



**EVALUATION OF THE INVOLUNTARY 72 HOUR
ASSESSMENT OF MENTALLY ILL PATIENTS AT
KALAFONG REGIONAL AND TSHWANE DISTRICT
HOSPITALS**

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degree of
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DECLARATION

I, Mrs. Morwa Asnath Mabena, declare that this research report is my own work. It is being submitted in partial fulfillment of the requirements for the degree of Master of Hospital Management Programme. It has not been submitted before for any degree or examination at this or any other University



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2010

DEDICATION

This work is dedicated to the memory of my late mother, Mrs Caroline Sinkepeng Mampisi Mokoena (16/04/1931 – 09/06/2009) for her love, support and encouragement throughout my studies. I love you mom, you have always been a source of inspiration to me and my siblings.

PUBLICATIONS

Nil

PRESENTATIONS

Nil

ABSTRACT

Background

The Mental Health Care Act No 17 of 2002 was promulgated in December 2004. One of the major changes brought about by this Act is the introduction of the 72- hour assessment period prior to further involuntary care, treatment and rehabilitation in a designated psychiatric hospital. The aim was also to provide and coordinate mental health services within general health services and the community where the mentally ill resides. It is possible to discharge patients after the 72-hour assessment period without necessarily admitting them involuntarily once stabilized in a general hospital.

Objectives

The objective of the study was to determine the demographics and clinical characteristics of involuntary patients admitted post 72-hour assessment period from Tshwane District Hospital and Kalafong Regional hospital as well as the association between employment status, substance abuse and previous psychiatric admission and the likelihood of involuntary admission to a psychiatric hospital. It was also further explored whether the process followed with involuntary admissions were in compliance with the Mental Health Care Act and its Regulations.

Method

A retrospective study of patients' files who were admitted in Weskoppies hospital between 01 June 2006 and 31 December 2006 was conducted. Two hundred files of involuntary mental health care users after the 72-hour assessment period at Kalafong Regional Hospital and Tshwane District Hospital were reviewed. All patients from the two referring hospitals admitted involuntarily during this period were included in the study.

Medicom electronic system was used to identify patients admitted during this time. Records were retrieved from the patients' administration department and these were reviewed. Descriptive statistics were computed as means and frequencies, and data was explored through exploratory data analysis by means of graphical display. Two-tailed paired t-test was used to compare continuous characteristics. Comparisons were examined by use of contingency tables. Data was computed and interpreted using the Microsoft Excel, N-stat programme and EPI Info 2002 analysis programme.

Results

33% of the study population was in the age group 18-25, 29% 26-35, 25% 36-50 years and fewer patients above 51 years. Males constituted a large percentage of the study population at 65.5% while females made up 34.5%. The typical involuntary

mental health care user was single (76%) with married users, divorced users and widowed users taking up the remaining percentage combined. Schizophrenia was the most frequent diagnosis made at 32.3%, followed by bipolar mood disorder at 23.1%. Substance related psychotic disorder was also significantly high at 20.5% of the study population. Cannabis was the most abused substance at 74%. Kalafong referred more blacks 81.5% as compared to Tshwane hospital with 54.3%. Kalafong had the most substance abusers (43.7%) while Tshwane Hospital only had 19.8%. None of the two referring hospitals indicated the time the 72- hour assessment period commenced and ended. It is however not specified or stipulated that the times should be indicated. This indicates a need for the monitoring processes during the assessment period to improve.

Conclusion

Involuntary admissions to Weskoppies psychiatric hospital following a 72 hour assessment period were more likely to be of young age, single, male with a diagnosis of schizophrenia and a history of substance abuse. Not all patients undergoing a 72 hour assessment process at Kalafong and Tshwane hospitals are assessed in accordance with the provisions of the MHCA and its regulation. Training in MHCA, guidelines and monitoring tools as well as infrastructure and resources for management of patients are some of the recommendations. Substance abuse

programs need to be provided and psychiatric beds at Weskoppies hospital need to be reorganised to accommodate the high demand on male beds.

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CHAPTER ONE

1.0 INTRODUCTION

General hospitals are designated to conduct 72- hour assessment on Health care users who may be considered to require admission as involuntary patients. These hospitals often lack the infrastructure to accommodate such patients. Further, they have a shortage of mental health care practitioners who are adequately skilled to make these assessments and trained on the implementation of the Mental Health Care Act. This is further compounded by the fact that, following the 72-hour assessment period, it is not always possible to transfer these patients to psychiatric hospitals for further involuntary care due to a lack of readily available beds. (Minutes of cluster meetings within the Steve Biko Academic Hospital cluster April 2005)

1.1 The Mental health Care Act.

The Mental Health Care Act No 17 of 2002 (MHCA) was promulgated on the 15 December 2004.

The promulgation of the Mental Health Act and the implementation of that Act were in line with the shifting paradigm in solving mental health problems. In the past, people with mental disorders were isolated from society in large custodial institutions

which were formerly known as lunatic asylums with repeated cases of ill-treatment of patients by warders. The Human Rights Commissions on visiting several psychiatric hospitals in Central America and India, found appalling and unacceptable conditions which included filthy living conditions, leaking roofs, overflowing toilets and broken doors and windows. Most of the patients visited were kept in pyjamas or were naked. About a third of the patients were people with epilepsy or mental retardation, who were kept unnecessarily in psychiatric hospitals and were not benefiting from the process of being institutionalized. Another third of the patients admitted in psychiatric hospitals had no psychiatric diagnosis to justify their presence in such hospitals. Similar conditions existed in other psychiatric hospitals and in other regions including South Africa (WHO: The World Health Report, 2001. Mental Health: new Understanding, New Hope.)

The Act therefore makes legal provision for the protection of the rights of psychiatric patients and gives clear guidelines as to under which circumstances should patients be admitted involuntarily into specialised psychiatric hospitals. The focus of this study is in the context of the Mental Health Care Act of 2002, more specifically regarding the management and subsequent transfer of psychiatric patients to a designated mental health institution post the 72-hour assessment period. The objective, according to the provision of the Mental Health Care Act, is that psychiatric patients are managed in the least restrictive environment as possible. Involuntary admission of patients, by its very nature, is related to deprivation and restriction of movements

of patients. This research is meant to establish that implementers of the Act have in-depth understanding of set procedures, establish if these implementers understand the profile of patients whose characteristics are likely to contribute to their involuntary status in a psychiatric hospital. This research is also to explore which factors seem to be related to involuntary hospitalization post the 72 hour assessment period.

The main aims of the MHCA are to:

1. Provide for the appropriate care, treatment and rehabilitation of persons who are mentally ill.
2. Protect members of the public and their property as may be necessary from persons with mental disorders.
3. Set out different procedures to be followed in the admission of such persons to treatment facilities.
4. Establish Review Boards in respect of every mental health establishment.
5. Provide for the care and administration of the property of mentally ill persons.

6. Address exploitation and abuse so as to safeguard the human rights of the mentally ill.
7. Provide and coordinate mental health services within general health services and the community where the mentally ill person resides (Kaliski, 2006).

A person who suffers or is alleged to suffer from mental illness can only be provided care, treatment and rehabilitation (CTR) at a health establishment in accordance with the provisions of the MHCA. A mental health care user (MHCU) who submits voluntarily to a health establishment for CTR services is entitled to such services. However, MHCUs incapable of making informed decisions may not be provided with assisted care unless a written application for CTR services is made to the head of the health establishment (HHE) and he or she approves it (Article 26 of the MHCA).

The Act also make provision for CTR services of MHCU without their consent if at the time of the application there is reasonable belief that the MHCU has a mental illness of such nature that the user is likely to inflict serious harm to him/herself or others or there is a need to protect the user's financial interests or reputation and the MHCU is incapable of making an informed decision and is unwilling to receive CTR required (Article 32 of the MHCA). One of the major changes introduced in the MHCA is the

concept of a 72-hour assessment period prior to further involuntary care at a psychiatric hospital (Article 34 of the MHCA). This avoids unnecessary admissions since some of the patients are stabilized during this period and discharged without a need for compulsory admission (Kaliski, 2006).

A 72-hour assessment process is started after the HHE grants the application for involuntary CTR services. Two mental health care practitioners (MHCP), including a medical practitioner, assess the mental health care user for a continuous period of 72 hours. The medical practitioner conducting the assessment determines the treatment programme and the place within the health establishment where the MHCU is to be kept during the assessment period to ensure the safety of the user and others. If the facilities at the health establishment concerned are unsuitable or personnel within such a health establishment are unable to cope with a MHCU due to the potential harm which the user may inflict on himself, herself, others or property, the health establishment may transfer the MHCU to another health establishment with suitable personnel or facilities to conduct the assessment.

The MHCPs must submit written report within 12 hours after the 72-hour assessment period to the HHE concerned indicating his/her recommendations on the physical and mental health status of the MHCU, also indicating whether further involuntary CTR

services must continue and whether such care should be provided on an in-patient or out-patient basis.

With the implementation of the Mental Health Care Act 17 of 2002, the fundamental provisions of the Act as set out in chapter II came into effect and its objects are to regulate the mental health care in a manner that makes the best possible mental health care, treatment and rehabilitation services available to the population equitably, efficiently and in the best interest of mental health care users within the constraints of the limited resources. It clarified the obligations of the mental health care providers, and this directly talks to compliance with the provision of the Act and its regulations. (Mental Health Care Act, 2002)

In a study by Jonsson, Moosa et al it became evident that the levels of compliance among Mental Health Practitioners in terms of completion of a Mental Health Care Act form and its regulations were poor as compared to the level of compliance among the South African Police Services. It was also observed that the physical condition of mental health users was recorded in only 10% of all referrals at the time of hand-over by South African Police Services to the Mental Health Practitioners. The possible reasons cited were high patient loads and severe staff shortage with an average of 4 medical officers attending to approximately 500 patients in an emergency unit within a 24 hour period (Jonsson, Moosa, et al. 2009).

The level of compliance in a study of involuntary psychiatric admissions in the Northern Cape Province with regard to making correct psychiatric diagnosis according to the old Act, Mental Health Act 18 of 1973 was only at 50%. It was suggested that the general practitioners' limited diagnostic ability of mental disorders indicated that they are not well versed in the diagnostic systems used in psychiatry. A brief skills-based program for general practitioners was identified as the possible solution to contribute to better identification and management of patients with common mental disorders by increasing the confidence and competence of those practitioners (Habib, van Rooyen, et al. 2007).

1.2 Involuntary admissions

Involuntary admission is when a MHCU is provided with care, treatment and rehabilitation as an inpatient in the health establishment without his or her consent. The Act is very specific as to under which conditions the MHCU must be provided with care, treatment and rehabilitation without his/her consent. A written application must be made to the HHE and such application must be granted for care, treatment and rehabilitation of the user without his or her consent. There must be reasonable belief that the MHCU has a mental illness and that such a user is likely to inflict serious harm to self or others or for the protection of the financial interests or reputation of

the user, and that such a user at the time of the application is incapable of making an informed decision on the need for care, treatment and rehabilitation and is unwilling to receive care, treatment and rehabilitation required (Mental Health Care Act, 2002).

Potkonjak and Karlović refer to involuntary hospitalization as a complex social and psychiatric phenomenon which raises numerous medical, legal, ethical, political as well as economic issues. The legal and ethical considerations of involuntary hospitalization are related to the basic human rights and limitation of freedom in terms of restricting patients' movements (Potkonjak, & Karlović, 2008).

In a study by Mihanović, Restek-Petrović et al. during a period running from 1 January 1998 to 7 December 1999 a total of 4417 patients were admitted to hospital, 3648 (82.60%) of which were voluntary and 769 (17.40%) involuntary admissions. During a period running from 8 December 1999 to 14 November 2001, the total numbers of admissions to the Sestre Milosrdnice University hospital (Zagreb, Croatia) were 4980. Out of these 4781 (96%) were voluntary admissions and 199 (4%) involuntary admissions. Although the total number of hospital admission increased in the second period, there was a marked decrease in the admission of involuntary admissions from 27% in the first period to only 4% in the second period (Mihanović, Restek-Petrović, et al. 2004).

In another study by Potkonjak and Karlović, the prevalence of involuntary admissions was even lower at only 2% of the total number of admissions. Out of a total of 9839 over a five year period, 106 were involuntary admissions (Potkonjak & Karlović, 2008).

In another Croatian study, the rate of involuntary admission rose significantly from 30.8% to 39.6% from 1998 to 1999 but then decreased significantly in 2000 to 5.6%. There was a further decrease in 2002 to 3.5%. The increase rate of involuntary admission from 1998 to 1999 was during the first two years of the implementation of the Law on Protection of Persons with Mental Disorders. The explanation given for the increase is suggested to be the time the psychiatrists and other role players like other physicians, judges, lawyers and social workers needed to become acquainted with the Law (Kozumplik, Jukić, et al. 2003).

Niehaus, Koen, et al. (2008) in a South African study, observed that the majority of patients were involuntary admissions- 77.2% compared to 15% assisted users. It is not yet known whether the implementation of the new Mental Health Care Act of 2002 resulted in more or fewer involuntary admissions than prior to the implementation of the Act. More studies will have to be conducted in this regard.

1.3. Literature Review

In an observational study in psychiatric acute patients admitted to General Hospital Psychiatric ward in Italy, it was found that the most frequent diagnosis recorded were schizophrenic disorders (Ballerini et al. 2007). These findings were confirmed by another study by Potkonjak and Karlović, 2008 which found that schizophrenia was the most common diagnosis in involuntary inpatients. This study also observed that most patients admitted involuntarily had high school education, were single and living alone, and were unemployed at the time of hospitalization.

Similar findings were arrived at by Habib et al. 2007, in a South African study of involuntary admission of psychiatric patients in the Northern Cape Province, most patients were male (65.8%), diagnosed with schizophrenia (57,8%), while 26.6% had substance related disorders.

It was pointed out in another study by Segal, et al. 1998 that demographic findings suggest that frequent involuntary users are more likely to be male, unmarried, non-white and unemployed.

Psychiatric patients and substance abuse

There is evidence that substance abuse in psychiatric patients' leads to neuropsychological impairment compared to psychiatric patients not abusing substance (DeQuardo, et al. 1994). Drug abuse can also interact with and alter the neural substrates that are relevant to the pathobiology especially in schizophrenia (Siris, 1990). Substance abuse is a significant problem with schizophrenic patients and schizophrenic patients with co-morbid substance abuse are most often younger in age, male and often with a low educational attainment (George & Krystal, 2000). The onset of psychiatric disorders tends to be earlier than for those not abusing substance. It is also associated with increased psychotic symptoms, non-compliance with treatment and violence (Weich, 2009).

Substance abuse rates with patients with bipolar mood disorder are also estimated to be high, at 50-70% (George & Krystal, 2000). The prognosis and severity of bipolar is worsened by co-morbid substance abuse whilst rates of co morbid substance abuse appear to be lower with unipolar depression at 30-50% (George & Krystal, 2000). Though detection of substance abuse is important in identifying high-risk patients, these patients often under-report alcohol and illicit drug use (George & Krystal, 2000). From this it is apparent that in so far as involuntary hospitalization is concerned, users with mental health illness and co-morbid substance use disorder,

tend to be younger and male, compared to users not abusing substances (George, & Krystal, 2000).

The International Narcotics Control Board of the United Nations office for Drugs and Crime, 2009 revealed that South Africans are the largest cannabis users in the world, with at least 2,5 million citizens using the substance, and that 237 000 South Africans are totally dependent on drugs. Although increasing social ethnic integration is evident, the drug consumption in South Africa remains ethnically differentiated. Another factor contributing to the increased use of illicit drugs is high unemployment levels. It is argued that among the non- White population, social injustice and weakened family bonds created an environment in which temporary escape from the harsh reality of everyday life is often sought through the consumption of psychoactive substances. Among the white population anecdotal evidence supports a connection between increased substance abuse and both increased availability of drugs and the psychological consequences of adjusting to life in the "new" South Africa (South Africa Country Profile on Drugs and Crime, 2002). The prevalence of alcohol misuse in South Africa is likely to be as much as 30% in certain groups and as low as 5% in others, depending on age, gender, socio-economic status as well as degree of urbanisation (Country Profile on Drugs and Crime, 2002). It is suggested that patients in specialised treatment centres whose primary substance of abuse is alcohol tend to be older whilst those whose primary substance of abuse is dagga are younger.

Usage is more prevalent in males than females while dagga and mandrax are more common among persons from less advantaged communities (Parry, 1998).

Clearly et al, 2009, in their study entitled "Psychosocial interventions for people with both severe mental illness and substance misuse" conceded that over 50% of people with a severe mental illness also consumed drugs and alcohol at hazardous levels. The consequence of this is that the substance abuse is associated with higher non-compliance of treatment, relapse, suicide, incarceration, homelessness and aggression. This issue of substance abuse poses a big challenge for those tasked with implementing the Act.

The challenge of mainstreaming mental health care

Humphreys et al. 2000, found, among a random sample of approved medical practitioners in West Midlands, that none of those interviewed was able to define the term mental disorder as used in their Mental Health Act, and only just over a third of those respondents could correctly identify the four legal categories of mental illness, mental impairment, severe mental impairment and psychopathic disorder. In similar studies conducted in Scotland, Bhatti et al, 1999 found that only one out of ten of the national sample of consultant psychiatrists could give the statutory definition of the

term mental disorder, and within the non-consultant sample only 28% could give the correct title and year of the Mental Health (Scotland) Act of 1984.

It is important that people charged with implementation of the Acts are familiar with the provisions of the Acts in order to ensure compliance. In the South African situation, it is only in the MHCA that medical practitioners working in general institutions or at the primary health care facilities are referred to as mental health care practitioners and are therefore required by law to evaluate and assess psychiatric patients, make a psychiatric diagnosis, commence treatment and discharge or refer to the next level of care where appropriate (Mental Health Act, 2002).

An observational study conducted in Italy was aimed at collecting data of psychiatric patients with acute episodes entering 15 General Hospital Psychiatric Wards (GHPW). (Ballerini, et al. 2007). Information was focused on diagnosis (DSM-IV), reasons for hospitalisation, prescribed treatment, outcome of aggressive episodes and evolution of the acute episode. Assessment was done on admission and discharge using the psychometric scales, namely Brief Psychiatric Rating Scale, Modified Overt Aggression Scale and the Nurses' Observation Scale for Inpatient. What they discovered was that the main reason for admission was a severe psychotic episode, with 19% presenting with aggressive behaviour and 47.7% without aggressive behaviour in

General Hospital Psychiatric Wards. The average hospital stay was 12 days, and patients with psychiatric conditions in acute phase benefited from intensified therapeutic interventions during their hospitalisation (Ballerini et al. 2007).

In order to minimise this long hospital admission period within South African psychiatric hospitals, the MHCA makes provision for patients to be kept at general hospitals initially, since some patients' psychotic episodes will clear whilst they are still treated in general hospitals, and will therefore not need to be referred to psychiatric hospitals.

In another study conducted by Kigozi, 2007 in Uganda it was demonstrated that the integration of mental health into general care as part of primary health care, ensures equity and access to affordable mental health care under resource constraints. The Ugandan experience has shown that the process of integration of mental health into general health care services can effectively be implemented if major key activities are included namely policy and legislative reforms, review of psychiatric education and curricula, development of guidelines and monitoring tools, provision of psychotropic drugs and other therapies as well as public education and consumer empowerment (Kigozi, 2007). This is critical since one of the challenges mentioned elsewhere above is limited psychiatric knowledge by primary health carers in South Africa.

Here, the Act also leads to enhanced resource mobilization for mental health within the general hospital system through shared benefits and a holistic approach to patient care. This provision of mental health services within general health care settings should be supported by health workers who are adequately trained in mental health care, in appropriate psychotropic medication and appropriate services in the community to achieve, maintain and improve the psychosocial wellbeing of mental health service users (Kleintjes, et al. 2006).

The Mental Health Care Act support the notion of integrating the treatment of mental illness at different levels including primary level, secondary level in general institutions, before finally referring to the last level of specialised care. The Act prescribes that patients should be treated in the least restrictive environment, and mental health is to be fully integrated into all levels of care. Legislative reform has been achieved by the promulgation of the Act, guidelines as well as the provision of psychotropic drugs at all levels. What is still lacking in South Africa is consumer empowerment and review of psychiatric education and curricula for health care personnel (Mental Health Care Act, 2002).

Also, one of the challenges that may limit the proper implementation of the Act is that assessing patients for mental illness needs a suitable environment to conduct interviews. Emergency rooms in South Africa are usually not ideal for this purpose

since there are a lot of distractions and movements within the milieu. Mental patients often have to compete with physical trauma patients for the limited resources within a general emergency room. Also, the admitting doctor has to diagnose, consider hospitalisation and plan treatment very quickly. Busy emergency room doctors may not have the time to provide the patient with all the necessary information while at the same time evaluating the patient's reaction, and also prevent family and staff pressures from determining the patient's decision (Melamed, et al. 1999).

There are however, instances where the situation is handled differently, for instance, in Maryland, in the USA, a patient who needs to be evaluated for mental illness is escorted to the nearest emergency room that has been designated as a receiving centre (Janofsky & Tamburello, 2006). Emergency room receiving centres must accept all patients brought for emergency evaluation by law enforcement officers, as long as they have a valid Petition for Emergency Evaluation form. A physician in a designated emergency room, who need not be a psychiatrist; should evaluate the patient within six hours of arrival. The evaluated patient must be discharged from the emergency room within thirty hours unless the patient agrees in writing to be admitted voluntarily, or is certified by two physicians, one physician and one licensed psychologist to meet the Maryland criteria, for an involuntary psychiatric admission.

The process was reviewed in 1988 by Jayaram, et al. 1990 where emergency room records and Petition for Emergency forms were examined. The conclusion was that the police, citizens and the courts were using Maryland's Petition for Emergency Evaluation appropriately. The study also found that although 68% of the petitions were police initiated, such evaluations were more than twice as likely to be discharged from the emergency room (Janosky & Tamburello, 2006).

Managing violent and disruptive patients

Seclusion and restraint are interventions used in the management of disruptive and violently behaving patients. Fisher, 1994, in reviewing literature on restraint and seclusion, arrived at a conclusion that seclusion and restraint are effective in preventing injury and agitation; that it is almost impossible to operate a program for severely acutely psychotic individuals without some form of seclusion or mechanical restraint; that both seclusion and restraint have detrimental physical and psychological effects on both staff and patients; and that training in prediction and prevention of violence in implementing seclusion and restraints is valuable in reducing the negative effects (Fisher, 1994).

In Uganda, health reforms resulted in new physical structures being constructed at regional hospitals, curriculum changes for various health workers, improved knowledge and skills in the promotion of mental health as well as care of mentally ill patients, improvement in the availability of psychotropic drugs at all levels of care, improved budgetary support for mental health and reduction of stigma associated with mental illness (Kigozi, 2007).

It is clear from this that the situation in South Africa demands an immediate intervention, since the infrastructure has not changed or adapted in most general hospitals to accommodate psychiatric patients, and facilities and resources in general hospitals do not comply with the provisions of the Mental Health Act. This is a serious infringement of mental health patients' rights.

1.4 Definition of terms.

- Head of Health Establishment (HHE) means a person who manages the health establishment
- Health establishment means institutions, facilities, buildings or places where persons receive care, treatment, rehabilitative assistance, diagnostic or therapeutic interventions or other health services, and includes facilities such as community health and rehabilitation centres, clinics, hospitals and psychiatric hospitals.

- Mental health care practitioner (MHCP) means a psychiatrist or registered medical practitioner or a nurse, occupational therapist, psychologist or social worker who has been trained to provide prescribed mental health care, treatment and rehabilitation services.
- Involuntary care, treatment and rehabilitation means the provision of health interventions to a person incapable of making informed decisions due to their mental status, and who refuses health interventions, but requires such services for their own protection or the protection of others.
- Health Care Provider (HCP) means a person providing health care services.
- Care, Treatment and Rehabilitation (CTR) means the provision of health interventions to mental health care users.
- Mental Health Care User (MHCU) means a person receiving care, treatment and rehabilitation services or using a health service at a health establishment aimed at enhancing the mental health status of a user.

1.5 Statement of the problem

Patients presenting at Weskoppies hospital post the 72- hour assessment period often arrive with incomplete documents as required by the MHCA. This may result in documents and users being sent back to the referring hospital, inconveniencing the user and those accompanying the user.

There is very little published data regarding the evaluation of the 72-hour assessment in South Africa and elsewhere, thus the opportunity and need to undertake this study at the two main referring hospitals to Weskoppies psychiatric hospital is evident.

The aim of the study is to evaluate the 72-hour assessment process and to determine the level of compliance in implementing the provisions of the MHCA and to suggest recommendations in order to ensure compliance. The Act is still relatively new and there is a lot of resistance amongst health care workers to treat psychiatric patients as this is often seen as the sole responsibility of psychiatrists and mental health institutions.

Another objective of the study is to compare the two referring hospitals in terms of patient profile; demographics; association of patient characteristics and involuntary admission; initiation of treatment by the referring hospital as well as use of mechanical restraints.

1.6 Hypothesis

All patients undergoing a 72-hour assessment at Kalafong and Tshwane hospitals are assessed in accordance to the provisions of the MHCA and its regulations.

1.7 Study Objectives

The objectives of the study are to determine:

- 1) The demographics and clinical characteristics of involuntary patients admitted to Weskoppies Hospital following a 72-hour assessment period at either Tshwane District hospital or Kalafong Regional hospital.
- 2) The association, if any, between demographics and clinical characteristics and being admitted involuntarily to a psychiatric hospital.
- 3) The compliance of physicians at the two hospitals (Kalafong and Tshwane) with the provisions of the Mental Health Care Act Regulations in terms of completions of forms.
- 4) Whether treatment was initiated and whether mechanical restraints and/or seclusion were utilised during the 72-hour assessment period.

CHAPTER TWO

2.0 MATERIALS AND METHODS

2.1 Study design

The study was a retrospective record review and the design used was both descriptive as well as analytic.

2.2 Subjects

The subject included all MHCUs, 18 years and older, who were admitted to Weskoppies Hospital, for further involuntary care during the period 1 June 2006 to 31 December 2006, and who underwent a 72-hour assessment at either Kalafong Regional Hospital or Tshwane District Hospital. Weskoppies hospital is a specialized psychiatric hospital situated in Tshwane in the western side of Pretoria in Gauteng. It offers acute psychiatry, forensic psychiatry, and chronic care for treatment resistant patients as well as child and adolescent services. The hospital has 1067 approved beds, 900 of which are operational. It serves the whole of Tshwane and Metsweding region, parts of Sedibeng, Mpumalanga Province and North West Province mostly for

forensic services. As a specialized hospital, it is the last level of care for psychiatric or mental health care users who cannot be managed at lower levels of care.

Kalafong hospital is the only regional hospital in Tshwane; it is situated in the western side of Pretoria in Atteridgeville Township and has about 800 operational beds. Historically Kalafong was designed to be a black hospital for all levels of care, including tertiary services. As a result the hospital still has some tertiary services although it is not funded for such services. The hospital has a complete package of services offered by regional hospitals with some tertiary services still being offered. Kalafong is servicing the whole of Tshwane and Metsweding region and is also managing a good number of patients from the Mpumalanga Province.

Tshwane district hospital is a level one hospital situated in the centre of Pretoria; it is situated next to the Steve Biko Academic hospital and has about 144 operational beds. It is one of the five district hospitals in the region, others being Pretoria West hospital in the western side, Mamelodi hospital in the eastern side, Odi hospital in the northern side and Jubilee hospital in the far north.

2.2.1 Inclusion criteria

The study population included MHCUs, above the age of 18 years, who were admitted to Weskoppies Hospital, during the period 1 June 2006 to 31 December 2006, and

who underwent a 72-hour assessment at either Kalafong Regional Hospital or Tshwane District Hospital.

2.2.2 Exclusion criteria

Fewer children are admitted as involuntary mental health care users, but rather as assisted mental health care users, and were therefore excluded from the study. Adolescents, though sometimes admitted as involuntary health care users were also excluded from the study because most of the adolescents admitted as involuntary users in most instances came from other areas and not from the two referring hospitals.

2.3 Procedures

Medicom electronic system was used to identify involuntary MHCU's admitted during the period 1 June 2006 and 31 December 2006. Hospital records of the identified users were retrieved from Weskoppies hospital's patient administration department and reviewed by the researcher. Each record was assigned a unique identifying case number and data were recorded on the data collection sheet. Patients' records at both Tshwane District and Kalafong Regional Hospital were sourced only for data not available from records at Weskoppies Hospital. Information such as what treatment was prescribed at the referring hospital as well as whether the patient was restrained

or secluded at the referring hospital if not available from patients' notes which in most instances were comprehensive and extensive was then sourced from referring hospitals. Such records were obtained from the referring hospitals using MHCUs names as appearing on the admission register in Weskoppies hospital. These hospitals are the major (>90%) source of referrals for this category of patients to Weskoppies Hospital. The researcher obtained demographics and clinical characteristics of the patients as well as MHCA forms. Form MHCA 04 is the application for assisted or involuntary care, treatment and rehabilitation which is to be completed by the person initiating the process, preferably a family member and must have seen the user within seven days of making the application. Applicant must be above 18 years. This form must be completed under oath. MHCA 05 is to be completed by two mental health care practitioners, such mental health care practitioners must not be the person making the application and one of them must be medical practitioner. Their findings should then after examining then be submitted to the head of the health establishment indicating whether the mental health care user must receive care treatment and rehabilitation as an assisted or involuntary care user. MHCA 06 is a 72-hour assessment and findings form which is completed by the medical practitioner and MHCP after the head of the health establishment has granted approval for the application of the involuntary CTR. MHCA 07 is a notice by the HHE on whether to provide assisted or involuntary inpatient CTR. MHCA 08 is a notice to the review board requesting approval for further involuntary CTR on an

inpatient basis. MHCA 09 is a notice after the 72-hour assessment period informing the review board that the MHCU warrants further involuntary CTR on an Outpatient basis. MHCA 11 is the form completed by HHE when transferring an involuntary MHCU on inpatient basis to a psychiatric hospital (See Addendums 2-7). The records were reviewed to check the completion of all the identified forms and data recorded on the data collection sheet. The information was then recorded in a data collection sheet and included:

a) Demographics

1. Age in years (since last birthday)
2. Gender (male/female)
3. Race (black/white/coloured/Indian)
4. Education level (primary/secondary/tertiary)
5. Employment (employed/unemployed/grant recipient)
6. Marital status (single/married/divorced/widowed)

b) Clinical characteristics

1. Previous history of mental illness (yes/no/unknown)
2. Previous admission for mental illness (yes/no/unknown)
3. Psychiatric Diagnosis based on DSM IV
4. Substance Abuse (yes/no/unknown) If yes specify

Information collected on each User's previous history of mental illness and previous admission, diagnosis as well as history of substance abuse.

c) The 72 hour assessment process

1. Time started – Time ended
2. Place – Tshwane District
Kalafong Hospital
3. Monitored after every 24 hours (yes/no)
4. Provisional diagnosis made (yes/no)
5. Treatment initiated (yes/no)
6. Restrained during the assessment period(yes/no)
7. Secluded during the assessment period (yes/no)

This measure examined the compliance with the provision of the Mental Health Care Act and information was sources from referral notes and referring hospital records

d) Completeness of documentation

1. Form 04 (Application form)
2. Form 05 (Examination and findings of MHCP)
3. Form 06 (72-hour assessment)

4. Form 07 (Notice by HHE on whether to provide assisted or involuntary inpatient care treatment of rehabilitation)
5. Form 08 (Notice by HHE to Review Board requesting approval for further involuntary CTR on an inpatient basis)
6. Form 11 (Transfer of involuntary MHCU on inpatient basis to psychiatric hospital)

This measure was also used to assess compliance with the Mental Health Care Regulations. If all the necessary forms and procedures were correctly completed then it was deemed that the process was in compliance with the MHCA and regulations.

2.4. Statistical Analysis

Descriptive statistics were computed as means and frequencies. Data was explored through graphical display also known as exploratory data analysis. The two-tailed paired t-test was used to compare the continuous characteristics. Comparisons were examined by the use of contingency tables (chi-squared test with Yates correction). Data was computed and interpreted with the help of Microsoft Excel, N-Stat Programme and EPI Info 2002 analysis programme.

2.5. Ethics

Ethical approval was obtained from the Human Research Ethics Committee (Medical), and the Faculty of Health Sciences approved the title. Confidentiality on all patients' files observed was kept, as the researcher was the only person involved in collecting data. Names did not appear on the data collection sheets in order to ensure anonymity.

CHAPTER THREE

3.0 Research findings

During the study period (01 June 2006 till 31 December 2006), two hundred (200) MHCUs were transferred to Weskoppies Hospital following a 72 hour assessment at the two referring hospitals. All users were included in this study. 59% (n=119) of these referrals were from Kalafong Hospital and 41% (n=81) from Tshwane District Hospital (Figure 3.1).

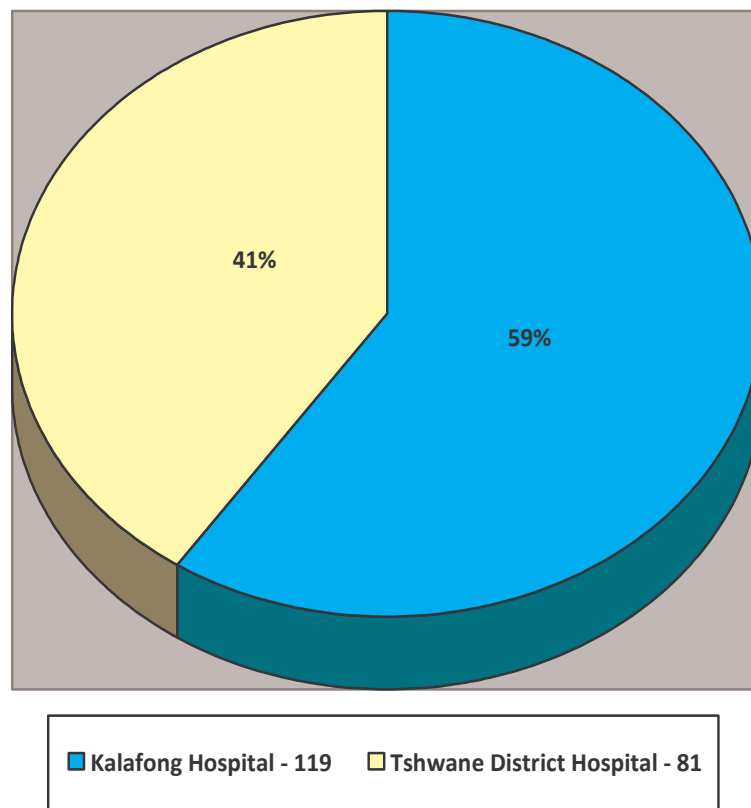


Figure 3.1 Distribution of the study population in relation to source of referral

Kalafong with 800 operational beds referred 119 patients in 6 months. Tshwane with 114 operational beds referred 81 patients in the same period. The study did not include the total number of admissions in both hospitals to can determine what percentage of the total patient admitted in each of the two hospitals ended up as involuntary admissions post the 72-hour assessment period. Another aspect which was not explored was the number of patients discharged on treatment after the 72-hour assessment either as involuntary outpatients or as assisted or voluntary. Further research in these aspects need to be conducted.

3.1 Demographics characteristics of the study population

3.1.1 Age group

The distribution of the study population with respect to age groups was 18 – 25 yrs =33% (n=66); 26 – 35 yrs =29%. (n=58); and 36 – 50 yrs =25% (n=50). There were however, fewer patients =10.5% in the age group 51 – 65 yrs (n=21) and the least =2.5% in the age group over 65 yrs (n=5) (Figure 3.2).

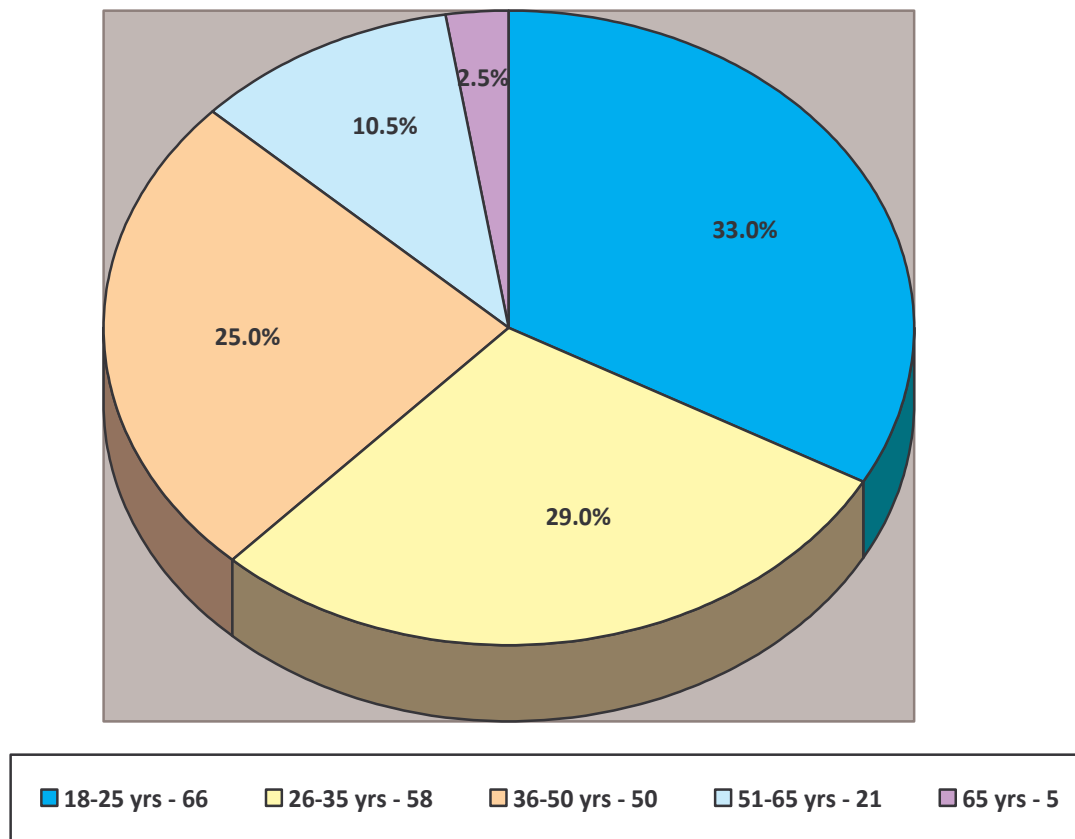


Figure 3.2 Age distribution of the study population

3.1.2 Gender

Males constituted 65.5% (n=131) of the study population whilst females constituted 34.5% (n=69) of the study population (Figure 3.3)

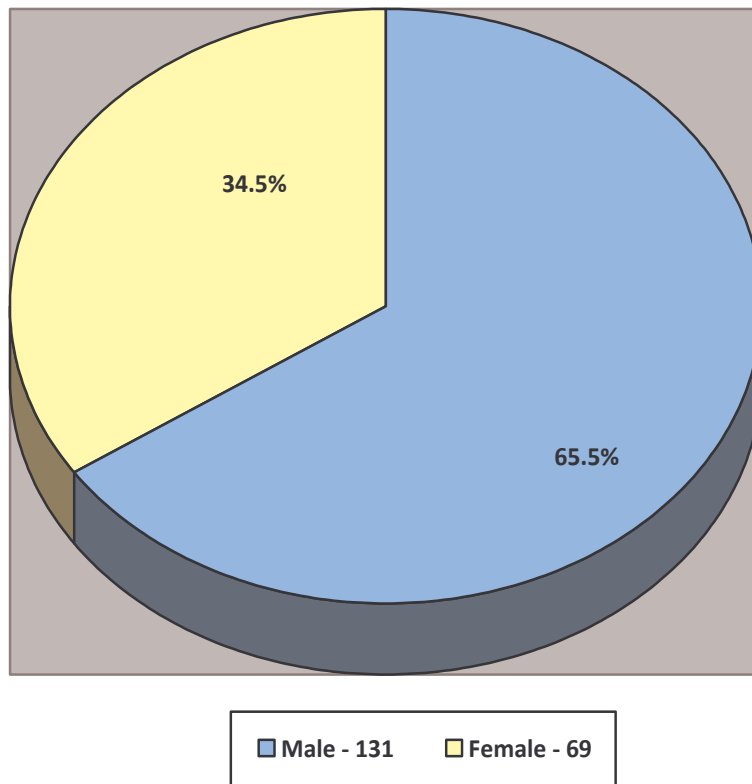


Figure 3.3 Distribution of the study population in relation to gender

3.1.3 Race groups

Of the 200 patients, 70.5% (n=141) were black; 50 (25%) white; 3.5 % (n=7) coloured and 1% (n=2) were Indian (Figure 3.4).

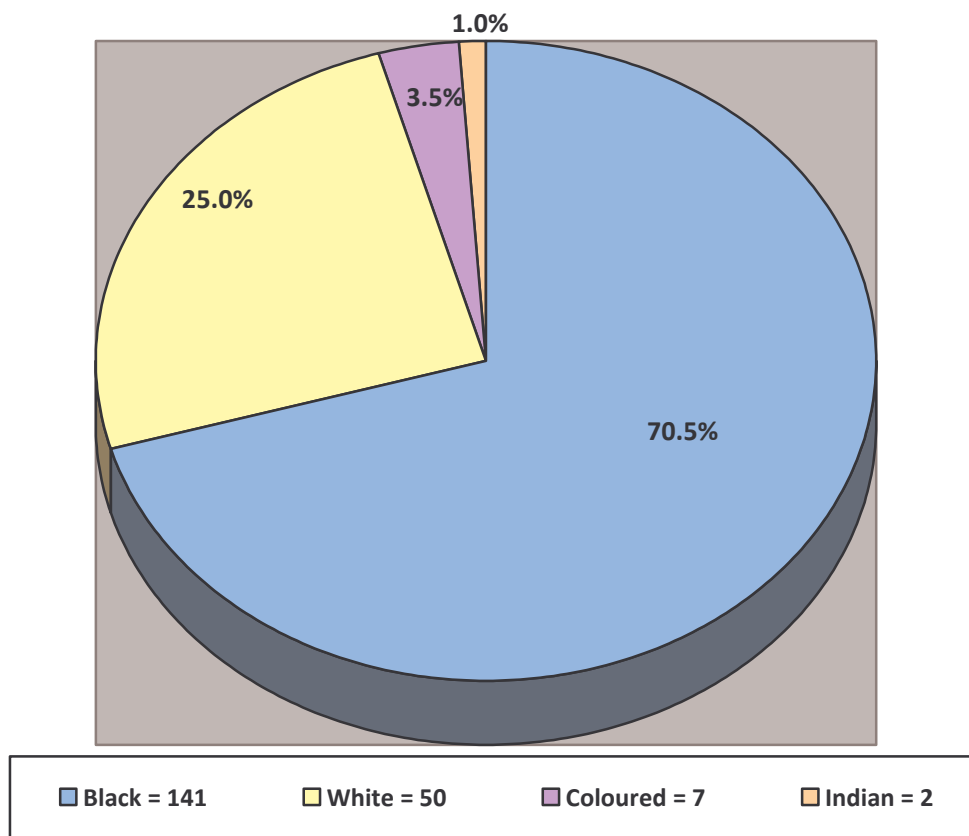


Figure 3.4 Distribution of the study population in relation to race groups

3.1.4 Educational status

The highest level of education achieved by the study group was as follows:

Primary level = 36% (n=72); Secondary level = 56.5% (n=113); Tertiary level = 7% (n=14); Never went to school = 0.5 % (n=1) (Figure 3.5)

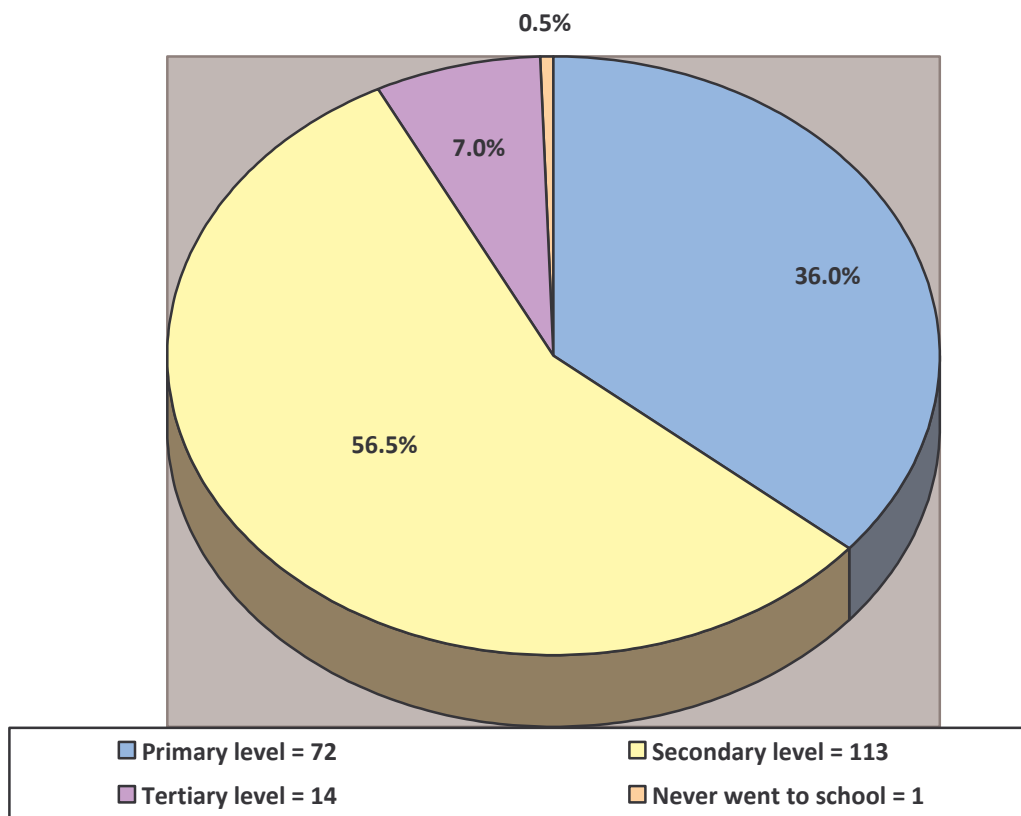


Figure 3.5 Educational levels of the study population

3.1.5 Employment status

The employment status was as follows:

Unemployed = 71.5% (n=143); Received disability grant = 8.5% (n=17); Employed = 20% (n=40) (Figure 3.6)

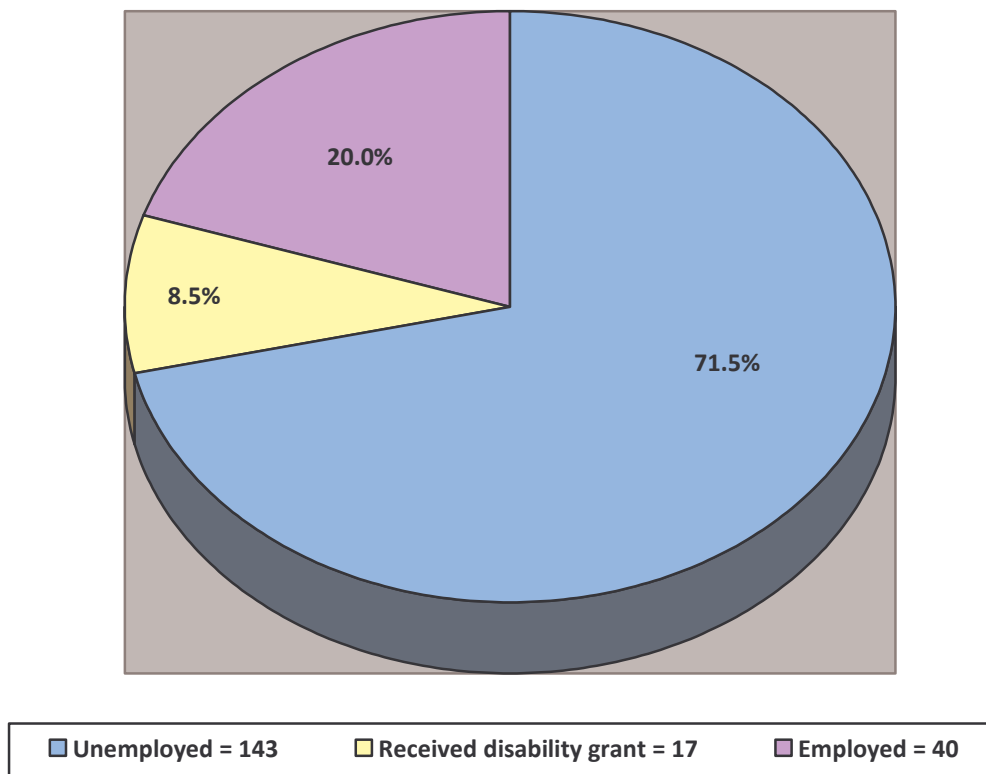


Figure 3.6 Employment status of the study population

3.1.6 Marital status

76% (n=152) of the study population were single, 18.5% (n=37) were married; 4.5% (n=9) were divorced; and 1 % (n=2) were widowed (Figure 3.7).

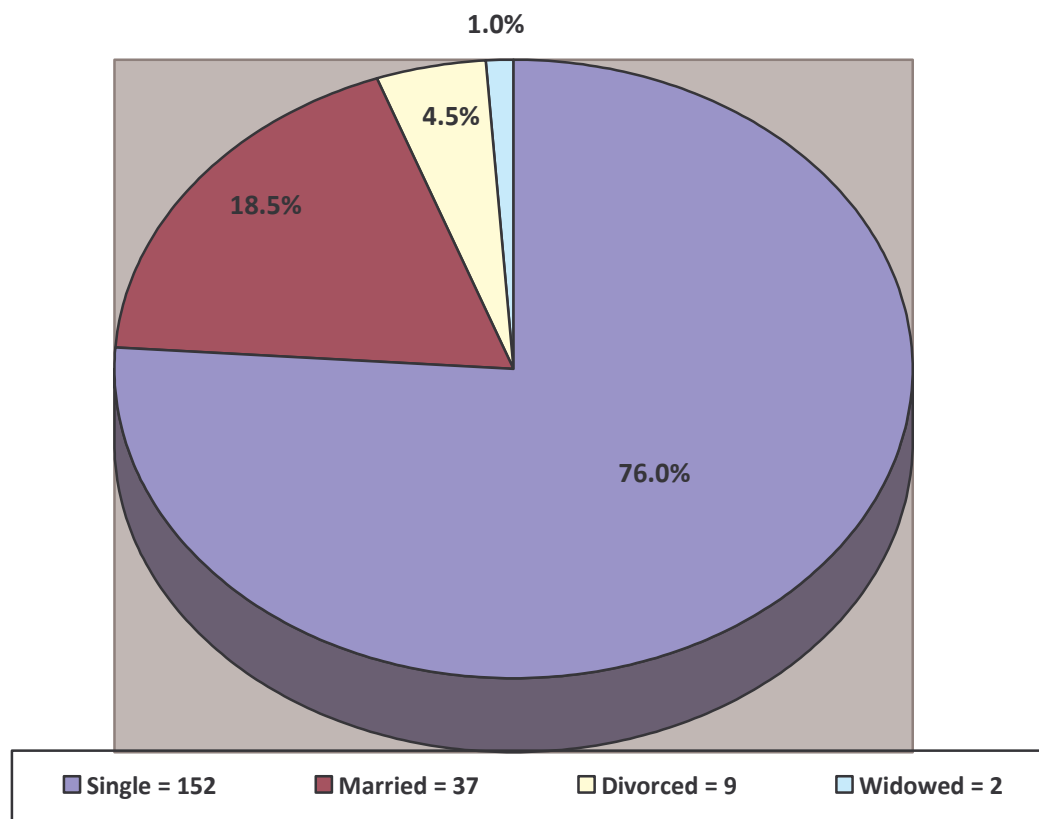


Figure 3.7 Marital status of the study population

3.2 Clinical characteristics of the study population

3.2.1 Previous mental illness

The distribution of the study population according to the history of mental illness is as follows:

Positive history = 43% (n=86); those who did not have any history of mental illness = 46% (n=93); those whom it could not be established whether they had previous mental illness before or not = 11 % (n=21) (Figure 3.8)

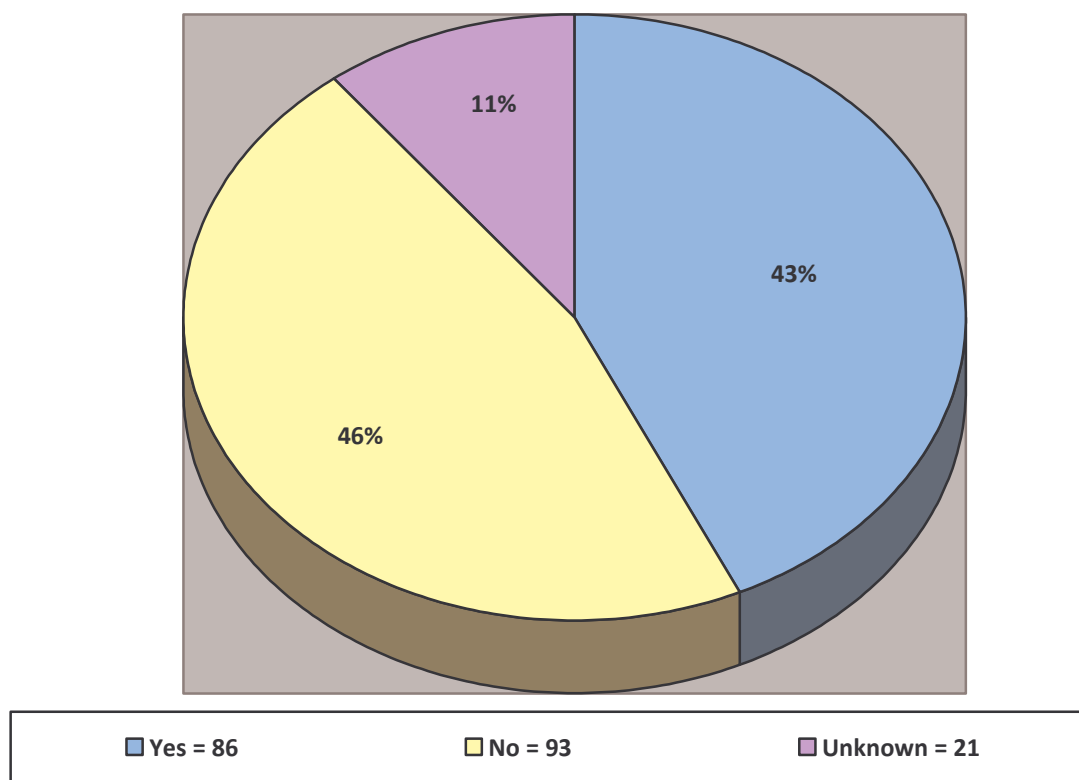


Figure 3.8 Distribution of history of mental illness amongst the study population

3.2.2 Previous admissions for mental illness

40.5% (n=81) of the study population had a previous hospital admission for a mental illness, 48.5% (n=97) had no previous admission and in 11.0% (n=22) of the study group it could not be established whether they were previously admitted for mental illness or not (Figure 3.9).

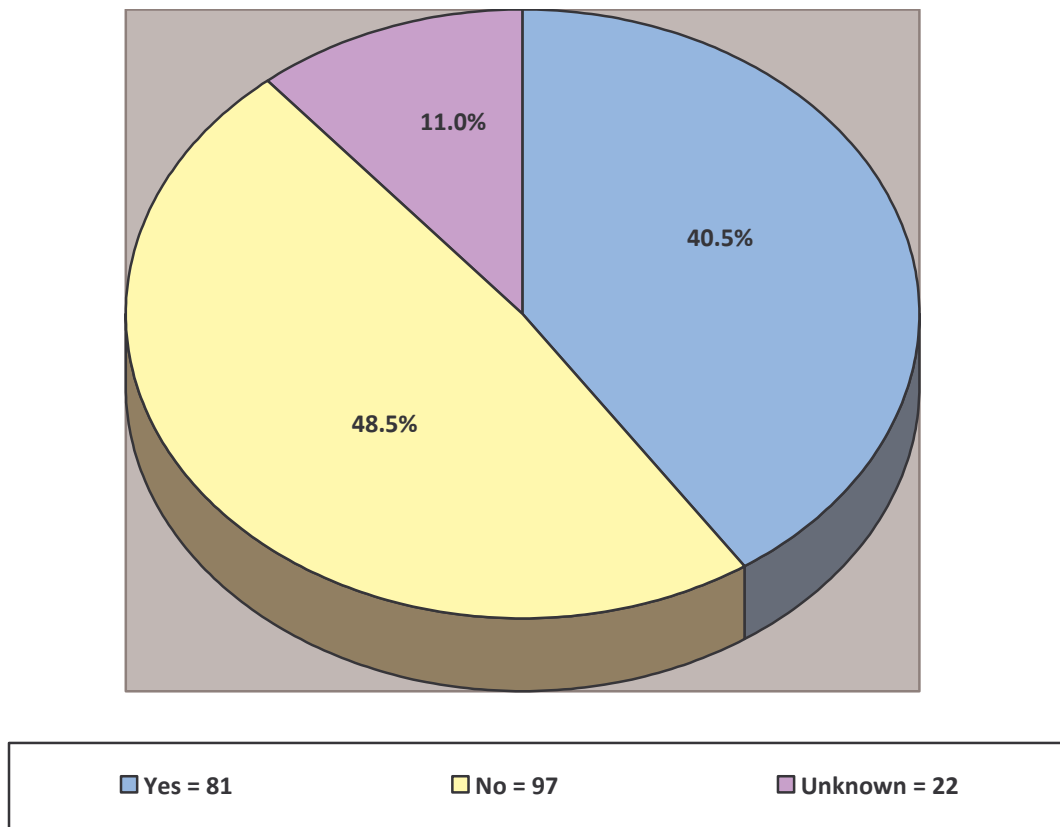


Figure 3.9 Distribution of previous admissions for mental illness amongst the study population

3.2.3 Psychiatric diagnosis based on DSM IV classification

The common psychiatric diagnoses of the study population were as follows: Schizophrenia = 34.6% (n=63); Bipolar Mood Disorder = 24.7% (n=45); Substance related psychotic disorders = 22.0% (n=40), Major Depressive Disorder = 12.6% (n=23); and Brief psychotic disorder = 6.0% (n=11) (Figure 6.10). Less common diagnoses were grouped together as Miscellaneous and included Schizo-Affective disorder; Psychotic Disorder secondary to General medical condition; Delusional Disorder; Borderline Personality Disorder); Post Partum Psychosis and Others, these are less common diagnoses = 6.6% (n=14) of the study population.

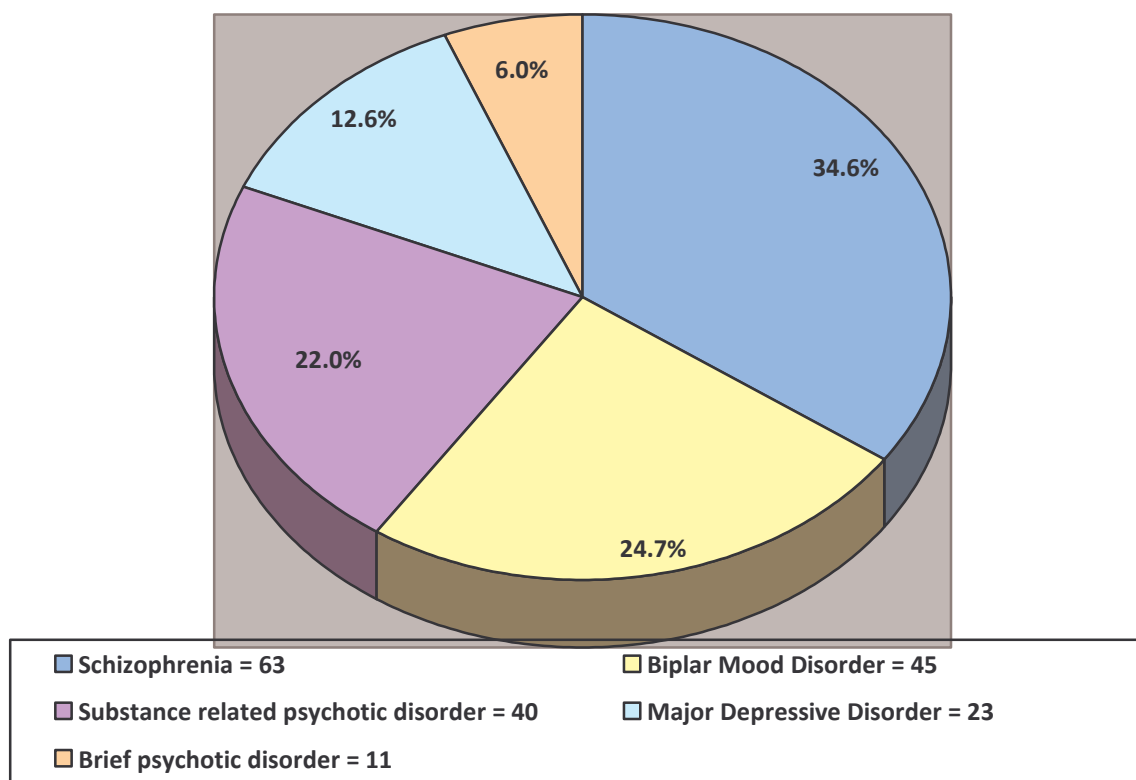


Figure 3.10 Distribution of psychiatric diagnoses based on DSM IV classification amongst the study population.

3.2.4 Substance Abuse

34% (n=68) of the study population abused substances whilst 42% (n=84) of the study population did not abuse substances. In 24% (n=48) of the study population it could not be established whether they abuse substances or not. (Figure 3.11)

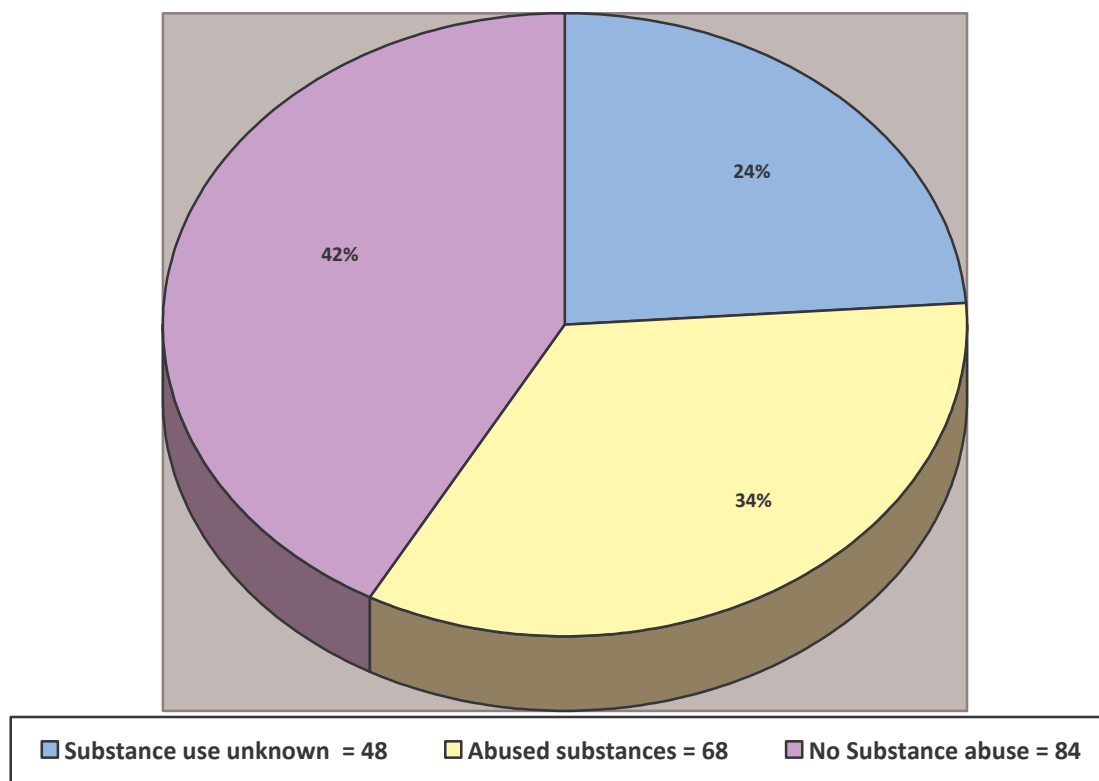


Figure 3.11 Distribution of substance abuse amongst the study population

3.2.4.1 Type of abused substances

Of the study population who abused substances, 74% (n=50) abused Cannabis; 16% (n=11) abused Alcohol; 7% (n=5) abused Cannabis and Alcohol and 3% (n=2) abused Cannabis and Mandrax (Figure 3.12)

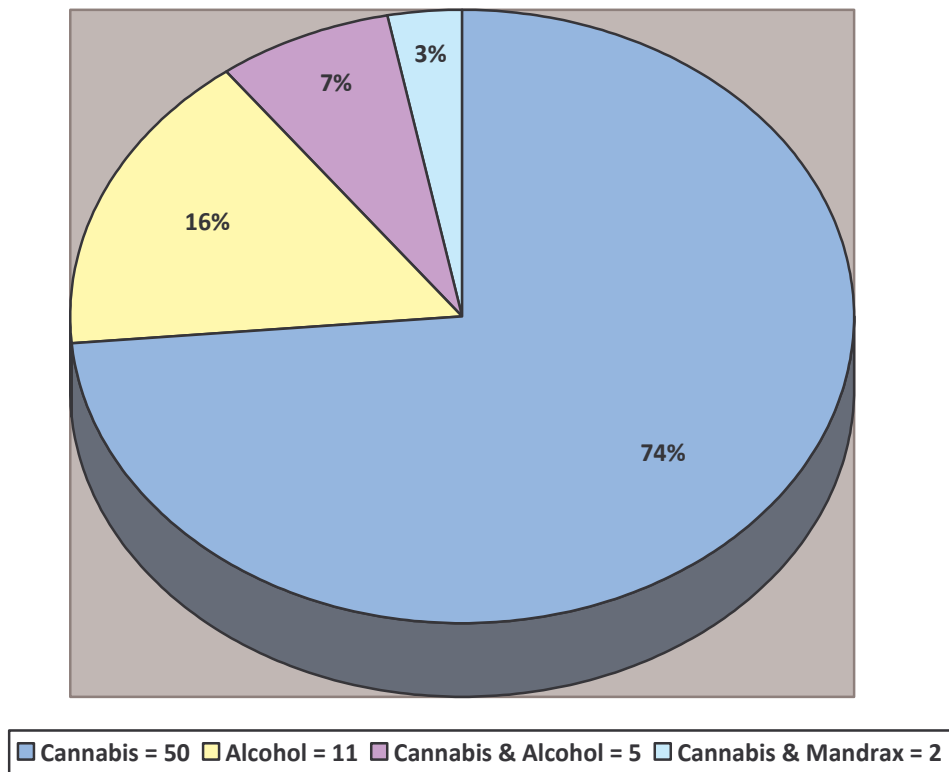


Figure 3.12 Distribution of types of substances abused by the study population

3.3 Comparison between the demographic and clinical characteristics of users referred from Kalafong and Tshwane district hospitals

59% (n=119) of the study population were referrals from Kalafong Hospital and 41% (n=81) from Tshwane District Hospital. These two groups of patients were compared to each other with regards their demographic and clinical characteristics.

3.3.1 Demographic characteristics

There was a statistically significant difference with respect to the racial distribution of the referrals from the two hospitals. 81% were black and 13.4% were white from Kalafong compared with 54.3% and 42% respectively from Tshwane District Hospital ($\chi^2 = 22.124$; $df = 3$; $p = 0.000$) (Table 3.1).

There was no statistically significant differences between the age group distribution ($\chi^2 = 9.376$; $df = 5$; $p = 0.095$); gender ($\chi^2 = 3.367$; $df = 1$; $p = 0.066$); educational status ($\chi^2 = 4.258$; $df = 3$; $p = 0.235$); employment status ($\chi^2 = 0.230$; $df = 2$; $p = 0.891$) and marital status ($\chi^2 = 3.764$; $df = 3$; $p = 0.288$) in the referrals from the two hospitals (Table 3.1).

Table 3.1 Frequency distribution of the demographic characteristics of users from the two referring hospitals

	Study Population (N=200)	Tshwane (N=81)	Kalafong (N=119)	
Age group				Chi2 = 9.376 df=5; p = 0.095
18-25	66 (33%)	32 (39.5%)	34 (28.6%)	
26-35	58 (29%)	15 (18.5%)	43 (36.1%)	
36-50	50 (25%)	21 (25.9%)	29 (24.4%)	
51-65	21 (10.5%)	10 (12.3%)	11 (9.2%)	
> 65	5 (2.5%)	3 (3.7%)	2 (1.7%)	
Gender				
Female	69 (34.5%)	34 (42.0%)	35 (29.4%)	Chi2 = 3.366; df= 1; p = 0.0665
Male	131 (65.5%)	47 (58.0%)	84 (58.0%)	
Race				
Black	141 (70.5%)	44 (54.3%)	97 (81.5%)	Chi2 = 22.123; df= 3; p= 0.000061
Coloured	7 (3.5%)	3 (3.7%)	4 (3.4%)	
Indian	2 (1.0%)	0 (0.0%)	2 (1.7%)	
White	50 (25.0%)	34 (42.0%)	16 (13.4%)	
Education				
No formal education	1 (0.5%)	0 (0.0%)	1 (0.8%)	Chi2= 4.2583; df= 3; p= 0.235
Primary	72 (36.0%)	34 (42.0%)	38 (31.9%)	
Secondary	113 (56.5%)	44 54.3%)	69 (58.0%)	
Tertiary	14 (7.0%)	3 (3.7%)	11 (9.2%)	
Employment status				
Employed	40 (20.0%)	16 (19.8%)	24 (20.2%)	Chi2= 0.2295; df = 2; p= 0.891
Receiving a grant	17 (8.5%)	6 (7.4%)	11 (9.2%)	
Unemployed	143 (71.5%)	59 72.8%)	84 (70.6%)	
Marital status				
Divorced	9 (4.5%)	3 (3.7%)	6 (5.8%)	Chi2=3.7644; df = 3; p = 0.288
Married	37 (18.5%)	17 (21.0%)	20 (16.8%)	
Single	152 (76.0%)	59 72.85%)	93 (78.2%)	
Widowed	2 (1.0%)	2 (2.5%)	0 (0.0%)	

3.3.2 Clinical characteristics

There was statistically significantly more substance abusers among the referrals from Kalafong (43.7%) compared to Tshwane district hospital (19.8%) ($\chi^2 = 12.566$; $df = 2$; $p = 0.002$) (Table 3.2). The most commonly abused substance was cannabis (74%), followed by alcohol (16%).

There was no statistically significant difference between history of mental illness ($\chi^2 = 8.419$; $df = 2$; $p = 0.015$); history of a previous admission ($\chi^2 = 4.973$; $df = 2$; $p = 0.083$); and the DSMIV diagnosis ($\chi^2 = 13.675$; $df = 12$; $p = 0.322$) in the referrals from the two hospitals (Table 3.2).

Table 3.2 Frequency distribution of clinical characteristics of the users from the two referring hospitals

	Study Population (N=200)	Tshwane (N=81)	Kalafong (N=119)	
Previous HoMI				Chi2 = 8.418973 Df = 2 P = 0.015
No	93 (45.5%)	28 (34.6%)	65 (54.6%)	
Unknown	21 (10.5%)	12 (14.8%)	9 (7.6%)	
Yes	86 (43.0%)	41 (50.6%)	45 (37.8%)	
Previous Admission				Ch2 = 4.973089 Df = 2 P = 0.083
No	97 (48.5%)	32 (39.5%)	65 (54.6%)	
Unknown	22 (11.0%)	12 (14.8%)	10 (8.4%)	
Yes	81 (40.5%)	37 (45.7%)	44 (37.0%)	
DSM 1V Diagnosis				Ch2 = 13.675261 Df = 12 P = 0.322
Schizophrenia	63 (31.8%)	25 (31.3%)	38 (32.0%)	
Bipolar Mood Disorder	45 (22.7%)	24 (30.0%)	21 (17.8%)	
Schizo-affective	3 (1.5%)	2 (2.5%)	1 (0.8%)	
Substance Related Psychotic Disorder	40 (20.2%)	11 (13.8%)	29 (24.6%)	
Psychotic Disorder secondary to General Medical Condition	5 (2.5%)	2 (2.5%)	3 (2.5%)	
Brief Psychotic disorder	11 (5/6%)	4 (5.0%)	7 (5.9%)	
Delusional disorder	1 (0.5%)	1 (1.3%)	0 (0.0%)	
Major Depressive disorders	23 (11.6%)	8 (10.0%)	15 (12.7%)	
Others	2 (1.0%)	0 (0.0%)	2 (1.7%)	
Borderline	1 (0.5%)	1 (1.35)	0 (0.0%)	
Dementia	2 (1.0%)	1 (1.3%)	1 (0.8%)	
Mental Retardation	1 (0.5%)	1 (0.8%)	0 (0.0%)	
Postpartum	1 (0.5%)	0 (0.0%)	1 (0.8%)	

3.4 The 72- hour assessment process

All of the patients in the study population had undergone a 72 hour assessment and details of the process were noted. In none of the patients was the time that the assessment started, ended, and the total hours of assessment recorded.

During the 72 hour assessment period 61.5% (n=123) of the total study population were monitored every 24 hours. However, 67.2% of the users referred from Kalafong hospital were monitored every 24 hours compared to only 53.1% of those referred from Tshwane district hospital ($\chi^2 = 4.085$; $df = 2$; $p = 0.130$) (Table 3.3)

85.5% (n=171) of the study population had written reports/notes in the patients files. However 91.6% (n=109) of the referrals from Kalafong had written reports compared to 76.5% (n=62) from Tshwane ($\chi^2 = 8.811$; $df = 2$; $p = 0.012$.)

98% (n = 196) of the total study population had psychiatric diagnosis made prior to referral to the psychiatric hospital. Kalafong recorded a diagnosis in 100% (n=119) of patients compared to only 95.1% (n=77) of the patients from Tshwane hospital ($\chi^2 = 5.996$; $df = 2$; $p = 0.015$) (Table 3.3)

91.5% (n=183) had treatment initiated in the general hospital prior to transfer to a psychiatric hospital. Kalafong initiated treatment in 95.0% (n=113) of their patients and Tshwane initiated treatment in 86, 4% (n=70) of their patients ($\chi^2 = 8.456$; $df = 2$; $p = 0.015$).

Only two patients were mechanically restrained prior to being transferred to Weskoppies hospital and both of these occurred at Kalafong hospital as reflected in the clinical notes.

Seclusion was used in 8.5% of the study population. There was no significant difference in the number of patients secluded between the two referring hospitals ($\chi^2 = 0.004$; $df = 2$; $p = 0.952$) (Table 3.3)

Table 3.3 Features of the 72 hour assessment process at the two referring hospitals

	Study Population (N=200)	Tshwane (N=81)	Kalafong (N=119)	
Monitored every 24 hrs				Ch2 = 4.084561 Df = 2 P = 0.130
No	40 (20.0%)	20 (24.7%)	20 (16.8%)	
Uncertain	37 (18.5%)	18 (22.2%)	19 (16.0%)	
Yes	123 (61.5%)	43 (53.1%)	80 (67.2%)	
Written Report notes				Ch2 = 8.811080 Df = 2 P = 0.012
No	26 (13.0%)	17 (21.0%)	9 (7.6%)	
Uncertain	3 (1.5%)	2 (2.5%)	1 (0.8%)	
Yes	171 (85.5%)	62 (76.5%)	109 (91.6%)	
Prov Psychiatric diagnosis				Ch2 = 5.996473 Df = 1 P = 0.014
No	4 (2.0%)	4 (4.9%)	0 (0.0%)	
Yes	196 (98.0%)	77 (95.1%)	119 (100.0%)	
Treatment Initiated				Ch2 = 8.455744 Df = 2 P = 0.015
No	15 (7.5%)	11 (13.6%)	4 (3.4%)	
Uncertain	2 (1.0%)	0 (0.0%)	2 (1.7%)	
Yes	183 (91.5%)	70 (86.4%)	113 (95.0%)	
Restrained during Ass pe				Ch2 = 1.433394 Df = 2 P = 0.488
No	182 (91.0%)	74 (91.4%)	108 (90.8%)	
Uncertain	16 (8.0%)	7 (8.6%)	9 (7.6%)	
Yes	2 (1.0%)	0 (0.0%)	2 (1.7%)	
Secluded during Ass perio				Ch2 = 0.003528 Df = 1 P = 0.952
No	183 (91.5%)	74 (91.4%)	109 (91.6%)	
Uncertain	17 (8.5%)	7 (8.6%)	10 (8.4%)	

3.5 Completeness of documentation

The two hospitals were fully compliant with respect to the completion of Forms MHCA 04; MHCA 05; MHCA 06; MHCA 07; MHCA 08 and MHCA 11. The only obvious omission in the completion of forms is related to the completion of form MHCA 06 which does not make any provision for time of commencement and completion of the 72 hour assessment to be recorded, which would then make it difficult to determine whether the patient was assessed for less than 72 hours or for over a period of 72 hours.

The results of the study were out of the 200 patients records reviewed, 59% of the study population was from Kalafong Regional hospital and 41% were from Tshwane District hospital. 62% of the study population was between 18-35 years old and only 2.5% in the age group over 65 years. Males made up 65.5% of the study population while females constituted 34.5%. 70.5% were black, white study population were 25%, coloured 3.5% and Indian study population were 1% of the total study population. 7% of the study population achieved tertiary educational level, 56.5% secondary level and 36% primary educational level, only 0.5% never went to school. The employment status of the population was as follows: 71.5% unemployed, 29% employed and 8.5% receiving disability grant. Married population was 18.5%, single was 76%, divorced made up 4.4% of the study population with only 1% widowed. Those with positive history of mental illness were 43% with 40.5% history of previous hospitalization for mental illness and 45% of the study population had no history of mental illness and 48.5% of the population with first hospitalization for mental illness.

Schizophrenia was the most common diagnosis at 31.8% followed by Bipolar Mood Disorder at 22.7 and Substance Related Psychotic Disorder at 22.2% 34% of the study population abused substances and the most abused substance was Cannabis at 74% followed by alcohol at 16% of the study population.

During the 72 assessment process in none of the patients was the time the assessment process started and ended, noted, therefore the total hours of assessment were not recorded. 61.5% of the study population was monitored every 24 hours as prescribed, 85.5% had written reports and the psychiatric diagnosis was made at the referring hospital in 98% of the patients prior to referral to a psychiatric hospital. Treatment was initiated in 91.5% of the patients and only 1% of the study population was restrained prior to transfer to a psychiatric hospital.

The results reflect a large number of involuntary mental health care users with a significantly large number of readmissions as involuntary users. Although the study did not compare the number of voluntary and assisted users over the same period and compare them to the number of involuntary users it would still appear as if the numbers of those involuntary admissions are still very high as compared with those in other countries which legislative reforms resulted in fewer involuntary admissions with more focus on community based care. (Kozumplik, Jukić, et al. 2003)

CHAPTER FOUR

4. DISCUSSION AND CONCLUSION

In the summary, the main findings of this study will be discussed under the following:

- Demographic characteristics
- Clinical profile of the patients who were involuntarily admitted post the 72 hour assessment
- Positive history of mental illness and previous admission for mental illness
- Compliance with the act including mechanical restraints and seclusion
- Monitoring of patients

4.1 Demographics characteristics

In discussing the demographics, the following variables will be discussed:

4.1.1 Gender

This study found that significantly more males (65.5%) were admitted to a psychiatric hospital for involuntary care following a 72 hour assessment. The findings are similar to a study comparing data on the involuntary placement or treatment of mentally ill patients in all European Union member states (Salize &

Dressing, 2004). The study reported that there was an overrepresentation of male patients in five out of eight countries. The authors suggested that this may be because of the level of dangerous behaviour in males as compared to females. This pattern might also reflect the general findings that mentally ill men tend to be more violent than females, hence the tendency to more frequently admit them as involuntary admissions citing dangerous behavior as the main reason.

Similar international studies on users of psychiatric emergency services suggest that frequent users are more likely to be male (Segal et al. 1998; Sullivan et al. 1993; Oyewumi, et al. 1992; Nurius, 1983).

Classen, et al. 2005 report that males were slightly more likely than females to be new hospital patients and were more likely to revisit the hospital than female patients. In another study on Service Utilization in South African Provincial Hospitals by Weinkove, 2006, similar findings were observed; where of the 133 patients admitted over a three month period, 51 of the study population was females (38%) and 82 males (62%).

Similar findings were found in other countries where the great majority of psychiatric inpatients were men with schizophrenia (Taiwo et al. 2008); (Dartnall et al. 1999). These findings were supported by Niehouse et al. 2008 in Stikland Psychiatric Hospital where data was collected from discharge summaries.

These results are similar in the South African context, and could suggest that factors like high rate of unemployment which currently increased substantially among men, recording an annual increase of 7.2% (141 000) and a marginal decrease of 3.3% (70 000) among women play a significant role in more males being affected (Statistics South Africa, 2009).

There are more male admissions in Weskoppies Hospital and the inpatient beds for males are more than female inpatients beds in the hospital. This over representation of males is reflected in the current situation where 79% of the inpatients are males and 21% females. Pressures experienced by the hospital with shortage of inpatient beds is always related to male patients whereas female patients can almost always walk in and be accommodated in an open ward which is less restrictive, or in a closed ward where patients' movements are restricted. It is also easier to place female patients successfully in communities once stabilized than it is to place male patients (Hospital beds statistics). The problem of placement may contribute to high demand for male beds and could also be contributing to male patients being likely to be readmitted involuntarily after discharge or placement, creating the so-called revolving door syndrome. (Hospital admission statistics, 2008)

Another possible factor contributing to males' involuntary psychiatric admissions is substance abuse which is more prevalent in males than females. A number of

studies concurred that a large number of males with substance abuse also display a high frequency of polysubstance abuse compared to female patients (DeQuardo, et al. 1994; Siris, et al. 1988; Negrete, et al. 1986; Bowers & Swigar, 1983)

Substance abuse also contributed to non-compliance to treatment by psychiatric patients, therefore resulting in readmission to psychiatric hospitals. There was also an associated violence which would then lead to involuntary admission of mental health patients since such patients are deemed to be a danger to either themselves or the community (Weich & Pienaar, 2009). South Africa, according to the Country profile on drugs and crime, is said to be by far the largest market of illicit drugs entering the country (South African Country Profile on Drugs and Crime Report, 2002). It is also most likely that the high levels of crime rate within the country could be attributed to issues like substance abuse and the likelihood of involuntary incarceration. The same country profile on drugs and crime alludes to the fact that South Africa remains one of the most crime-ridden societies in the world.

In contrast to the high rate of male admission to Weskoppies hospital, a study by Potkonjak and Karlović, 2008 in Croatia found a prevalence of more female involuntary admissions over a five year period retrospective study with the experience of the Croatian Act on mental health than males. The sample of involuntary female patients was 57.5% (n=61) and males were 42.5% (n=45).

Similar findings were also observed in an Italian observational study by Ballerini, et al. 2007.

According to The World Health Report, 2001 women are more likely to suffer from mental illness than males, particularly from depressive disorders which tend to affect more women. This could be attributed to the fact that women continue to bear the burden of responsibilities associated with multiple roles of being wives, mothers, educators and caregivers of others, while at the same time they are increasingly becoming a significant part of a labour force and sometimes even the prime source of income in some families. Interestingly, it is not known why women who are vulnerable and also at risk of having a psychiatric condition, or why they are less likely to be admitted involuntarily than males. It could be because of their tenacity.

4.1.2 Age

33% of the study population was in the age group 18- 25, 29% 26-35 and 25% 36-50. 10.5% were in the age group 51-65 and only 2, 5% were above 65 years. The high rate of young people (62% 35 years old and younger) admitted involuntarily in this study could possibly be linked to substance abuse which is more prevalent among this age group, particularly cannabis abuse (Parry, 1998). The use of substances in psychiatric patients complicates management of psychiatric

conditions, and psychiatric patients who abuse substance are often admitted for the first time at a younger age compared to patients in whom substance abuse was not a major factor (DeQuardo, 1994).

The study by Kleintjies et al. 2006 entitled: "The prevalence of mental disorders among children, adolescents and adults in the Western Cape, South Africa" observed that the overall prevalence rate of mental disorders was 25,% for adults and 17% for children and adolescents.

Weinkove reported a similar finding, in which 37 of the 133 patients were under the age of 25, 53 in the age group 26-40 and 37 in the age group 41- 60 with only 5 patients over 60 years (Weinkove, 2006).

The patients' ages were found to be ranging from 16-67 with most of the patients aged between 21-40 (62.8%) and only 5 patients (2.5%) older than 60 years in a study by Habib, van Rooyen et al. 2007 in a South African study conducted in the Northern Cape Province. It would appear that the ages of involuntary patients, especially of those abusing substances, is much younger than those not abusing substances, with more males admitted involuntarily at a younger age in psychiatric hospitals than their female counterparts. The ready availability of substances and their high abuse rate in the country as well as its effects on psychiatric conditions could be a contributing factor (Weich & Pienaar, 2009).

4.1.3 Marital status

In this study, 76% of involuntary users were single, 18.5% married, 4.5% divorced and only 1% of the study population widowed. These findings are consistent with other studies confirming the findings that psychiatric patients are too often single or divorced. In a study by Potkonjak and Karlović, 2008 it was found that there were more female patients that were single, divorced or living alone as compared to male patients who were mostly married and were living with others. This could be because women are more likely to cope even though staying on their own since women in most cases are capable of attending to their basic needs and hygiene which is often difficult for males to cope with on their own.

The assumption might be that married people are more likely to have support systems in place which might act as a protective measure against mental illness or against involuntary admission compounded by loneliness and depression. Married people could also be inclined to comply with treatment because of the support they receive and therefore have fewer risks of relapse and readmission as involuntary users (Potkonjak & Karlović, 2008).

4.1.4 Employment status

The majority of the study population, 71.5% was unemployed, followed by the working population at 20%, and those receiving disability grants being small 8.5%.

Segal et al. concur with the notion of involuntary patients more often being single and unemployed (Segal, et al. 1998).

Potkonjak and Karlović, 2008, on the other hand found a relatively high rate of insured patients in their Croatian study population. This, according to the researchers, was as a result of the Croatian health insurance and social policy, which provides health insurance to citizens. Poverty and associated conditions of unemployment were cited as appearing to be related to mental and behavioral disorders although it is also suggested that further research in this regard should be explored

It would also be interesting to establish how many of the employed users are insured and therefore would contribute toward the revenue collection of the hospital if they were not forced to be hospitalized.

The World Health Report, 2001, also suggests that the evidence by Kessler, et al. 1994 and Saraceno & Barbui, 1997, is supported that the course of mental disorders

is determined by the socioeconomic status of the individual. This could be because of barriers to accessing mental health care amongst poor populations. Resources are often unavailable for the poor segment of society.

4.2 Clinical characteristics

In discussing the clinical profile of the involuntary mental health care user, the following approach is adopted:

Common diagnoses

The most commonly diagnosed psychiatric condition was Schizophrenia (31.8%) followed by Bipolar Mood Disorder (22.7%) and Substance Related Psychotic Disorders (20.2%).

In a study of psychiatric admissions in the European Union, it was stated that the largest group of involuntarily admissions were those with severe and chronic mental disorders such as schizophrenia, accounting for 30-50% of all involuntary placements (Salize & Dressing, 2004).

In another study by Mihanović et al. 2004, it was pointed out that the highest rate of involuntary hospitalized patients in the disease classification group including

schizophrenia and other psychotic disorders amounts to 65.3%. Other studies also found that schizophrenia and drug dependence were most common diagnoses at 22.2 % and 26.7% respectively (Potkonjak & Karlović, 2008).

Weinkove in his study on service utilization in South African provincial hospital found that 73% of the study population had psychotic disorders including schizophrenia, bipolar mood disorder and major depressive disorder (Weinkove, 2006).

Kruger and Lewis in their study on "Factors contributing to community placement of long-term psychiatric patients: A profile of placed patients and social work interventions" 2009 also found that around two thirds of the patients suffered from a psychotic disorder including schizophrenia, schizoaffective disorder or a psychotic disorder due to general medical condition.

Janofsky and Tamburello on the other hand found that the most commonly diagnosed condition was substance related disorder at 29% of all cases at the emergency room. Bipolar mood disorder was the highest amongst psychiatric illnesses at 15%, closely followed by schizophrenia at 13% of psychiatric diagnoses made (Janofsky & Tamburello, 2006).

In a study by Kessler et al. 1994 "Lifetime and 12-Month Prevalence of DSM-111-R Psychiatric disorders in the United States", they found that the most common psychiatric disorders were major depression and alcohol dependence.

In this current study, Substance Related Psychotic Disorders was also significantly high (20.2%), this finding highlights once more the role of substances in mental health and that it plays a significant role in the likelihood of being involuntarily admitted to a psychiatric hospital.

The lifetime prevalence rate of substance abuse among people suffering from schizophrenia is about 50% and estimates of recent or current substance abuse, range from 20%-65%. The same adverse consequences such as poor social status, health, economic and psychiatric consequences also affect schizophrenic individuals abusing substances. It is suggested that substance abuse has additional serious consequences since it tends to increase dopaminergic activities resulting in relapse and compromising the efficacy of treatment (Kessler et al. 1994). It is also suspected that substance abuse does not only contribute to non-compliance to treatment but that it is often a source of conflict in families, which is a pernicious circumstance for schizophrenic patients who are highly vulnerable to stress (Bellack & DiClemente, 1999).

It is widely assumed that the reason schizophrenic patients' abuse of substances is in an effort to try to reduce psychotic symptoms and to alleviate the sedating side effects of neuroleptics (Bellack & DiClemente, 1999).

Several researchers found a correlation between substance abuse and early onset of schizophrenia (DeQuardo et al. 1994; Mueser et al. 1990; Andreasson et al. 1989; Breakey et al. 1974) and that the effect of substance abuse in schizophrenia generally suggest poorer outcomes in those abusing substances. It is argued that people with serious mental illness, schizophrenics being in the majority, are now one of the highest risk groups for HIV infections since data indicate that this group is more likely to engage in unsafe sex (Bellack & DiClemente, 1999).

Several investigators conceded that the increasing prevalence of substance abuse may have important implications for the onset, clinical manifestation, and the outcome of schizophrenia. The results suggest a precipitating role for substance abuse in people predisposed to schizophrenia. It was also found that dually diagnosed patients, including those with schizophrenia, tend to have poorer response to antipsychotic treatment, and are more often hospitalized (DeQuardo, et al., 1994 Bowers, et al. 1990; Mueser, et al. 1990; Miller & Tanenbaum, 1989). All these factors increase the chances of involuntary admissions and involuntary readmissions among these groups of patients because of the poor prognosis and the likelihood of non-compliance to treatment.

Siris, 1990 alludes to the fact that substance abuse in patients with schizophrenia is problematic since substance abuse tends to exaggerate the difficulty of engaging patients in treatment strategies, and could also lead to increased frequency or severity of mental illness. The possibility of such patients frequenting psychiatric institutions as involuntary admissions is compounded by both the schizophrenia and substance abuse, and such patients are more often not in a position to seek treatment voluntarily. This concern is supported by several studies (Schneider & Siris, 1987; Richard, et al. 1985; McLellan & Druley, 1977; Breakey, et al. 1974).

Kaplan and Sadock, 1997 noted that the prevalence of schizophrenia is equal to both male and females, although its onset is earlier in men than in women. Women tend to suffer from schizophrenia at a later stage than males. Male schizophrenics admitted in psychiatric institutions account for more than half of all male schizophrenic patients, whereas only a third of all schizophrenic females are admitted to a psychiatric hospital before the age of 25. Peak ages for the onset of schizophrenia are 15-25 for males and 25-35 for females. With the development of effective antipsychotic drugs and changes in the management of psychiatric patients, and with more emphasis on rights of psychiatric patients, there has been a dramatic change in the pattern of hospitalization for psychiatric patients over the past four decades. The probability of readmission within the first two years after discharge is about 40%-60%. 50% of beds in psychiatric institutions are occupied

by schizophrenic patients and schizophrenia accounts for 16% of all psychiatric patients on any treatment (Kaplan & Sadock, 1997).

The problem of schizophrenia is compounded by substance abuse. According to Smith and Hucker, 1994 patients with schizophrenia are more susceptible to the negative effects of substance abuse and that those who abuse substance are more at risk of behaving violently. Since violent behavior is one of the possible reasons for involuntary hospitalization, dangerousness is most often cited as the reason for involuntary admission; it is not surprising to see the correlation between involuntary admissions amongst this group of patients in the current study.

Smith and Hucker, 1994 examined the strength of association between schizophrenia, substance abuse and violence, and arrived at the conclusion that there was circumstantial evidence to support the hypothesis that patients with schizophrenia who abuse drugs or alcohol are at an increased risk of behaving violently than those schizophrenics who do not abuse drugs or alcohol. Over a third of the population abused substance prior to involuntarily admission in the hospital. It further states that approximately 1.97 million South Africans are dependent on alcohol whilst 237 000 South Africans are totally dependent on drugs. It has been suggested that mentally ill patients with their impaired judgment may often use drugs to self-medicate psychiatric symptoms and that some drug users may develop psychiatric disorders as a result of drug use, or that in certain instances the

psychiatric disorder and the substance use might have a common underlying etiological cause (Lehman, et al. 1989).

In a study undertaken at Stikland Hospital in the Western Cape, patients with substance abuse also displayed more violence prior to their admission than patients who did not abuse substances. This violent behavior would then qualify them for involuntary admission since there would be an element of threat due to the violence displayed by these people (Weich & Pienaar, 2009).

In this research, Kalafong hospital had more substance abusers (43.7%) than Tshwane hospital (19.8%). The difference between the two referring hospitals is huge with the sample from Kalafong having more than twice as many substance abusers as the sample from Tshwane hospital.

Co-morbid substance abuse and psychiatric disorders often confront clinicians in mental health. Bellack and DiClemente, 1999 observed that drug and alcohol abuse by people with schizophrenia has become one of the significant problems facing clinicians and agencies involved in their treatment.

A study by DeQuardo, et al. 1994 confirmed the findings by Breakey, et al. 1974 and those of Mueser, et al. 1990, that patients who abused substances were admitted at a younger age as compared to those who do not abuse substance. Considering that the majority of involuntary admissions in the current study are younger than 35

years old and that substance abuse in the country has reached alarming proportions, there is a need for South Africa to look into reintegrating substance abuse services within the mental health services.

It is important to identify substance abuse in psychiatric patients since these are high risk patients who tend to under-report alcohol and illicit drug use (George & Krystal, 2000). This aspect of the possibility of under-reporting substance abuse among psychiatric patients could affect the findings of the current study. If under-reporting is considered, the challenges of substance abuse could be much greater than it is currently believed to be the case.

Alcohol at 16% was the second most used substance in the study under review. WHO in its estimates by Parry 1998 point out that alcohol dependence is third leading cause of disease burden in developing countries. South Africans, it is alleged consume well over 5 billion litres of alcoholic beverages per year. Adult per capita consumption of absolute alcohol is between 9 and 10 litres per year, placing the country among the higher alcohol consuming nations (Parry, 1998).

This challenge of alcohol emerged in this current study, where substance abuse among the study population from Kalafong hospital was more than twice (43.7%) of the substance abusing population from Tshwane hospital (19.8%). Alcohol is easily available in the Townships due to a number of shebeens and taverns which operate

for much longer hours than bottle stores. The high rate of substance abuse is in line with findings by the International Narcotics Control Board of the United Nations office for Drugs and Crime, 2009.

In the Maryland situation referred to earlier, those evaluated with a substance related diagnosis in the emergency room were less likely to be admitted based on psychiatric conditions. Similar to the South African findings, substance abuse was also markedly underreported in this study in the sample of emergency petitions. It was suggested by the authors of the Maryland study that there be more specific enquiry into the presence and as the severity of substance related disorders. These suggestions are based on the findings that after emergency room evaluation, substance abuse was found to be a common co-morbidity and was the most frequently made clinical diagnosis in general (Janofsky & Tamburello, 2006).

History of previous mental illness

43% of the study population had a positive history of mental illness and 45.5% had no history of previous mental illness. 40.5% were previously admitted for mental illness and 48.5% were first time admissions for mental illness. The high number of patients with a history of previous mental illness and or previous admissions for mental illness needs to be explored further. There is a need to establish whether all these patients warranted involuntary admissions or whether the attitudes of the

physicians in general hospital are that once a psychiatric inpatient, always a psychiatric inpatient, without clinically assessing and managing such patients and discharging them. Rather than referring them to the most restrictive environments for further management as involuntary users. Another possibility could be the lack of skills to manage psychiatric conditions, resulting in physicians operating from a position of caution and referring all patients for specialists' assessment rather than dealing with the situation themselves. There is still a lot of uncertainty surrounding management of psychiatric patients because of the unpredictable behaviour of such patients, particularly since it is difficult enough for psychiatrists to predict levels of dangerousness in a psychiatric patient. The lack of resources to manage aggressive patients, coupled with high volumes of patients in emergency rooms could also be contributory to the inability of excluding medical causes in patients presenting in general institutions' emergency departments (Jonsson, Moosa, et al. 2009).

Findings of this study show that Tshwane hospital had just over half of the population (50.6%) referred, presenting with a history of previous mental illness and 45.7% of the population with previous admission for mental illness. These findings do explain at least in part the reason that Tshwane hospital is referring a high number of patients post the 72 hour assessment period. Kalafong referred 37.8% of the population with a positive history of mental illness and 37% with previous admissions for mental illness. Unlike Kalafong hospital, Tshwane hospital, as a district hospital, does not have family physicians who can contribute to the

management of these patients without necessarily referring them for involuntary admission in psychiatric hospitals. Taking a comprehensive history of such patients to exclude physical and organic general medical conditions, as well as the management of withdrawal symptoms and delirium in an environment which is equipped to deal with such situations, can be challenging and similarly demanding for an ill-equipped physician. There is a need for the working environment to be more conducive to accommodate psychiatric patients as well as sufficient and skilled human resources in general hospitals, which would enable physicians to manage psychiatric patients presenting in those facilities as required by the provisions of the Mental Health Care Act. Development of guidelines for management of patients presenting at general hospitals with a mental condition and monitoring tools for health professionals can go a long way in dealing with uncertainties where clinicians, in trying to exercise caution, end up referring all psychiatric patients to the psychiatric institution. Psychiatrists can also be used to give support and training to clinicians in district and regional hospitals, thereby ensuring proper integration of mental health services and also assisting those clinicians and the nursing staff to be confident in dealing with patients suffering from mental illness.

4.3 Compliance to the act

Restraining and seclusion

Only 1% of the study population was restrained and 8.5% secluded during the assessment period at both hospitals. Seclusion and restraint are interventions used in the treatment and management of disruptive behaviours in psychiatry. Both techniques are used in managing violent and aggressive psychiatric patients in order to prevent them from inflicting harm to themselves or to others. Restraint is also used in the elderly and confused patients to prevent them from falling or wandering. It would appear as if little is known as to the efficacy of the two techniques since little or no evidence regarding the benefits of both seclusion and restraint could be found. It is argued that in the view of the two techniques being extremely invasive in nature, their use should be minimised for ethical reasons and that they should only be used in extreme circumstances (Sailas & Fenton, 2000).

In some studies conducted regarding the use of seclusion and restraint in Finland, seclusion was applied in only 6.6% of psychiatric inpatients and the use of restraint in 3% of the inpatients. In other studies in Denmark and in Norway the figures were even lower than those of the Finnish study (Tuohimäki, 2007).

Whilst there are proponents of mechanical restraint and seclusion like Fisher, 1994 in extreme circumstances in order to protect staff and patients, others are of the opinion that seclusion and mechanical restraints are outdated, tyrannical or degrading. There are also reports of serious adverse effects of these techniques in qualitative reviews (Sailas & Fenton, 2000).

It has been debated whether seclusion does in fact reduce or prevent the aggressive behaviour of seriously ill psychiatric patients or whether this method is used more as a punitive measure. It is a complex and often emotive process where proponents of it argue that it is therapeutic or necessary in the control of violent and disruptive behaviour. Those opposed to it regard it as potentially punitive and lacking in therapeutic benefit (Tuohimäki, 2007). Other scholars are of the opinion that coercive measures such as seclusion and restraints may cause unwanted outcomes, resulting in more harm than good. Some studies indicate the need for planning and screening in order to decrease the use of seclusion and restraint (Bensley, et al. 1995; Fisher, 1994; Brown & Tooke, 1992).

A study conducted in 23 psychiatric hospitals in New York State, on average found that 2.9% which is between 0.4% - 9.4% of patients in the study population were secluded (Way & Banks, 1990).

Swett, 1994 observed that seclusion was associated with patient's young age, borderline diagnosis and irritability with multiple symptoms. Another study linked the risk of seclusion to frequent earlier admissions but not to diagnosis (Soloff & Turner, 1981).

Since there is no consensus on the use of seclusion and mechanical restraints by mental health care practitioners, it is not surprising that both techniques were not used in the two general hospitals in the management of patients undergoing the 72 hour assessment. It would appear as if the preferred mechanism to deal with violent and threatening behaviour was the use of medication. Medication appears to be more acceptable than the use of methods which might attract negative reaction from relatives and other visitors, which in turn could easily result in negative media coverage.

After reviewing literature and arriving at differing opinions regarding the use of seclusion and restraints, it is difficult to establish the real reasons why the measures were not used by the two hospitals in the management of disruptive and violent behavior. It could only be assumed that generalists in general hospitals would find it difficult to use techniques which are not familiar to them, and that ethically they might have a problem using techniques whose therapeutic benefits cannot be guaranteed. There is also a problem of possible under reporting and or not recording all the interventions by clinicians. Alternatively it could be because the

infrastructure of the hospitals has not changed since the implementation of the Mental Health Care Act 17 of 2002. The hospitals included in the study both have no seclusion facilities; therefore the treating team might have no option but to rely on the chemical restraints in the management of disruptive and aggressive patients.

The monitoring of patients

61.5% of the study population was not monitored every 24 hours as required by the provisions of the Mental Health Care Act. The compliance rate between the two referring hospitals was differentiated with Kalafong hospital's compliance rate being slightly higher at 67.2%, compared to Tshwane hospital where the compliance rate was 53.1%. It could be argued that the availability of family physicians at Kalafong hospital as a Regional and training institution made a lot of difference in the management of psychiatric patients during the 72 hour assessment period.

This result notwithstanding, it warrants a reminder, referring to an earlier stated statistic, that among a random sample of approved medical practitioners in West Midlands, it was found that none of the medical practitioners interviewed was able to define the term mental disorder as used in the Mental Health Act, and only just over a third of them could correctly identify the four legal categories of mental illness, mental impairment, severe mental impairment and psychopathic disorder. In similar studies by Bhatti et al. 1999, only one out of ten consultant psychiatrists was able to give the correct title and year of the Mental Health Act of Scotland 1984

(Humphreys et al. 2000). It could then be deduced that the failure to monitor patients during the 72 hour assessment as required by the Mental Health Care Act 17 of 2002 is related to the clinicians' knowledge or lack thereof regarding the provisions of the Act and its regulations. Lack of resources, including human resources in the form of doctors and high workloads could also be contributory to non-compliance.

Although both hospitals indicated the date of the commencement of the 72 hour assessment period, none of them indicated the times the assessment started or ended, making it difficult to establish whether patients were assessed for a period that was less than, or that exceeded the required 72 hours. There was in general relatively good compliance with other provisions of the Act and its regulations which is encouraging, given the fact that there was some resistance from the clinicians to accommodate psychiatric patients in general hospitals, from the fear that the psychiatric patients' unpredictable behaviour will produce adverse events (Concerns raised by clinicians during a cluster meeting in Tshwane Region, April 2005).

In trying to establish whether the introduction of the Mental Health Care Act would have resulted in more patients being incarcerated than with the previous Mental Health Care Act, it was confirmed that there were fewer admissions as involuntary mental health care users than there were certified patients admitted over a similar

period of time. Hospital data revealed that where there were only 200 patients referred from Kalafong and Tshwane District hospitals over a 7 month period from 01 June 2006 to 31 December 2006. There were 1720 patients admitted as certified (involuntary) patients during a period of 01 June 2005 to 31 December 2005 in the hospital (Hospital data, 2005). The other compounding factor is that whereas for the period 01 June 2005 to 31 December 2005 all the certified patients admitted in the institution were considered, the same cannot be said regarding the 2006 involuntary mental health care users admitted. This study is limited to involuntary users from Kalafong and Tshwane hospitals and does not include involuntary admissions from other hospitals like Mamelodi, Pretoria West, Tembisa, Dr George Mukhari, Steve Biko Academic and from other Provinces.

It would be interesting to establish the percentage of patients who presented to the two hospitals for a 72 hour assessment, who were discharged by the hospitals without being referred to the psychiatric hospital for further management. Another interesting study would be to check whether all those referred were appropriate referrals and were not discharged after being admitted simply because there was no need to have referred them. If all patients post the 72 hour assessment were then referred to a specialist hospital without clinicians managing them in the least restrictive environment and at an appropriate level of care, it could imply clinical bias in the approach of clinicians in general hospital when faced with patients presenting with mental illness. Family and social service personnel applying for the

72 hour assessment of a patient are not always objective and are often introducing some bias into the system, if they have already decided that inpatient hospitalization is a solution. In such cases, they will strongly advocate for inpatient hospitalization. If clinicians rely more on the history than on the actual symptoms presented by patients, then the possibilities of inappropriate admissions are most likely. The problem could be resolved by development of assessment tools which would assist physicians in general hospitals to objectively evaluate the need for further involuntary admission of patients, given the relatively costly fact of involuntary admission in a specialized institution.

4.4. Limitations

A limitation of this study is that the research was limited to involuntary admissions from Kalafong Regional Hospital and Tshwane District Hospitals only. It does not include involuntary admissions from other hospitals or those from other provinces. Thus the results of the study should be understood within the limitations of the size and representivity of the study population, taking into consideration that the referrals from other hospitals such as Mamelodi, Pretoria West, Steve Biko Academic, Tembisa, Dr George Mukhari and patients from Mpumalanga Province where not included in the study population, and this may have some effect upon the results of the study.

Another limitation of the study is that the researcher concentrated mostly on the information provided by clinicians on the referral notes which might not be inclusive

of all the interventions provided. Heavy reliance on the referring hospital's records without accessing nursing notes could also affect the findings this though, the strength of this study is that it utilised. Given this though, the strength of this study is that it utilised, as a data gathering tool, a retrospective file review, which is reliable in detecting involuntary admissions. These completed documents are clear cut and not open to interpretations, thus increasing their admissibility. It is also the first study of its kind to evaluate the 72 hour assessment since the implementation of the new Mental Health Care Act of 2002.

4.5. Conclusions and Recommendations

Summary of findings regarding factors associated with involuntary admissions, review of the hypothesis and the study objectives followed by recommendations.

4.5.1. Factors associated with involuntary admissions

Admissions to Weskoppies Hospital following a 72 hour assessment were more likely to be of younger age, single, male with a diagnosis of schizophrenia and a history of substance abuse. Screening for these characteristics at the referring hospital would improve the appropriateness of such referrals.

There is evidence to support that most of the requirements of the 72 hour assessments are done in the least restrictive environment and there appears to be a general compliance with the provision of the Act and its regulations.

Review of the Hypothesis

Hypothesis: All patients undergoing a 72-hour assessment at Kalafong and Tshwane hospitals are assessed in accordance to the provisions of the MHCA and its regulations.

The hypothesis was disproven. Not all patients undergoing a 72-hour assessment at Kalafong and Tshwane hospitals were assessed in accordance of the provisions of the MHCA and its regulations.

Review of Study Objectives

The objectives of the study were to determine:

- The demographics and clinical characteristics of involuntary patients admitted to Weskoppies Hospital following a 72 hour assessment period at either Tshwane District hospital or Kalafong Regional hospital.

Clinical records of 200 involuntary mental health care users were explored and the findings indicated that the majority of them were male, single, unemployed and

younger than 35 years old as far as the demographics are concerned.

- Clinically the majority of users had no history of mental illness and had no previous admission for mental illness in a psychiatric hospital; Schizophrenia was the common diagnosis followed by substance induced psychotic disorders.
- The comparison between demographics and clinical characteristics of referrals from Kalafong and Tshwane hospitals.

Involuntary users from the two hospitals were compared to each other with regards to their demographic and clinical characteristics and the findings were as follows:

There were more black users referred from Kalafong hospital as compared to Tshwane hospital. There was no significant difference between the two hospitals regarding the age distribution, gender, educational status, marital status as well as employment status. Kalafong referred more substance abusers than Tshwane.

- The compliance of physicians at the two hospitals (Kalafong and Tshwane) with the provisions of the Mental Health Care Act Regulations in terms of completions of forms:

In reviewing the records as well as the prescribed forms, compliance rate was found to be relatively good with the exception of the exact time the 72 hour assessment process would have started and ended, making it difficult to establish whether patient were assessed for more or less than 72 hours. The forms does not make

provision for the times to be recorded hence it is difficult to blame clinicians since this is not specified thus not properly regulated.

Monitoring of patients during the assessment period need to be improved since the overall score is around sixty one percent.

- Whether treatment was initiated and whether either mechanical restraints and/or seclusion were utilized during the 72 hour assessment period:

Record review revealed that treatment was initiated in majority of cases and that mechanical restraint or seclusion was seldom used or reported in both hospitals during the assessment period.

4.5.2 Recommendations

Following these specific findings, the following recommendations are suggested, in order to address the flagged issues within the body of this thesis.

1. Training in MHCA

Since the compliance rate with regard to the features of the 72 hour assessment need to improve it is suggested that more training on the MHCA should be provided both from the Directorate level at Provincial level and at Regional level by clinicians

from the specialized hospital to the referring hospitals. Such training should be continuous to accommodate the high turnover of health care practitioners.

2. Guidelines and monitoring tools

Specific guidelines and monitoring tools to be developed by the Directorate for clinicians who are not necessarily psychiatrists to enable them to deal effectively with assessment and management of psychiatric patients in order to enable them to be in line with the spirit of the MHCA and be less intrusive.

Risk assessment tools to be developed by both National Department of Health as well as the Provincial Department assist with identification of risk factors associated with psychiatric patients by the referring hospitals in order to assist such institutions in the appropriate referral levels.

3. Infrastructure and Resources

The infrastructure in general hospitals should support the management of psychiatric patients who often need to be managed separately from other patients, and these to include seclusion rooms for those patients who might need to be managed in a secluded environment in order to protect such a patient, other patients and members of staff.

Management of psychiatric patients would inevitably need more human resources since psychiatry is labour intensive and does not necessarily rely on expensive

equipments and machinery. Other resources that may assist with the restraining of disruptive patients need to be provided.

4. Review of MHCA forms

The findings of this study indicated that none of the referring hospitals indicated the time the 72 hour assessment period commenced or ended. The reason identified is that the specific form does not make provision for the time to be recorded; therefore the need to review the form to be more user friendly and to force health care providers to record the specific times the assessment commenced and ended is evident

5. Substance Abuse programs

Since the use of substances was found to play a significant role in psychiatric conditions and the high levels of abuse especially amongst the youth, it is imperative that this aspect should enjoy priority both at National level, Provincial level and at local level.

Substance abuse and Rehabilitation projects need to be joint ventures between the Department of Health and Social Development. Health centres should also be better equipped to deal with dual diagnoses and to manage patients presenting to such centres more effectively in a coordinated and comprehensive manner.

The general public need to be made aware of the dangers of substance use and abuse as well as the effects of substance abuse in order to empower the public to

regain its freedom from the debilitating effects of substance and the high levels of substance abuse in our country.

6. Local level: Weskoppies hospital

There is a need for the hospital to re-organise services. The findings revealed a high demand for male beds. The demographic findings suggested that the involuntary users are more likely to be male, unmarried, black and unemployed therefore planning to include more male psychiatric beds as opposed to female beds to accommodate the demand for male psychiatric inpatients beds. The need for more male beds might also have an impact on the recruitment processes whereby more male nurses will be needed to assist with the management of male psychiatric patients. Male psychiatric patients often undermine the authority of female nurses and often refuse reasonable engagements like treatment when offered by females than would be the case if there is a male figure around.

In conclusion the findings revealed that the majority of psychiatric admissions are still involuntarily admitted in a psychiatric hospital which was also confirmed by another South African study by Niehaus et al, whereby the involuntary admissions were 77.2% as compared to 15% of assisted users. More studies need to be conducted to establish whether the Implementation of the Mental Health Care Act had any effect in encouraging less restrictive admission than it was before its implementation.

The Mental Health Care Act went a long way in trying to address the rights of Mental Health Care Users and also to make incarceration into the psychiatric institutions not as easy as before, in order to ensure that psychiatric patients are treated in the mainstream health system, and that only in exceptional cases would there be a need to transfer such patients to psychiatric hospitals. The findings of the study are encouraging; there is a lot of positive response and the attitude of health care workers in general hospitals is improving, with regards to mental health services. Psychiatric patients are now accommodated in the mainstream in line with the mental health reforms which is also a trend internationally and in African states. There is however an opportunity for further research to establish whether the implementation of the MHCA resulted in fewer or more involuntary admissions in specialised psychiatric hospitals.

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ADDENDUMS

1.0 ADDENDUM 1

1.1 DATA COLLECTION SHEET

FILE NUMBER:

REFERRING HOSPITAL

Tshwane District	1	
Kalafong	2	

DEMOGRAPHICS

1. Age in years (since last birthday)

18 – 25 yrs	1	
26 – 35 yrs	2	
36 – 50 yrs	3	
51 – 65 yrs	4	
> 65 yrs	5	

2. Gender

Male	1	
Female	2	

3. Race

Black	1	
White	2	
Coloured	3	
Indian	4	

4. Educational level

Primary	1	
Secondary	2	
Tertiary	3	

5. Employment

Employed	1	
Unemployed	2	
Grant recipient	3	

6. Marital Status

Single	1	
Married	2	
Divorced	3	
Widowed	4	

CLINICAL CHARACTERISTICS

7. Previous history of mental illness

Yes	1	
No	2	
Unknown	3	

8. Previous admission for mental illness

Yes	1	
No	2	
Unknown	3	

8. Psychiatric Diagnosis according to DSM IV

Schizophrenia	1	
Bipolar mood disorder	2	
Schizo-affective disorder	3	
Substance related psychotic disorders	4	
Psychotic disorders secondary to GMC	5	
Brief psychotic disorder	6	
Delusional disorder	7	
Major depressive disorders	8	
Other	9	
Specify		

9. Substance Abuse

Yes	1	
Specify		
No	2	
Unknown	3	

72-HOUR ASSESSMENT

10. Time started recorded

Yes	1	
No	2	

11. Time ended recorded

Yes	1	
No	2	

12. Total number of hours recorded

Yes	1	
No	2	

13. Monitored every 24 hours

Yes	1	
No	2	
Written report/notes available		
Yes	1	
No	2	

14. Provisional Psychiatric diagnosis made

Yes	1	
No	2	

15. Treatment initiated

Yes	1	
No	2	

16. Restrained during assessment period

Yes	1	
No	2	

17. Secluded during assessment period

Yes	1	
No	2	

COMPLETENESS OF MHCA FORMS

18. Completeness of Form 04

Yes	1	
No	2	

19. Completeness of Form 05

Yes	1	
No	2	

20. Completeness of Form 06

Yes	1	
No	2	

21. Completeness of Form 07

Yes	1	
No	2	

22. Completeness of Form 08

Yes	1	
No	2	

23. Completeness of Form 09

Yes	1	
No	2	

24. Completeness of Form 11

Yes	1	
No	2	

25. Completeness of ALL Forms

Yes	1	
No	2	



DEPARTMENT OF HEALTH
Republic of South Africa

MHCA 04

DEPARTMENT OF HEALTH

APPLICATION FOR ASSISTED- OR INVOLUNTARY CARE, TREATMENT AND
REHABILITATION

[Section 27(1) or 33(1) of the Act]

I hereby apply for assisted care or involuntary care for:

Surname of user

First name(s) of user

Date of birth or estimated age

Gender: Male ☐ Female ☐

Occupation Marital status: ☐ S ☐ M ☐ D ☐ W

Residential address:

.....
.....
.....
.....

Surname of applicant

First name(s) of applicant

Date of birth of applicant (must be over 18 years of age)

Residential address:

.....
.....
.....
.....

Relationship between applicant and mental health care user: (mark with a cross)

Spouse ☐ Next of kin ☐ Partner ☐ Associate ☐
Guardian ☐ Health care provider ☐ Parent ☐

(If user is under 18 this application must be made by the parent or guardian)

2

I last saw the user on at
(date) (time) (place)

(The applicant must have seen the user within seven days of making this application)

Where the applicant is the health care provider:

If the spouse, next of kin, partner, associate, parent or guardian is unwilling to make the application, state the reasons why:

.....
.....
.....

If the spouse, next of kin, partner, associate, parent or guardian is incapable or not available to make the application, state the steps that have been taken to locate them:

.....
.....
.....
.....

I, the undersigned, am of the opinion that the above-mentioned person is suffering from a mental illness / intellectual disability for the following reasons:

.....
.....
.....

and believe that assisted- or involuntary care, treatment and rehabilitation is needed because

.....
.....
.....
.....

3

In the case of an application for involuntary care:

I further give reasons which show that the person is so ill that he / she will not accept treatment as a voluntary mental health care user or cannot be admitted as an assisted mental health care user

.....
.....
.....
.....
.....

I also attach the following information in support of my application (if available)

- Medical certificates
- History of past mental illness / intellectual disability
- Other:

Print initials and surname.....

Signature:

(Applicant)

Date:

Place:

Note: Applicant must sign under oath



DEPARTMENT OF HEALTH
Republic of South Africa

MHCA 05

DEPARTMENT OF HEALTH

**EXAMINATION AND FINDINGS OF MENTAL HEALTH CARE PRACTITIONER
FOLLOWING AN APPLICATION FOR ASSISTED- OR INVOLUNTARY CARE,
TREATMENT AND REHABILITATION
[Sections 27(5) and 33(5) of the Act]**

Surname of user

First name(s) of user

Date of birth or estimated age

Gender: Male ☐ Female ☐Occupation Marital status: ☐ S ☐ M ☐ D ☐ W

Residential address:

.....

.....

.....

.....

Date of examination: Place of examination:

Category of designated mental health care practitioner:

Physical health status (filled in only by mental health care practitioner qualified to conduct physical examination):

(a) General physical health

.....

.....

.....

(a) Are there signs of injuries? Yes ☐ No ☐(b) Are there signs of communicable diseases? Yes ☐ No ☐

If the answer to (b) or (c) is Yes, give further particulars:

.....

.....

2

Information on user received from other person(s) or family (state names and contact details)

.....
.....
.....

Facts concerning the mental condition of the user which were observed on previous occasions (State dates and places):

.....
.....
.....

Mental health status of the user at the time of the present examination:

.....
.....
.....

Type of illness (provisional diagnosis):

.....
.....
.....

In my opinion the above-mentioned user

Has homicidal tendencies

Yes ☐

No ☐

Has suicidal tendencies

Yes ☐

No ☐

Is dangerous

Yes ☐

No ☐

Recommendation to head of health establishment – application for assisted care

The user is capable of making an informed decision on the need to receive care, treatment and rehabilitation services:

Yes ☐

No ☐

The user is suffering from a mental illness / severe or profound intellectual disability, and as a consequence of this requires care, treatment and rehabilitation for their own health and safety or the health and safety of others

Yes ☐

No ☐

If Yes, this should be on an inpatient or outpatient basis:

Inpatient ☐

Outpatient ☐

Give reasons:

.....
.....

Recommendation to head of health establishment – application for involuntary care

The user is capable of making an informed decision on the need to receive care, treatment and rehabilitation services: Yes ☐ No ☐

The user is willing to receive care, treatment and rehabilitation services

Yes ☐ No ☐

In my view, the user is likely to inflict serious harm on him / herself or others

Yes ☐ No ☐

In my view, care, treatment and rehabilitation is necessary for the user's financial interests and reputation

Yes ☐ No ☐

The user should receive involuntary care, treatment and rehabilitation

Yes ☐ No ☐

If No, would you recommend that the user receive assisted care?

Yes ☐ No ☐

I (name of mental health care practitioner)
hereby declare that I have personally assessed
..... (name of mental health care user) at
..... (name of health establishment) on (date).

.....
Signature

Date:

Place:

ADDENDUM 4

2

.....

 Facts concerning the mental condition of the user which were observed on previous occasions (State dates and places):

.....

 Mental health status of the user at the time of the present assessment:

.....

 Type of illness (provisional diagnosis):

In my opinion the above-mentioned user

Has homicidal tendencies

Yes ☐

No ☐

Has suicidal tendencies

Yes ☐

No ☐

Is dangerous

Yes ☐

No ☐

"If 'No' to all the above-mentioned questions, the following recommendation and reason(s) therefore are as follows:"

Recommendation to head of health establishment – application for assisted care

The user is capable of making an informed decision on the need to receive care, treatment and rehabilitation services: Yes ☐ No ☐

The user is suffering from a mental illness / severe or profound intellectual disability, and as a consequence of this requires care, treatment and rehabilitation for their own health and

3

safety or the health and safety of others Yes ☐ No ☐

If Yes, this should be on an inpatient or outpatient basis: Inpatient ☐ Outpatient ☐

Give reasons:

.....
.....

Recommendation to head of health establishment – application for involuntary care

The user is capable of making an informed decision on the need to receive care, treatment and rehabilitation services: Yes ☐ No ☐

The user is willing to receive care, treatment and rehabilitation services Yes ☐ No ☐

In my view, the user is likely to inflict serious harm on him / herself or others Yes ☐ No ☐

In my view, care, treatment and rehabilitation is necessary for the user's financial interests and reputation Yes ☐ No ☐

The user should receive involuntary care, treatment and rehabilitation Yes ☐ No ☐

If Yes, should this user receive involuntary outpatient care, treatment and rehabilitation Yes ☐ No ☐

If No, would you recommend that the user receive assisted care? Yes ☐ No ☐

Print initials and surname.....

Signature:

(mental health care practitioner / medical practitioner)

Date:

Place:



MHCA 07

DEPARTMENT OF HEALTH

**NOTICE BY HEAD OF HEALTH ESTABLISHMENT ON WHETHER TO PROVIDE
ASSISTED- OR INVOLUNTARY INPATIENT CARE, TREATMENT AND
REHABILITATION
[Sections 27(9), 28(1) and 33(8) of the Act]**

I hereby consent / do not consent

(name of head of health establishment)

to the inpatient assisted care, treatment and rehabilitation / involuntary care, treatment and
rehabilitation* of

(name of user)

The findings of two mental health care practitioners concur that the user –

- (a) should / should not receive assisted care, treatment and rehabilitation services as an
outpatient / inpatient; or
- (b) must / must not receive involuntary care, treatment and rehabilitation services

I am satisfied / not satisfied, that the restrictions and instructions on the mental health care
user's right to movement, privacy and dignity are proportionate to the care, treatment and
rehabilitative services contemplated.

The reasons for consenting / not consenting are as follows:

.....
.....
.....

Print initials and surname.....

Signature:

(head of health establishment)

Date:

Place:

* Delete what is not applicable

[Copy to applicant, mental health care user and Review Board]



DEPARTMENT OF HEALTH
Republic of South Africa

MHCA 08

DEPARTMENT OF HEALTH

NOTICE BY HEAD OF HEALTH ESTABLISHMENT TO REVIEW BOARD
REQUESTING APPROVAL FOR FURTHER INVOLUNTARY CARE,
TREATMENT AND REHABILITATION ON AN INPATIENT BASIS
[Section 34(3)(c)(ii) of the Act]

I, hereby request
(name of head of health establishment)

approval from the Review Board for further involuntary care, treatment and rehabilitation on
an inpatient basis of

(name of user)

The findings of the mental health care practitioner and medical practitioner are that the user
requires further involuntary care, treatment and rehabilitation.

I am satisfied / not satisfied that the restrictions and intrusions on the mental health care
user's right to movement, privacy and dignity are proportionate to the care, treatment and
rehabilitative services contemplated.

Attached hereto please find –

- (a) a copy of the application to obtain involuntary care, treatment and rehabilitation
[MHCA 04];
- (b) a copy of the notice given in terms of section 33(8) [MHCA 07]; and
- (c) a copy of the assessment findings [MHCA 06].

The basis of this request for further involuntary care, treatment and rehabilitation on an
inpatient basis is

Signature:

(head of health establishment)

Date:

Place:

"(Copy (excluding attachments) to applicant)"

ADDENDUM 7



DEPARTMENT OF HEALTH
Republic of South Africa

MHCA 11

DEPARTMENT OF HEALTH

TRANSFER OF INVOLUNTARY MENTAL HEALTH CARE USER ON INPATIENT BASIS TO PSYCHIATRIC HOSPITAL [Section 34(4), (5) or (6) of the Act]

..... an involuntary
(name and surname of user)
mental health care user on an inpatient basis who was admitted to
..... (name of health establishment)
which is not a psychiatric hospital on (date) must be
transferred to (name of psychiatric hospital).

Print initials and surname
(head of health establishment)

Signature:
(head of health establishment)

Date:

Place:

[Copy to Review Board]

ADDENDUM 8

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

Division of the Deputy Registrar (Research)

HUMAN RESEARCH ETHICS COMMITTEE (MEDICAL)

R14/49 Mabena

CLEARANCE CERTIFICATE

PROTOCOL NUMBER M071152

PROJECT

Evaluation of the Involuntary 72 Hour
Assessment of Mentally Ill patients at Kalafong
Regional and Tshwane District Hospitals

INVESTIGATORS

Ms MA Mabena

DEPARTMENT

School of Public Health

DATE CONSIDERED

07.11.30

DECISION OF THE COMMITTEE*

APPROVED UNCONDITIONALLY

Unless otherwise specified this ethical clearance is valid for 5 years and may be renewed upon application.

DATE 07.12.07

CHAIRPERSON 
(Professors PE Cleaton-Jones, A Dhai, M Vorster,
C Feldman, A Woodiwiss)

*Guidelines for written 'informed consent' attached where applicable

cc: Supervisor : Prof MYH Moosa

DECLARATION OF INVESTIGATOR(S)

To be completed in duplicate and **ONE COPY** returned to the Secretary at Room 10005, 10th Floor, Senate House, University.

I/We fully understand the conditions under which I am/we are authorized to carry out the abovementioned research and I/we guarantee to ensure compliance with these conditions. Should any departure to be contemplated from the research procedure as approved I/we undertake to resubmit the protocol to the Committee. **I agree to a completion of a yearly progress report.**

PLEASE QUOTE THE PROTOCOL NUMBER IN ALL ENQUIRIES

ADDENDUM 9



Mrs MA Mabena
P O Box 77221
Mamelodi
0122
South Africa

Faculty of Health Sciences
Medical School, 7 York Road, Parktown, 2193
Fax: (011) 717-2119
Tel: (011) 717-2075/6

Reference: Ms Tania Van Leeve
E-mail: tania.vanleeve@wits.ac.za
04 December 2007
Person No: 0618647W
PAG

Dear Mrs Mabena

Master of Public Health (Hospital Management): Approval of Title

We have pleasure in advising that your proposal entitled "*Evaluation of the involuntary 72 hour assessment of mentally ill patients at Kalafong regional and Tshwane district hospital*" has been approved. Please note that any amendments to this title have to be endorsed by the Faculty's higher degrees committee and formally approved.

Yours sincerely

A handwritten signature in cursive script, appearing to read 'S. Benn'.

Mrs Sandra Benn
Faculty Registrar
Faculty of Health Sciences

