ORIGINAL ARTICLE

Community Psychiatric Nursing: An Evaluation of Schizophrenic Patients in the First 3 Years

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Summary

The admission records of 35 patients before and after referral to the community psychiatric nursing (CPN) team between Jan-July 1992 and followed up for 3 years were studied. The CPN programme had been found to be effective in significantly reducing the rate of relapse as indicated by total number of admissions from 133 to 44 (mean admission rate from 3.3 to 1.3) and length of time stayed in hospital from 4810 to 1164 days (mean length of stay from 141.5 to 34.2 days) during the 3 years under review. The length of stay for each admission was also found to be shortened from 42.6 to 26.5 days.

Key Words: Community psychiatry, Schizophrenia

Introduction

The life history of a schizophrenic patient frequently includes numerous episodes of relapses. It is not uncommon to encounter a patient who has been admitted for as many as 20 times, with each admission occurring soon after the last one and the duration of stay getting longer. In the study by Leff and Wing (1971)[1], a one year relapse rate for patients not on active medications (on placebo) was quoted at 80% and a rate of 66.7% for those who discontinued their medication by themselves. Various theories have been advanced to account for this high rate of relapse. Amongst others, these include the high tendency for patients to default on their follow-up and their medication, because of a lack of insight, or because of unpleasant side effects of drugs, environmental stressors including high expressed emotion amongst significant others, and poor coping skills. The high rate of relapse often leads to a revolving door pattern of admissions and discharges, much to the exasperation of care givers.

The Sarawak Mental Hospital is a small hospital when compared to the mental institutions in West Malaysia like Hospital Bahagia or Hospital Permai. It has 338 beds and a bed occupancy rate of 90%. Most of the beds are occupied by chronic long stay patients. The hospital first started its community psychiatry program with the opening of the Day Care Centre in Kuching city in 1987. In 1992, it started the community psychiatric nursing programme (CPN). The CPN's objective was to try and address the high rate of defaulters (hence minimising relapses) and to avert the need for admissions and possible subsequent rejection by relatives. This was done through:

a) Tracing defaulters (this was achieved by computerising all outpatient attendances),
b) Domiciliary visits,
c) Psychoeducation on the nature, course, prognosis of the disorder for both clients and caregivers. This serves to emphasise the importance of compliance as well as to reduce E.E. amongst caregivers.
d) Practical advice on how to cope with clients' behaviour as well as leisure time management.

The object of this paper is to study the effectiveness of CPN in preventing admissions and in reducing

length of hospitalisation of mental patients in the Kuching area who come under the CPN project.

Materials and Method

All patients with a diagnosis of schizophrenia, referred to the CPN from Jan-July 1992 were included in this retrospective study. The admission records for the 3 years preceeding referral were compared to the records of the 3 years post referral. Those with a concurrent diagnosis of mental subnormality were exluded. The patients diagnosis, age (at last birthday), sex, date of first diagnosis, number of previous admissions and length of admissions (in days) were extracted from case records. Length of illness was then calculated to the nearest whole year.

Statistical treatment

The non parametric, distribution free, median test is used to test significance.

Results

Table I
Sample age, length of illness, age of diagnosis

Sex	n	Mean age (yrs)	Length of illness (yrs)	Age of Dx (yrs)
M	20	41.3	14.6	27.4
F	14	38.1	16.4	22.4
All	34	40.0	15.4	25.4

Table II
Admissions and hospital days (means in brackets)

Sex	n	Total Admissions ($\bar{x}$ in brackets)		Days Hospitalised ($\bar{x}$ in brackets)		Length of stay per Admission (days)	
		Pre-CPN	Post-CPN	Pre-CPN	Post-CPN	Pre-CPN	Post-CPN
M	20	74 (3.7)	30 (1.5)	3151 (157.9)	672 (33.6)	42.6	22.4
F	14	39 (2.8)	14 (1.0)	1659 (118.5)	492 (35.4)	42.5	35.1
All	34	113* (3.3)	44* (1.3)	4810** (141.5)	1164** (34.2)	42.6***	26.5***

*$p<0.01$ **$p<0.01$ ***$p<0.01$

Table III
Age of diagnosis and number of admissions/days hospitalised

Age of diagnosis	n	No. of admissions ($\bar{x}$)		Days hospitalised ($\bar{x}$)	
		Pre-CPN	Post-CPN	Pre-CPN	Post-CPN
≤ 20	7	3.86	2.29	264.9**	47.0**
> 20	27	3.19*	1.00*	109.7***	30.3***

*$p<0.01$ **$p<0.01$ ***$p<0.05$

Table IV
Length of illness and number of admissions/days hospitalised

Length of illness	n	No. of admissions ($\bar{x}$) Pre-CPN	No. of admissions ($\bar{x}$) Post-CPN	Days hospitalised ($\bar{x}$) Pre-CPN	Days hospitalised ($\bar{x}$) Post-CPN
≤10	11	2.36	0.82	99.9	31.0
10-20	11	3.82*	1.45*	158.9	34.9
>20	12	3.75**	1.58**	164.1	37.1

*$p<0.01$ **$p<0.05$

Discussion

In Malaysia, most psychiatric services are provided through static facilities and in Sarawak, this has been the case. Although the treatment facilities are modern and decentralisation of services has been the aim, there is little doubt that the current services remain largely centralised, and poorly understood by both the general public as well as health professionals. There is no coordinated attempt to develop community psychiatry further except for the opening of general hospital psychiatric units and day care centres. Given the high default rate of psychiatric outpatients, there had been few attempts at developing a system for tracing of defaulters, to follow them up in the community despite the high frequency of relapses.

While this study found that the CPN programme had been effective in reducing relapses and readmissions regardless of the chronicity of their illness or the age of onset of their disorder, it is however not possible to assess which component (i.e. psychoeducation, family therapy, practical advice, and thereby reducing E.E., reducing expectation, encouraging acceptance and continued compliance) of the programme had been of more importance.

Numerous papers[2,3,4] have pointed out the importance of social intervention in improving patient's psychosocial functioning, in reducing the level of expressed emotions amongst caregivers as well as compliance with medication and that the effects of medications and psychoeducation are complimentary to each other in preventing relapses. However, despite continued medications, patients still relapse and it was concluded by Hogarty *et al* (1986) that relapses of schizophrenic patients were inevitable and that interventions merely serve to postpone the inevitable relapses.

The CPN, while doing psychoeducation, can never match the intensity of that conducted by the above quoted authors, with their monthly, or bimonthly visits to some of the more remote areas. As this is essentially a retrospective study using patients themselves as their own controls, it is not possible to assess how the limited psychotherapy done could have affected the E.E or the acceptance of patients by their caregivers or whether the improvements seen were due to the increased attention given to them. However, there is little doubt that the improvement can be attributed to continued medications. Despite the continued medications, 22 out of 34 (i.e 64.7%) of patients did suffer relapses at least once over the 3 years studied. This rate compares favourably with the studies by Hogarty *et al* (1979)[5] and Schooler *et al* (1980)[6] which quoted as 35-40% relapse rate in the first year amongst discharged schizophrenia, not explained by non-compliance.

This study showed that CPN is effective regardless of the stage of the illness at which patients are referred to the CPN, with significant improvement seen in those who had been ill for less than 10 years to those who had been ill for more than 20 years.

While it is generally accepted that a younger age of diagnosis carries a poorer prognosis, the CPN nevertheless did produce a reduction in the rate of admissions as well as length of time spent as inpatients. The reduced length of stay per admission probably reflected the better acceptance back by relatives after

treatment as well as detection of relapses at an earlier less florid stage.

Conclusion

CPN programme was effective in reducing the number of admissions, the length of time spent by the patients in the hospitals as well as in shortening the average length of stay per admission. As such, this programme could be expanded further to other areas of the state.

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