenia (66.7%), followed by mental retardation with related psychiatric disorders (12.2%) and epilepsy with related psychiatric disorders (11.1%). Seventy-seven percent of the patients were single, while 71.1% of the patients came from social class IV and V.

Seventy-four percent of the patients were unemployed prior to admission. Ninety-two percent of the patients were admitted under compulsory admission. Thirty-two per cent of the patients had no social support at all (ie. no relatives or carers were contactable) and 53.3% of the patients had poor social support (ie. the relatives were available but refused to cooperate with the patients' management). Only 11.1% of these patients had a carer who visited them frequently and was willing to participate in patients' management.

Dangerousness

About one-third of the patients had a history of aggression and violence prior to the index admission. Fifty-three per cent of the patients displayed some form of violence towards others (ie. staff and other

Table I
Sociodemographic characteristics (n=90)

Sex
- Male: 42
- Female: 48

Age (years)
- Range 18 to 85
- Mean: 37

Ethnic group
- Malay: 44
- Chinese: 35
- Indian: 10
- Other: 1

Diagnosis
- Schizophenia : 60
- Mood disorder: 7
- Epilepsy with related psychiatric disorder: 10
- Mental retardation and related psychiatric disorder: 11
- Dementia: 2

Marital status:
- Single: 69
- Married: 8
- Divorced: 8
- Separated: 2
- Widowed: 3

Social class:
- I: 1
- II: 3
- III: 23
- IV: 30
- V: 34

Employment status prior to admission
- Employment: 24
- Unemployed: 67

Average duration of illness: 15 years

Admission:
- Compulsory: 83
- Voluntary: 8

Social support:
- Good: 10
- Poor: 48
- No: 29

Table II
Comparison between NLS in two age groups

	Younger (n=41) N (%)	Older (n=49) N (%)
Sex		
Male	19 (46.3)	23 (46.9)
Female	22 (53.7)	26 (53.1)
Marital status		
Single	37 (90.2)	32 (65.3)
Married	1 (2.4)	7 (14.3)
Divorced/separated/widowed	3 (7.3)	10 (20.4)
Ethnic		
Malay	20 (48.8)	24 (49.0)
Chinese	14 (34.1)	21 (42.9)
Indian	6 (14.6)	4 (8.2)
Others	1 (2.4)	0
Employment prior to admission		
Yes	8 (19.5)	16 (32.7)
No	33 (80.5)	33 (67.3)
Average number of previous admission	5	7
Diagnosis		
Schizophrenia	21 (51.2)	39 (79.6)
Mood disorder	4 (9.6)	3 (6.1)
Epilepsy with related problems	6 (14.6)	4 (8.2)
Mental retardation with related problems	10 (24.4)	1 (2)
Dementia	0 (0)	2 (4.1)
Legal status		
Voluntary	3 (7.3)	4 (8.2)
Compulsory	38 (92.7)	45 (91.8)
History of violence		
Danger to self	32 (78.0)	28 (57.1)
Danger to others	25 (61.0)	33 (67.3)

patients) in the past three months. Sixty-six per cent of the patients showed features of self-neglect and wandering. Over half of the patients (51.1%, n=46) were rated by the managing staff as effecting a risk of violent or self-neglect without supervision.

Current personal and interpersonal functioning

Sixty-three per cent of patients had significant problems in daily living activities (eg. getting up in the morning, personal appearance, cleaning room or making bed). About 22.2% of these patients engaged in little or no social interaction. Twenty-three per cent of these patients manifested significant behavioural problems (eg. head banging, sexual disinhibition, temper tantrum, etc.) in the preceding month.

Physical health

Significant coexisting medical problems (eg. cerebrovascular accident, head injury, insulin-dependent diabetes mellitus, etc.) were noted in 10% of the sample and these subjects needed close nursing care for their medical conditions.

Difference between male and female patients

Male patients in this study was slightly younger than female patients (36 years versus 39 years). They were more often single (97.6% versus 58.3%) as opposed to married (2.3% versus 14.6%) or previously married (O versus 27.1%). There was more often a history of violent or dangerous behaviour (76.2% vs 41.7%).

More male patients were diagnosed as having schizophrenia than female patients (78.5% versus 56.3%). More females were diagnosed as having a mood disorder (12.5% versus 2.4%).

Table II summarises the difference between the younger and older new long-stay (NLS) patients. The younger group was predominantly single, unemployed, and slightly over 75% had a history of danger to self. More patients in the older group were married or previously married. A female preponderance was noted in both groups. Schizophrenia remained the commonest diagnosis. More than 90% of these patients were admitted under compulsory detention.

Table III showed the psychopathology of the sample

Table III
Psychopathology of schizophrenic patients as assessed on PANSS (n=60)

Individual Scale Item	Mean Score
Positive Scale	
Delusion	3
Conceptual disorganisation	4
Hallucinatory behaviour	4
Excitement	2
Grandiosity	
Suspiciousness/persecution	2
Hostility	2
Scale total (Range 7-49):	18
Negative Scale	
Blunted affect	4
Emotional withdrawal	4
Poor rapport	3
Passive apathetic social withdrawal	5
Difficulty in abstract thinking	3
Lack of spontaneity & flow of conversation	3
Stereotyped thinking	2
Scale total (Range 7-49)	24
General Psychopathology Scale	
Somatic concern	2
Anxiety	1
Guilt feelings	1
Tension	1
Mannerism & Posturing	2
Depression	2
Motor retardation	2
Uncooperativeness	2
Unusual thought content	2
Disorientation	2
Poor attention	3
Lack of judgement & insight	3
Disturbance of volition	3
Poor impulse control	2
Preoccupation	3
Active social avoidance	3
Scale total (Range 16-112)	34
Supplementary Aggression Risk	
Anger	2
Difficulty in delaying gratification	2
Affective lability	2
Scale total(Range 3-21)	6

as rated on the PANSS. These patients had a mean score of 18 on the positive scale, 24 on the negative scale, 34 on the general psychopathology scale and 6 on the supplementary aggression risk.

Further analysis showed that 46.6% of these patients had a moderate to severe level of psychopathology (ie. 38.3% showed moderate and 8.3% severe) on the positive scale. Sixty-three per cent had moderate to severe negative features (ie. 56.7% moderate and 6.7% had severe). Sixty-five percent had a moderate to severe score on the general psychopathology scale. Twenty-three per cent were assessed to be moderate to severe risk to aggression (ie. 21.7% moderate and 1.7% severe).

Using the WHO Psychiatric Disability Assessment Schedule (DAS), 68.3% of the patients was noted to be socially withdrawn and solitary, but would mix passively with others if encouraged to do so. Eight per cent of the patients never mixed socially with anyone, even when encouraged to do so. Twenty-two per cent of the patients were threatening in behaviour, or verbally abusive. Twenty-seven per cent were unable to contribute to any housekeeping activities on the ward or premises and 33.3% contributed very little towards housekeeping (eg. dusting). Fifty-seven per cent were not involved with any work therapy outside the ward. Twelve per cent of these patients were not allowed outside ward unless under escort and 40% were only allowed out of ward when supervised.

Discussion

Mental health care system in Malaysia is gradually moving towards community care, with deinstitutionalisation and decentralising of psychiatric services from the mental hospitals to the general and district hospitals. In this process, we found that about 20% of our new admissions each year in Permai Mental Hospital appeared to require long-term hospital stay, as observed in other settings[5]. This study is our attempt to understand the profile of new long-stay patients in our local setting, examining their sociodemographic characteristics, psychopathology and functioning level.

In our study sample, schizophrenia was the commonest diagnosis. Schizophrenia, with its marked psychopathology and functional impairment, remains the largest diagnostic group in most mental hospitals. It is also the commonest diagnosis among the new long-stay population[5,6].

Among our study sample, 32.2% had no available social support and another 53.3% with very poor family support (ie. relatives were contactable but refused to participate in patients' management). There is growing evidence from controlled studies that the majority of psychiatric patients can be treated more effectively in the community if there is availability of a comprehensive and continuous community care to provide for the multiple and diverse needs of both patients and their carers[12,13]. Hospitalization is now widely viewed as stigmatizing, depersonalizing and promoting chronicity[14] in settings where there is availability of good community psychiatric services. In our study, the findings that patients were being rejected by their carers may be explained by the burden on carers looking after these patients, the lack of knowledge or fear of the illness or poor coping skills among the carers, the lack of supportive network and outreach services. A fact that need to be emphasised is that deinstitutionalisation and community mental health care are not synonymous[14]. Many concerns have emerged from both advocates of psychiatric hospitals and comprehensive community-based services about the aftermath of deinstitutionalization in terms of neglect and the homelessness among the mentally ill and the burden placed on their families and community[15].

In Permai Mental Hospital, attempts had been made to organise some form of community care to overcome the above mentioned problems. There is a community nursing team consists of two staff nurses who visit the community psychiatric patients who stay within Johore Bahru in their home to provide depot medication and provide health education to the families. There is a half-way home within the hospital compound for psychiatric patients who are working outside the hospital. There is also a rented flat in the city for psychiatric patients who are working and capable of living in unsupervised housing. These are some positive initial attempts within the resources of a mental hospital although only a very small minority of our psychiatric patients benefited. The challenge for the next decade is to establish a comprehensive community

mental health services that reaches out to all the relevant psychiatric clients and their families in the community.

A high proportion of these patients was considered to pose a significant risk to others (ie. more than half of these patients displayed some form of violence to others) and two-thirds of them were at risk of self-harm despite intensive treatment in the hospital. Furthermore, more than one-fifth of them had significant behavioural problems (eg. head banging and sexual disinhibition). These factors explained most of their compulsory admissions earlier and probably deferred their discharge from the hospital.

Young NLS patients (ie. aged 18 to 34 years) were predominantly single, unemployed, and had a history of violence. The older NLS patients were more likely to be married and there was higher prevalence of dementia. More intensive treatment and rehabilitation efforts are important to prevent this younger group of patients becoming long-stay care patients.

Focusing on the psychopathology of schizophrenic patients, 46.7% of the patients manifested significant (ie. moderate to severe) level of psychopathology on the positive scale and 23.3% of these patients had a significant (ie. moderate to severe) aggression risk. These patients' symptoms persisted despite high doses of antipsychotics. The high percentage of treatment-resistant schizophrenic patients in this new long-stay group is understandable as Permai mental Hospital is a referral centre for all the patients who need long stay from the east coast and southern part of Penisular Malaysia. These patients with florid psychotic symptoms will need further hospitalization, a trial of atypical antipsychotics (e.g. clozapine), or alternative supervised environment, as they have marked impaired reality testing. Our figure corresponded to most previous findings that about one-third of new long-stay patients could not be discharged due to their psychosis and behavioural problems[4].

Sixty-three per cent of the sample had moderate to severe level of psychopathology on the PANSS negative scale. This negative features could be part of the illness and could also be due to the institutionalism. These group of patients also need supervision due to their tendency to self-neglect.

Wing[16] suggested four sources of social impairment in schizophrenia emerging from (i) acute symptoms (eg. delusions, hallucinations), (ii) chronic symptoms (eg. blunted affect, poverty of speech), (iii) secondary handicaps (eg. institutionalization), and (iv) extrinsic disadvantages (eg. poor social support). All these aspects were examined in this study.

Anthony and Liberman[17] adapted a conceptual model for psychiatric rehabilitative assessment and intervention, comprising four levels (ie. pathology, impairment, disability and handicap). Disability refers to any restriction in normal ability to perform activities associated with an impairment. This disability was looked into specifically using the WHO Psychiatric Disability Assessment Schedule (DAS). This study showed 76.6% patients were socially withdrawn and 60% of the patients contributed little or made no contribution to housekeeping. Slightly more than one-half of these patients were not involved in work therapy outside the ward. About one-half of these patients needed close supervision. Their needs for rehabilitation ranged from activities of daily living to domestic and vocational skills and this remain the challenges faced by the rehabilitation team.

There were some methodological aspects in this study which need to be addressed. Permai Mental Hospital is a referral mental hospital with a biased population. The study period was three months and provides a cross-sectional picture of that specific period. It was possible that they were not entirely representative of the mental hospital population at large. The DAS consists of two sections: one completed by interview of relatives or others who had been living with the patient before admission; and the other by interview with the nursing staff caring for the patient since admission. Among these schizophrenic patients, 28.3% of their relatives were just not traceable. Bearing in mind the limitations of this study, it is possible to make tentative suggestion that despite the focus on community care, a proportion of the patients in Permai Mental Hospital still have protracted stay because of certain characteristics (ie. persistent psychopathology, poor family support, risk of dangerousness).

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