# Involuntary admission of psychiatric patients in the Northern Cape Province and the accuracy of the initial psychiatric assessment done by the referring general practitioners

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## **Abstract**

## **Background**

Admission to a mental healthcare facility is not always based on the voluntary consent of the patient. Sometimes a patient is unable or unwilling to consent to admission because of his mental status and lack of insight into his mental illness. If a mentally ill person needs admission because of a threat to himself and other people, the law prescribes procedures to admit such a person into an appropriate facility for care, treatment and rehabilitation. Such admissions are called involuntary admissions. Involuntary admissions in a psychiatric hospital have financial, legal and ethical implications. In order to avoid unnecessary involuntary admissions, there is a need to determine and understand the factors causing involuntary admissions. Many previous studies have focused on the differences between patients admitted voluntarily and involuntarily. The goal of this study was to analyse the conditions responsible for the involuntary admission of psychiatric patients in the Northern Cape Province and the accuracy of the initial psychiatric assessment done by the referring general practitioners.

# Method

This descriptive study included 199 patients admitted to West End Hospital in Kimberley for involuntary treatment during 2003. The data were extracted from clinical records and legal documentation relating to these patients. The patients' final diagnoses were extracted from the discharge summary and were based on the text revision of the fourth edition of DSM (DSM-IV-TR). Only diagnoses on axis I (clinical disorders and other conditions that may be a focus 1 clinical attention), axis II (personality disorders and mental retardation) and axis III (physical disorder or general medical condition that is present in addition to the mental disorder) were included in this study.

## Results

Most patients were male (65.8%) and the patients' ages ranged from 16 to 67 years (mean 32 years). Patients were mostly diagnosed with schizophrenia (57.8%), while 26.6% had substance-related disorders. Few patients (5.0%) were diagnosed with mental retardation and personality disorders. A quarter (24.1%) of the patients had a general medical condition. The majority (81.4%) of patients were found "certifiable" and 77.4% were known psychiatric patients. Two-thirds of the patients were referred by general practitioners doing session for the state hospitals. The overall accuracy of psychiatric diagnosis by the referring doctors was considered correct if any of the provisional diagnoses listed by the referring (certifying) doctor matched with the final diagnosis at discharge from the hospital. Approximately half (49.5%) of the patients were diagnosed correctly by the referring doctors.

## Conclusion

Schizophrenia and psychoactive substance-related disorders were the most important conditions leading to involuntary care in the Northern Cape. General practitioners play a major role in involuntary admission, but only made correct psychiatric diagnoses in approximately half of the patients.

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#### Introduction

Admission to a mental healthcare facility is not always based on the voluntary consent of the patient. Sometimes a patient is unable or unwilling to consent to admission because of his mental status and lack of insight into his mental illness. If a mentally ill person needs admission because of a threat to himself and other people, the law prescribes procedures to admit such a person into an appropriate facility for care, treatment and rehabilitation. 1.2 Such admissions are called involuntary admissions.

In South Africa, the process of involuntary admission is initiated by the application for involuntary care by a family member, followed by a psychiatric evaluation by two mental health practitioners. Under the previous Mental Health Act (Act No. 18 of 1973), which was valid until 14 December 2004, a magistrate had to issue a Reception Order to the medical superintendent of the relevant psychiatric hospital for the involuntary admission of the patient.1 The Mental Health Care Act 2002 (which came into effect on 15 December 2004) has changed the procedure.2 Now there is no need for a Reception Order in the case of an involuntary admission of a mental healthcare user.

The Northern Cape has five administrative districts, comprising the Upper Karoo, Frances Baard, Siyanda, the Namaqua region and Kgalagadi.<sup>3</sup> The only mental healthcare facility available in the province for involuntary admissions of psychiatric patients is the West End Hospital in Kimberley. Mentally ill patients from all five districts are referred to West End Hospital for involuntary admission. This facility has four different wards, with 107 beds for psychiatric patients.

Many previous studies have focused on the differences between patients admitted voluntarily and involuntarily.<sup>4,5</sup> The aim of this study was to analyse the conditions responsible for the involuntary admission of psychiatric patients in the Northern Cape Province and to determine the accuracy of the initial psychiatric assessment done by the referring general practitioners.

## Methods

This retrospective descriptive study included all patients involuntarily admitted to West End Hospital (under Section 9 of the Mental Health Act of 1973) from

Table I: Designation of referring doctors

Designation of doctor	Number of patients certified by:				
	1st certifying doctor		2 <sup>nd</sup> certifying doctor#		
	N	%	N	%	
Community service medical officer	37	18.6	20	11.7	
Medical officer	37	18.6	37	21.6	
General practitioner	123	61.8	112	65.5	
District surgeon	2	1.0	2	1.2	
Total	199		171		

\*Twenty-eight patients were certified by only one doctor because of the non-availability of a second doctor in some remote areas of the province.

1 January 2003 to 31 December 2003. Patients admitted under Section 28 of the Mental Health Act of 1973 (state patients) and under Section 4 of the Mental Health Act of 1973 (assisted care) were excluded from the study. Information was extracted from in-patient hospital records, which included legal documentation accompanying the patient at the time of admission (application for a reception order, medical certificate under the Mental Health Act, 1973, reception order and medical report). Approval was obtained from all the relevant authorities and the protocol was approved by the Ethics Committee of the Faculty of Health Sciences at the University of the Free State.

The patients' final diagnoses were extracted from the discharge summary and were based on the text revision of the fourth edition of DSM (DSM-IV-TR).<sup>6</sup> Only diagnoses on axis I (clinical disorders and other conditions that may be a focus 1 clinical attention), axis II (personality disorders and mental retardation) and axis III (physical disorder or general medical condition that is present in addition to the mental disorder) were included in this study.

A pilot study was carried out on the clinical and legal records of five patients. All the data were collected on a data form by the first author. In cases where data were missing, the first author obtained the information from alter-

native sources, e.g. through telephonic contact.

Descriptive statistics, namely frequencies, percentages for categorical data, means, standard deviations, medians and percentages for continuous data were calculated.

The Ethics Committee of the Faculty of Health Sciences, University of the Free State approved the study. The Head of Department of Psychiatry, as well as the Medical Director of Kimberley Hospital Complex, gave permission to extract data from the patients' files and hospital records.

### Results

This study included the data of 199 patients. Most patients were male (65.8%). The patients' ages ranged from 16 to 67 years (mean 32 years), with most aged between 21 and 40 years (62.8%). Only five patients (2.5%) were older than 60 years.

The majority of patients (45.2%) were referred from Frances Baard district, while 18.1%, 17.6% and 16.1% were referred from the Karoo, Namaqua and Siyanda districts respectively. Fifty-three patients (26.6%) were admitted in the first quarter of the year, 23.1% in the second quarter, 21.1% in the third quarter and 29.1% in the fourth quarter. The designations of referring (certifying) doctors are given in Table I.

**Table II**: The patients' psychiatric assessment after admission and previous psychiatric assessment (n = 199)

	Frequency	Percentage
Assessment:		
Patient is certifiable	162	81.4
Not certifiable	37	18.6
Previous assessment:		
Known psychiatric patient	154	77.4
First episode of disturbed behaviour	45	22.6

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Doctors with a Bachelor's degree in medicine (MBChB/MBBS/BM) certified and diagnosed most of the patients (93.5%).

Some patients received more than one provisional diagnosis. The most common provisional diagnosis was schizophrenia (88.9%), followed by psychosis (31.2%) and substance-induced psychosis (14.6%). Other frequent provisional diagnoses included bipolar mood disorder (13.1%), schizoaffective disorder (9.6%) and organic psychosis (7.5%). The majority (81.4%) of patients were found "certifiable" and 77.4% were known psychiatric patients (see Table II).

The majority of the patients (57.8%) were diagnosed with schizophrenia and other psychotic disorders (see Table III). The next most common categories were substance-related disorders (26.6%) and mood disorders (21.6%). Five patients (2.5%) had no axis I diagnosis on discharge. Delirium, dementia, amnestic and other cognitive disorders (1%) and adjustment disorders (1%) were relatively uncommon. Of the 199 patients, only 10 (5.0%) had a final diagnosis along axis II and 48 (24.1%) had a diagnosis along axis III. Regarding diagnoses along axis III, 9.1% of patients were suffering from epilepsy, 4.5% had hypertension and 2.5% were HIV positive. Other important conditions were diabetes (1.5%), respiratory problems/respiratory tract infections (1.0%) and chronic obstructive airway disease (1.0%). One patient (0.5%) had a brain tumour.

The overall accuracy of psychiatric diagnosis by the referring doctors was considered correct if any of the provisional diagnoses listed by the referring (certifying) doctor matched with the final diagnosis at discharge from the hospital. Approximately half (49.5%) of the patients were diagnosed correctly by the referring doctors.

The correct diagnosis made by the four types of doctors is given in Table IV, with community service medical officers having the largest percentage of correct diagnoses. When 95% confidence intervals (CI) for percentages and their differences was used to compare the doctors, the results were as follows: community service medical officer with medical officer, CI 1.9% to 43.6%; community service medical officer with private general practitioner, CI 8.9% to 42%; and medical officer with private general practitioner, CI -14.5% to 20.6%. Thus, community service medical officers performed significantly better regarding correct diagnosis then medical officers and private general practitioners.

## **Discussion**

For a mentally ill person, involuntary admission to a psychiatric hospital is

Table III: The patients' final diagnoses along axes I and II

Final diagnosis	Frequency	Percentage
Axis I (clinical disorders):		
Disorders usually first diagnosed in infancy, childhood or adolescence (excluding mental retardation)	1	0.5
Delirium, dementia and amnestic and other cognitive disorders	2	1.0
Substance-related disorders	53	26.6
Schizophrenia and other psychotic disorders	115	57.8
Mood disorders	43	21.6
Adjustment disorders	2	1.0
No diagnosis or condition on axis I	5	2.5
Axis II (mental retardation and personality disorders):		
Mental retardation	9	4.5
Personality disorders	1	0.5

Table IV: Relationship between accuracy of diagnosis and designation of referring doctor

Designation	N	Correct diagnosis		Incorrect diagnosis	
		N	%	N	%
Community service medical officer	37	26	70.3	11	29.7
Medical officer	37	17	46.0	20	54.1
Private general practitioner	123	53	43.1	70	56.9
District surgeon	2	2	100	0	0

P = 0.01

an extreme life event.<sup>7</sup> These patients are extremely vulnerable as a consequence of the control by others, and the personal limitations due to a psychiatric disease that can influence their own control over their lives.<sup>8</sup> In this study, more males than females were admitted involuntarily, which is consistent with other studies.<sup>9,10,11</sup> Involuntary admission is highly related to positive psychotic symptoms.<sup>12</sup> Compared to voluntary patients, involuntary patients do not appear to be at a high risk of mortality.<sup>13</sup>

Apart from socio-demographic and disease-related variables, referral practices depend on the referring physician's attitude and competence in psychiatry. <sup>14</sup> Sometimes this leads to unnecessary referrals to the hospital. <sup>15</sup> In a study of recognition of psychiatric disorders in non-psychiatric hospital wards, it was observed that nearly half of all psychiatric disorders were missed by ward physicians, suggesting that better psychiatric training for non-psychiatric doctors is necessary. <sup>16</sup>

Involuntary admissions in a psychiatric hospital have financial, legal and ethical implications. In order to avoid unnecessary involuntary admissions, there is a need to determine and understand the factors causing involuntary admissions. An analysis of the demographic distribution of patients requiring involuntary admission in the Northern Cape Province is needed to assist with the planning of improved community mental health services in this vast province.

Most of the patients (85.9%) were certified by two doctors. The majority of the patients (63.52%) were certified by general practitioners doing sessions for the state hospitals in the province. This reflects the importance of the role played by general practitioners in the delivery of mental health services in the Northern Cape. About one-third (35.4%) of the patients were certified by community service medical officers and medical officers collectively. District surgeons played a minimal role (1.1%) in referrals. There were only two district surgeons in the province during 2003.

Schizophrenia was the most commonly diagnosed condition, with psychosis second. Psychosis is a nonspecific term and not part of the DSM-IV-TR or ICD-10 terminology. This may indicate that doctors are not familiar with the DSM-IV-TR or ICD-10 systems, and could be a reason why inexperienced

community service doctors where better than GPs regarding accuracy of diagnosis.

Every patient was assessed by a psychiatrist or a psychiatric medical officer after an involuntary admission. The report specified whether a patient was "certifiable" or not. In this study, the majority of patients (81.4%) were found to be certifiable. It shows that general practitioners identified the need for involuntary admission correctly most of the time. Thirty-seven patients (18.6%) were assessed as "not certifiable".

quarters More than three the patients (77.4%) were known psychiatric patients who had relapsed due to various reasons. The main burden of involuntary admissions thus comes from known psychiatric patients. There is a need for better follow up of psychiatric patients at community clinics to reduce the relapse rate in these patients. About one-quarter of the patients (22.6%) presented with a first episode of disturbed behaviour. There is thus a need for primary preventive measures regarding mental health in the province. About one-quarter of the patients (26.6%) were suffering from "substance-related disorders". Axis II disorders were not frequently observed in this study.

Mental disorders were diagnosed correctly by the referring doctors in less than half (49.5%) of the patients. <sup>17</sup> The general practitioners' poor accuracy of diagnosis of mental disorders indicates that they are not well versed in the diagnostic systems used in psychiatry. A brief skills-based training programme may contribute to better identification and management of patients with common mental disorders by increasing general practitioners' confidence and competence. <sup>18</sup>

Consultations in which the general practitioner notices psychosocial problems usually make heavier demands on the general practitioner's workload than other consultations.<sup>19</sup>

# Conclusion

Schizophrenia and psychoactive substance-related disorders were the most important conditions leading to involuntary care in the Northern Cape. The relapse of known psychiatric patients is a common problem that needs to be addressed. General practitioners played a major role in the involuntary admissions

of psychiatric patients in the Northern Cape, but only made correct psychiatric diagnoses in approximately half of the patients.

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