A Review of the Psychiatric Care Provided to Patients who Subsequently Offended

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Abstract: *Background*: An examination (audit) of the files of patients who had received any mental health services in the year prior to an alleged offence may inform our understanding of the relationship between mental health and crime. More helpfully, it may provide information to facilitate a reduction in the rate of such tragic events

Method: The records of all patients assessed by the Midland Regional Forensic Psychiatric service in the 26 months from January 2010 were screened. The 222 who received a diagnosis of a non-organic psychosis and who were recorded as having offended within one year of a previous psychiatric service attendance formed the cohort. The data extracted from their clinical files, relating primarily to that pre-offence psychiatric contact, included legal, clinical and contextual information.

Results: Analysis examined the characteristics of this forensic population and most particularly, of their pre-offending service contact. This identified clinical practice and delivery issues which could reduce the rate of conversion of psychiatric patients to "forensic" status.

Conclusions: The results inform issues of effectiveness of adult service delivery with particular consideration of the intensity of clinical contact, antipsychotic drug choice and adherence and the use of assertive treatment.

Keywords: Mental health care, forensic, service delivery, assertive treatment.

INTRODUCTION

The relationship between psychiatric disorders and criminal offending has been much studied [1]. That the two occur together more often than if chance was the sole determinant is well established [2].

A number of potentially relevant characteristics of psychiatric offenders, including illness acuity, diagnosis, age, gender, ethnicity, living situation and socioeconomic status have been specifically studied. Acceptance by Courts of an insanity defence (i.e., a Disease of the Mind) or inability to plead are illustrations of the confidence with which diagnostic issues are seen as relevant to the relationship [3].

Less clearly established is the relationship between effective psychiatric care, in the sense of symptom remission, and the prevention of offending [4].

Forensic psychiatric services frequently receive patients who have offended after previously receiving psychiatric treatment [5]. Better understanding of the contributors to the effectiveness of that care might allow service improvements which could contribute to a reduction in the rate of offending. Many variables, including service availability, service assertiveness, client autonomy, choice of medication, adherence with prescribed treatments and other service or patient characteristics might affect the post treatment course.

Clinicians have daily experience of patient relapses in the context of discontinued medication [6]. There is also widespread awareness and concern regarding the differences in the clinical phenotypes and clinical courses which may correlate with ethnicity [7, 8]. This is of particular concern in New Zealand where it has been claimed that Maori are eight times more likely to present to the Justice system than are Pakeha (non indigenous New Zealanders) [7].

An examination (audit) of the files of psychiatric patients who subsequently offended and were admitted to a forensic service, may inform the practices, policies and procedures of the treating psychiatric services and our understanding of the relationship between mental illness and crime. Such an observational study undertaken in a country with significant interest in, and commitment to, the mental health of its indigenous people, may be particularly informative.

Study Aims

The overall aim was to examine the records of patients admitted to the Midland Regional Forensic Services and who had attended any psychiatric services in the year before offending, to document the occurrence and rates of clinical decisions which, if

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different, could have reduced the chances of their subsequent offending

Ethics

Under the NZ guidelines the project was signed off as non-interventional, observational audit not requiring external ethics committee consideration as the project was conducted by the forensic service staff, extracting the data for their service improvement.

METHOD

The records of all clients assessed by the Midland Regional Forensic Psychiatric Services during the period January 2010 to March 2012 were screened. Those who had received a forensic service diagnosis of a non-organic psychosis, and were recorded as having been in contact with psychiatric services in the previous year, formed the cohort for more detailed examination. The following data, which all relating primarily to that pre-offence psychiatric contact, were extracted from the 222 files identified as meeting those criteria:

- Patient identification details, including gender, age, NHI number, ethnicity
- Date and type of index offence
- Specific diagnosis
- Mental Health Act status at time of index offence
- Mental Health service contact,
- Mental Health staff time contributed
- timing in relation to the subsequent offending
- Documented substance abuse profiles
- Details of any pharmacological management and treatment adherence
- Risk Assessment documentation
- Social factors including family involvement, accommodation
- HoNoS (Health of the Nation outcome scales) profile

The ethnicity was documented from the hospital records and was that with which the patient identified.

The date of the index offence was collected from hospital records and corroborated by police records and NZ police summary of facts where available. The 15 index offences were coalesced into two groups, violent or non-violent offending.

The diagnoses were as documented by clinicians. The last diagnosis prior to the index offence was used. The following diagnostic categories were used:

- Bipolar Affective Disorder
- Delusional disorder
- Drug induced psychosis
- Psychosis NOS
- Psychotic depression
- Schizophrenia
- Schizo-affective disorder

The amount of contact with the mental health team responsible for their care was extracted from the service records where available, and otherwise from their summaries.

Adherence to prescription medication was documented as good or poor based on statements made by clinicians in the service records. This was corroborated as far as possible by reviewing IMI medication charts, filled prescriptions and medication levels where available.

Risk assessments through the files in the year prior to the index offence were reviewed. We classified risk statements into one of three categories:

- No risk documented
- No risk identified
- Some risk identified

HoNos (Health of the Nation Outcome Scale) scores were obtained, where possible, from hospital records or from a Ministry of Health data base. The last HoNos score prior to the index offence and the date it was recorded were included in the collection data.

Information regarding accommodation was obtained from the hospital records documentation as well as their perceived social support.

RESULTS

The majority (93.2%) of the cohort of 207 were male with only 15 (6.8%) female. NZ Maori were over-

represented (67.6%) in comparison to the general population which is approximately 15% Maori [10]. The cohort ranged in age from 19 to 77 years with a mean of 37 years.

121 (54.5%), of the patients had an established diagnosis of Schizophrenia, followed by Bipolar Affective Disorder in 43 (19.3%) and Schizoaffective disorder in 23 (10.3%). Two (0.9%) patients were thought to have met the criteria for Delusional Disorder. The majority of the cohort (176 or 79%), had contact with a General Adult mental health service in the year prior to the index offence with 21 (9.5%) having attended a forensic service.

Forty three percent of the offences were classified as non-violent and 57% as violent. Acts intended to cause injury represented 71% of the violent offending followed by sexual assault and related offences which represented 16% of violent offending. Homicide and related offences only accounted for 2 out of the cohort of 222.

The majority of non-violent offending was unlawful entry with intent/burglary; breaking and entering (28%) followed by offences against government procedures, government security and government operations (22%).

The rate of violent offending by Maori (51%) was significantly less than was that for Europeans (71%, p=0.0037, Fishers exact test). There was no correlation between medication adherence and violent offending (p=0.547 n Fishers exact test.).

Medication adherence was regarded by their clinicians as poor in the majority of patients, regardless of ethnicity. According to their clinical records about half of the patients had poor medication compliance. Oral medication adherence was the lowest, with only 1/3 of patients being regarded as having good compliance. Nearly one half of those on long acting injections (LAI) were adherent. Despite recognised poor adherence, only 35% of clients were made subject to a compulsory treatment order.

Details of client contact with mental health services were analysed. 40% (83) had a period of inpatient admission during the year prior to them committing an index offence. Nearly 80% of clients had an intense period of follow up, with a minimum of fortnightly contact. 31 patients were assessed on the same day they committed their offence. 38% of the clients had contact within 7 days of committing a serious offence.

The majority of clients were recorded as abusing alcohol (84%) and/or cannabis (78%) in the year prior to their offending. 34% of the total abused some other substance(s) in the year before offending.

Table **1** compares the client's social supports and accommodation. The majority of clients had good (43%) or at least some (40%) social support networks in place. As expected, living with family provides for better social support than being in rented accommodation (p = 0.004) However, receiving hospital type or supported accommodation is not significantly better than being transient (p =0.115).

Some risks were identified and documented in 83% of the clients prior to the index offence. Assessed as posing a greater risk correlated with longer inpatient hospitalisation and more intensive community contact. However, this was not reflected by HONOS scores in the year prior to the index offence. The Majority of HONOS scores were in the lower range. 49 Clients had no HONOS score entered into the record.

DISCUSSION

The results provide a factual database to inform the planning of mental health service delivery, seeking to increase effectiveness. This include particular consideration of intensity of client contact, antipsychotic drug choice and medication adherence.

The male to female ratio was comparable to that in other forensic mental health services, both nationally and internationally. The mean age was calculated as 36.7 years. This is notable given that these patients all received a diagnosis of a psychotic or manic illness.

Table 1: Comparison of Living Situation and Perceived Social Support

	Lived with family	Own Home	Rented	Supported / Hospital level	Transient
Good social support	55	1	18	12	7
Some social support	26	2	21	13	25
Minimal social support	3	0	7	10	17

Psychotic illnesses are usually considered to emerge with identifiable prodromal symptoms at a younger age [11].

While those diagnosed with delusional disorder are considered to be at higher risk and more treatment resistant [12], only 2 of the present cohort met the criteria for delusional disorder.

New Zealand is a multicultural country with a legislative commitment to biculturalism. While the current population is of mixed ethnicity, people of European descent numerically dominate (68%) followed by New Zealand Maori (15%). New Zealand Maori were over-represented in this study (67.6%) in comparison to the general population. Within the patient cohort, the Maori rate for violent offending (51%) was significantly less than was that for NZ Europeans (71%). This contrasts with an earlier New Zealand study of general New Zealand psychiatric service users which found that the highest ratings assigned by clinicians for over activity/aggression on the HoNoS were to Maori males, followed by Maori females [9].

Although all the patients in the present study came to the attention of the forensic services because of an alleged offence, within the group no correlation was found between medication adherence and violent offending.

The majority of client's medication adherence was rated as poor by their clinicians, regardless of ethnicity. Adherence to oral medication was worse than to LAI or a combination of LAI and oral medication. Despite recognised poor adherence, and identifying at least some risk factors, only 35% of clients were made subject to the Mental Health Act. This would suggest a relatively non-assertive approach, delivered within a NZ health care model which gives significant primacy to the "recovery" philosophy, as opposed to assertive community treatment for clients where some risks were clearly identified.

It was also recognised that this cohort continued to abuse alcohol and other substances, including cannabis but derivative, effective, interventions were seldom referred to. Client non-compliance with non-participation in planned alcohol and drug service involvement being a contributor to the risk assessments.

The majority of clients were rated to have good or at least some social support. As expected, living with family provided for better social support than being in rented accommodation. However, hospital type or supported accommodation was not significantly better than being transient. The value and support of family in treating people with mental illness should be recognised and encouraged by the treating team.

While it is recognised that assertive community treatment (ACT) is not cheap, studies have shown the costs of ACT services to be offset by a reduction in hospital use in patients. ACT substantially reduces psychiatric hospital use, increases housing stability, and moderately improves symptoms and subjective quality of life. In addition, ACT is highly successful in engaging patients in treatment [13].

Nearly 80% of clients had an intense period of follow up, at least fortnightly or more frequently, in the year prior to the index offence. This demonstrates that often the clients had regular contact with MHS and were reasonably well known to the clinicians. These clients were not lost to follow up. The time interval since last contact did suggest that 38% of clients had contact with the service in the week prior to the index offence, but the pharmacological follow-up does not appear to have been as assertive as was the staff/patient contact. Being assessed as posing a greater risk to self and others, correlated with longer inpatient hospitalisation and more intensive community follow up.

All patients examined in this cohort eventually committed an index offence within the parameters described by the study. This suggests that interventions might be better targeted at the nature of the treatment rather that the framework of access. Potential targets for treatment include compliance, medication choice and improvement of social support networks. It could reasonably provoke discussion or debate about the roles of legally enforced treatments, more assertive service delivery, or even more liberal use of legal treatment compulsion in this group who were largely psychotic and non-compliant with treatment.

CONCLUSION

While maximising patient autonomy remains a principle in the New Zealand emphasis on recovery [14], it does not in any way relieve clinicians from their responsibility to accurately formulate the risks of ongoing mental illness to either the patient or people in their environment. The development of a relevant, effective management plan needs to reflect this.

The use of the mental health act, including community treatment orders, and the use of long acting injectable antipsychotics should perhaps more often be seen as acts of beneficence towards the individual and society rather than as impingements on autonomy. The understanding of the contributors to the effectiveness of care of carefully balancing autonomy with assertive treatment might allow service improvements that could contribute to a reduction in the rate of offending and indeed, contribute to greater autonomy for the service user in the medium to long term.

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