

Chapter 1. Introduction

1.1 Background history

The idea that mentally ill people who commit violent crimes are entitled to psychiatric treatment rather than imprisonment originated over 200 years ago, when in 1800, in Great Britain, James Hadfield was found “not guilty by reason of insanity” following his attempt to kill King George III. As a result, there was a gradual introduction of specialist secure units or “special hospitals” for the “criminally insane”, individuals in need of “treatment under conditions of special security on account of their dangerous, violent, or criminal propensities”.¹ Legislative changes then occurred. Similarly in South African history, the assassination of H.F.Verwoerd, the then prime minister and one of the chief architects of apartheid, in 1966, by Demitrios Tsafendas, a paranoid schizophrenic, led to a judicial commission. This commission, chaired by Judge Rumpff, investigated “The Responsibility of Mentally Deranged Persons”. The findings and recommendations of the Rumpff Commission resulted in the Mental Health Act of 1973, and also later, sections 77, 78 and 79 of the Criminal Procedures Act of 1977.^{2,3,4} Forensic psychiatry was born.

1.2 Forensic Psychiatry and South African Law

Chapter 13 of the Criminal Procedures Act (CPA) No. 51 of 1977, is entitled “Accused: Capacity to understand proceedings: Mental illness and Criminal Responsibility”. It comprises three sections. Section 77 (“Capacity of accused to understand proceedings”) addresses the accused’s competence or fitness to stand

trial. This refers to the accused's ability to follow court proceedings and 'to make a proper defence'. The issue of criminal responsibility, particularly incapacity as a result of a mental illness or mental defect is covered in Section 78 ("Mental illness or defect and criminal responsibility"). Criminal law defines criminal responsibility as 'the capacity of an accused to appreciate the wrongfulness of a criminal act and to act in accordance with this knowledge at the time of the alleged offence'. The procedures for psychiatric assessment of the accused are dealt with by Section 79 ("Panel for purposes of enquiry and report under Sections 77 and 78").^{3,5,6}

Defendants may thus be referred for forensic psychiatric evaluation (in terms of Section 79 of the CPA), to determine their competence to stand trial (Section 77 of the CPA) and criminal responsibility (Section 78 of the CPA). Subsequent amendments to section 79 of the CPA also made allowances for referral 'for any other reason', such that a forensic evaluation may also be requested to assess any possible psychological or psychiatric factors which may appear to be relevant to the court. Referral can occur at any stage of a defendant's trial. The law presumes that all people possess criminal capacity and do not suffer from a mental illness or defect. However, when the possibility arises that an accused may suffer from a mental illness or defect, this becomes grounds for referral. The accused may then be referred to a psychiatric hospital for observation, where he/she undergoes evaluation by a multiprofessional team for a period of up to 30 days. Thereafter, the appointed psychiatrist/s produce a report, which is submitted to the court. This report usually includes the accused's name, age and the criminal charge, an outline of the accused's relevant background information, and a description of the accused's mental state both currently and retrospectively at the time of the alleged offence.

Results of any special investigations or psychometric tests that may have been performed are also included. (Generally, special investigations, such as blood tests, cerebrospinal fluid tests and radiological investigations, are not routinely done, only when clinically indicated.) The report also contains a psychiatric diagnosis, ideally conforming to the diagnoses contained in the DSM (Diagnostic and Statistical Manual) or ICD (International Classification of Diseases) manuals, a conclusion regarding fitness to stand trial and criminal responsibility, as well as recommendations for further management of the accused. Based on the report's findings and recommendations, the court then decides the outcome of the case.^{3,5,6,7} When an accused is found unfit to stand trial or not criminally responsible due to mental illness or defect (and thus essentially 'not guilty'), the court may, depending on various factors, decide to admit the accused to a psychiatric hospital, forensic psychiatric facility, or even an outpatient facility, for further treatment and rehabilitation. An important determining factor is whether or not the alleged offence involved serious violence. In the latter situation the accused is declared a state patient by the court.^{3,5}

Certification as a state patient occurs in terms of Section 42 of Chapter VI of the Mental Health Care Act (MHCA) No. 17 of 2002. Admission under Chapter V ("Voluntary, assisted and involuntary mental health care") of the MHCA, however, is only considered if the alleged offence did not involve serious violence (and where the available evidence suggests that the accused probably did commit the alleged offence).^{3,5,8}

The MHCA No.17 of 2002 was passed by parliament in 2002,^{8,9,10} and implemented

in December 2004.¹⁰ The MHCA of 2002 replaced the Mental Health Act (MHA) No.18 of 1973. According to the old MHA of 1973, state patients fell under Chapter 4 (“State patients and mentally ill prisoners”) Section 28 of this Act, whereas accused persons who had been charged with a minor offence were generally certified instead under Chapter 3 (“Reception order, cases of urgency, mentally ill persons who are dangerous, official curator ad litem, powers of judge of supreme court”) Section 19 of the old MHA of 1973.^{5,11}

1.3 Forensic Psychiatric Units

In South Africa forensic psychiatric units serve two main functions. Firstly, to provide a site where the courts may refer defendants for forensic psychiatric observation (as per the Criminal Procedure Act of 1977). Secondly, for the indefinite detention of forensic state patients, those who have been declared “not competent to stand trial” and/ or “not criminally responsible” due to a mental illness or defect, so that they may receive treatment and rehabilitation. (The terms “forensic state patients” and “state patients” will henceforth be used interchangeably).

Forensic psychiatric wards thus admit both observandi and state patients.

Observandi are the alleged offenders undergoing psychiatric observation (as per the CPA). State patients are then those alleged offenders who were found not fit to stand trial and/or not criminally responsible and whose charges generally involved serious violence (eg. murder, rape, assault with the intent to do grievous bodily harm and robbery with aggravating circumstances.) The purpose of referral of these “mentally ill offenders”, to a psychiatric institution is not for punishment, but for treatment and

rehabilitation. These state patients are not given any specified 'sentence'. Their management is guided by the usual therapeutic principles. Additionally, they also become involved in programmes aimed at 'rehabilitation and resocialization'. Throughout this process of rehabilitation, consideration is given to their potential risk to the community.⁵

Ultimately, however, many of these state patients may be discharged from the hospital back to their communities once they are stable and well. State patients may be discharged, conditionally or unconditionally, or they may be reclassified as involuntary mental health care users (Section 47 of the MHCA of 2002.) The application for discharge or reclassification of state patients requires reports to be compiled by two doctors and the head of the health establishment. The Judge in Chambers makes the final decision regarding discharge or reclassification. In the case of discharge of state patients, this is usually granted conditionally, meaning that various conditions are given and must be adhered to for a stipulated period (usually 2 years).⁵ If not, the conditional discharge may be revoked. Conditional discharge therefore is a transitional step toward the outright release of state patients, enabling the court to supervise these state patients and with the main goal being to minimize the potential danger to the community.¹² Reclassification usually occurs when the state patient is chronically ill and not likely to ever become a candidate for discharge.⁵ Reclassification thus allows the state patient to then be referred to a residential placement facility for ongoing long-term care in a structured and supervised environment.

There are a small number of forensic psychiatric institutions in South Africa, with only two in Gauteng Province. Sterkfontein Psychiatric Hospital is one of these two.

Sterkfontein Hospital receives about 250 to 300 observation cases a year, and admits on average about 50 new state patients annually. Currently, Sterkfontein Hospital has approximately 300 state patients in the forensic wards. The remaining state patients are out in the community, on leave of absence, or they have been discharged or reclassified, or they may have absconded.

Chapter 2. Literature review

2.1 International Literature

2.1.1. Contact with psychiatric services prior to the offence

Forensic psychiatric populations are important and of interest for a number of reasons.

Firstly, one may ask whether health care providers have failed this group of individuals, by not identifying them as being at risk for violence or criminal activity and adequately managing that risk. In a study by Meehan et al which looked at perpetrators of homicide who had schizophrenia, 72% had previous contact with psychiatric services and 56% had shown a change in the quality, intensity, or conviction of or emotional response to their delusional beliefs in the month before the offence.¹³ Douglas et al found that the majority of mentally ill offenders had received psychiatric treatment prior to the offence.⁴ Similarly, Wang et al found that 89% of mentally ill offenders had past psychiatric history.⁴ Quanbeck et al examined the relationship between criminal arrest and, amongst other things, the use of community mental health services among patients with bipolar I disorder. They found that patients who had been arrested were more likely to have a treatment history characterized by more frequent, briefer hospitalizations.¹⁴

Alternatively, one may question whether these mentally ill offenders had just been missed completely. Kravitz et al believe that mentally ill offenders typically only enter the mental health care system through the judicial system¹² and therefore that their first contact with mental health care providers occurs after they have offended.

2.1.2. Issues related to stigma

Another issue is that these are patients who have no doubt suffered the stigma of mental illness. Link et al found that “symptoms of mental illness remain strongly connected with public fears about potential violence with a desire for limited social interaction”.¹⁵ But now that these patients have already committed an offence, public fears and stigma can only be greater as the stereotype has now been confirmed. Thus the task of treatment, rehabilitation and eventual re-introduction back into the community may then be even more challenging.

2.1.3. Mental illness, violence and crime

Although there is widespread fear that mentally ill people pose a significant risk of interpersonal violence,¹⁵ and associations between mental disorders and deficiencies and violence and crime have been examined and documented,^{15,17,18} there are studies which show that the order of the association between violence and mental illness is small.¹⁹ Meehan et al found that of the 1594 people convicted of homicide in England and Wales during 1996-1999, only 5% had schizophrenia.¹³ Phillips et al found that only 0.2%-2.0% of all schizophrenic persons in the community were arrested for violent crimes each year, accounting for 1.1%-2.3% of all arrests for

violent crimes in Alaska during 1977-1981.²⁰ Swanson et al reviewed baseline data collected for the CATIE Project and looked at violent behaviour in persons with schizophrenia. They found that the 6 month prevalence of serious violence (assault resulting in injury or involving use of or threat with a lethal weapon or sexual assault) was only 3.6%.²¹

However, other studies have shown that the presence of a serious mental illness increases the risk of violent crimes, such as the study by Tiihonen et al in Finland. They found that for men diagnosed with a serious mental illness, as compared to those without a mental disorder, the chances of committing violent crimes were 4 times higher, and for women the risk was 27 times higher. In those with schizophrenia, Tiihonen et al found that the men were 7 times more likely to commit murder and the women 15 times more likely to commit murder.²²

2.1.4. Mentally ill offenders

Of those with mental illness who do commit a crime, some associations have been found. In terms of demographics, several international studies, including those by Douglas et al, Skipworth et al, Wang et al and Yap et al, have found that the majority of mentally ill offenders were male, single and unemployed.^{4,7} Douglas et al also found that less than half of the mentally ill offenders had completed high school.^{4,7}

Regarding the psychiatric diagnoses of mentally ill offenders, schizophrenia was found to be the most frequent diagnosis according to various studies, such as those by Douglas et al, Skipworth et al, Wang et al, Yap et al and Vielma et al.^{4,7,22} The

literature, however, differs with regards to the next most frequent psychiatric diagnoses. According to Douglas et al, schizophrenia was followed by mood disorders and then substance related disorders.⁴ According to Skipworth et al, 59% had schizophrenia, followed by other psychotic disorders in 17%, then mood disorders in 13%, personality disorders in 8% and organic disorders in 3%.⁴ Wang et al found that 71,8% of mentally ill offenders had schizophrenia, followed by mood disorders in 12,4% and then mental retardation in 7,6%.⁴ According to Yap et al 45,5% had schizophrenia, followed by 12,8% who were diagnosed with mental retardation, and then 9,1% who had a personality disorder.⁷ Walker and McCabe found that, of their sample of mentally ill offenders, 41% had schizophrenia, 35% had a diagnosis of mental retardation, 12% had a personality disorder and 8% had an affective disorder.²²

In terms of the offences committed by mentally ill offenders, Skipworth et al found that murder was the most common serious crime, followed by sexual violence, while property offences accounted for only 9,6% of the offences.⁴ Wang et al also found that murder and attempted murder were the most common offences (57,1%) in their sample, followed by assault (12,9%), robbery (8,2%) and sexual assault (7,1%).⁴

With regards to a previous criminal history among mentally ill offenders, Douglas et al found that most had prior contact with the law, having been previously charged with violent behaviour.⁴ However, Wang et al reported that the minority (17,1%) had a previous conviction, although most of these were for violent crimes.⁴

In terms of criminal responsibility, Wang et al reported that 64,1% of mentally ill offenders were found to be not responsible for the offence, due to their mental illness.⁴

Thus it has been shown that, as with members of the general population, some mentally ill patients may sometimes be charged for criminal acts. They may then subsequently be found “not guilty by reason of insanity” or “not criminally responsible due to mental illness or defect” and committed to a forensic psychiatric facility for treatment and rehabilitation.

According to Kravitz et al, “ultimately, more than 90% of all offenders acquitted as not guilty by reason of insanity will be released to the community from the hospital following the general trend of shifting the site of psychiatric care from traditional institutional settings to nontraditional settings in the community”.¹²

Regarding the duration of hospitalisation of mentally ill offenders, Roesch and Golding found that the average duration was almost 2 years. They also hypothesized that the length of hospitalisation may be related to the seriousness of the crime, such that mentally ill offenders charged with violent crimes would be hospitalised longer than those charged with less serious offences.⁷

2.1.5. Rehospitalisation and recidivism rates

Rehospitalisation and recidivism rates, according to international literature, have varied widely.

Kravitz and Kelly examined rehospitalisation and criminal recidivism in a group of 43 offenders with mental disorders who were adjudicated as “not guilty by reason of insanity” in Chicago in 1996 and who were mandated to receive treatment in a forensic psychiatric outpatient program as a condition of their release.¹² (Patients requiring inpatient care were excluded, as were patients with a primary diagnosis of anti-social personality disorder or drug abuse disorder, because of their high risk of recidivism.) They reported that the mean length of stay in the program was 68 months, with a range of 4,9 months to 18,4 years. 47% were rehospitalised at least once during the program, and 19% were rearrested or committed a new crime. They concluded that, even after treatment in a specialized forensic program, this sample of mentally ill offenders remained impaired symptomatically and functionally. Although avoidance of rehospitalisation would be considered a successful outcome, the authors concluded that rehospitalisation is still preferable to rearrest and may be an important intervention to prevent criminal recidivism in this population. They also mentioned that rehospitalisations and recidivism are both functions of the duration of follow-up and that increased rates of rearrest and rehospitalisation would be expected with longer observation periods.¹²

In another study, cited by Kravitz and Kelley,¹² Heilbrun and Griffin reported rearrest rates of 2-16% for offenders on conditional release, with rates as high as 42-56% on

long-term follow-up after conditional release was terminated. They reported both higher and more variable rehospitalisation rates, 11-78%, for offenders on conditional release, although most estimates ranged from 11-40%. This is in contrast to earlier studies, where persons were discharged unsupervised without monitoring or treatment, that showed rearrest rates of 24-61% and rehospitalisation rates of 18-44% for individuals found not guilty due to insanity who were released back into the community.¹²

Lamb et al found that during their 5-year follow-up 79 mentally ill offenders receiving court-mandated community outpatient treatment, 32% were rearrested and 72% of these arrests were for crimes of violence.²³

However, a more recent publication by Skipworth et al, in their study of “insanity acquittee outcomes”, found that only 6% had violently reoffended 2 years after their release back into the community.^{4,24}

In a study by Pasewark et al, men and women who had been deemed “not guilty by reason of insanity” were compared with a matched group of subjects who had been convicted of a crime. It was found that the acquitted subjects spent significantly less time in hospital than the matched subjects spent in prison. They also found that the number of acquitted subjects who were rearrested after release from hospital was about the same as that of the control subjects who had been released from prison.²⁵

2.1.6. The nature and timing of subsequent offences

Lovell et al looked at mentally ill offenders released from prison, the post-release services they received, new offences they committed and factors associated with recidivism. (They excluded persons with paraphilias and personality disorders other than borderline personality disorder.) They found that although 70% of subjects were charged with new crimes (including minor offences such as trespassing and public intoxication) or supervision violations, only 10% committed crimes against persons and 2% committed very serious crimes. According to the findings of their study, the rate of commission of new serious crimes was greatest during the first year or so after release and gradually decreased thereafter, beginning to level off between 2-3 years after release.²⁶ This is in contrast to the opinion of Kravitz and Kelly,¹² mentioned previously, that increased rates of rearrest would be expected with longer observation periods. According to Lovell et al, the majority (63%) of the new serious crimes committed were preceded by other, more minor, criminal justice encounters (“harbinger offenses”), indicating that there were usually some warning signs.²⁶

2.1.7. Factors influencing relapse and recidivism rates

The literature also mentions factors which may influence recidivism and rehospitalisation rates. These include comorbid antisocial personality disorder, previous history of arrests for violent crimes, and a history of a learning disability.²⁷ Non-adherence to treatment after discharge is also thought to be a major factor in patient relapse and recidivism.^{27,28}

Chaimowitz et al considered risk factors posed by mentally ill offenders. They divided these risk factors into modifiable (dynamic) and non-modifiable (static) factors.

Modifiable factors, according to Chaimowitz et al, included active symptoms of major mental illness, substance abuse, medication adherence, the individual's insight into their mental illness, anger management and involvement with criminal associates.

Factors such as criminal history, presence of certain personality disorders (especially antisocial personality disorder), a history of substance abuse, low intelligence and cognitive disorders represented the non-modifiable risk factors. Chaimowitz et al further stated that both insight and treatment adherence are independent contributors to the risk of violence.^{4,29} Yates et al also considered treatment adherence to be a very important and enduring factor associated with clinical stability and prevention of recidivism.⁴

Substance abuse has been linked with relapse, violence and rearrest.^{21,22,27} There have also been many studies of the effects of cannabis use on mental illness.

Although these studies have sometimes yielded conflicting results, it is worth noting some of the findings. As cited by Johns,³⁰ Negrete et al, Cleghorn et al and Baigent et al all found that cannabis aggravates the severity of positive symptoms; Swanson et al suggested a possible link between cannabis and violence; and Negrete et al and Linszman et al found that cannabis use can have adverse effects on the course of schizophrenia, which may cause patients to experience "significantly more and earlier psychotic relapses".³⁰ Positive psychotic symptoms have been found to increase the risk of violence.²¹

2.2 The South African Context

In comparison to international literature, there is a paucity of local published research in the field of forensic psychiatry.^{4,31,32} South African studies have looked at reasons for referral of forensic observation cases and the eventual outcome of these referrals,^{22,34} as well as specific subpopulations, for example epileptic offenders referred for observation,³² intellectually disabled offenders referred for observation,³³ and state patients who committed child homicide.³⁵ Although some literature has been published regarding the profile of state patients,^{4,7} very little is found regarding the long-term outcome of state patients, particularly regarding duration of hospitalisation, discharge and reclassification details (such how often and after how long), abscondment rates, and rehospitalisation and recidivism rates following the release of state patients back into the community.

According to South African literature, in terms of demographics, state patients were mostly all male, single and unemployed, with an average age in the 30's.^{4,7} Similarly with regards to observandi, they were found to be mainly male, unmarried, unemployed, with an average age in the late 20's or early 30's.^{22,32,33} Regarding the offences that the state patients had been charged with, the majority were offences committed against persons, most commonly of a sexual nature, such as rape.^{4,7} This was similar to the offences committed by the observandi.^{32,33} The most common psychiatric diagnosis among state patients, as well as among observandi who were found have a mental illness or defect, was schizophrenia, followed by mental retardation.^{4,7,22} In terms of criminal responsibility and fitness to stand trial, the vast majority (80% or more) of state patients were found both unfit to stand trial and not

criminally responsible.^{4,7} Regarding past psychiatric history, in a recent article on the profile of state patients, it was found that 58% had received treatment for mental illness prior to the offence and that 62% of these patients had a history of previous poor compliance to treatment. The authors were therefore of the opinion that some of these crimes could have been prevented by adequate treatment and supervision of compliance.⁴ However, in an earlier study of observandi, a significant number of those found to have a mental illness had no prior psychiatric history and were thus only diagnosed as being mentally ill for the first time after the offence.²² The prevalence of both current and previous substance abuse has been shown to be high among state patients in South Africa, with alcohol being the most commonly abused substance (74%), followed closely by cannabis (67%).^{4,7,22,32,33}

Aside from a paucity of studies, forensic psychiatry in South Africa faces several other challenges. These include a limited number of forensic psychiatric facilities and a shortage of qualified psychiatrists, particularly in the state sector, of whom very few are involved in forensic psychiatry.³¹ Furthermore, other sociopolitical and socioeconomic factors in the country, such as high levels of crime, poverty, inequality and unemployment,³⁶ as well as various shortcomings of the often criticised South African Police Service (SAPS),³⁷ present further obstacles, which may impact on the practice of forensic psychiatry in South Africa.

So research in this field in SA becomes very important. The results of such research may serve to highlight areas of concern, possibly dispel some of the fears and misconceptions, and allow those concerned to begin to develop strategies to further improve the treatment, rehabilitation and reintegration back into society of mentally ill offenders, as well as to reduce relapse and recidivism rates in this population. It is

hoped that this study will form the basis from which much more local research can be done to achieve the above.

Chapter 3. The Study

3.1 Study Aim

To describe the profile of state patients who were admitted to Sterkfontein Psychiatric Hospital during the years 2004 and 2005 and to examine the 3 year outcome of this population of state patients

3.2 Research Questions

3.2.1. What proportion of state patients were still detained at Sterkfontein Hospital after 3 years and what proportion had been released back into the community after 3 years?

3.2.2. What were the most common reasons for state patients being inpatients after 3 years?

3.2.3. Of the state patients who were out in the community after 3 years, what proportion were out on leave of absence, had been discharged, had been reclassified or had absconded?

3.4. What was the documented recidivism rate in this population of state patients after 3 years?

3.3 Study Objectives

3.3.1. To determine the baseline characteristics:

Age at admission, sex, race, marital status, employment status prior to becoming a state patient, highest level of education, past criminal history, past psychiatric history, past medical history, family psychiatric history, substance abuse history and any other relevant information that was noted on the forensic observation report.

3.3.2. To determine the nature of the offence and findings from the forensic observation that led to the patient becoming a state patient. This included psychiatric diagnosis, fitness to stand trial and criminal responsibility.

3.3.3. To determine the outcome after 3 years:

To determine what proportion of state patients were still detained at Sterkfontein Hospital and what proportion had been released back into the community after 3 years;

To determine what the reasons were for state patients still being admitted as inpatients after 3 years;

To determine, of the state patients who were out in the community after 3 years, what proportion were out on leave of absence, had been discharged, reclassified or had absconded;

To determine what the documented recidivism rate was in this population of state patients after 3 years.

3.4 Methods

3.4.1. Study design

This study took the form of a retrospective clinical file review. A descriptive analysis was undertaken of state patients admitted in 2004 and 2005.

3.4.2. Site of study

The study was conducted at the Forensic Unit of Sterkfontein Hospital, in Krugersdorp.

3.4.3. Study population

The study population included state patients who were referred to Sterkfontein Psychiatric Hospital for admission during the period of 1st January 2004 to 31st December 2005.

3.4.4. Inclusion and exclusion criteria

All patients who were referred for admission as state patients, (under Section 42 of the Mental Health Care Act (MHCA) No.17 of 2002, or under Section 28 of the old Mental Health Act No. 18 of 1973, prior to the implementation of the new MHCA of 2002), to Sterkfontein Psychiatric Hospital, during the two year period of 1st January 2004 – 31st December 2005 could be included in this study. Informed consent was however required to review the files of any patient who was still admitted at Sterkfontein Hospital at the end of the 3 year review period, or at the time of data collection. If consent was not obtained the patient was excluded from the study.

3.5 Data Collection

The Forensic Unit admission register was used to identify all the state patients admitted between 1st January 2004 and 31st December 2005. Data was sourced from the admission register, forensic observation report and clinical notes made during the observation period. These records provided the information regarding the state patients' baseline characteristics, including age, sex, race, marital status, employment status, highest level of education, past criminal history, past psychiatric history, past medical history, family psychiatric history, and substance abuse history, as well as the nature of the offence and the findings from the forensic observation, i.e. the psychiatric diagnosis, fitness to stand trial and criminal responsibility. Any other relevant documents, when available in the state patients' files, were also reviewed. These included court documents and police records, such as the SAPS 69 form, which may have accompanied the clinical records during the observation period. (The SAPS 69 is a South African Police Services clearance document, which reflects any previous convictions and the details and nature of the offence/s.) Data related to the state patients' outcome after 3 years was obtained from the clinical notes and records compiled during the 3 years following admission as a state patient. A data collection sheet was used to collect the data. (*Appendix 3*). Data was only collected from patients' files at the end of the 3 year follow-up period, in other words, only after they had been admitted as state patients for 3 years.

3.6 Pilot study

A pilot study was initially carried out, using the files of 10 state patients who met inclusion criteria for the study. The purpose of the pilot study was to test the method for data collection and to assess the feasibility of the study. This preliminary analysis did not reveal any problems, and thus the study proceeded.

3.7 Data Analysis

The data was analysed using descriptive statistical analysis, and represented in terms of means and frequencies. A statistician was consulted when analysing the data and the statistical package STRATA version 12 was used.

3.8 Ethics

Permission and approval for this study was granted by the Chief Executive Officer of Sterkfontein Hospital, as well as The Human Research Ethics Committee (HREC) and the University of the Witwatersrand's Faculty of Health Sciences Postgraduate Committee. (*Appendix 1*).

This was a descriptive retrospective study. The participants were not actively involved- no interviews were conducted and no procedures were performed on the study participants. However, any state patient that was still at Sterkfontein at the end of the 3 year review period, or at the time of data collection, was approached and informed consent was requested for the review of his/her clinical files. If the state

patient was unable to give informed consent, this was requested from the next of kin or guardian, or, if they were not traceable, from the head of the health establishment.

3.9 Confidentiality

State patients were each assigned a study participant number, which was recorded on the top of the data collection sheet. The state patients' names and hospital numbers were not recorded on the data collection sheets. Only the principle investigator had access to the list of names, which corresponded to the various study participant numbers. The only other documents that contained the state patients' names were the consent forms. Again, only the principle investigator had access to these. The HREC would, however, be entitled to review these consent forms if deemed necessary.

3.10 Funding

A research grant of R2000 was awarded in 2008 by the Faculty of Health Sciences Research Committee from the Medical Research Endowment Fund to assist with this research project.

Chapter 4. Results

117 state patients, who were admitted during the study period, 01/01/2004 to 31/12/2005, met the inclusion criteria for the study. However, 3 state patients were excluded from the study, as consent was not obtained. Therefore, 114 state patients were included in study.

4.1. Baseline data

4.1.1. Sex

87% (n=99) of the state patients were male, whereas only 13% (n=15) were female. (*Figure 1 and Table 1*).

4.1.2. Age

The mean age for the study population was 32 years, with the range being 14 to 62 years.

In terms of age and sex distribution, (*Figure 2*), the male state patients were generally younger than the female state patients.

The mean age for the male state patients was 31 years, with the range being 14 to 62 years, whereas among the female state patients the mean age was 40 years, with a range of 21 to 55 years.

The distribution of state patients in the various age categories was as follows:

- 10-19 years: 9 state patients (all males);
- 20-29 years: 38 state patients (35 males, 3 females);
- 30-39 years: 41 state patients (38 males, 3 females);

- 40-49 years: 21 state patients (14 males, 7 females);
- 50-59 years: 4 state patients (2 males, 2 females);
- 60-69 years: 1 state patient (male). *(Table 1).*

Figure 1: Sex

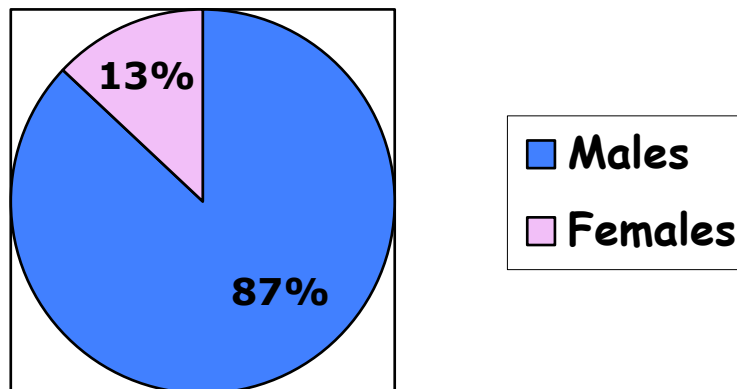
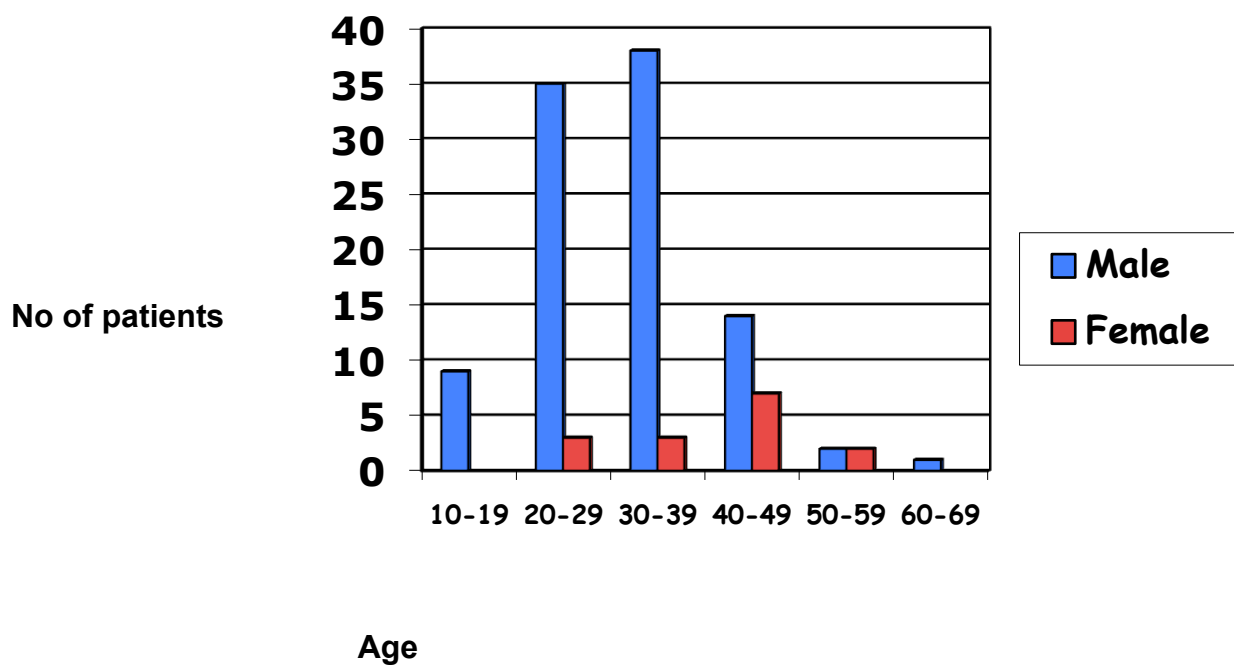


Figure 2: Age and Sex distribution



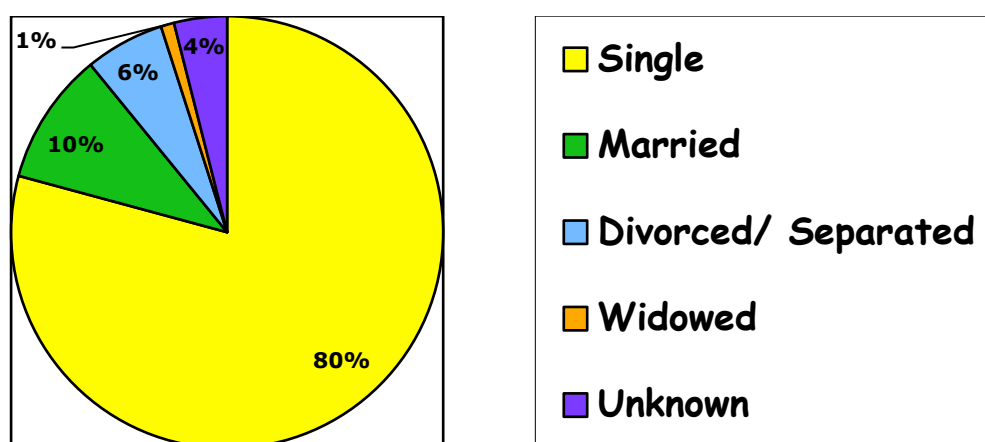
4.1.3. Race

With regards to race, 83% (n=95) of the state patients were black, 9% (n=10) were white, and 8% (n=9) were coloured.

4.1.4. Marital status

The majority of state patients, 80% (n=91) were single, whereas 10% (n=11) were married, 6% (n=7) were divorced or separated, 1% (n=1) widowed and in 4% (n=4) of state patients their marital status was unknown. (*Figure 3 and Table 1*).

Figure 3: Marital status



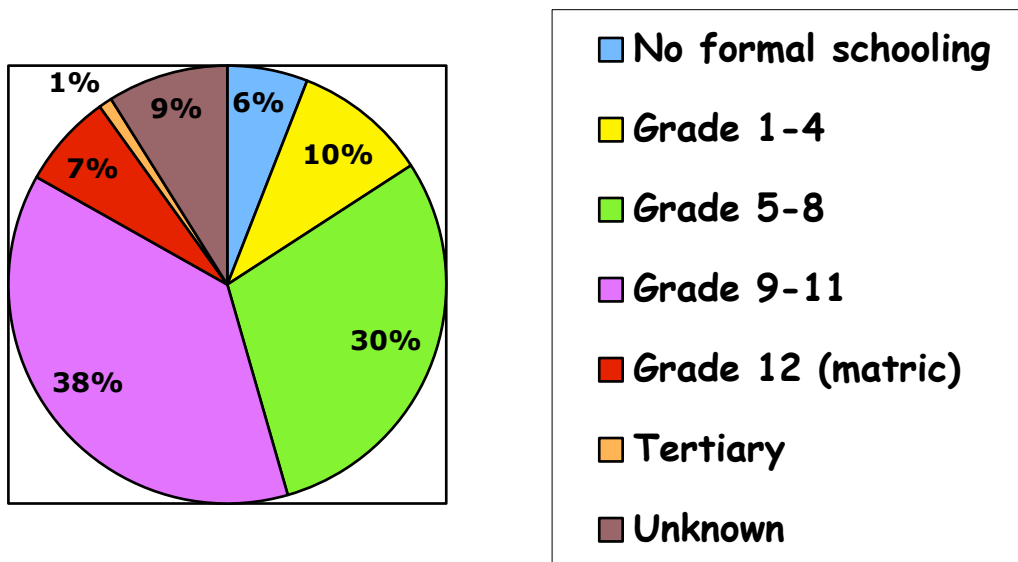
4.1.5. Highest level of education

The state patients' highest level of education (HLOE) was as follows:

- 6% (n=7) had received no formal schooling;
- 10% (n=11) HLOE was between grade 1-4;

- 30% (n=34) had a HLOE between grade 5-8;
- 38% (n=43) achieved a HLOE of between grade 9-11;
- 7% (n=8) completed grade 12;
- 1% (n=1) had a tertiary qualification;
- and in 9% (n=10) the education status was unknown. *(Figure 4 and Table 1).*

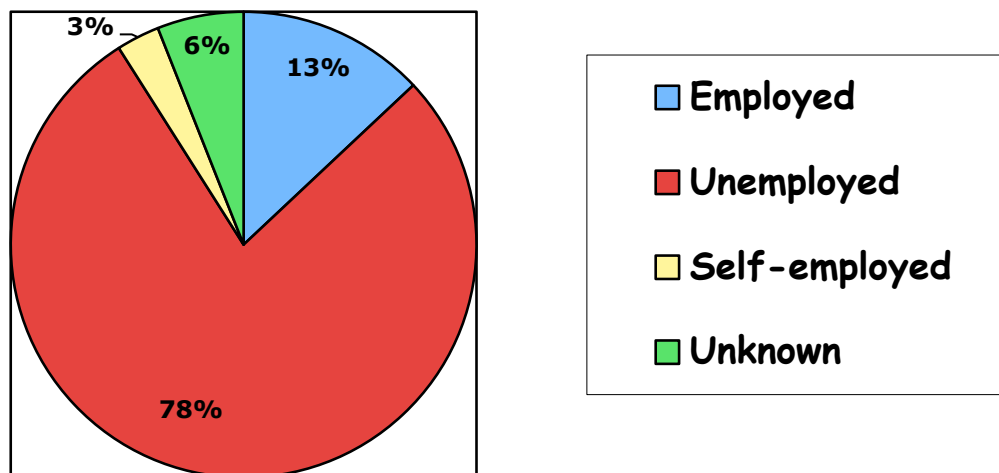
Figure 4: Highest level of education



4.1.6. Employment status

The majority, 78% (n=89), were unemployed prior to becoming state patients, whereas 13% (n=15) of state patients were employed, 3% (n=3) were self-employed and in 6% (n=7) their employment status prior to admission as a state patient was unknown. *(Figure 5 and Table 1).*

Figure 5: Employment status



4.1.7. Disability grant

22% (n=25) of the state patients were on a disability grant at the time of admission, with no information being available for the remaining 78% (n=89). (*Table 1*).

Table 1: Baseline demographic data

		Mean	n	%	SD	range
Sex	Male		99	87		
	Female		15	13		
Age (years)		32.3			9.2	14 - 62
	10 - 19 yrs		9			
	20 - 29 yrs		38			
	30 - 39 yrs		41			
	40 - 49 yrs		21			
	50 - 59 yrs		4			
	60 - 69 yrs		1			
Race	Black		95	83		
	White		10	9		
	Coloured		9	8		
Marital status	Single		91	80		
	Married		11	10		
	Divorced/ Separated		7	6		
	Widowed		1	1		
	Unknown		4	4		
Education	No formal schooling		7	6		
	Grade 1 – 4		11	10		
	Grade 5 – 8		34	30		
	Grade 9 – 11		43	38		
	Grade 12 (matric)		8	7		
	Tertiary		1	1		
	Unknown		10	9		
Employment status	Employed		15	13		
	Unemployed		89	78		
	Self-employed		3	3		
	Unknown		7	6		
On a disability grant *			25	22		

** Note: Information regarding disability grants was not always available in notes from the forensic observation reports.*

4.1.8. Past criminal history

With regards to past criminal history, 34% (n=39) of state patients admitted to a past criminal history, 54% (n=62) denied a past criminal history, and in 11% (n=13) of state patients a past criminal history could not be obtained (i.e. was unknown).

Past criminal history according to the police records (SAPS 69), when available, revealed that 14% (n=16) of state patients had a past criminal history and 25% (n=28) of state patients did not. However, of note was that police records regarding past criminal histories was not provided in 61% (n=70) of cases.

15% (n=17) of state patients reported or had documented reports of having previously come for forensic psychiatric observation, meaning they had previously been charged with an offence and that this had occurred prior to their admission as state patients in 2004/2005. It is noteworthy, regarding the outcome of these 17 prior forensic observations, that in 10 of these cases, the forensic observation findings had led to them being declared state patients at that time, prior to 2004/2005. Of these 10 state patients, 7 had reoffended and been made state patients for a second time, resulting in their admission to Sterkfontein Hospital during 2004/2005, whereas 3 of these individuals had been readmitted during the study period of 2004/2005 (1 after having absconded, and the other 2 after being transferred back from other forensic hospitals.) (*Table 2 and Table 3*).

Table 2: Past criminal history						
			n		%	
Past criminal history: according to the patient						
	Yes	- <i>Previously sent for forensic observation *</i>	17	39	15	34
		- <i>Unknown regarding previous observation</i>	22		19	
	No		62		54	
	Unknown		13		11	
* <i>This refers to forensic observation for previous offences reported in the past criminal history, in other words prior to 2004/2005.</i>						
Past criminal history: according to police records						
	Yes		16		14	
	No		28		25	
	Unknown		70		61	

Table 3: Previous forensic observations (prior to 2004/2005)

	<u>Outcome of previous forensic observation</u>	<u>Subsequent events</u>	<u>Subsequently reoffended?</u>	<u>2004/2005 Sterkfontein admission</u>
<u>1.</u>	State patient Charge: Murder, 1999	Absconded, 2001	Reoffended Charge: Murder	Readmitted as state patient again
<u>2.</u>	State patient Charge: Kidnapping of a child, 2002	Absconded, 2003	Reoffended Charge: Rape of a minor	Readmission as a state patient
<u>3.</u>	State patient Charge: Assault GBH, 1995	Unconditionally discharged, 2000	Reoffended Charge: Assault GBH	Readmission as a state patient
<u>4.</u>	State patient Charge: Murder, 1991	Reclassified and discharged, 2001	Reoffended Charge: Murder	Readmission as a state patient
<u>5.</u>	State patient (Weskoppies) Charge: Murder, 1999	Absconded	Reoffended Charge: Rape, Assault GBH (7 th offence!)	Readmission as a state patient
<u>6.</u>	State patient Charge: Attempted Murder, 2003	Granted LOA	Reoffended (while on LOA) Charge: Robbery with aggravating circumstances	Readmission as a state patient
<u>7.</u>	State patient Charge: Murder, 1996	Absconded	Reoffended Charge: Theft Readmitted to SFH, then transferred to Fort England, 2002	Readmission as a state patient

Table 3 continued...

	<u>Outcome of previous forensic observation</u>	<u>Subsequent events</u>	<u>Subsequently reoffended?</u>	<u>2004/2005 SFH admission</u>
<u>8.</u>	State patient Charge: Rape, 1995	Absconded		Readmission
<u>9.</u>	State patient Charge: Theft, Housebreaking, Damage to property, 1999	Transferred to Weskoppies & Fort England		Readmission
<u>10.</u>	State patient Charge: Murder, 1996	Transferred to Fort England, 2003		Readmission
<u>11.</u>	Involuntary mental health care user (MHCU)		Reoffended	First admission as state patient
<u>12.</u>	Involuntary MHCU		Reoffended	First admission as a state patient
<u>13.</u>	Involuntary MHCU		Reoffended	First admission as a state patient
<u>14.</u>	Fit & Responsible		Reoffended	First admission as a state patient
<u>15.</u>	Fit & Responsible		Reoffended	First admission as a state patient
<u>16.</u>	Unclear what the outcome of the previous forensic observation was		Reoffended	Admission as a state patient
<u>17.</u>	"Not fit" But police questioned the outcome of this forensic observation	Readmitted for again forensic observation (for the same charge)		First admission as a state patient

4.1.9. Past psychiatric history

More than half of the state patients, 59% (n=67) had a past psychiatric history. In 13% (n=15) of state patients there was a possibility of a past psychiatric history or the details were not clear in the records, in 1% (n=1) it was unknown and in 27% (n=31) of state patients there was no past psychiatric history. (*Table 4*).

4.1.10. Past medical history

In terms of past medical history, this was found in 24% (n=27) of state patients:

- Epilepsy 14%;
- Tuberculosis 3%;
- HIV 3%;
- Hypertension 2%;
- Diabetes 1%;
- Asthma/chronic obstructive airways disease 1%;
- and various other illnesses and conditions in 7%.

35% (n=40) of state patients had previously had a head injury with loss of consciousness, of which 43% (n=17) had required admission for this. 35% (n=40) of state patients had no previous history of a head injury with loss of consciousness and in 30% (n=34) this history was unknown. (*Table 4*).

Table 4: Past psychiatric and medical history						
			n		%	
Past psychiatric history						
	Yes		67		59	
	No		31		27	
	Possibly/ details unclear		15		13	
	Unknown		1		1	
Past medical history						
	Yes	- Epilepsy	16	27	14	24
		- TB	3		3	
		- HIV	3		3	
		- Diabetes	1		1	
		- Asthma / COPD	1		1	
		- Hypertension	2		2	
		- Other	8		7	
	No		76		67	
	Unknown		11		9	
Previous head injury with loss of consciousness						
	Yes	- Required admission	17	40	35	
		- Did not require admission	7			
		- Unknown	16			
	No		40		35	
	Unknown		34		30	

4.1.11. Family psychiatric history

A family psychiatric history was found in 17% (n=19) of state patients:

- 9% had a history of mental illness in the family;
- 5% had a history of substance abuse in the family;
- and 3% had a family history of epilepsy.

There was no documented family history of suicide.

53% (n=61) of state patients had no family psychiatric history and in 31% (n=35) the family psychiatric history was unknown. (*Table 5*).

4.1.12. Substance abuse history

In 71% (n=81) of the state patients there was a history of substance abuse and 37% (n=42) of state patients gave a history of polysubstance abuse (i.e. abuse of 2 or more substances). Alcohol was the most frequently abused substance, being reportedly abused by 57% (n=65) of state patients. This was followed closely by cannabis in 47% (n=54) of state patients. 23% (n=26) of state patients denied a history of substance abuse, and in 6% (n=7) this history was unknown. (*Table 5*).

Table 5: Family history and substance abuse history						
			n		%	
Family psychiatric history						
	Yes	- Mental illness	10	18	9	16
		- Substance abuse	5		4	
		- Epilepsy	3		3	
		- Suicide	0		0	
	No		61		53	
	Unknown		35		31	
Substance abuse history						
	Yes	- Alcohol	65	81	57	71
		- Cannabis	54		47	
		- Other	12		11	
		- Polysubstance abuse (2 or more substances)	42		37	
	No		26		23	
	Unknown		7		6	

4.2. Details of the offence

Regarding the offences that led to these mentally ill offenders being admitted as state patients, the majority, 75% (n=85), were charged with a single offence. However, in some cases, state patients were charged with more than one offence: two charges in 18% (n=21) of state patients and three charges in 7% (n=8).

There were a total of 151 offences committed by the 114 state patients.

The offences were categorised as those committed against persons, those against property and other offences:

- The most common category was found to be offences committed against persons, which accounted for 68% (n=103).
- Of the offences committed against persons, violent offences, which were not of a sexual nature, were most frequent, comprising 38% (n=58), followed by offences of a sexual nature in 26% (n=40).
- Offences committed against property accounted for 25% (n=38) of cases.

In terms of the individual offences:

- Assault with the intention to do grievous bodily harm (assault GBH) was the most common offence, 19% (n=29),
- followed by rape, 18% (n=27),
- and then murder, 13% (n=20).

Rape, attempted rape and indecent assault constituted the offences against persons which were of a sexual nature. Regarding these offences: rape charges (n=27), the victim was a minor in the majority of the cases (n=19), indecent assault charges (n=10), the victim was a minor in all cases.

Details of the other offences can be found in the table below. (*Table 6*).

Table 6: Details of the offence

Offences (n=151)	n	%
Offences committed against persons :	103	68
- Violent, non-sexual :	58	38
Assault GBH	29	19
Murder	20	13
Assault	6	4
Attempted murder	3	2
- Sexual :	40	26
Rape	27	18
Indecent assault	10	7
Attempted rape	3	2
- Other offences committed against persons :	5	3
Intimidation	2	1
Kidnapping	2	1
Domestic violence	1	1
Offences committed against property :	38	25
Malicious damage to property	9	6
Housebreaking	4	3
Arson	4	3
Theft	7	5
Robbery with aggravating circumstances	5	3
Armed robbery	4	3
Robbery	4	3
Attempted theft	1	1
Other offences :	10	7
Possession of unlicensed firearm	6	4
(Attempted) Escape from custody	2	1
Illegal discharge of a firearm	1	1
Contravention of a protection order	1	1
<i>* Note : The offences are expressed as a percentage of the total number of offences (n=151) which were accumulated among the total population of 114 state patients.</i>		

4.3. The Psychiatric Diagnosis

With regards to the psychiatric diagnoses made during admission for forensic observation, psychotic disorders represented the most common diagnostic category in 45% (n=51) of the study population. The most common diagnosis was found to be schizophrenia in 44% (n=50) of state patients, with 1% (n=1) having a diagnosis of schizophreniform disorder. Mood disorders were found much less commonly, with bipolar disorder being the diagnosis in 4% (n=4) of the state patients, all of whom had presented with a manic episode at the time of the offence, and major depressive disorder (MDD) with psychotic features (and cognitive impairment) in 1% (n=1). Other diagnoses which were found, according to the state patients' forensic observation reports, included:

- “Psychosis” in 20% (n=23) of the state patients (of which 11 state patients were psychosis not-otherwise-specified (NOS), 2 disorganised, 2 paranoid, 1 post-partum, 1 due to HIV/AIDS, 1 due to Epilepsy, 1 due to head injury, 1 “organic”, 1 “undifferentiated”, and 2 unspecified).
- Mental retardation in 16% (n=18) of state patients;
- Organic brain syndrome in 5% (n=6), of which 2 state patients presented with psychotic features;
- Dementia in 4% (n=5), of which 2 of the cases occurred with epilepsy and 2 with psychotic features; Epilepsy in 4% (n=5) of the state patients, of which 2 cases were also diagnosed with dementia, 1 with psychosis, 1 with organic brain syndrome and psychotic features, and 1 as a diagnosis on it's own, in the context of an acute confusional state following a seizure;
- “Maniform psychosis” which was reported as the diagnosis on the forensic observation report in 4% (n=5) of state patients. *(Table 7).*

Table 7: Psychiatric diagnosis

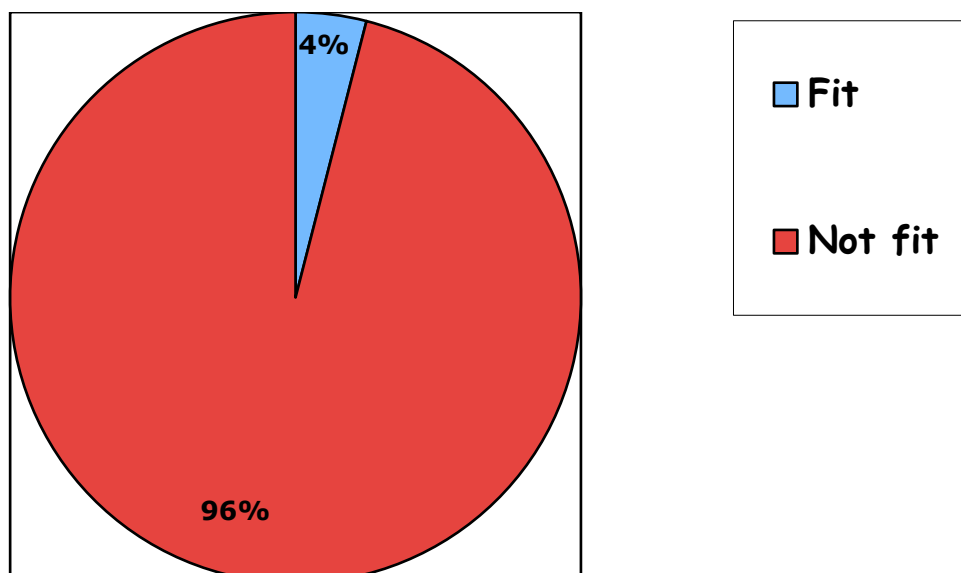
		n	%
Psychotic disorders	- Schizophrenia	50	44
	- Schizophreniform disorder	1	1
Mood disorders	- Bipolar mania	4	4
	- MDD with psychotic features (and cognitive impairment)	1	1
Other	- "Psychosis"	23	20
	- Mental retardation	18	16
	- Organic brain syndrome	6	5
	- Dementia	5	4
	- Epilepsy	5	4
	- "Maniform psychosis"	5	4
<i>* Note: Whereas the total number of state patients was 114, the total number of individual diagnoses shown in this table adds up to 118. This is because some state patients had two diagnoses (2 state patients were diagnosed with both epilepsy and dementia; 1 with epilepsy and "psychosis"; 1 with epilepsy and organic brain syndrome).</i>			

4.4. Fitness to stand trial and criminal responsibility

4.4.1. Fitness to stand trial

The majority of state patients, 96% (n=109) were found not fit to stand trial. The remaining 4% (n=5) of the state patients were found fit to stand trial, all of whom were also found to not be criminally responsible: 3 of these state patients were found unable to appreciate the wrongfulness of their actions and 2 were found able to appreciate the wrongfulness of their actions but unable to act in accordance with such an appreciation. (Figure 6).

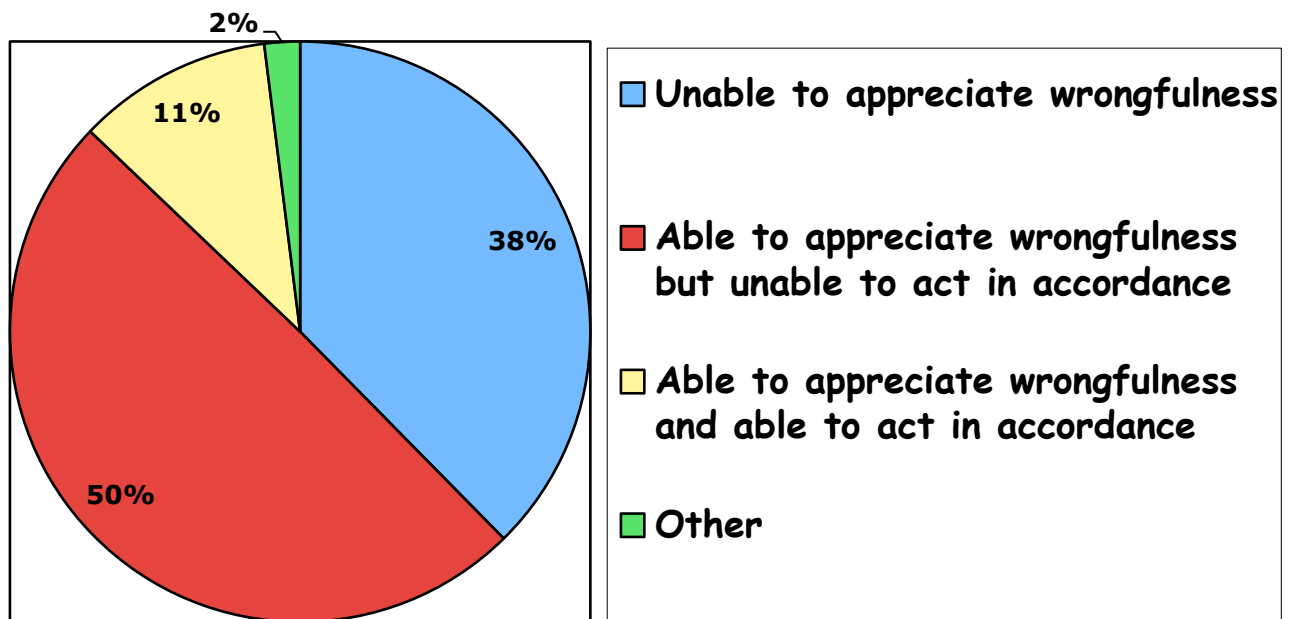
Figure 6: Fitness to stand trial



4.4.2. Criminal responsibility

In terms of criminal responsibility, 88% (n=100) of the state patients were found not criminally responsible, with 38% (n=43) unable to appreciate the wrongfulness of his/her actions and 50% (n=57) able to appreciate the wrongfulness but unable to act in accordance with such an appreciation. 11% (n=12) were found able to appreciate wrongfulness *and* able to act in accordance, i.e. criminally responsible, however, all these state patients were found unfit to stand trial during their forensic observation, and therefore admitted as state patients. Of the remaining 2% (n=2), 1 state patient was found to have insufficient evidence to comment on criminal responsibility and 1 other state patient had only a comment stating “not responsible from a psychiatric point of view” in the report, but no mention of responsibility in terms of the ability to appreciate wrongfulness and to act in accordance. (Figure 7)

Figure 7: Criminal responsibility



4.5. The 3 year follow-up data

4.5.1. State patients in Sterkfontein vs. in the community

After 3 years, 26% (n=30) of state patients were still admitted at Sterkfontein Hospital.

The majority of the state patients, 69% (n=79), were in the community:

- 72% (n=57) of these state patients were out on leave of absence (LOA);
- 25% (n=20) of these state patients had absconded;
- 3% (n=2) had been reclassified;
- and 0% had been conditionally or unconditionally discharged at the end of the 3 year follow-up period.

Of the remaining patients, 4% (n=4) had died within the 3 year period and 1% (n=1) had been transferred to another forensic hospital. (*Figure 8 & figure 9*).

Figure 8: 3 year outcome (i)

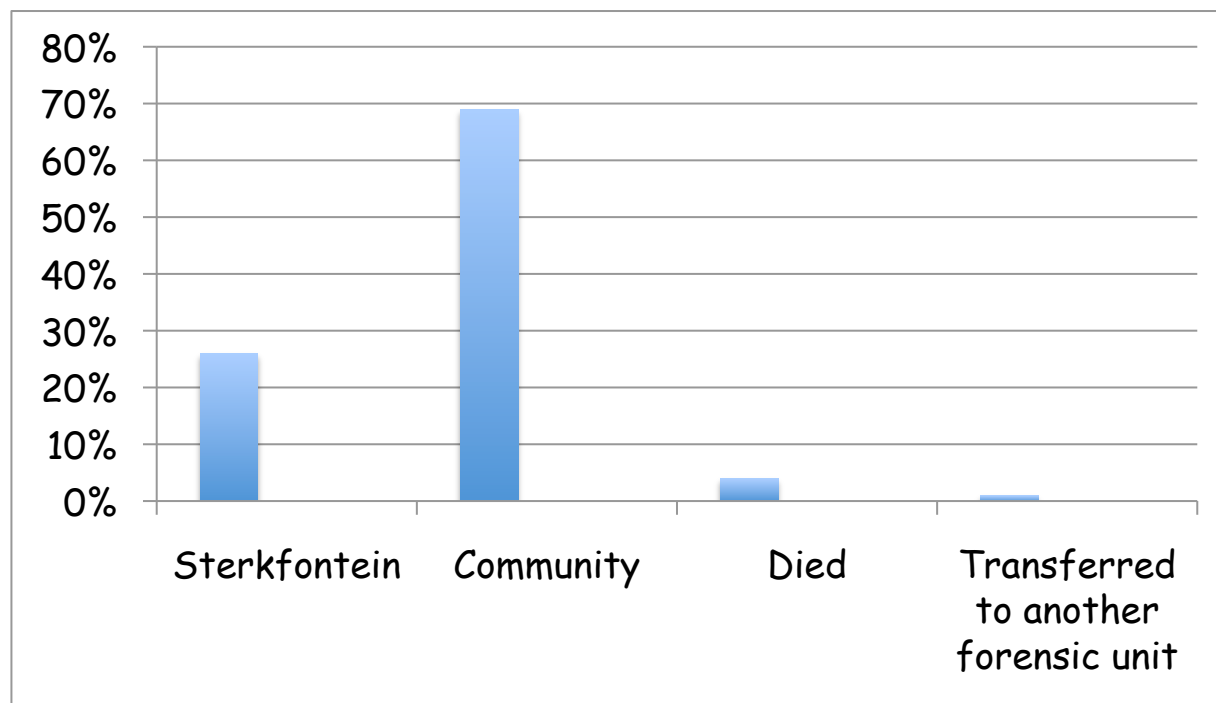
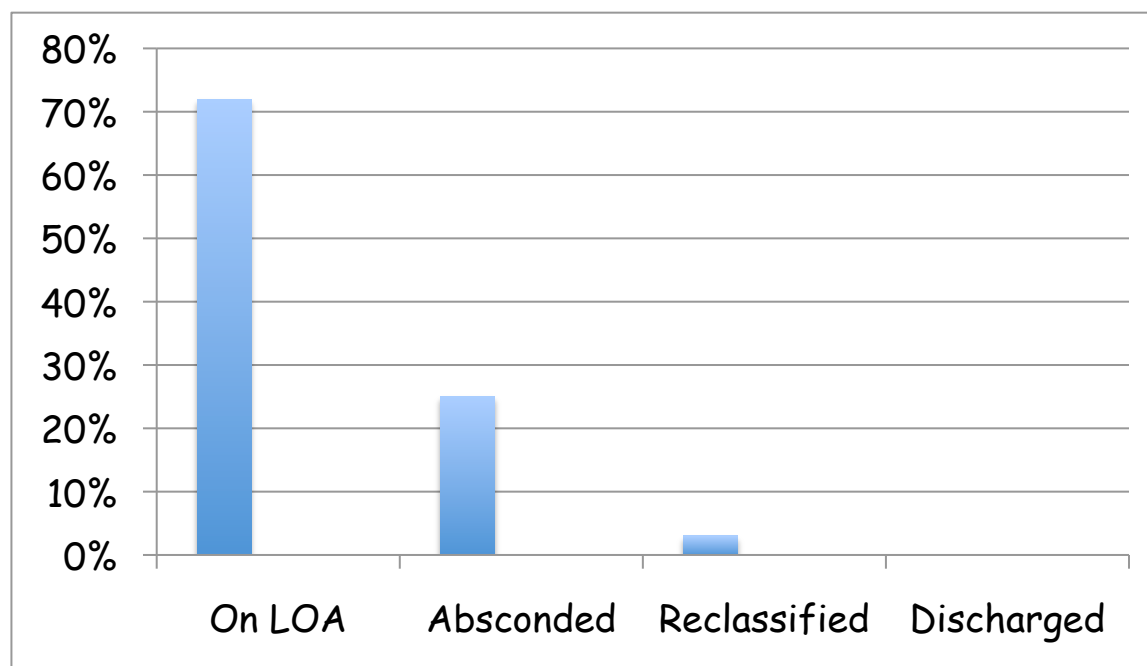


Figure 9: 3 year outcome (ii)



4.5.2. Reasons for still being admitted at Sterkfontein Hospital

Thirty state patients were still admitted at Sterkfontein Hospital after 3 years.

The three most frequent reasons for still being in the hospital were as follows:

- remains mentally unstable in 27% (n=8) of cases;
- stable but no/ poor family contact in 23% (n=7) of state patients;
- and still considered a high risk for reoffending in 20% (n=6) of cases.

Various other reasons were also found for patients still being admitted:

- poor family contact/ poor insight/ previous unsuccessful LOA's (13%);
- stable and awaiting family to collect patient for LOA (7%);
- awaiting transfer to another forensic hospital (7%);
- recent relapse while out on LOA (7%);
- remains sexually inappropriate (7%);
- stable and awaiting reclassification (3%);
- stable, reclassified and awaiting placement (3%);
- recently tried to abscond (3%);
- unsuccessful previous placement (3%);
- reoffended and readmitted for forensic observation (3%);
- reclassified, awaiting placement, but got medically ill (3%). *(Table 8).*

Table 8: Reasons for still being admitted at Sterkfontein Hospital		
	n	%
Remains mentally unstable	8	27
Stable but no / poor family contact	7	23
Still considered a high risk for reoffending	6	20
Poor family contact /poor insight /previous unsuccessful LOA's	4	13
Stable and awaiting family to collect patient for LOA	2	7
Awaiting transfer to another forensic hospital	2	7
Recent relapse while out on LOA	2	7
Remains sexually inappropriate	2	7
Stable and awaiting reclassification	1	3
Stable, reclassified and awaiting placement	1	3
Recently tried to abscond	1	3
Unsuccessful previous placement	1	3
Reoffended and readmitted for forensic observation	1	3
Reclassified, awaiting placement, but became medically ill	1	3
<i>* Note: The reasons for still being admitted are expressed as a percentage of number of state patients still admitted after 3 years (n=30). It was found that there was sometimes more than one reason for a state patient still being admitted and therefore the total percentage in this table adds up to more than 100%.</i>		

4.5.3. LOA's and family contact during the 3 year period

Of the 57 state patients who were out on LOA at the end of the 3 year period:

- the majority, 82% (n=47), had been granted a six month LOA;
- 11% (n=6) were out on a LOA of two to three months;
- 4% (n=2) one month LOA;
- 2% (n=1) two week LOA;
- and 2% (n=1) an LOA of only a few days.

Furthermore, of the 47 state patients who were out on a six month LOA at the end of the 3 year period:

- 13% (n=6) were on their 1st six month LOA;
- 7% (n=3) on the 2nd consecutive six month LOA;

- 19% (n=9) the 3rd consecutive six month LOA;
- 13% (n=6) the 4th;
- 45% (n=21) the 5th;
- and 4% (n=2) on the 6th consecutive six month LOA.

Of those 30 state patients who were still admitted after 3 years:

- 73% (n=22) had previously been out on LOA at some stage during that period;
- However, 27% (n=8) had never been out on LOA.
- 93% (n=28) of state patients had had some family contact during the 3 years;
- Whereas, only 7% (n=2) had no documented family contact during that time.

4.5.4. Reclassification

Of the 4 state patients who had been reclassified by the end of the 3 year period, reclassification had been applied for after a mean period of 21 months (with a range of 17 - 25 months), and had been granted after a mean period of 26,5 months (range 18 – 36 months).

4.5.5. State patients who absconded

With regards to the 20 state patients who were found to have absconded by the end of the 3 year follow-up period:

- 83% (n=16) of these state patients had absconded while on LOA;
- and the remaining 17% (n=4) had absconded from Sterkfontein Hospital itself (1 patient had absconded from the ward, 2 patients absconded from the hospital grounds while out on parole, and 1 patient absconded from Sterkfontein but the notes were not clear as to where he absconded from).

Of the 16 state patients who absconded while on LOA, the majority had been granted longer LOA's, so it was often not their first LOA:

- 56% (n=9) absconded while on 6 month LOA's;
- 19% (n=3) of the state patients absconded after being granted 3 month LOA's;
- 13% (n=2) after being granted 1 month LOA's;
- 6% (n=1) after a 2 week LOA period;
- and 6% (n=1) after being granted a 3 day LOA.

It was also found that, during the 3 year follow-up period, 17% (n=19) of the state patients, according to the records, had absconded, but had then subsequently been returned to Sterkfontein Hospital.

4.5.6. Outcome of state patients found unfit but responsible

Although this was not one of the research objectives, the 3 year outcome of the state patients who were found not fit to stand trial but criminally responsible (i.e. able to appreciate the wrongfulness of their actions and able to act in accordance) was reviewed. It was found that of these 12 state patients:

- 33% (n=4) had absconded (1 state patient had absconded from Sterkfontein Hospital, and 3 state patients had not returned from LOA);
- 33% (n=4) were still on LOA at the end of the 3 year follow-up period;
- 25% (n=3) were still admitted at Sterkfontein Hospital;
- and 8% (n=1) had died.

(Table 9.)

Table 9:
The 3 year outcome of state patients found not fit but responsible

	Charge	Diagnosis	Outcome at 3 year follow-up
1.	Murder	MDD with psychotic features & cognitive impairment	Absconded from Sterkfontein Hospital (* This was the 2 nd time this patient had been made a state patient; previously also charged with murder, absconded and then reoffended.)
2.	Assault GBH	Psychosis NOS (Schizophrenia)	On 6 month LOA (7 th LOA)
3.	Rape of a minor	Psychosis NOS (Schizophrenia)	On 1 month LOA (5 th LOA)
4.	Armed Robbery	Schizophrenia	Deceased (Died while on LOA)
5.	Murder	Schizophrenia	Admitted in Sterkfontein (Reason: Stable, but recently tried to abscond)
6.	Robbery with aggravating circumstances, possession of an illegal firearm, escape from legal custody	Disorganised psychosis (Schizophrenia)	Absconded while on 3 month LOA (2 nd LOA, about 8 months after admission as a state patient)
7.	Indecent assault of a minor, kidnapping	Paranoid psychosis (Schizophrenia)	On 6 month LOA (7 th LOA)
8.	Robbery with aggravating circumstances	Psychosis NOS	Admitted in SFH (Reason: Still mentally unstable)
9.	Rape of a minor	Schizophrenia	Absconded while on 1 month LOA (2 nd LOA, about 5 months after admission as a state patient)
10.	Murder	Psychosis NOS (Schizophrenia)	Absconded while on 3 month LOA (4 th LOA, about 20 months after admission as a state patient)
11.	Murder, attempted escape from custody	Psychosis due to head injury	On 6 month LOA (7 th LOA)
12.	Rape of a minor	Schizophrenia	Admitted in SFH (Reason: Still mentally unstable)

4.5.7. Reoffending state patients

The 3 year outcome of the 7 reoffending state patients (i.e. those patients who had been made state patients prior to 2004/2005 and had then reoffended and been readmitted as state patients again during the study period) was also noted.

Of these 7 state patients:

- 57% (n=4) were still admitted in Sterkfontein Hospital at the end of the 3 year period;
- while 29% (n=2) had absconded;
- and 14% (n=1) was on LOA.

(Table 10.)

Table 10: The 3 year follow-up data of reoffending state patients

	Original Charge	Subsequent events	2004/2005 Charge	Diagnosis	3 year outcome
1.	Murder (1999)	Absconded (2001)	Murder	MDD with psychotic features & cognitive impairment	Absconded (From SFH hospital grounds)
2.	Kidnapping of a child (2002)	Absconded (2003)	Rape of a minor	Psychotic disorder (Schizophrenia)	Admitted in SFH (Reason: Remains mentally unstable and sexually inappropriate, still considered high risk for reoffending)
3.	Assault GBH (1995)	Unconditionally discharged (2000)	Assault GBH	Psychotic disorder (Schizophrenia)	On 6 month LOA
4.	Murder (1991)	Reclassified and discharged (2001)	Murder	Psychotic disorder (Schizophrenia)	Admitted in SFH (Reason: Still considered high risk for reoffending)
5.	Murder (1999, Weskoppies)	Absconded	Rape, Assault GBH) 7 th offence!	Dementia with psychotic features	Admitted in SFH (Reason: Still considered high risk for reoffending)
6.	Attempted Murder (2003)	Reoffended on LOA	Robbery with aggravating circumstances	Psychotic disorder	Admitted in SFH (Reason: Remains mentally unstable)
7.	Murder (1996)	Absconded. Reoffended. Readmitted. T/F Fort England & SFH	Theft, Murder	Psychotic disorder (Schizophreniform disorder)	Absconded (From SFH hospital grounds)

4.5.8. Recidivism rate

With regards to the recidivism rate after 3 years:

- There was no record of recidivism in 90% (n=103) of the state patients.
- In 5% (n=6) of state patients the notes suggested the possibility of involvement in criminal activity but had no confirmatory notes or documentation.
- However, 4% (n=5) of state patients were rearrested and charged with a new offence during the 3 year period. *(Table 11).*

It may be noteworthy that none of these 5 state patients who were rearrested during the 3 year follow-up period were from the group of 7 reoffending state patients. *(Refer to 4.5.7.)*

Table 11: Details of rearrests at the 3 year follow-up						
	Offence	Where	Outcome	Diagnosis	Fitness	Responsibility
1.	Rape of a minor	In community (did not return from LOA)	Referred for observation	Schizophrenia	Fit to stand trial	Able to appreciate wrongfulness and act in accordance
2.	Rape of an adult	In community while on LOA	Referred for observation	Schizophrenia	Unfit to stand trial	Able to appreciate wrongfulness and act in accordance
3.	Robbery	In community while on LOA	Referred for observation	Mental retardation, cannabis abuse	Fit to stand trial	Able to appreciate wrongfulness but unable to act in accordance
4.	Theft of a laptop	In community while on LOA	No case as complainant failed to appear in court	Schizophrenia	--	--
5.	Assault GBH of a fellow patient	In the ward at Sterkfontein Hospital	Referred for observation	Cognitive impairment; Aphasia due to head injury	Unfit to stand trial	Able to appreciate wrongfulness but unable to act in accordance

Chapter 5. Discussion

5.1. Baseline data

The profile of this population of state patients did not reveal any remarkably unexpected results and was mostly consistent with that found in the literature. The majority of state patients were male, as has been found in many other studies both locally and internationally.^{4,7} The racial distribution of the state patients was in keeping with that of the general population in South Africa.³⁸ The mean age of the state patients was similar to that found in other studies.^{4,7} Of note was that the age range was quite broad and that the mean age for male and female patients was quite different (31 years vs 40 years respectively). The majority of state patients were unmarried. It is not known whether this implies that many patients were from a migrant population, or perhaps that those who were not married in the legal sense, but rather married traditionally according to their customs, did not report their marital status as married or were not recorded by clinicians as married. According to the literature, however, it has been found that the average age that South Africans get married is 30 years.⁷ Most of the state patients were unemployed, as has been previously found in other studies.^{4,7} This could be partly explained by the high unemployment rate in the general population in South Africa, (42% according to the 2001 national census³⁸), as well as the possibility that this population of mentally ill offenders were even less likely to be employed due to their psychiatric illnesses.

With regards to education, South African statistics have shown that 34% of the general population are “functionally illiterate”, having a highest level of education of

grade 6 or less (18% never attended school and 16% completed grade 1-6), and that only 20% complete matric, and an even smaller number, 8% achieve a higher qualification.³⁸ The majority of state patients in this study either completed primary school or some secondary school, however, only 7% managed to complete matric and 1% had a tertiary qualification.

Regarding the past criminal history, the results from this study should be viewed cautiously. 54% of state patients had reported no prior criminal history and in 11% that history could not be obtained from the state patients themselves. According to the police records, when available in the state patients' files, such as the SAPS 69 form, 25% of the state patients had no previous convictions. However, in 61% of the state patients, no police records were available. Limitations, such as unreliable information from the state patients' themselves and the inconsistency with regards to the availability of police records about previous convictions, make it difficult to actually know if the majority of state patients had prior contact with the criminal justice system or not. The literature has also not been consistent in its findings in this regard,⁴ however, it has been shown that a previous criminal history may increase the risk of recidivism,^{4,27,29} and thus becomes important in terms of the ongoing and future risk management of state patients.

In terms of the past psychiatric history, the majority of state patients had contact with psychiatric services prior to the alleged offence, with only 27% reporting no previous psychiatric history. This finding is in keeping with findings from other studies, both locally and internationally.^{4,13}

In terms of the past medical history, the most common medical illness was found to be epilepsy, which was present in 14% of the study population. This finding is of interest, as it is higher than prevalence rate of epilepsy in the general population in South Africa, which has been reported as 2,2%,³⁹ and it has been described in the literature that an association may exist between epilepsy and violence.³² However, of note, was that only 4% of the state patients had epilepsy as a diagnosis on their forensic observation report, suggesting that the others (who had reported a history of epilepsy under their past medical history) had another, primary psychiatric disorder, which was responsible for them being found not criminally responsible and/or unfit to stand trial. Furthermore, it was found that 35% of the state patients in this study had a history of a previous head injury with loss of consciousness. A potential explanation for this finding is that traumatic brain injury may result in neurobehavioural and cognitive changes, leading to further problems, including disinhibition, poor impulse control, aggression and also epilepsy,³ and these may all lead to aggressive behaviour. Another noteworthy finding was the HIV infection rate in this study. Only 3% of state patients were known to be HIV positive. HIV infection rates in Africa have been shown to range from 15% to 38,8%,³⁹ and according to the South African National HIV survey 17% of adults (25 years or older) are HIV infected.⁴⁰ A possible explanation for the low HIV infection rate in this study is that the baseline demographic data, which included that past medical history, was gathered from the forensic observation reports, and generally during the forensic observation periods medical investigations are not routinely performed unless clinically indicated.³ (Medical investigations, such as HIV testing, would usually only be performed later, after admission as a state patient.) The low HIV infection rate may also reflect underreporting from the patient. Information obtained from state patients at the time

of observation may not always have been accurate or reliable, especially if they were psychotic and unable to give a clear account of themselves or their previous medical histories. (The same can be said for other information, such as past psychiatric history and past criminal histories.)

Regarding the substance abuse history, this study found a very high rate of substance abuse among state patients (71%), with alcohol and cannabis being the most commonly abused substances (57% and 47% respectively). This is consistent with the results of a similar South African study on the profile of state patients,⁴ as well as with South African statistics, where alcohol and cannabis are the two leading substances of abuse.^{41,42,43} However, the actual rate of cannabis abuse in this forensic population was much higher than that reported in the general population.^{41,42,43} It is known that psychiatric patients abuse substances twice as much as the general population,⁴² and that an association between cannabis abuse and crime exists.^{21,22,27,30,41} This finding may thus serve to support those associations. As substance abuse may influence recidivism, as well as relapse rates,^{21,27}, this should be borne in mind when state patients are eventually released back into the community. Indeed, having the combination of a history of violence, serious mental illness and substance abuse or dependence is associated with an almost ten times greater risk of future violence than having mental illness alone.⁴⁴

5.2. Details of the offence

In terms of the details of offences, it was found that the majority of offences were those committed against persons, with property offences occurring less frequently, and this is consistent with findings in the literature locally and internationally.^{4,7} This finding is also expected in that the state patients are generally those mentally ill offenders who have committed more serious and/or violent offences, whereas those who commit more minor offences are usually not admitted as state patients but rather as involuntary mental health care users. Though other South African studies of state patients have found sexual offences to account for the majority of offences committed against persons,^{4,7} in this study, offences of violent but non-sexual nature were more common than offences of a sexual nature. However, rape was found to be the second most common offence, when the offences were considered individually, with assault GBH being the most common offence and murder the third most common. Of concern regarding offences of a sexual nature, was the finding that the victims were often reported to be minors.

5.3. The psychiatric diagnosis

In this study, the majority of state patients (45%) were diagnosed with a psychotic disorder. Schizophrenia was found to be the most common diagnosis, occurring in 44% of the state patients. This is consistent with the literature, locally and internationally.^{4,7,22} The other diagnosis in this group was schizophreniform disorder (1%). “Psychosis” was found as the diagnosis, according to the forensic observation reports, in 20% of state patients. However, “psychosis” is not recognised as a

diagnosis according to the DSM (Diagnostic and Statistical Manual) or ICD (International Classification of Diseases) manuals, and it was therefore grouped under “other disorders” in this study. It can only be speculated as to whether or not any of these state patients with “psychosis” should or would have been diagnosed with schizophrenia if strict DSM/ ICD criteria had been adhered to. However, according to Skipworth et al in New Zealand, other psychotic disorders followed schizophrenia as the second most common diagnosis.⁴ In this study, after schizophrenia and “psychosis”, mental retardation was the next most frequent diagnosis, occurring in 16% of the state patients. Other South African studies have reported mental retardation as the second most frequent diagnosis in their populations of mentally ill offenders.^{4,7,22}

5.4. Criminal responsibility and fitness to stand trial

Most state patients in this study were found not fit to stand trial (96%) and/or not criminally responsible (88%) which is in keeping with the findings of other studies of mentally ill offenders.^{4,7} Of the 11% who had had been found criminally responsible (able to appreciate wrongfulness and act in accordance), all of these state patients were found to be unfit to stand trial.

5.5. The 3 year outcome and the research questions answered

With regards to the first research question, after 3 years the majority, 69%, of state patients were no longer detained at Sterkfontein Hospital and had been released back into the community. This finding is in keeping with the trend towards

deinstitutionalization, that is described in the literature, where the aim is to treat, and rehabilitate and, once stable, to reintegrate mentally ill offenders back into their communities, where they can continue outpatient treatment and follow-up,^{5,12} In the South African context, it should also be questioned whether and/or to what extent overburdened psychiatric state hospitals, as well as the backlog of patients awaiting admission for forensic psychiatric observation,^{31,45,46} may also have contributed to this trend.

The second research question concerned the most common reasons for state patients being still admitted after 3 years. This study found the top three reasons were, in order of frequency, state patients still being mentally unstable (27%), being stable but having no or poor family contact (23%) and still being considered a high risk of reoffending (20%).

In terms of state patients being mentally unstable, this appears to be an understandable reason for remaining admitted. However, mentally unstable may be considered an ambiguous term, in that it may indicate, for example, that a patient is still psychotic and/or treatment resistant, or it may suggest that the patient is low functioning and/or has poor insight and judgment. To be able to better improve long-term treatment and rehabilitation, it may be valuable to explore this issue further in future studies.

With regards to the issue of lack of family support, a recent South African study found that 80% of state patients had family and/or friends who were “willing to accommodate the patients upon discharge”, and only 20% who did not.⁴ Yet in this

article, the authors also commented that, based on their clinical experience, this was “a surprising finding, as lack of family support is one of the main reasons why state patients cannot be discharged”.⁴ Nonetheless, the finding that 23% of state patients in this study, who were still admitted at the end of the 3 year period, were considered stable but had no or poor family contact and therefore could not be released into the community was noteworthy. It highlights that social issues remain a challenge and play a crucial role in the care, treatment and rehabilitation of state patients. It was also found that 73% of the state patients who were still in Sterkfontein Hospital at the end of the 3 year period had previously been out on leave of absence (LOA) at some stage during that time and furthermore, that 93% of those state patients had had family contact during the 3 years. This therefore seems to suggest that the problem is not that state patients have no families, but rather that there may be challenges that prevent their families from being able to provide care and supervision for them on an ongoing basis in the community. One can only speculate as to what these challenges might be. Perhaps issues relating to stigma, families themselves fearing the patients, society not readily accepting such mentally ill offenders back into their communities, the perception of poor police support in terms of assisting in bringing state patients back to hospital in the event that they abuse substances, relapse, become aggressive and refuse to return at the end of their LOA. Sterkfontein Hospital may not be easily accessible to many families living in other areas, and therefore transport and financial challenges may be a problem. Poor patient supervision at home due to family members working or being frail and elderly, as well as compliance and substance abuse issues may be other challenges.

As to state patients still being considered a high risk for reoffending, it may be argued that one may have expected this to be a more frequent reason for still being admitted, as consideration of the potential risk to the community is an essential part of the long-term management and rehabilitation of state patients.⁵ A possible explanation for why being regarded as still a high risk of reoffending accounted for only 20% of state patients remaining in Sterkfontein Hospital at the end of the 3 year period may be that perhaps the number of such high risk state patients was underestimated. One of the limitations of this study is that determining the reasons for state patients still being admitted was dependant on the clinician's notes, and it was not always noted whether the state patient was considered a high risk or not. In addition to that, no risk assessment tools were ever used to formally assess risk. Other reasons for state patients still being admitted included recent relapse while on LOA, awaiting transfer to another forensic hospital, remaining sexually inappropriate, recently having tried to abscond, having reoffended and readmitted for observation, and unsuccessful previous placement. These reasons suggest that the state patients may also still have been mentally unwell and possibly also still considered a high risk for reoffending, but as the clinician may not have specifically stated that in the notes this would not have been captured as a reason for that particular state patient.

In terms of the third research question, it was found that of the state patients who were out in the community after 3 years, 72% were out on leave of absence (LOA), making this the most common reason for being out in the community at the end of the study period. Of the remaining state patients out in the community, 25% had absconded, 3% had been reclassified and 0% had been discharged. With regards to the absconding rate, this should be of concern. In fact, the previous Minister of

Health, Dr Manto Tshabalala-Msimang, mentioned that “systems that deal with state patients that abscond need to be strengthened and should be prioritised” in a speech at a Forensic Mental Health Seminar in July 2008.⁴⁶ It is possible that that state patients who abscond are more likely to relapse because the chances are higher that they might be non-adherent to treatment and potentially also abuse substances. State patients who abscond are thus of concern because of the potential risk of relapse and recidivism. Another issue is state patients who were found unfit to stand trial but criminally responsible for their original offence. Theoretically, once such state patients are mentally stable and fit to stand trial, they should be referred back to the courts. However, if such state patients have absconded, they have potentially become lost from the system and avoided being taken back to court to stand trial for an offence of which they were previously deemed to be criminally responsible.

The final research question related to the recidivism rate after 3 years. The documented recidivism rate in this population of state patients after 3 years was found to be 4%. However, with regard to previous recidivism, 34% of state patients admitted to previous criminal histories. According to police records, 14% of state patients had a previous criminal history (although it must be noted that police records regarding prior convictions were not supplied for 61% of the state patients.) 6% of the study population had been state patients before and then reoffended. Considering all of the above, the overall rate of previous recidivism was found to be 39% (based on patient self report and/or the police report and/or based on a history of previously being a state patient and then having reoffended.) So, it seems that although the recidivism rate in this population was quite low after 3 year follow-up, in fact for a considerable number of these state patients the offences leading to their admission

as state patients in 2004/2005 were not their first offences so that they were already reoffenders. It may be speculated as to whether the finding of a 4% recidivism rate may indicate a degree of success in terms of the treatment and rehabilitation of these state patients provided during their admission as state patients at Sterkfontein Hospital. However, the possibility that the recidivism rate is a product of the relatively short follow-up period, and whether it would be higher with a longer follow-up period, can also not be ruled out.

5.6. Limitations

As is often the case with retrospective reviews, incomplete or insufficient data in the records and clinical files can be a problem. Specific examples, encountered in this study, included inadequate information regarding previous offences, lack of a distinction between arrests and convictions, failure to document whether the clinician had specifically asked about recidivism at follow-up visits after LOA, the notes not always clearly stating the reason why the patient was still admitted in hospital. Another example of inadequate information was that the psychiatric diagnoses in the forensic reports did not always conform to diagnoses listed in the DSM or ICD manuals. The lack of the use of risk assessment tools was another limitation. This is a high risk group of patients, particularly in view of relapse and recidivism, and it should therefore be important that their risk be appropriately managed and regularly reviewed. Consistently comprehensive clinical notes, as well as adequate record keeping, are therefore essential. With regards to the previous criminal history, the lack of police records was certainly also a limitation. Furthermore, police records regarding the previous criminal history, such as the SAPS 69 form, were occasionally

and inconsistently provided for some, not all, mentally ill offenders during their forensic observation period. Additionally, these forms only stated whether or not the state patients had been convicted previously, and not anything regarding prior charges or arrests. In such a population of mentally ill offenders, that is problematic as these individuals may not ever get convicted because of their mental illness, but it remains important to know whether or not they have previously been arrested or charged with an offence, and what the outcome of that was (for example, the individual was sent for forensic observation, or the case was dropped). With regards to state patients who had previously been sent for forensic observation to Sterkfontein Hospital specifically, their records were in the department so these reports were accessible. However, in cases where state patients may have been for forensic observation at another forensic hospital, and when this information was known, the forensic report was requested from the other forensic hospital. However, that was dependant on that information being provided and, in view of the irregularity with which police reports and other relevant information were supplied, it is possible that information may have been missed in some cases.

With regards to recidivism, having to rely solely on the clinical notes, which may have been inadequate, without any other additional source of information, for example police checks, is another limitation of this study. As a result, it is possible that the recidivism rate may have been underestimated.

An additional limitation was that the study time period, of 3 years, may have been too short. Furthermore, the sample size may also have been a limitation for this study. Consent was required to review the files of state patients still admitted to Sterkfontein

at the end of the 3 year period or at the time of data collection. Consent was not obtained from 3 state patients, who had to be excluded from the study, and as a result the study sample size consisted of 114 state patients. The study took place at Sterkfontein Hospital in Gauteng, and it is also possible that the results from this study may thus not be generalisable to all state patients and forensic units in South Africa.

Chapter 6. Recommendations

It was found that most of the state patients in this study were unemployed and that a substantial number had a past criminal history. The links between unemployment and crime are known,³⁶ and it has also been well documented in the literature that a criminal history is a risk factor for future violence and recidivism.^{3,4,27,29} Thus, strategies to improve socioeconomic and sociopolitical issues, such as unemployment and crime, in South Africa are important.

Over half of the state patients in this study had a past psychiatric history prior to the offence, and it was not an uncommon finding for state patients to have a history of epilepsy or a previous head injury. A positive history of substance abuse, particularly alcohol and cannabis, was also common. Therefore, interventions to decrease substance abuse in the community, improve psychiatric treatment and follow-up of those who default outpatient treatment, and to improve care, treatment and rehabilitation of those individuals with epilepsy and traumatic brain injury, is essential.

In terms of the offences leading to state patient admission, the majority involved violence of some kind towards others, and the three most frequent charges were assault with the intention of doing grievous bodily harm, rape and murder. Regarding the rape charges, as well as other offences of a sexual nature, the victim was often a minor. Hence it is also recommended, that attempts are made to improve the supervision and protection of children within the community.

Schizophrenia and mental retardation were two of the most common psychiatric diagnoses in this study of state patients. Consequently, efforts to optimise the treatment and rehabilitation of such individuals are crucial. These should include family and community education, as well as counselling and support for state patients and their families, community facilities for supervised care, training and rehabilitation, and sheltered employment.

The literature has identified factors that may influence the relapse and recidivism rates of mentally ill offenders,^{4,21,22,27,28,29} and also factors which may influence rehabilitation programmes.⁴ Some of these factors are potentially modifiable, such as active symptoms of a major mental illness, substance abuse, patient insight, and medication compliance.⁴ In this study, it was found that the most common reason for state patients remaining in hospital after 3 years, was still being mentally unstable. Thus, so as to improve rehabilitation and allow for state patients to ultimately be released back into their communities, emphasis should be placed on optimum treatment of the active symptoms of their psychiatric disorders. In terms of substance abuse, as with other studies of state patients,^{4,7,22,32,33} high rates of substance abuse were found in this study. Therefore, it is recommended that substance abuse rehabilitation should be an important part of forensic programmes. Likewise, programmes focusing on improving patient insight and treatment adherence should be enhanced. Having family and/or friends willing to accommodate state patients after their discharge has also been identified as a factor that may influence rehabilitation.⁴ In this study, it was found that one of the most common reasons for still being admitted after 3 years was poor family contact. It is therefore recommended that social services provided by forensic units need to be

strengthened and that the importance of such services be highlighted. The lack of psychiatric community-based services and facilities in South Africa, including day-care services, residential placement facilities and vocational rehabilitation programmes, has been identified in the literature,^{47,48} These deficiencies need to be addressed, so as to improve support for the families of state patients and to better facilitate the reintegration of state patients back into their communities. Family and community education would also be helpful in this regard. It has also been reported that people with mental illness are often mistreated by their family and friends, as well as the community, and that mental health stigma contributes to the risk of substance abuse and criminal activities.⁴⁹ Thus anti-stigma and awareness-raising programmes may also contribute to improved outcomes for state patients, as well as psychiatric patients in general.

The use of risk assessment tools is recommended, to more adequately and objectively evaluate the risk of recidivism among state patients, as well as appropriately manage the risk. Various risk assessment methods and tools have been developed and they serve as evidence-based structured instruments, which may be used to assess risk. Two types of structured instruments exist, actuarial instruments and structured professional judgment instruments. Actuarial methods, for example the RRASOR (Rapid Risk Assessment for Sexual Offence Recidivism), serve to provide the probability of risk within a particular population, rather than for a specific individual. They consider only historical factors, and do not require clinical knowledge or take into consideration current and dynamic factors. As a result, the value of actuarial methods is limited within the practice of forensic psychiatry. Clinical methods, or structured professional judgment instruments, are patient-based, and

they take into account both situational and dynamic factors. Examples include the HCR-20 (Historical-Clinical-Risk-Management-20), PCL-R (Psychopathy Checklist-Revised) and the START (Short-Term Assessment of Risk and Treatment). Although it has been reported that risk assessment tools are not routinely used in most forensic psychiatric units in South Africa, some experience with such instruments has been described. Roffey and Kaliski conducted a pilot study, using the START instrument, at Valkenberg Hospital in Cape Town. They found that START was valuable, less in terms of making predictions, but more in terms of establishing the strengths and vulnerabilities of their state patients, which could then be focused on, and that this represented “true risk management”. Limitations of using START, according to their experience, was that it was time consuming and labour-intensive, requiring input from the multi-disciplinary team. However, Roffey and Kaliski argued that, for reasons including those of ethics and accountability, the use of some form of structured risk assessment should nonetheless be performed in forensic psychiatric units, where the assessment of dangerousness is fundamental. They stated that clinical decisions regarding the ongoing detention of state patients, and/or their release into the community should be justifiable, and as evidence exists regarding the usefulness of risk assessment tools, it may be considered unethical not to use them. They recommended that the routine use of risk assessment tools, such as the HCR-20, which is less time and labour-intensive than START, should be piloted.⁵⁰

As was also mentioned in a similar South African study,⁴ it is recommended that systems be developed and improved, so as to monitor all state patients in psychiatric hospitals and those released into the community. This should assist in the early detection of state patients who have relapsed and/or who have not returned for

review at the end of their LOA periods, and are thus at risk of relapsing, so that they can be treated promptly, before possibly again committing a criminal act. Systems should also include measures to adequately deal with state patients who have absconded. Furthermore, regarding state patients who were originally found to be criminally responsible but unfit to stand trial, systems should be in place to ensure that such state patients are referred back to the relevant authorities once they have been successfully treated and rehabilitated, so that their cases may then be resolved in the face of the law. Better collaboration with members of the court and the South African Police Service is also crucial. More detailed information, particularly with regards to previous criminal history should be routinely provided for all individuals who are referred for forensic observation. Timely and efficient police follow-up of state patients who have absconded is essential, as is the police department's response to calls for assistance from families when a state patient has relapsed within the community.

In terms of state patients who may commit another offence after having absconded or while out on LOA, when the offence is a minor one, it is possible that the charge may be dropped and not pursued legally, and the individual released. However, if a system existed within the police, where it could be easily identified at the time of arrest, whether or not a person was a state patient, it would allow for such state patients to be brought to psychiatric services, where they could be reviewed in terms of possible relapse and need for readmission, possibly before committing another, more serious offence.

The results from this study will hopefully form the basis from which further South African research can be done. More specifically, studies to evaluate the issues and obstacles in the management of state patients, as well as the impact of various interventions, such as substance abuse rehabilitation, improved community support, and the use of risk assessment tools. Longer follow-up periods may also be necessary to better assess recidivism rates. Such research would also be helpful in terms of supporting and ensuring the functioning and growth of Forensic Psychiatric Units, such as the one at Sterkfontein Hospital.

References

1. Swartz B: Managing high security psychiatric care: Book Review. (Book edited by Kaye C, Franey A; Philadelphia, Jessica Kingsley Publishers, 1998.)
Psychiatric Services, March 2000; 51:396-397.
2. Kaliski S, Hooper J: *Forensic psychiatry in South Africa*. Department of Psychiatry, University of Cape Town & Forensic Unit, Valkenberg Hospital.
Retrieved on 24 September 2007 from
<http://bama.ua.edu/~jhooper/southaf.html>.
3. Kaliski S, editor. *Psycholegal Assessment in South Africa*. Cape Town: Oxford University Press, 2006.
4. Strydom N, Pienaar C, Dreyer A, van der Merwe L, Jansen van Rensburg B, Calitz FJW, et al.: Profile of forensic psychiatric inpatients referred to the Free State Psychiatric Complex, 2004-2008. *South African Journal of Psychiatry*, June 2011; 17(2):40-43.
5. Zabow T, Van Rensburg P, Voster M: Psychiatry and the law. In Robertson, Allwood and Gagiano, editors. *Textbook of Psychiatry for Southern Africa*. Cape Town: Oxford University Press, 2001: 383-396.

6. Criminal Procedure Act No.51 of 1977. Retrieved on 17 July 2012 from http://www.kzntransport.gov.za/reading_room/acts/national/Criminal%20Procedure%20Act%20&%20Regulations.pdf.
7. Barrett SP, du Plooy J, du Toit J, Wilmans S, Calitz FJW, Joubert G: Profile of mentally ill offenders referred to the Free State Psychiatric Complex. *South African Journal of Psychiatry*, June 2007; 13(2):56-58.
8. Mental Health Care Act No. 17 of 2002. Government Gazette, Republic of South Africa, vol. 449, no. G24024, Cape Town, 6 November 2002. Retrieved on 17 July 2012 from <http://www.info.gov.za/view/DownloadFileAction?id=68051>.
9. Freeman M: New mental health legislation in South Africa- principles and practicalities: A view from the Department of Health. *South African Psychiatry Review*, August 2002; 5(3):4-8.
10. Janse Van Rensburg ABR: A framework for current public mental health care practice in South Africa. *African Journal of Psychiatry*, November 2007; 10(4):205-209.
11. Mental Health Act No. 18 of 1973. Retrieved on 17 July 2012 from <http://www.kznhealth.gov.za/mentalact1973.pdf>.

12. Kravitz HM, Kelly J: An outpatient psychiatry program for offenders with mental disorders found not guilty by reason of insanity. *Psychiatric Services*, December 1999; 50:1597-1605.
13. Meehan J, Flynn S, Hunt IM, Robinson J, Bickley H, Parsons R, et al.: Perpetrators of homicide with schizophrenia: a national clinical survey in England and Wales. *Psychiatric Services*, November 2006; 57:1648-1651.
14. Quanbeck CD, Stone DC, McDermott BE, Boone K, Scott CL, Frye MA: Relationship between criminal arrest and community treatment history among patients with bipolar disorder. *Psychiatric Services*, July 2005; 56:847-852.
15. Link BG, Phelan JC, Bresnahan M, Stueve A, Pescosolido BA: Public conceptions of mental illness: labels, causes, dangerousness, and social distance. *American Journal of Public Health* 1999; Vol.89, Issue 9:1328-1333.
16. Hodgins S: Mental disorder, intellectual deficiency, and crime: evidence from a birth cohort. *Archives of General Psychiatry*, June 1992; 49(6):476-483.
17. Fazel S, Grann M: The population impact of severe mental illness on violent crime. *American Journal of Psychiatry*, August 2006; 163(8):1397-13403.

18. Swanson JW, Holzer CE, Ganju VK, Tsutomu Jono R: Violence and psychiatric disorder in the community: evidence from the epidemiologic catchment area surveys. *Psychiatric Services. Hosp Community Psychiatry*, July 1990; 41:761-770.
19. Shaw J, Hunt IM, Flynn S, Meehan J, Robinson J, Bickley H, et al.: Rates of mental disorder in people convicted of homicide: national clinical survey. *The British Journal of Psychiatry* 2006; 188:143-147.
20. Phillips MR, Wolf AS, Coons DJ: Psychiatry and the criminal justice system: testing the myths. *American Journal of Psychiatry* 1988; 145:605-610.
21. Swanson JW, Swartz MS, Van Dorn RA, Elbogen EB, Wagner HR, Rosenheck RA, et al.: A national study of violent behavior in persons with schizophrenia. *Archives of General Psychiatry* 2006; 63:490-499.
22. Calitz FJW, van Rensburg PHJJ, Fourie C, Liebenberg E, van den Berg C, Joubert G: Psychiatric evaluation of offenders referred to the Free State Psychiatric Complex according to sections 77 and/or 78 of the Criminal Procedures Act. *South African Journal of Psychiatry*, September 2006; 12(3):47-50.
23. Lamb HR, Weinberger LE, Gross BH: Court-mandated community outpatient treatment for persons found not guilty by reason of insanity: a five-year follow-up. *The American Journal of Psychiatry* 1988; 145:450-456.

24. Skipworth J, Brinded P, Chaplow D, Frampton C: Insanity acquittee outcomes in New Zealand. *Australian and New Zealand Journal of Psychiatry*, November 2006; 40:1003-1009.
25. Pasewark RA, Pantle ML, Steadman HJ: Detention and re-arrest rates of persons found not guilty by reason of insanity and convicted felons. *American Journal of Psychiatry*, 1982; 139: 892-897.
26. Lovell D, Gagliardi GJ, Peterson PD: Recidivism and use of services among persons with mental illness after release from prison. *Psychiatric Services*, October 2002; 53:1290-1296.
27. Kunz M, Yates KF, Czobor P, Rabinowitz S, Lindenmayer JP, Volavka J: Course of patients with histories of aggression and crime after discharge from a cognitive-behavioral program. *Psychiatric Services*, June 2004; 55:654-659.
28. Lamberti JS: Understanding and preventing criminal recidivism among adults with psychotic disorders. *Psychiatric Services*, June 2007; 58:773-781.
29. Chaimowitz GA, Mamak M, Padget R: Management of the mentally abnormal offender. *Brief Treatment and Crisis Intervention*, February 2008; 8(1):15-26.
30. Johns A: Psychiatric effects of cannabis. *The British Journal of Psychiatry* 2001; 178:116-122.

31. Ogunlesi AO, Ogunwale A, De Wet P, Roos L, Kaliski S: Forensic psychiatry in Africa: prospects and challenges. (Guest editorial). *African Journal of Psychiatry*, January 2012; 15:3-7.
32. Marais PJ, Calitz FJW, Pretorius PJ, Joubert G: The demographic, clinical and forensic profile of offenders diagnosed with epilepsy referred to the Free State Psychiatric Complex Observation Unit in terms of section 77 and/or 78 of the Criminal Procedure Act 51 of 1977. *South African Journal of Psychiatry*, March 2011; 17(1):16-22.
33. Calitz FJW, van Rensburg PHJJ, de Jager PP, Olander ML, Thomas L, Venter R, et al.: Psychiatric evaluation of intellectually disabled offenders referred to the Free State Psychiatric Complex, 1993-2003. *South African Journal of Psychiatry*, December 2007; 13(4):147-152.
34. Vorster M: *A retrospective study of the "observation" patients sent to Sterkfontein Hospital for Forensic evaluation for the years 1982, 1983 and 1984. A comparison of the reasons for their referral with the eventual outcome in terms of fitness to plead and psychiatric diagnosis made.* [dissertation]. Johannesburg: Univ. of the Witwatersrand, 2 October 1986.
35. Friedlander W: *Child homicide in a forensic setting- a comparison of mothers, fathers and non-parents who kill children.* [dissertation]. Johannesburg: Univ. of the Witwatersrand, 10 November 2005.

36. Why does South Africa have such high rates of violent crime? Supplement to the final report of the study on the violent nature of crime in South Africa. Produced by the Centre for the Study of Violence and Reconciliation (CSVR) for the Justice, Crime Prevention and Security (JCPS) cluster; submitted to the Minister of Safety and Security 7 April 2009. Retrieved on 18 August 2012 from http://www.csvr.org.za/docs/study/7.unique_about_SA.pdf.
37. Bruce D, Centre for the Study of Violence and Reconciliation: Good Cops? Bad Cops? Assessing the South African Police Service. Retrieved on 18 August 2012 from <http://www.iss.co.za/uploads/CQBRUCE.PDF>.
38. Statistics South Africa- Census 2001: Census in Brief. Retrieved on 9 August 2012 from <http://www.statssa.gov.za/census01/html/CInBrief/CIB2001.pdf>.
39. Epilepsy in the WHO African Region: Bridging the gap. The Global campaign against epilepsy "Out of the shadows". Retrieved on 27 August 2012 from http://www.who.int/mental_health/management/epilepsy_in_African-region.pdf.
40. South Africa HIV and AIDS statistics. Retrieved on 25 August 2012 from <http://www.avert.org/south-africa-hiv-aids-statistics.htm>.
41. Peltzer K, Ramlogan S: Cannabis use trends in South Africa. *South African Journal of Psychiatry*, December 2007; 13(4):126-131.

42. Peltzer K, Ramlagan S: Illicit drug use in South Africa: Findings from a 2008 national population-based survey. *South African Journal of Psychiatry*, March 2010; 16(1):8-15.
43. Ramlagan S, Peltzer K, Matseke G: Epidemiology of drug abuse treatment in South Africa. *South African Journal of Psychiatry*, April 2010; 16(2):40-49.
44. Busko M: Severe mental illness alone does not predict violent crime. *Archives of General Psychiatry* 2009; 66:152-161.
45. Kahn T: South Africa: no room at state hospitals for mentally ill suspects. *Business Day* 2006 October 13. Retrieved on 12 May 2011 from <http://allafrica.com/stories/200610130757.html>.
46. Tshabalala-Msimang M: Speech notes for Minister of Health, Dr Manto Tshabalala-Msimang at the Forensic Mental Health Seminar/ workshop, Birchwood Hotel, Benoni on July 14, 2008. *South African Government Information*. Retrieved on 12 May 2011 from <http://www.info.gov.za/speeches/2008/08071611451003.htm>.
47. Botha U, Koen L, Oosthuizen P, Joska J, Hering L: Assertive community treatment in the South African context. *African Journal of Psychiatry*, November 2008; 11(4):272-275.

48. Kruger C, Lewis C: Patient and social work factors related to successful placement of long-term psychiatric in-patients from a specialist psychiatric hospital in South Africa. *African Journal of Psychiatry*, May 2011; 14(2):120-129.
49. Kakuma R, Kleintjes S, Lund C, Drew N, Green A, Flisher AJ: Mental Health Stigma: What is being done to raise awareness and reduce stigma in South Africa? *African Journal of Psychiatry*, May 2010; 13(2):116-124.
50. Roffey M, Kaliski SZ: 'To predict or not to predict- that is the question.' An exploration of risk assessment in the context of South African forensic psychiatry. *African Journal of Psychiatry*, July 2012; 15(4):227-233.

Appendix 1

Human Research Ethics Committee Clearance Certificate

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

Division of the Deputy Registrar (Research)

HUMAN RESEARCH ETHICS COMMITTEE (MEDICAL)

R14/49 Marais

CLEARANCE CERTIFICATE

PROTOCOL NUMBER M080210

PROJECT

Forensic State patients at Sterkfontein
Psychiatric Hospital- A 3-year follow-up
of state patients admitted in 2004&2005

INVESTIGATORS

Dr BS Marais

DEPARTMENT

Neurosciences/Psychiatry

DATE CONSIDERED

08.02.29

DECISION OF THE COMMITTEE*

Approved unconditionally

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

DATE 08.04.25

CHAIRPERSON



(Professor P E Cleaton Jones)

*Guidelines for written 'informed consent' attached where applicable

cc: Supervisor : Dr U Subramaney

DECLARATION OF INVESTIGATOR(S)

To be completed in duplicate and **ONE COPY** returned to the Secretary at Room 10004, 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

Appendix 2

Definitions:

State Patient

Someone who has been charged with a crime involving serious violence (eg, murder or rape) and is declared by the court, usually after a period of forensic psychiatric observation, to be either unfit to stand trial and/or not criminally responsible as a consequence of a mental illness and/or defect. An order is then issued (J105) that this person be detained at a mental institution as a “State Patient”, as per Section 42 of the Mental Health Care Act 17 of 2002.

Reclassification of State Patients

State patients may, with time, eventually be reclassified as involuntary mental health care users. This usually occurs in patients with chronic patients who are stable, but require long-term structured and institutionalized care. They may have no or poor family support, but are also unlikely to cope alone in the community. An application for reclassification can only be made once in every 12 month. The decision rests with the Judge in Chambers. Reclassification occurs in terms of section 47 of the Mental Health Care Act.

Conditional and Unconditional Discharge of State Patients

State patients may also be ultimately be discharged. This also takes place according to section 47 of the Mental Health Care Act. Again, an application can only be made

once every 12 months and the decision is made by the Judge in Chambers.

Discharge may be granted conditionally or, more rarely, unconditionally. In the case of conditional discharge, a number of conditions, usually as recommended by the doctors who made the application, must be adhered to over a period of time stipulated by the Judge (usually 2-3 years.) The patient is reviewed every six months during this period. If these conditions are not adhered to the conditional discharge may be revoked and the patient's status may revert that of a state patient.

Abscond

“To depart hurriedly and furtively, especially unlawfully or to avoid arrest” – according to the Concise Oxford Dictionary. In the case of a state patient, to abscond would mean to escape from the hospital where he or she has been ordered, by the court, to be detained, or failing to return to the hospital on the stipulated date after a period of leave of absence from the ward was granted.

Appendix 3

Data Collection Sheet *(Answer on the lines or Circle appropriate answers)*

Patient Details & Baseline Data *(From forensic observation report)*

1. Study participant number _____

2. Date of admission as a state patient _____

3. Age on admission as a state patient _____

4. Sex

- 1. Male
- 2. Female

5. Race

- 1. Black
- 2. White
- 3. Coloured
- 4. Indian
- 5. Asian
- 6. Other - _____
- 7. Unknown

6. Marital status

- 1. Single
- 2. Married
- 3. Divorced
- 4. Widowed
- 5. Other - _____
- 6. Unknown

7. Employment status (prior to becoming a state patient)

- 1. Employed - _____
- 2. Unemployed
- 3. Self employed - _____
- 4. On a disability grant
- 5. Other - _____
- 6. Unknown

8. Highest level of education

- 1. No formal schooling
- 2. Grade 1 – Grade 4
- 3. Grade 5 – Grade 8
- 4. Grade 9 – Grade 11
- 5. Grade 12 (matric)
- 6. > Grade 12 (tertiary education) - _____
- 7. Unknown

9. Previous criminal history (according to the patient)

- 1. Yes - _____
- 2. No
- 3. Unknown

10. Previous criminal history (according to the police records, if available in the clinical file)

- 1. Yes - _____
- 2. No
- 3. Unknown

11. Past psychiatric history

- 1. Yes - _____
- 2. No
- 3. Possibly, details not clear / not confirmed
- 4. Unknown

12. Relevant medical history

- | | | |
|------------|--------------|----------------------|
| 1. Yes - | 1a. Epilepsy | 1e. Cardiac problems |
| 2. No | 1b. TB | 1f. Asthma/COPD |
| 3. Unknown | 1c. HIV+ | 1g. Hypertension |
| | 1d. Diabetes | 1h. Other - _____ |

13. Previous head injury with loss of consciousness

- | | | | | |
|------------|---------------------|---------|--------|-------------|
| 1. Yes - | Required admission? | 1a. Yes | 1b. No | 1c. Unknown |
| 2. No | | | | |
| 3. Unknown | | | | |

14. Relevant family history

- 1. Mental illness
- 2. Suicide
- 3. Substance abuse
- 4. Epilepsy
- 5. No relevant family history
- 6. Unknown

15. Substance abuse history (according to the patient)

- 1. Yes - (List substances:) _____
- 2. No
- 3. Unknown

16. Other relevant information obtained on history

(eg. conduct disorder features, attending a special school, history of abuse)

- 1. Yes - _____
- 2. No

**17. Any relevant results of investigations done during forensic observation
(eg. urine cannabis, CT scan, bloods)**

Details of the Offence

(From forensic observation report)

1. Charge(s)

1. Murder
2. Attempted murder
3. Culpable homicide
4. Rape - Was the victim a minor? 4a. Yes 4b. No 4c. Unknown
5. Indecent assault - Was the victim a minor? 5a. Yes 5b. No 5c. Unknown
6. Assault with the intention to do grievous bodily harm
7. Robbery with aggravating circumstances
8. Other - _____

2. Psychiatric diagnosis on the forensic report (i.e. diagnosis on admission as a state patient)

3. Criminal responsibility

1. Able to appreciate the wrongfulness of his/her actions
2. Unable to appreciate the wrongfulness of his/her actions
3. Able to act in accordance with such an appreciation
4. Unable to act in accordance with such an appreciation
5. Other - _____

4. Fitness to stand trial

1. Fit to stand trial
2. Not fit to stand trial
3. Fit to stand trial with assistance

3 Year Follow-up Data

(from clinical notes / records)

1. Where is the patient at the end of the 3 year follow-up period?

1. Still in Sterkfontein Hospital
2. In the community
 - 2a. Out on leave of absence (LOA)
 - 2b. Out on Conditional discharge (D/C)
 - 2c. Out on Unconditional D/C
 - 2d. Reclassified & sent to a placement facility
 - 2e. Absconded
3. Other
 - 3a. Transferred to another Forensic Hospital _____
 - 3b. Unknown (eg. records lost) _____
 - 3c. Patient deceased _____

2. If patient still admitted, answer the following questions

1. What is the reason?
 - 1a. Patient remains mentally unstable / unwell
 - 1b. Patient remains violent and/or unpredictable
 - 1c. Patient remains sexually inappropriate in the ward
 - 1d. Patient still considered a high risk for reoffending
 - 1e. Stable & awaiting family to collect pt for LOA
 - 1f. Stable but no or poor family contact
 - 1g. Stable and awaiting reclassification (application process begun)
 - 1h. Stable & reclassified but still awaiting placement
 - 1i. Other _____
 - 1j. Unknown
2. Has the patient ever been out on LOA before?
 - 2a. Yes
 - 2b. No
 - 2c. Unknown
3. No documented family contact since admission
 - 4a. Yes
 - 4b. No
 - 4c. Unknown

3. If patient out on LOA, answer the following questions

1. Duration of LOA granted
 - 1a. Few days
 - 1b. Two weeks
 - 1c. One month
 - 1d. Two or three months
 - 1e. Six months
2. For patients out on 6 month LOA at the end of the 3 year follow-up period, how many consecutive 6 LOA's has the patient been on? _____

4. If patient has been conditionally/ unconditionally D/C'd, answer the following questions

1. Conditional D/C
2. Unconditional D/C
3. How long after admission was conditional/unconditional D/C applied for?

4. How long after admission was conditional/unconditional D/C granted?
5. How many consecutive successful 6 month LOA's had the patient been on when the application for conditional/unconditional D/C was made? _____
6. Has the patient ever been readmitted since conditional/unconditional D/C was granted:

Yes / No

5. If patient has been reclassified, answer the following questions

1. How long after admission was reclassification applied for? _____
2. How long after admission as a state patient was reclassification granted?
3. What was the reason for applying for reclassification? _____

6. If patient has been sent to a residential placement facility, answer the following questions

1. How long after reclassification was granted was the patient sent to placement? _____

2. Was the patient ever admitted back in Sterkfontein after being sent to placement?

1a. Yes. Reason _____

1b. No

1c. Unknown

7. If patient is out in the community on abscondment, answer the following questions

1. Absconded while at Sterkfontein 1a. From the ward
1b. From hospital grounds, while on parole
1c. Other _____
1d. Unknown

2. Absconded while out on LOA

3. Unknown where the patient absconded from

8. Regarding recidivism (answer for all patients)

1. The patient has been rearrested since being a state patient or charged with a new offence

1a. Number of times _____

1b. Charge(s) _____

1c. Offense committed out in the community: Y / N

1d. Offense committed in hospital / the ward: Y / N

2. Although records do not indicate whether or not the patient was rearrested or recharged, they do indicate that the patient may have been involved in criminal activity

2a. Nature of criminal activity _____

2b. Occurred while in the ward: Y / N

2c. Occurred in the community: Y / N

3. No record of any recidivism