

LONG AND SHORT STAY PATIENTS IN A HONG KONG PSYCHIATRIC DAY HOSPITAL

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SUMMARY

The present study tried to compare the various socio-demographic and clinical data between the short-stay and the long-stay psychiatric day patients of a district general hospital. The results showed that there were not much differences in many socio-demographic and clinical factors, but the long stay ones were usually unmarried and more were transferred to other units for management upon discharge from the day hospitals. Explanations for such negative findings were discussed which called for attention to other more important determinants of hospital stay.

Keywords: length of stay, day hospital, determinants

INTRODUCTION

Psychiatric day hospitals had been in existence for many years (Mak, 1994), but not all patients would benefit from the services they provide. Many patients left after a trial of a short stay, while others were kept there for very long period. Then there is those who stayed for an intermediate period of time. So far there has been no study compared these different groups of patients. In fact, Gath et al (1973) found that patients attending traditional large mental institutions in Birmingham in the United Kingdom were older, more severe diseases, greater morbidity. McGrath & Tantam (1987) also did a similar comparison in south Manchester, but the results were rather negative except for the quantity of previous hospital treatment.

Despite the current trend to return these patients as soon as possible into the community, there is no standard reference about the appropriate duration of hospital stay for such patients. Overseas references, e.g. the "predetermined length of stay" of the Professional Standards Review Organisation in the United States of America (Root, 1975), are not useful because there are socio-cultural factors which influence the duration of hospitalisation e.g. the attitude of Chinese families towards mental illness, the availability of other community support, etc. On the other hand, there are occasions when some doctors have kept their patients too long without real medical reasons rather than to play safe through prolonged observation, or even to suit their working schedules. This could be a wastage of hospital resources, but there is a need to evaluate this clinical aspect of the individual doctor.

An analysis of the length of stay (LOS) issue in Hong Kong may be of interest in delineating what sort of patients may benefit more from the day hospital service. It can assist in the planning of services and can alert the clinicians as to which sorts of patients will benefit from such service.

However, it must be stated here that LOS is subjected to quite a number of variable factors some of which cannot be controlled by the clinicians e.g. change of hospital admission policy or charges, staff deployment, etc.

OBJECTIVES

The objectives of the present report are twofold, viz.:

1. To record the various sociodemographic and basic clinical data of psychiatric day-patients of a district general hospital.
2. To compare the various data between the short stay groups, using the χ^2 for non-continuous variables and the Pearson correlation coefficients for continuous variables.

METHODOLOGY

This is a retrospective analysis of patient records of all the 153 patients discharged during the 3 year period of 1991-1993 from the day hospital of the Psychiatric Department of the University of Hong Kong located within the Queen Mary Hospital which provided 20 day-hospital beds or better called places. The day-hospital usually admits patients with chronic psychiatric illness for rehabilitation under the care of a multidisciplinary team. Similar to U.K. centres, a full range of occupational, social and recreational activities are offered. The patients were all adult patients usually between the age of 18 to 65.

The length of stay was calculated from the dates of admission and discharge from the day hospital concerned (Lwanga & Tye, 1986). In the absence of naturally defined groups, the patients were arbitrarily classified according to the criteria used by Gath et al (1973) i.e. less than 3 months (short-stay), 4 - 9 months (medium stay) and over 9 months (long-stay).

RESULTS AND ANALYSIS

Altogether there were 153 patients throughout the three years, the details of which were described in another paper (Mak & Lee, 1996). According to the distribution of the calculated LOS, there was no evidence that there were two or more populations of day patients (Fig. 1 and 2), nor was there any suggestion of a very prolonged stay group. For the present analysis, the patients were therefore arbitrarily divided into the three groups as stated above, resulting in 118 patients in the short-stay group, 32 patients for the medium stay and 3 patients for the long stay.

A comparison between the various socio-demographic data were presented in Table 1 below.

Table 1: Length of stay comparison of psychiatric day patients

Variables	Test	Value	Sig.
<i>year of discharge (1991:1992:1993)</i>	χ^2	9.09	N.S.
<i>sex (male:female)</i>	χ^2	0.174	N.S.
<i>age group</i>	R	-0.743	no rel
<i>marital status</i>	χ^2	8.029	<0.05
<i>major diagnostic groups</i>	χ^2	2.040	N.S.
<i>history of suicidal gesture</i>	χ^2	1.006	N.S.
<i>history of violence</i>	χ^2	3.017	N.S.
<i>status on discharge (home:transfer:other places)</i>	χ^2	11.137	<0.05
<i>duration of mental illness</i>	R	0.040	no rel.

DISCUSSION

The number of long-stay patients in the present analysis was actually very small (3 patients) which was in marked contrast to that of findings in McGrath & Tantam's study (1987) where there was a much larger percentage of long stay patients. The arbitrary use of a 3-month and 9-month cut off point may not be most appropriate, and could affect the reliability of the comparative results. The most significant reason for this scarcity of long-stay patients was that the Day Hospital involved had been trying to avoid unrehabilitable patients from prolonged jamming of the day places, and there were other settings in Hong Kong (especially the day activity centres) providing less intensive rehabilitation activities for some chronic mental patients.

There was no significant difference in LOS, age or sex between the three years under study which meant that the sample was representative of the period under study.

On comparing the three groups, there was lack of sex difference and this was consistent with that of McGrath & Tantrum (1987). As regard age, one administrative determinant was that the day hospital concerned admitted only those between age 16-64. It excluded those in the two extremes of age which might have a different pattern of day hospital stay.

Fig. 1: Percentage of patients remaining on day hospital roll vs time from enrolment - linear scale

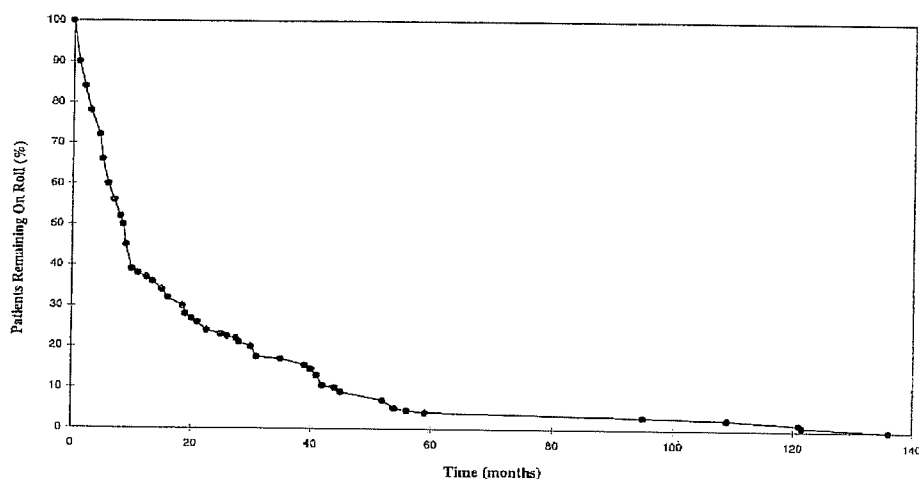
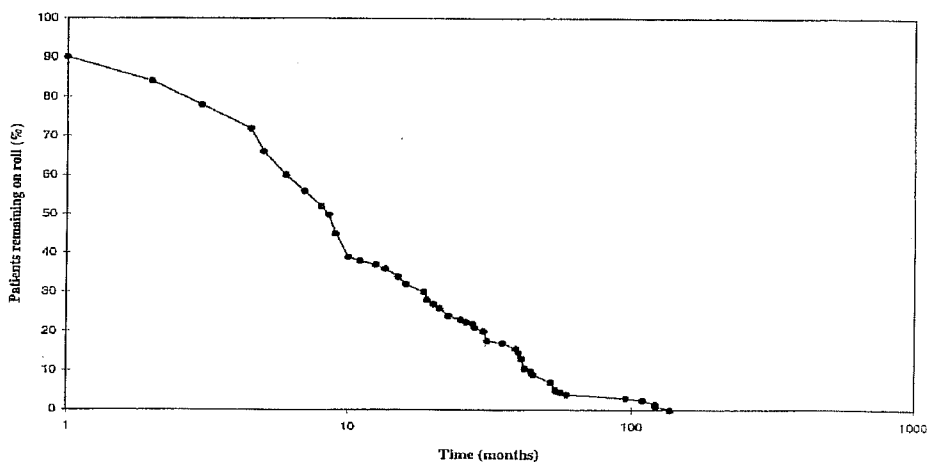


Fig. 2: Percentage of patients remaining on day hospital roll vs time from enrolment - log scale



However, marital status was found to be significant, with relatively more singles in the medium and long stay groups and this was different from the finding of McGrath and Tantam (1987). The reasons could be many, including the need to earn more money for the family, the domestic duties required to look after the family and even the psychological and social support received from the spouse. Thornicroft (1991) mentioned that marital status was indeed one component of 'deprivation'.

As regard the clinical information, there was no difference as regard the diagnosis, the duration of illness, history of violence or suicide, which led to the query about using diagnosis for service planning. The main reason was that there were many variables which could affect the LOS and discharge policies including administrative factors (such as doctor's policy and preferences, efficiency of discharge procedures, teaching and research reasons, etc.) or other legal and social factors.

Nevertheless, there was a difference between the status on discharge amongst the three groups, with more patients in the medium stay group being transferred to other units upon discharge from the day hospital. This was mainly because that this sub-group of patients required long-term rehabilitation before they could really function independently in the community. Many of the short-stay patients could return to their homes.

The present study was not without limitations. The most obvious one was the relatively small number of patients which could affect the separation into sub-groups such as diagnostic entities. The analysis of a more prolonged period would be useful, but could be biased by administrative policies if time was prolonged. Secondly, the study had not enough resources to look into other clinical and social data such as previous treatment, family support, social functioning on admission and discharges, etc. which could be important in influencing the duration of hospital stay. Further studies into these areas would be valuable. Last but not the least, there were quite a number who had only stayed for a few days and then defaulted attendance at the day hospital (Mak & Lee, 1996). They should strictly speaking be considered non-representative sample of the short-stay category.

CONCLUSION

The day hospital patients consisted of short term and long term patients. Despite a few differences in marital status and status on discharge, they were similar in many other clinical and social areas. This relatively negative findings implied that the duration of stay could not be distinguished by these traditional clinical information alone, and other factors or determinants must be considered e.g. previous employment, previous in-patient admissions to hospital including day-hospital, etc. (McGrath & Tantam, 1987). As the traditional roles of the day hospital were being challenged (Mak, 1994), further studies were called for in this area because the data generated could be important for service planning and quality assurance (Conklin, 1983).

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REFERENCES

- Conklin, T.J. (1983) Quality Assurance. In *Psychiatric Administration* (Eds. J.A. Talbott & S.R. Kaplan) Ch. 9, pp273-285.
- Gath, D.H., Hassall, C. & Cross, K.W. (1973) Whither psychiatric day care? a study of day patients in Birmingham. *British Medical Journal* 1: 94-98.
- Lwanga, S.K. & Tye, C.Y. (1986) *Teaching Health Statistics*. W.H.O. Geneva.
- Mak, K.Y. (1994) The changing roles of the day hospitals in Hong Kong. *Journal of the Hong Kong College of Psychiatrists* 4: 29-34.
- Mak, K.Y. & Lee, L.K.C. (1996) A study on the average length of stay of psychiatric day hospital patients in a district general hospital in Hong Kong. (unpublished paper).
- McGrath, G. & Tantam, D. (1987) Long-stay patients in a psychiatric day hospital. A case note review. *British Journal of Psychiatry* 150: 836-840.
- Root, J. (1975) PSROs in Connecticut - past, present and future. *Conn. Med.* 39: 793-795.
- Thornicroft, G. (1991) Social deprivation and rates of treated mental disorders. Developing statistical models to predict psychiatric service utilization. *British Journal of Psychiatry* 158: 475-484.

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