

# Service Utilization in a South African, provincial hospital

Andrews et al (2001) in a large epidemiological study in Australia found high rates of mental illness but low rates of service utilisation.<sup>1</sup> Although not systematically investigated in South Africa, there is no reason to believe this country is any different. In South Africa staff shortages have given the impression of service over utilization.

The present study, a retrospective review, attempted to quantify the under utilization of mental health services by showing that the use of mental health services in a province (Mpumalanga) of South Africa is very low. This suggests that in addition to having a shortage of staff and facilities there is a huge area of unmet need for psychiatric services. The study carries an underlying assumption that the incidence of mental illness is the same in all countries. This is supported by Weich and Araya in their editorial in the *British Journal of psychiatry*.<sup>2</sup> The World Health Organization study by Jablensky et al also suggests that the incidence of psychosis in the developing countries is as common as in the industrialized countries but has a better prognosis.<sup>3</sup>

Information was taken from the "admissions and discharges" book of a 24 bed acute psychiatric ward of a general hospital situated in a South African town with a population of 309,000 and serving a health district of one million people in a province of 3,2 million. Information was collected regarding the number of patients admitted over a particular 3 month period (July-September, 2005). The new Mental Health Care Act had been in place for 6 months. Consequently anyone admitted involuntarily had to be transferred to a designated unit and the acute psychiatric ward was the only designated unit in the province of 3,200,000 people.

In a 3 month review of admissions, 38 patients were admitted in July, 56 in August and 39 in September 2005. Patients were admitted for an average length of stay of 8 days. The 24 bed unit rarely had more than 16 patients at any time.

Of the 133 patients admitted, 68 were from the urban areas of the town, 2 were from an adjoining municipality that is part of the greater drainage area of the hospital. Sixty three people were from other areas of the province.

Fifty one of the sample were females and 82 were males. Thirty seven were under 25 years of age, of which one was only fifteen. Fifty three were between 26 and 40 and 37 were between 41 and 60 years of age. Only 5 patients were over sixty.

Of the 133 patients admitted over the 3 months under review, 98 (73%) had psychotic disorders (21 of whom were diagnosed with Bipolar Mood Disorder I). Eighteen patients were diagnosed with Major Depressive Disorder and 4 received a diagnosis of Borderline Personality Disorder. All diagnoses were made in accordance with the DSM-IV guidelines by a qualified psychiatrist.

These are very low rates of admission for such a large population. If these figures are compared to the ward in Australia, in which I worked, it is even more remarkable. In Australia, approximately 200 patients were admitted over a similar time period with an average length of stay of 11 days. The ward there fulfilled the needs of a health district of 250,000 people as compared to the psychiatric unit in South Africa, which served 3,2 million people. This was in an urban environment of a first world country with a comprehensive community care and case management service. There was also a large private health care system, which all Australians can use. One would expect much lower rates of admission in Australia than South Africa, with so much provision for community care, but the opposite appears to occur.

In spite of epidemiological studies suggesting mental illness is universal, there are several reasons to expect a higher level of mental illness in the South African sample. There is a high rate of unemployment in the country as a whole and in particularly in rural areas such as this province.<sup>4</sup> Poverty and unemployment are recognized risk factors for mental illness.<sup>5</sup> One could expect a much higher prevalence of depression and anxiety in this province of South Africa. There is a high crime rate, a high incidence of road traffic accidents and of crimes against women and children.<sup>4</sup>

Community psychiatric services are also limited and this should lead to high rates of relapse and re admission. There are officially no psychiatric nurses. Clinic nurses are primary health care nurses and some are trained in psychiatry. Those trained in psychiatry will hold a clinic once or twice a week and dispense medicines to those with a psychiatric diagnosis who have been sent for follow up treatment.

Alternative explanations to the aforementioned finding include:

- i. The South African mentally ill may be treated elsewhere than this psychiatric unit leading to a misrepresentation of the numbers using the service. First, it should be noted that there is a parallel health service for people who are employed in reasonably paying jobs. This is covered by health insurance. Such people would go to private hospitals.
- ii. Patients may have been admitted to other health establishments in the province. There are 22 small local hospitals which will treat patients and only transfer those patients they cannot manage or those requiring hospitalization after the 72 hour period. There are no forensic facilities in the province and such patients are admitted to Pretoria. In addition patients who are difficult to manage because of violence are sent there.
- iii. As in every study of mental illness there are people with severe mental illness who are treated in the community

and are never admitted to hospital. During this period there was a psychiatrist in one clinic who would have started patients on treatment.

- iv. The difference may be related to a general low admission rate for non psychotic disorders. A review of hospital admissions undertaken by Harrison in Manchester in 2003/4 found that 42% of admissions were for psychotic disorders compared to a national average of 26%.<sup>6</sup> In the current study 73% of admissions were for psychotic disorders.
- v. The fact that 30% of the population are under 15 years of age and that the other 70% have a life expectancy of 47 years could effect the simple interpretation of these figures.<sup>4</sup> Children are not usually admitted to the ward and patients with illnesses associated with longevity would be omitted.

In conclusion the current study suggests that, in spite of possible alternative explanations, the number of people who are presenting for treatment is a small percentage of those with mental illness. This conclusion is supported by a comparison with similar services in a first world country. The lack of staff in South African hospitals gives the impression that the service is overloaded. In fact there is a vast area of unmet need in the community which is ignored by health care providers.

It must be emphasized that the study was limited to one hospital in one province. The numbers of patients treated in the community was not measured, nor was there any epidemiological data documenting the prevalence of mental illness in this community. There are no outcome studies to confirm that those with severe mental illness such as schizophrenia have the chronic course seen in other studies of outcome.

Investigation of these factors would be expensive and not necessarily add to community well being. Future research

should aim to increase public awareness of mental illness and available treatment. This is valuable in it's own right. If this leads to an increased use of facilities it would confirm the existence of low levels of service utilization.

### References

1. Andrews G, Henderson S, Hall W. Prevalence, comorbidity, disability and service utilisation *British Journal of Psychiatry*. 2001; 178: 145 – 153
2. Weich S, Araya R. International and regional variation in the prevalence of common mental disorders: do we need more surveys? *British Journal of Psychiatry* 2004; 184: 289 – 290
3. Jablensky A, Sartorius N, et al. *Schizophrenia: manifestations, incidence and course in different cultures: a WHO 10 country study. Psychological medicine Monograph (suppl. 20) Cambridge University Press. Cambridge. 1992*
4. *South Africa Survey 2003 / 4 South African Institute of Race Relations*
5. Allardyce J, Gilmour H, et al; *Social fragmentation, deprivation and urbanicity: relation to first admission rates for psychoses. British Journal of Psychiatry* 2005; 187: 401 – 406
6. Harrison JA, Creed F. *Hospital admission rates and diagnosis. (letter) British Journal of Psychiatry*. 2005; 187: 488 – 489.

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